COMPETITION COMMITTEE

Competition and Regulation Issues in Telecommunications

Series Roundtables on Competition Policy

N° 38

OECD

2001

Unclassified **DAFFE/COMP(2002)6**

Organisation de Coopération et de Développement Economiques
Organisation for Economic Co-operation and Development

01-Feb-2002

English/French

DIRECTORATE FOR FINANCIAL, FISCAL AND ENTERPRISE AFFAIRS
COMPETITION COMMITTEE

DAFFE/COMP(2002)6
Unclassified

COMPETITION AND REGULATION ISSUES IN TELECOMMUNICATIONS

JT00120248

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English/French

FOREWORD

This document comprises proceedings in the original languages of a Roundtable on Competition and Regulation issues in telecommunications which was held by the Committee on Competition Law and Policy in May 2001.

It is published under the responsibility of the Secretary General of the OECD to bring information on this topic to the attention of a wider audience.

This compilation is one of several published in a series entitled "Competition Policy Roundtables".

PRÉFACE

Ce document rassemble la documentation dans la langue d'origine dans laquelle elle a été soumise, relative à une table ronde sur les questions de concurrence et de réglementation en matière de télécommunications, qui s'est tenue en mai 2001, dans le cadre de la réunion du Comité du droit et de la politique de la concurrence.

Il est publié sous la responsabilité du Secrétaire général de l'OCDE, afin de porter à la connaissance d'un large public les éléments d'information qui ont été réunis à cette occasion.

Cette compilation fait partie de la série intitulée "Les tables rondes sur la politique de la concurrence".

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EXECUTIVE SUMMARY

By the Secretariat

In the light of the written submissions, the background note and the oral discussion, the following points emerge:

(1) Since the last review of the telecommunications sector by the CLP in 1995, this sector has been transformed by continued liberalisation and substantial growth in competition. In virtually all OECD countries, however, telecommunications markets remain relatively concentrated. Competition is generally strongest in the mobile market and weakest (although growing) in the market for local services (including local broadband services). There is some movement in the EU towards consolidation of the existing framework and harmonisation with EC competition law.

In 1995, more than two-thirds of the OECD countries retained statutory monopolies in the telecommunications sector. By the end of 2001, only Turkey will retain statutory restrictions on entry in the fixed line business. Key milestones in the liberalisation of this sector include the passage of the 1996 Telecommunications Act in the US, the WTO Agreement on Basic Telecommunications Services of 1997, the package of legislation in Australia, liberalising entry from July 1997, and the framework of EC directives requiring full competition from 1 January 1998.

As a result of these moves, competition has developed to varying degrees in virtually all telecommunications markets. In Germany, new entrants have taken 40 percent of the long-distance market - this success being attributed to, amongst other things, the ability of the entrants to use the billing facilities of the incumbent. In the US, although litigation has held up full implementation of certain parts of the 1996 Act, Regional Bell Operating Companies have been allowed to enter the long-distance market in a few states and competition is now developing in the market for local telecommunications services, especially in certain states and especially in the market for services to large and medium sized business customers. Competition has also developed rapidly in mobile markets, with customers in many OECD countries having a choice of three or more mobile network operators and some having a choice of five or more mobile networks. In most OECD countries the number of mobile subscribers exceeds the number of fixed-line subscribers.

Even though competition has developed rapidly, telecommunications markets remain relatively concentrated by conventional competition standards. Incumbent operators typically retain at least 60 percent of the long-distance market (less in the US and Finland) and the vast majority of the market for local loops. Incumbent share in the mobile market can be lower, but even here concentration levels are very high by the standards of other sectors. Although a few countries have five or more mobile operators, most countries have three or fewer and many countries have a choice of only two mobile networks.

Recent regulatory issues include the terms and conditions for access to unbundled local loop (both raw copper and line sharing), the scope and cost-sharing of number portability and allocation of the spectrum for new 3G and WLL services. Most countries have implemented price-cap systems for

controlling retail prices (but not access prices) of operators with market power. Some countries (such as Finland, the US or the UK) have removed or lightened retail price controls for services in which there is sufficient competition. Most countries require some form of accounting separation and special disclosure of accounting information. A few countries (such as the Netherlands and Switzerland) have required the dominant telecommunications operator to divest its activities in cable TV.

Regulatory reform in this sector is continuing. The EU is in the process of consolidating the existing framework of 26 directives into five, relying less on *ex ante* regulation and more on the *ex post* application of conventional competition law. In particular, the sector-specific notion of "substantial market power" will be redefined in a manner consistent with the competition law notion of dominance under Article 82 of the EC Treaty as interpreted by the ECJ. Germany has also stated its intent to move in the direction of greater reliance on competition law. New Zealand, which currently relies exclusively on competition law, is in the process of moving a little closer to the OECD mainstream by establishing a new institution for resolving access disputes and making recommendations on which facilities access should be mandated. In Japan, a bill before the Diet would establish a telecommunications disputes settlement commission and a universal service fund.

(2) In all OECD countries the generic competition law applies fully to the telecommunications sector. As a result, most national regulatory authorities share jurisdiction with the competition authority, giving rise to the need for co-ordination and often explicit co-operation. Competition cases in the telecommunications sector are very common, especially the different forms of abuse of a dominant position, such as denial of access to essential facilities, predation, tying and bundling.

No countries reported any exemptions or exceptions in the application of the competition law to the telecommunications sector. Australia has a special provision in the competition law which strengthens the application of the competition laws in this sector, although these provisions have not been heavily used and a current review recommends removing them.

In virtually all OECD countries, both the national regulatory agency ("NRA") and the competition authority have some responsibility for controlling anti-competitive behaviour in the telecommunications industry. This shared jurisdiction gives rise to the need for co-ordination. Korea, the Netherlands, the Czech Republic and Norway all mentioned explicit co-operation or co-ordination agreements. Mexico also has considered the importance of enhancing co-operation and co-ordination among regulatory and competition authorities. In the Netherlands, the NRA and the NMa have jointly authored publications and have set up joint industry-oversight teams.

Allegations of anti-competitive behaviour in the telecommunications sector have been common. All the forms of anti-competitive abuse of a dominant position (denial of access to an essential facility, predation, tying and bundling, and so on) can be found in the telecommunications sector. The majority of abuse cases relate to access to essential facilities, i.e., (*a*) whether or not a particular service must be offered to a rival; (*b*) the timeliness and quality with which the service must be offered; and (*c*) the price at which the service is offered, particularly in comparison to the price, timeliness or quality that the dominant operator offers to itself or its affiliated companies.

Typically, the scope of "essential facilities" is determined by regulation, removing many potential access disputes from the jurisdiction of competition law. Nevertheless issues related to the scope of essential facilities continue to arise. In particular, complaints have arisen over access to co-location or to certain facilities such as masts and towers for locating cell-sites. In addition, as discussed below, some countries have addressed the question whether national roaming for mobile networks should be mandated.

Even where incumbent operators are mandated to supply certain services, they may still only respond slowly, with a lower-quality service offering. Complaints have frequently arisen over the speed with which the incumbent makes certain facilities available, such as leased lines to a large customer, or unbundled local loops for the provision of ADSL. In some cases the service is provided but at a lower capacity than is requested. In other cases the service is provided but the quality of the end-to-end service is degraded in some way. The Netherlands notes that "interconnection links and leased lines continue to be scarce" and "complaints about the supply and reliability of leased lines in particular continue to be filed in numbers." Mexico and some other countries insist on the principle of "first come, first served", as a tool for limiting the ability of the incumbent to serve itself ahead of the request of a rival.

Incumbent operators are occasionally accused of predatory pricing, especially when offering discounts for bundles of competitive and non-competitive products, or when setting low retail prices relative to access or interconnection prices. In Mexico a recent resolution places a floor on the average price of long distance service, requiring them to recover the total average costs (including capital cost). Telmex (the incumbent operator in Mexico) has been explicitly prohibited from differentiating prices on a geographic basis to prevent it from lowering its prices only in those areas in which it faces local competition.

(3) Although there is widespread agreement that incumbent fixed-wire operators should be required to provide origination and termination services for rival networks, recently questions have arisen whether it is necessary to also regulate the price for termination on mobile networks. A related question is whether competition in the mobile sector can be enhanced through mandated access to existing networks, in the form of mobile virtual network operators or mandatory roaming.

In the telecommunications industry, as long as a subscriber is only connected to one network, any calls to that subscriber must pass through that subscriber's network. The network has a form of monopoly over calls to that subscriber. An important question is under what circumstances does that network have the incentive and ability to exercise that market power by raising the termination charges above cost? It is widely recognised that it is essential to regulate termination charges on fixed networks in order to prevent dominant fixed network operators from using high interconnection charges to prevent the growth of competition. In recent years, several regulatory authorities have addressed the question whether it is also necessary to regulate termination prices on mobile networks.

Under the convention that the calling party pays (which is the usual situation for mobile services in OECD countries outside North America), mobile callers indirectly pay the charges for termination on fixed networks, but do not pay the charges for fixed-to-mobile termination. If it is assumed that mobile subscribers care primarily about the price of the calls they make and not the price of calls made to them, mobile subscribers will pay little attention to the price of fixed-to-mobile calls at the time they make their choice as to which mobile network to subscribe. As a result, there will be little competitive pressure on fixed-to-mobile termination charges.

Several regulatory authorities have sought to address this by introducing new forms of regulation on fixed-to-mobile termination charges (e.g., UK, France, Australia). Australia has proposed an approach in which fixed-to-mobile termination charges are linked to a basket of mobile-to-fixed prices. In Italy, two mobile companies agreed to simultaneously raise their termination charges, at the same time as a new entrant was entering the market. The Italian competition authority found that this was a restrictive concerted practice and imposed substantial penalties (although part of the decision was repealed by the Italian supreme administrative court).

Consumers seem to care strongly about the geographic extent of the mobile network they have chosen. Mobile networks need to establish significant coverage of the population of a country if they are to provide a competitive service. The cost of establishing a network of sufficient geographic coverage is largely fixed and can limit the number of firms which can survive in equilibrium. Countries with higher population densities tend to be able to support a larger number of mobile networks.

Recognising that smaller networks are at a competitive disadvantage, Italy sought to encourage further entry in its mobile sector by mandating roaming on existing networks for a period of years for all subsequent networks after the first. Many countries (such as the UK and Finland) have required that successful bidders for third-generation spectrum licenses will have the right to roam on existing second-generation networks for a period of time. A related issue is the question whether competition in the mobile network could be enhanced by mandating roaming in remote or rural areas for networks which are established in urban areas.

As, always, whenever new services are brought within the scope of access regulation, there is the question of how access to those services should be priced. Theory suggests that prices for roaming in remote or rural areas should be higher than the existing networks' retail prices for mobile calls in the same areas, to prevent rival mobile operators benefiting from the same implicit cross-subsidy as do users of the existing networks' services.

(4) *A mismatch in the structure of access prices relative to final prices has given rise to a number of competition concerns. Traditionally access prices have been based predominantly on "per-minute" charges. As retail prices have moved towards a "flat rate" or non-usage sensitive charges, competitors have complained that they cannot compete, especially in the market for Internet services. The solution is to ensure that any forms of price-discrimination that are present in retail prices are matched in access prices.*

Most countries adopt different approaches to the control of final prices and the control of access prices. In particular, it is common for the incumbent firm to have some flexibility to set final prices within the context of an overall price cap, while the regulator will typically specify interconnection or access prices individually. Even where both prices are controlled in the same manner there is often little or no attempt to ensure that access prices are regulated in a way which matches the structure of final prices. This may restrict the scope for competition, and may lead to competition complaints. Since the growth of competition will, in this scenario, threaten the structure of final prices, there may also arise calls for the restriction of competition.

This situation has arisen most clearly in the Internet market. At present most residential customers access the Internet through a dial-up connection over the local loops owned and operated by the local incumbent operator. Traditionally, the local incumbent operator has charged for this Internet access call origination on the basis of a per-minute price. Recently there has been a move towards offering unmetered or "flat rate" Internet service tariff options. However, when the ISP affiliated with the incumbent local operator has started offering flat-rate Internet retail options, rival ISPs have complained that they cannot compete with a flat-rate service while paying per minute access tariffs.

This problem does not just arise in the market for Internet access. In the long-distance market, competition concerns were raised in Australia and New Zealand when the incumbent introduced a cap on the price of a long-distance off-peak call. If rivals pay per-minute access charges and if long-distance callers with long call hold-times can be distinguished from long-distance callers with short call hold-times, then, in the presence of such a cap, the rivals could find it unprofitable to

compete for high-usage callers, restricting the size of the market to which they can compete. Sweden notes: "A fundamental problem from the competition viewpoint has been that interconnection charges have only been variable, whilst Telia's tariff structure vis-à-vis its final customers was made up of both a fixed rental charge and a variable call charge". This issue has also arisen in Germany, Finland, the Netherlands, Australia and the UK. The ACCC investigated the claim that Telstra's $3 cap on long-distance off-peak calling was anti-competitive and decided there was not enough evidence to bring a case.

Unfortunately the problem cannot be resolved by lowering the level of the per minute access charges or raising the level of the flat rate retail charge so that the rivals can profitably serve the average final customer. If the rivals can break even on the average customer then they will make a loss on high-usage customers. The scope of the market for which rivals can compete is therefore limited to only low-usage customers. The solution to this problem is to ensure that the structure of access prices reflect the structure of the retail prices – in this case by ensuring that there is a flat-rate internet access call origination service available at the wholesale level when the incumbent local company offers flat rate internet access service at the retail level.

An unresolved issue is the question of whether it is possible to structure access prices in a way which matches the structure of retail prices. Retail tariff packages may depend on the particular consumption patterns of a particular end user. In contrast, interconnection is usually purchased "in bulk", with payments for interconnection based on capacity or total minutes of interconnecting traffic, with no distinction as to the identity or consumption of the particular retail customers involved.

(5) *Competition authorities have often raised concerns when incumbent networks charge higher prices to calls to rival networks. Such differential pricing can be a tool to enhance the competitive advantage of the incumbent. On the other hand, where such differential pricing is impossible, entrant networks can benefit from above-cost interconnection prices by signing up consumers which receive more calls than they make ("call-sinks"). Conversely, when interconnection prices are below cost, entrant networks can profit from signing up large producers of calls.*

Another issue which competition authorities have had to address is the question whether networks should be allowed to charge higher prices for calls to other networks (or offer discounts for on-network calls). When such differential pricing is allowed, larger networks have an incentive to insist on high interconnection charges. This raises the price for off-network calls. Since smaller networks have proportionally more off-network calls, the customers of smaller networks suffer proportionally more than those of larger networks, reducing the attractiveness of smaller networks. Norway faced two cases of this kind, one of which involved discounts for calls from Telenor to Telenor Mobile and the other different prices for calling between the mobile operators.

High interconnection charges are not always to the detriment of smaller networks. When interconnection prices are above cost there is an incentive to both reduce outgoing cross-network traffic and increase in-coming cross-network traffic. This can be achieved by signing up call-sinks such as dial-up Internet service providers. In Sweden, when Telia noticed that it had a net outflow of calls to its rival operators, it tried first to introduce higher charges for off-network calls. When that was prohibited, Telia responded by seeking to lower its interconnection charges to its rivals.

(6) *In addition to abuse of dominance case, competition authorities have addressed a large number of concentrations in the telecommunications sector, as newly liberalised companies seek to restructure and to expand into related markets such as Internet service provision, cable television provision or even content services such as Internet or multimedia content.*

Given the high degree of concentration in most telecommunications markets, competition authorities have been concerned about many mergers which would have had primarily horizontal effects. Examples of mergers which raised concerns in the long-distance market include the attempted merger of AAPT and Optus in Australia and WorldCom/Sprint in the US. Enhanced concentration in the Internet backbone was the primary concern in the WorldCom/MCI merger in the US. Increased concentration in the mobile market was an important issue in the AT&T/TCI and SBC/Ameritech/Comcast mergers in the US and the SK Telecom/Shinsegi Telecom merger in Korea. This last merger was approved subject to the unusual condition that the merged entity reduce its market share from 57 percent to below 50 percent by June 2001. Finally, in the Primestar case in the US, the primary concern was competition between cable television companies and satellite television services – one of the primary competitors to cable television.

In another class of mergers the primary concerns seem to be related to the potential for blocking new entry as in the Telia/Telenor merger in the EU or the prohibition in Mexico of a merger between Telmex and local cable companies. In contrast mergers of two neighbouring local service providers have been on occasions allowed, as in the Bell Atlantic/NYNEX merger in the US.

Vertical mergers, which would allow a firm dominant in one market to exercise market power in a neighbouring market, have also sometimes been opposed. A proposed merger between Telstra (the incumbent operator in Australia) and OzEmail (the largest Internet service provider) was opposed by the ACCC. In contrast, the merger of AT&T (predominantly a long-distance company) and TCI (predominantly a cable company) in the US was permitted.

SYNTHÈSE

par le Secrétariat

Sur la base des communications écrites, de la note d'information générale et du débat oral, il est possible de dégager les points suivants :

(1) *Depuis le précédent examen du secteur des télécommunications effectué par le CLP en 1995, ce secteur a été transformé par une progression continue de la libéralisation et un développement appréciable de la concurrence. Dans la quasi-totalité des pays Membres de l'OCDE, toutefois, les marchés des télécommunications demeurent relativement concentrés. La concurrence est généralement la plus forte sur le marché des mobiles et la plus faible (bien qu'en progression) sur le marché des services locaux (notamment les services locaux à large bande). On constate une certaine évolution au sein de l'UE vers une rationalisation du cadre en vigueur et une harmonisation avec le droit communautaire de la concurrence.*

En 1995, plus des deux tiers des pays Membres de l'OCDE comptaient encore des monopoles officiels dans le secteur des télécommunications. Fin 2001, seule la Turquie conservait des restrictions officielles à l'entrée sur le marché des réseaux fixes. Les étapes clés de la libéralisation de ce secteur ont été notamment l'adoption de la Loi sur les télécommunications de 1996 aux Etats-Unis, l'accord de l'OMC sur les services de télécommunications de base de 1997, le dispositif législatif libéralisant en Australie l'entrée sur le marché des télécommunications à compter de juillet 1997, et l'ensemble des directives communautaires imposant l'ouverture à la pleine concurrence à compter du 1er janvier 1998.

A la suite de ces mesures, la concurrence s'est développée à divers degrés sur la quasi-totalité des marchés des télécommunications. En Allemagne, de nouveaux opérateurs se sont appropriés 40 pour cent du marché longue distance -- ce succès étant attribué, en autre chose, à la possibilité pour les nouveaux entrants d'utiliser les moyens de facturation de l'opérateur historique. Aux Etats-Unis, bien que des actions en justice aient retardé la mise en œuvre intégrale de certaines sections de la Loi de 1996, des sociétés régionales d'exploitation Bell ont été autorisées à se lancer sur le marché longue distance dans quelques Etats et la concurrence se développe maintenant sur le marché des services locaux de télécommunications (notamment celui des services à large bande), en particulier dans certains Etats, et notamment sur le marché des services destinés aux moyens et grands comptes. La concurrence s'est également développée rapidement sur les marchés des services mobiles, la clientèle dans de nombreux pays Membres de l'OCDE ayant maintenant le choix entre trois opérateurs de réseaux mobiles ou plus, et certains ayant même le choix entre cinq réseaux mobiles, voire davantage. Dans la plupart des pays Membres, le nombre d'abonnés mobiles dépasse le nombre des abonnés au réseau fixe.

Bien que la concurrence se soit développée rapidement, les marchés des télécommunications demeurent relativement concentrés si l'on se réfère aux critères traditionnels de la concurrence. Les opérateurs historiques conservent en général au moins 60 pour cent du marché longue distance, et la majeure partie du marché des boucles locales. La part des opérateurs historiques

sur les marchés des communications mobiles peut être plus faible, mais même lorsque c'est le cas, les niveaux de concentration sont très élevés comparés à ceux d'autres secteurs. Dans de nombreux pays, le choix n'est possible qu'entre deux réseaux mobiles seulement.

Les problèmes de réglementation récemment observés concernent notamment les modalités et conditions de l'accès à la boucle locale dégroupée (qu'il s'agisse de l'accès au cuivre nu ou du partage de la ligne), l'extension et le partage des coûts de la portabilité du numéro et l'allocation du spectre pour les nouveaux services de troisième génération et la BLR. La plupart des pays ont mis en place des systèmes de plafonnement pour la maîtrise des tarifs pour l'usager (mais non des tarifs d'accès) pratiqués par les opérateurs bénéficiant d'un pouvoir de marché. Certains pays (comme la Finlande, les Etats-Unis ou le Royaume-Uni) ont levé ou allégé les contrôles des tarifs de détail pour les services dans lesquels il existe une concurrence suffisante. La plupart des pays imposent une forme ou une autre de séparation comptable ainsi que la divulgation d'informations comptables spécifiques. Quelques pays (comme les Pays-Bas, l'Allemagne ou la Suisse) ont imposé à leur opérateur de télécommunications dominant la cession de ses activités de câblo-distribution.

La réforme réglementaire dans ce secteur se poursuit. L'Union européenne est engagée dans un processus de rationalisation de son dispositif actuel de 26 directives pour le ramener à cinq textes seulement, l'idée étant de renoncer en partie à la régulation préalable au profit d'une application *ex post* de la législation traditionnelle en matière de concurrence. Ainsi, la notion propre à ce secteur de "pouvoir de marché significatif" sera redéfinie d'une manière compatible avec la notion de position dominante du droit de la concurrence en vertu de l'article 82 du Traité de la CE, tel qu'il est interprété par la Cour de justice des Communautés européennes. L'Allemagne a également indiqué son intention de s'en remettre davantage au droit de la concurrence. La Nouvelle-Zélande qui se fonde actuellement exclusivement sur le droit de la concurrence s'oriente dans une voie un peu plus proche de celle de la majorité des pays Membres de l'OCDE en mettant en place une nouvelle institution chargée de régler les litiges en matière d'accès et de formuler des recommandations quant aux installations pour lesquelles l'accès devrait pouvoir être rendu obligatoire. Au Japon, un projet de loi devant la Diète établirait une commission de règlement des litiges en matière de télécommunications ainsi qu'un fonds de financement du service universel.

(2) Dans tous les pays Membres de l'OCDE, le droit général de la concurrence s'applique pleinement au secteur des télécommunications. De ce fait, la plupart des autorités de régulation nationales partagent leur juridiction avec les autorités de concurrence, ce qui rend nécessaires une coordination et souvent une coopération explicite. Les litiges en matière de concurrence dans le secteur des télécommunications sont très fréquents, notamment les différentes formes d'abus de position dominante, comme le refus de donner accès à des installations essentielles, les comportements prédateurs, la vente liée et le regroupement de prestations.

Aucun pays n'a signalé d'exemption ou d'exception particulière à l'application du droit de la concurrence dans le secteur des télécommunications. En Australie, des dispositions spéciales du droit de la concurrence renforcent l'application de cette législation dans ce secteur, mais ces dispositions n'ont pas été beaucoup utilisées et une étude en cours sur la question recommande leur suppression.

Dans la quasi-totalité des pays Membres de l'OCDE, aussi bien les organismes nationaux de régulation que les autorités de concurrence ont une certaine responsabilité dans le contrôle des comportements anticoncurrentiels dans l'industrie des télécommunications. Ce partage de juridiction rend nécessaire la coordination. La Corée, les Pays-Bas, la République tchèque, le

Mexique et la Norvège ont tous mentionné des accords explicites de coopération ou de coordination. Aux Pays-Bas, l'autorité nationale de régulation et la NMa ont édité conjointement des publications et mis sur pied des équipes conjointes de supervision du secteur.

Les allégations de comportements anticoncurrentiels dans le secteur des télécommunications sont fréquentes. Toutes les formes d'abus anticoncurrentiel de position dominante (refus d'accès à une installation essentielle, comportement prédateur, vente liée et groupage de prestations, etc.) peuvent s'observer dans le secteur des télécommunications. La majorité des cas d'abus de position dominante concerne l'accès à des installations essentielles, à savoir *a*) s'il faut ou non donner accès à un service particulier à un concurrent ; *b*) les conditions (délais et qualité) dans lesquelles le service doit être offert ; *c*) le tarif auquel le service est offert, notamment comparé aux tarifs, aux délais ou à la qualité dont bénéficie l'opérateur dominant lui-même ou ses sociétés affiliées.

En règle générale, la notion d'installations "essentielles" est définie par la réglementation, ce qui fait qu'un grand nombre de litiges possibles en matière d'accès ne relèvent pas du droit de la concurrence. Néanmoins, des problèmes continuent de se poser qui sont liés à l'étendue de cette notion. Ainsi des plaintes ont été déposées concernant les conditions de colocalisation ou l'accès à certaines installations comme les pylônes ou les mats pour l'implantation des relais. De plus, comme on ne verra plus loin, certains pays se sont demandés si l'itinérance nationale pour les réseaux mobiles devrait être rendue obligatoire.

Même lorsque les opérateurs historiques sont tenus de fournir certains services, il arrive que ceux-ci ne répondent qu'avec lenteur, en offrant un service de médiocre qualité. Les plaintes sont fréquentes concernant les délais dans lesquels l'opérateur historique donne accès à certaines installations, comme la mise en place de lignes louées pour la desserte d'un client important, ou le dégroupage de la boucle locale pour la fourniture de l'ADSL. Dans certains cas, le service est bien assuré, mais avec une capacité inférieure à celle demandée. Dans d'autres cas, le service est fourni mais la qualité du service de bout en bout est dégradée d'une façon ou d'une autre. Les Pays-Bas notent "qu'il subsiste une pénurie pour les liaisons d'interconnexion et les lignes louées" et "les plaintes continuent de se multiplier concernant la disponibilité et la fiabilité des lignes louées, en particulier". Le Mexique et un certain nombre d'autres pays insistent sur le principe du "premier arrivé, premier servi", comme moyen de limiter la possibilité pour l'opérateur historique de se servir en premier, avant un concurrent.

Les opérateurs historiques sont parfois accusés de pratiquer des tarifs de prédation, notamment lorsqu'ils proposent des réductions sur des offres regroupant des produits exposés et non exposés à la concurrence, ou lorsqu'ils fixent des tarifs de détail à des niveaux bas par rapport aux prix de l'accès ou de l'interconnexion. Au Mexique, une décision récente fixe un plancher au tarif moyen du service longue distance, les opérateurs étant contraints de récupérer l'intégralité des coûts moyens (y compris le coût du capital). Telmex (qui est l'opérateur historique au Mexique) s'est vu explicitement interdire de moduler ses tarifs selon les zones géographiques, de manière à l'empêcher de ne les abaisser que dans les zones où il est confronté à une concurrence au plan local.

(3) Bien qu'il existe un large accord sur le fait que les opérateurs historiques de réseaux fixes devraient être tenus d'assurer des services d'extrémité d'origine et de terminaison pour les réseaux concurrents, on s'est récemment interrogé sur l'opportunité de réguler aussi les tarifs des services de terminaison sur les réseaux mobiles. Une question connexe est de savoir si la concurrence dans le secteur des services mobiles peut être améliorée en imposant un accès aux

réseaux existants, sous la forme d'opérateurs de réseau virtuel mobile ou d'itinérance obligatoire.

Dans le secteur des télécommunications, tant que l'abonné n'est relié qu'à un seul réseau, tout appel qui lui est adressé doit transiter par ce réseau. Le réseau dispose donc d'une forme de monopole sur les appels à destination de l'abonné. Une question importante est de savoir dans quelles circonstances l'opérateur de ce réseau peut être tenté d'exercer ce pouvoir de monopole et a la possibilité de le faire en faisant payer des redevances de terminaison supérieures aux coûts ? Il est largement admis qu'il est indispensable de réglementer les tarifs de terminaison sur les réseaux fixes pour empêcher les opérateurs dominants de réseaux fixes de pratiquer des redevances d'interconnexion élevées, susceptibles d'entraver le développement de la concurrence. Au cours des années récentes, plusieurs autorités de régulation se sont penchées sur la question de savoir s'il fallait également réguler les prix des services de terminaison sur les réseaux mobiles.

En vertu du principe de la tarification de l'appelant (qui correspond en gros à la pratique habituelle pour les services mobiles dans les pays de l'OCDE en dehors de l'Amérique du Nord), les utilisateurs qui effectuent un appel par mobile payent indirectement les redevances de terminaison sur les réseaux fixes, mais ils n'acquittent pas les redevances de terminaison du réseau fixe vers le réseau mobile. Si l'on suppose que les abonnés mobiles se préoccupent essentiellement du prix des appels qu'ils effectuent, et non du prix des appels qui leur sont adressés, ces abonnés mobiles se préoccuperont peu du prix des appels des réseaux fixes vers les réseaux mobiles au moment de choisir un réseau mobile auquel s'abonner. De ce fait, il y a peu de pression concurrentielle sur les redevances de terminaison des réseaux fixes vers les réseaux mobiles.

Plusieurs autorités de régulation se sont saisies de ce problème en introduisant de nouvelles formes de régulation des redevances de terminaison des réseaux fixes vers les réseaux mobiles (par exemple au Royaume-Uni, en France et en Australie). L'Australie a proposé une approche dans laquelle les redevances de terminaison des réseaux fixes vers les réseaux mobiles sont rattachées à un panier de tarifs des réseaux mobiles vers les réseaux fixes. En Italie, deux opérateurs de réseaux mobiles s'étaient mis d'accord pour simultanément relever leurs redevances de terminaison, au moment où un nouvel opérateur arrivait sur le marché. L'autorité italienne chargée de la concurrence a estimé qu'il s'agissait d'une pratique concertée restrictive, et elle a imposé de fortes amendes (bien qu'une partie de la décision ait été annulée par le tribunal administratif suprême italien).

Les consommateurs semblent particulièrement attentifs à la couverture géographique du réseau mobile qu'ils ont choisi. Les réseaux mobiles doivent desservir une proportion importante de la population d'un pays pour offrir un service compétitif. Le coût de la mise en place d'un réseau offrant une couverture géographique suffisante est dans une large mesure fixe, et cela peut limiter le nombre d'entreprises en mesure de survivre en situation d'équilibre. Dans les pays à forte densité démographique, le nombre de réseaux mobiles en mesure d'assurer leur pérennité est en général plus élevé.

Consciente du fait que les petits réseaux sont désavantagés vis-à-vis de la concurrence, l'Italie s'est efforcée d'encourager l'arrivée de nouveaux opérateurs dans le secteur des services mobiles en imposant l'itinérance sur les réseaux existants pendant un certain nombre d'années pour l'ensemble des réseaux établis après le premier réseau. De nombreux pays (comme le Royaume-Uni et la Finlande) ont exigé que les titulaires de licences de troisième génération bénéficient d'un droit d'itinérance sur les réseaux existants de deuxième génération pendant un certain

temps. Une question connexe est de savoir s'il serait possible d'améliorer la concurrence sur les réseaux mobiles en imposant l'itinérance dans les zones rurales et éloignées pour les réseaux qui sont établis dans les zones urbaines.

Comme toujours chaque fois que de nouveaux services entrent dans le champ de la réglementation régissant l'accès, la question se pose de savoir comment tarifer l'accès à ces services. La théorie indique que les prix de l'itinérance dans les zones distantes ou éloignées devraient être plus élevés que les tarifs pratiqués par les opérateurs en place dans ces mêmes zones pour les appels mobiles effectués par leurs abonnés, de manière à empêcher les opérateurs mobiles concurrents de bénéficier de la même péréquation tarifaire implicite que les utilisateurs des services des réseaux en place.

(4) *L'existence d'un décalage entre la structure des tarifs d'accès et celle des tarifs pour l'abonné a suscité un certain nombre de préoccupations sur le plan de la concurrence. Les tarifs d'accès sont traditionnellement basés dans une large mesure sur une tarification à la minute. Or du fait que les tarifs pour l'abonné ont eu tendance à évoluer vers les formules forfaitaires ou non basées sur la consommation, des concurrents se sont plaints qu'ils ne pouvaient rivaliser, notamment sur le marché des services Internet. La solution consiste à veiller à ce que toute forme de discrimination par les tarifs observée au niveau des tarifs pour l'abonné soit corrigée au niveau des tarifs d'accès.*

La plupart des pays adoptent des approches différentes pour la maîtrise des tarifs pour l'usager et de ceux pour les opérateurs concurrents. Il est notamment fréquent que l'opérateur historique bénéficie d'une certaine flexibilité pour la détermination des tarifs pour l'usager dans le cadre d'une planification globale de ses tarifs, tandis que l'autorité de régulation fixe en général au cas par cas les tarifs d'interconnexion ou d'accès. Même lorsque les deux types de tarifs sont contrôlés de la même manière, il est très rare que l'on vérifie que les tarifs d'accès sont régulés d'une manière adaptée à la structure des tarifs pour l'abonné. Cela peut restreindre les possibilités de concurrence et conduire à des plaintes dans ce domaine. Comme le développement de la concurrence aura pour effet, dans un tel scénario, de mettre en péril la structure des tarifs pour l'abonné, cela peut aussi susciter des demandes de restriction de la concurrence.

C'est sur le marché des services Internet que cette situation est apparue le plus clairement. Actuellement, la plupart des abonnés résidentiels ont accès à l'Internet via une liaison commutée sur des boucles locales détenues et exploitées par l'opérateur historique local. Traditionnellement, celui-ci facturait à la minute ce service d'origine de l'appel d'accès Internet. Or on a pu constater récemment l'apparition d'offres tarifaires pour le service Internet "non basées sur la durée" ou forfaitaires. Toutefois, lorsque le FAI affilié à l'opérateur local historique a commencé à proposer des options tarifaires Internet forfaitaires, les FAI concurrents se sont plaints de ne pouvoir rivaliser avec un service forfaitaire du fait que les services d'accès leur étaient facturés à la minute.

Le problème ne concerne pas uniquement le marché de l'accès Internet. Sur le marché longue distance, des problèmes de concurrence sont apparus en Australie et en Nouvelle-Zélande lorsque l'opérateur historique a plafonné le tarif des appels longue distance en période creuse. Si les concurrents acquittent des redevances d'accès facturées à la minute et les utilisateurs qui effectuent des appels longue distance de longue durée peuvent être distingués de ceux qui effectuent des appels longue distance de courte durée, alors, avec un tel plafonnement, il peut devenir non rentable pour les opérateurs concurrents de rivaliser sur le marché des gros consommateurs, ce qui restreint la taille du marché qui leur est ouvert. La Suède note : « Un problème fondamental du point de vue de la concurrence a été que les redevances

d'interconnexion ont été exclusivement variables, alors que la structure tarifaire de Telia vis-à-vis de sa clientèle finale était constituée à la fois d'une redevance de location fixe et d'une redevance variable en fonction des appels ». Ce problème s'est également posé en Allemagne, en Finlande, aux Pays-Bas, en Australie et au Royaume-Uni. L'ACCC a étudié une plainte selon laquelle le plafonnement à 3$ par Telstra de ses appels longue distance en période creuse était anticoncurrentiel et a estimé qu'il n'y avait pas suffisamment d'éléments de preuve pour poursuivre l'affaire.

Malheureusement, le problème ne peut pas être résolu en abaissant les tarifs d'accès par minute ou en relevant le niveau de la redevance forfaitaire facturée à l'abonné afin que les concurrents puissent rentablement desservir l'utilisateur final moyen. Si les concurrents peuvent trouver la rentabilité avec l'abonné moyen, ils seront déficitaires avec les gros consommateurs. Le marché sur lequel les concurrents peuvent rivaliser est donc limité uniquement à celui des petits consommateurs. La solution à ce problème est de faire en sorte que la structure des tarifs d'accès reflète la structure des tarifs pour l'usager — en l'occurrence en veillant que les opérateurs puissent bénéficier d'un tarif forfaitaire sur le service de terminaison initiale de l'appel pour l'accès Internet lorsque l'opérateur local historique propose à l'usager un accès forfaitaire à Internet.

Une question non résolue est de savoir s'il est possible de structurer les tarifs d'accès d'une manière adaptée aux tarifs pour l'usager. Les formules tarifaires proposées à l'usager peuvent varier selon les modes de consommation. En revanche, l'interconnexion fait généralement l'objet de transactions "en volume", dont le montant est généralement basé sur une capacité ou un nombre total de minutes d'interconnexion de trafic, sans distinction quant à l'identité ou à la consommation des différents usagers en cause. Parallèlement, d'autres problèmes peuvent surgir, comme le fait que l'utilisation d'un tarif d'accès binôme est susceptible d'introduire des économies d'échelle dans une activité ouverte à la concurrence, ce qui limite le nombre d'entreprises en mesure de rivaliser. En Finlande, suite à la libéralisation de la boucle locale, les opérateurs historiques ont introduit d'importantes réductions sur les volumes (ce qui est une forme de tarification binôme) que seuls leurs propres affiliés pouvaient obtenir, ce qui en pratique aboutissait à exclure les concurrents.

(5) *Les autorités de concurrence ont souvent marqué leur inquiétude lorsque des opérateurs de réseaux historiques facturent plus cher les appels à destination des réseaux concurrents. Cette tarification modulée peut être un moyen de renforcer l'avantage concurrentiel de l'opérateur historique. En revanche, lorsque cette modulation est impossible, les nouveaux opérateurs de réseaux peuvent tirer parti de tarifs d'interconnexion supérieurs aux coûts en recrutant des abonnés qui reçoivent davantage d'appels qu'ils n'en effectuent ("captation d'appels"). Inversement, lorsque les tarifs d'interconnexion sont inférieurs aux coûts, les nouveaux opérateurs de réseaux peuvent en tirer parti en recrutant une clientèle qui effectue beaucoup d'appels.*

Une autre question sur laquelle les autorités de concurrence ont dû se pencher est de savoir si les opérateurs devraient être autorisés à pratiquer des tarifs plus élevés pour les appels à destination des autres réseaux (ou à offrir des réductions sur les appels sur leurs réseaux). Lorsqu'une telle tarification différentielle est autorisée, les réseaux les plus importants sont incités à pratiquer des tarifs d'interconnexion élevés. Cela augmente le prix des appels vers les autres réseaux. Comme sur les réseaux de moindre importance les appels vers des réseaux extérieurs sont proportionnellement plus nombreux, la clientèle des petits réseaux est proportionnellement davantage pénalisée que celle des réseaux importants, ce qui réduit l'attrait des petits réseaux. Deux litiges de ce type ont été relevés en Norvège, qui concernaient l'un des réductions tarifaires

sur les appels du réseau Telenor vers le réseau Telenor Mobile et l'autre l'application de tarifs différents pour les appels entre opérateurs mobiles.

La pratique de redevances d'interconnexion élevées n'est pas toujours au détriment des petits réseaux. Lorsque les tarifs d'interconnexion sont supérieurs aux coûts, cela crée une incitation à la fois à réduire le trafic interréseaux sortant et à augmenter le trafic interréseaux entrant. Un moyen d'y parvenir est de rechercher des clients qui reçoivent davantage d'appels qu'ils n'en effectuent, par exemple des fournisseurs de services d'accès commuté à Internet. En Suède, lorsque Telia a constaté un déficit net d'appels avec des opérateurs concurrents, il a d'abord essayé de relever ses tarifs pour les appels vers les autres réseaux. Lorsque cela a été interdit, Telia a réagi en abaissant ses redevances d'interconnexion avec ses concurrents.

(6) *Outre des abus de position dominante, les autorités de concurrence se sont saisies d'un grand nombre de cas de concentration dans le secteur des télécommunications, des entreprises nouvellement libéralisées s'efforçant de se restructurer et de se développer sur des marchés voisins comme la fourniture de services Internet, la fourniture de services de télévision par câble ou même de services de contenus, comme des contenus Internet ou multimédia.*

Etant donné le niveau élevé de concentration sur la plupart des marchés des télécommunications, les autorités de concurrence se sont préoccupées de nombreuses fusions qui auraient eu des effets essentiellement horizontaux. Sur le marché longue distance, on peut notamment citer à cet égard la tentative de fusion entre AAPT et Optus en Australie, et celle de WorldCom/Sprint aux Etats-Unis. Le principal sujet de préoccupation de la fusion WorldCom/MCI aux Etats-Unis était un renforcement de la concentration sur le marché des services d'interconnexion Internet. De même, la forte concentration sur le marché des services mobiles était particulièrement préoccupante dans les fusions AT&T/TCI et SBC/Ameritech/Comcast aux Etats-Unis et la fusion SK Telecom/Shinsegi Telecom en Corée. Cette dernière fusion a été autorisée à la condition inhabituelle que la société issue de la fusion ramène sa part de marché de 57 pour cent à moins de 50 pour cent d'ici juin 2001. Enfin, dans l'affaire Primestar aux Etats-Unis, le principal sujet de préoccupation était la concurrence entre les opérateurs de câblodistribution et les services de télévision par satellite — lesquels sont parmi les principaux concurrents de la télévision par câble.

Pour une autre catégorie de fusions, la principale préoccupation semble être liée aux possibilités de blocage de l'accès de nouveaux concurrents, comme dans la fusion Telia/Telenor dans l'Union européenne ou l'interdiction au Mexique d'une fusion entre Telmex et des compagnies locales de câble. En revanche, des fusions entre deux fournisseurs voisins de services locaux ont parfois été autorisées, comme dans la fusion Bell Atlantic/Nynex aux Etats-Unis.

Les fusions verticales, qui permettraient à une entreprise en position dominante sur un marché d'exercer son pouvoir de marché sur un marché voisin se sont parfois heurtées à un refus. Un projet de fusion entre Telstra (opérateur historique en Australie) et OzEmail (le plus gros fournisseur de service Internet) a été refusé par l'ACCC. En revanche, la fusion entre AT&T (essentiellement un opérateur longue distance) et TCI (essentiellement un câblo-opérateur) aux Etats-Unis a été autorisée.

BACKGROUND NOTE

by the Secretariat

1. Introduction

The telecommunications industry has been completely transformed by the introduction of competition. An industry which was once organised as a protected public utility is now one of the more dynamic and innovative sectors of OECD economies.

But the process of introducing competition has not always been smooth. This process has often been associated with vociferous allegations of anticompetitive behaviour. Many of these allegations can be traced back to an underlying issue related to interconnection or access – that is, issues related to which facilities should be made available, by which firms, on what terms and conditions. A deeper understanding of access and interconnection issues in telecommunications helps to shed light on the more important competition issues that have arisen in the telecommunications industry in the last few years.

This paper focuses on several competition issues that have arisen in the telecommunications industry in the last few years. As we will see, most of these issues have in common questions related to access – what access should be provided, by whom and to whom and, fundamentally, on what terms and conditions. Specifically, this paper focuses on the following issues:

(a) fixed-to-mobile call termination; Many countries have effective competition between mobile operators, but does this competition place adequate downward pressure on fixed-to-mobile call termination charges?

(b) mandatory national roaming; Would mandating access to the networks of existing mobile operators facilitate the development of competition in the mobile market? Should the price for access be above the retail price existing networks charge for the same service?

(c) local loop unbundling; Is it possible to set prices for unbundled local loop which both ensure efficient recovery of fixed costs and a level playing field for competition?

(d) access for internet service providers*;* The introduction of flat-rate internet access service has lead to complaints from rival internet service providers and has highlighted the competition problems that arise when rivals pay for access on a per minute basis while the incumbent charges a flat rate to its retail customers. How should access be priced to avoid these problems?

(e) price discrimination and predatory pricing; Should incumbent local operators be allowed to discount in the face of competition from new local entrants? Does such discounting deter entry?

Each of these issues is considered in turn in the remainder of this paper. This paper will not discuss other important competition issues in telecommunications, such as issues in merger control or issues that arise from the increasing convergence of the telecommunications and broadcasting industries. As was discussed in a previous Working Party 2 roundtable, although there are alternatively paths for delivering high bandwidth one-way to the home, there are relatively few alternatives to fixed-wire networks for high-speed two-way communications. In the future, therefore, as broadcasting increasingly turns towards broadband interactive services, it is likely that the players which are dominant in broadband fixed-wire networks will also enjoy a dominant position in the provision of interactive broadcasting services.

The key ideas of this paper can be summarised at the outset:

- The telecommunications industry provides point-to-point communications services. These services can be divided into "transmission" or "backbone" services and "distribution" or local loop services. The degree of competition which can be sustained in transmission markets differs according geographic and demand factors. In most countries the transmission market will sustain effective competition. In the distribution market, the scope for competition depends on the technology used to connect to the end-user and geographic and demand factors. The scope for competition in fixed-wire broadband networks is greatest in the CBDs of large cities, is rather limited in suburban areas and may not exist at all in remote or rural areas. The scope for competition in mobile services also depends on geographic and demand factors. Mobile markets, although competitive, tend to be concentrated by traditional standards. Countries with low population density and low mobile penetration tend to have less competition in the mobile sector.

- As long as subscribers are only connected to one network, that network has a monopoly over calls which terminate with that subscriber. In some circumstances, even if there is competition between networks for subscribers, there may not be competitive pressure on termination charges. This has particularly been an issue with termination on mobile networks. Fixed-to-mobile termination charges have remained high despite increasing competition among mobile networks. Although some pressures to reduce mobile termination charges exist, the predominant view is that these are weak and that additional regulatory intervention is necessary to ensure fixed-to-mobile charges are held at an efficient level.

- Potential subscribers to mobile networks prefer networks with larger geographic scope. Especially in countries with low population density or low mobile penetration, only a limited number of networks with national coverage may be able to be sustained. In most OECD countries concentration in the mobile market is high by conventional concentration measures. The number of networks that could be sustained could be increased if new networks could reach roaming agreements with existing networks. Government policy can enhance the likelihood that entrants will succeed in reaching roaming agreements with existing operators. Economic theory shows that roaming should be priced *above* the retail price for mobile service in the roamed areas.

- Many countries have chosen to require "unbundling" of the local loop (i.e., mandated access to the local loop of the incumbent operator) as a tool to enhance competition in the provision of local loop and DSL services. Countries differ, however, in how unbundled local loop should be priced. Some countries insist on that local loops should be priced based on costs while others insist that local loops should be priced on the basis of the retail price of the incumbent minus a discount. These two approaches can be seen as two alternative ways of resolving the conflict that arises when there are more objectives than can be obtained with a

single instrument – access prices. Cost-based access prices in principle give the right incentives for constructing duplicate networks, but provide no guarantee that local loop competition will develop throughout the network. Retail-minus access prices allow competition to develop throughout the network but will encourage inefficient network duplication in low-cost areas. The conflict between these objectives could be eliminated through the use of other tools, such as a universal-service mechanism which "taxed" local loop providers in low-cost areas and "subsidised" local loop providers in high-cost areas.

- Even where there is no geographic variation in local loop prices and costs, competitive entry could still be limited if access prices for local loop do not reflect the structure of the incumbent's retail prices. If, for example, the incumbent's prices for local loop *usage* are above marginal cost and the access price is structured as a simple fixed fee, then the new entrants have an incentive to target only the highest-usage customers. In addition to limiting the scope for new entry, this may undermine the incumbent's retail pricing structure, which may in turn undermine efficiency. This problem can be resolved by ensuring that any price discrimination which is present in the incumbent's retail prices is reflected in the access prices – and in this case, the prices for unbundled local loop.

- Parallel concerns have arisen in the market for Internet service. Concerns have arisen when the ISP owned by the incumbent network operator started offering Internet access on the basis of a simple flat fee for unlimited usage. At the same time, rival ISPs paid the incumbent network operator fees for access to the local loop which were based on per minute usage charges. With this structure of charges it can be shown that the rival ISPs are essentially limited to competing only for low-volume customers. This problem can be solved if rival ISPs are offered a menu of wholesale pricing plans which correspond to the retail plans offered by the incumbent operator's ISP.

- Finally, careful attention must be paid when competition law principles which are standard in other, competitive, industries are applied to industries with more limited scope for competition, such as the telecommunications industry. In particular, in some countries whether or not prices are predatory is assessed on the basis of a test which allows an incumbent to price down to (but not below) its incremental cost. In the context of an industry with substantial joint and common costs, this test may act as a deterrent for entry. If the regulatory regime has chosen to rely on facilities based competition instead of regulation as a tool for disciplining market power, it may be appropriate to adjust the test for predatory pricing. In particular, the incumbent should be prevented from pricing below a measure such as stand-alone cost or from discounting over an area smaller than the minimum feasible size of a rival network.

By way of introduction, the next section of the paper reviews the basic structure of the telecommunications industry, the need for access and interconnection regulation and certain general principles for pricing access and interconnection.

2. An introduction to the telecommunications sector

2.1 Transmission and Distribution Networks in Telecommunications

The telecommunications industry primarily provides point-to-point analogue and digital communications links.[1] Point-to-point communications links can be distinguished[2] from one another by the following characteristics:

(a) the identity of the customers at the start and end points of the communications link (a communications link between two customers A and B is usually not substitutable for a link between A and C);

(b) the effective bandwidth of the communications link in each direction (i.e., the amount of information that can be carried over the link in each direction, taking into account any information lost in the process) and whether that bandwidth is maintained or guaranteed over time, or is subject to traffic on the network;

(c) the mobility of the start and end points (i.e., whether the start or end point can physically move around either before or during a communications link and the limits of that mobility); and

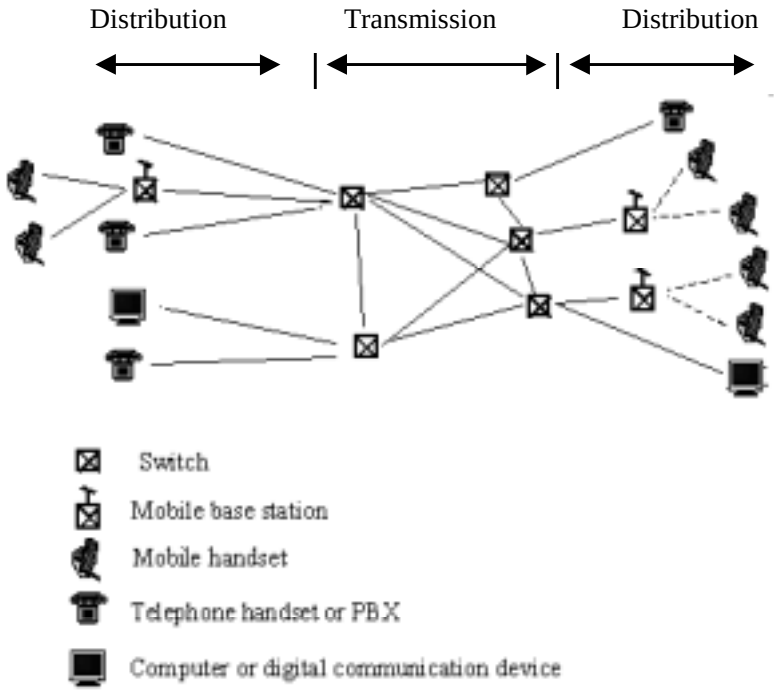
(d) the quality of the service (e.g., the delay between the sending and receiving of a piece of information – certain forms of communication, such as two-way voice conversation or video-conferencing can only tolerate relatively little delay in the transmission of the information, while certain types of data traffic can tolerate higher delays).

As in all other network industries, there are certain economies of scale in the provision of telecommunications links which gives rise to the incentive to aggregate flows of traffic and gives the industry its "network" character. It also gives rise to certain economies of scope and density – once a link is established to one locality, it is typically less expensive to establish telecommunications links to neighbouring localities.

As in the electricity, natural gas (and, to a lesser extent) the airline industry, it is possible to make a distinction between what we might call "transmission" services and "distribution" services. The scope for competition differs between these two types of services.

"Transmission" services in telecommunications correspond to the high-capacity (high-bandwidth) "trunk" services that link large switches and other large producers and consumers of telecommunications traffic. "Distribution" services in telecommunications are the lower bandwidth, higher geographic density links between switches and the smaller consumers, whether wireless or wired. These distribution links are also known as the "last mile" or the "local loop". The wireless connection between a mobile handset and the closest base station can also be said to form part of the "distribution" services.[3]

The distinction between transmission and distribution services can be illustrated in the following stylized diagram:



For competition purposes, it is important to determine the extent of economies of scale and scope and the degree of competition which can be sustained in each segment of the industry.

"Transmission" services can be provided over either wired (fibre-optic cables) or wireless (radio or infrared) communications links. Fibre-optic cable has a very large capacity but also has substantial installation costs and therefore sizeable economies of scale. Wireless links have lower setup costs (access is still required to sites for transmitting and receiving antennas) but higher costs of adding extra bandwidth. Wireless transmission therefore involves lower economies of scale.

Overall, putting aside interconnection issues, the provision of wide-coverage facilities-based switched "transmission" services is probably a naturally oligopolistic industry. The sunk costs of installing fibre-optic cables are significant and there are few capacity constraints at existing levels of demand. In most OECD countries there are likely to be only a few substantial facilities-based providers of these services, competing at the margin with non-switched and point-to-point providers of switched telecommunications services.

"Distribution" telecommunications services can also be provided through wired and wireless technologies. The most common wired distribution services are the traditional copper wire "twisted pair", fibre-optic cables, co-axial cables and some combination of all three. Wireless services include so-called "fixed wireless" services (which provide local loop services to a fixed location using a radio connection) and mobile (cellular) services.

The scope for competition in "distribution" services differs according to the technology used, the level of demand and the density of the population. The degree of competition that can be expected will differ from country to country and one geographic area to another within the same country. Economic models for the US suggest that with current technology and demand projections, the scope for facilities-based competition among fixed-wire broadband networks in metropolitan[4] areas is relatively limited. Although it is economically feasible to install one metropolitan broadband network in most towns and cities, only the most densely populated parts of cities could expect to have two competing broadband

networks. Rural areas would probably not be served by broadband fixed-wire networks at all at current prices.[5]

In the case of cellular services, although the fixed costs are not as significant as in a fully wired network, nevertheless there are substantial fixed costs associated with the establishment of a network of cellular base stations with adequate geographic coverage. The scope for competition again varies with demand and population density. While density and demand is probably sufficiently high in large cities to sustain many competing networks of base stations, the scope for competition is significantly lower in low demand / low density areas. In practice, the extent of competition in mobile services in some countries is limited by constraints on the amount of available spectrum. In other OECD countries spectrum suitable for cellular service is unused, suggesting that other constraints limit the number of market players. As discussed later in this paper, we find that market concentration is higher in countries with lower population density and cellular penetration.

To summarise, the scope for competition is greatest in telecommunications "transmission" services, although even here the industry is likely to be naturally oligopolistic. There are substantial economies of scale and scope in the provision of telecommunications distribution services which strictly limit the possible number of market entrants. The scope for competition in these services varies from region to region, according to the magnitude of demand and the density of the telecommunications consumers in those regions. Competition is likely to be higher in mobile services although this will also depend on geography and density of demand).

2.2 The Effects of Consumer "Lock in"

As we have just noted, the provision of distribution services typically involves substantial fixed costs and relatively low marginal costs – that is, some degree of increasing returns to scale. Conventionally, these economies of scale are passed on to consumers in the form of a two-part tariff for distribution comprising a fixed charge for subscription to a telecommunications service and a variable or usage charge.[6]

These two-part charges tend to have the effect of locking-in consumers to only one distribution link of each type at a time[7]. This tendency for subscribers to be locked in to just one company for a period of time[8] has several important effects:

(a) First, consumer lock-in has the effect of making consumers interested in the *range of services* offered by that company – in particular, the consumer will prefer companies which can offer a larger number of other subscribers to which calls can be made or received and (especially in the case of mobile services) a larger range of geographic locations from which calls can be made or received.[9]

The fact that consumers value not just the price and quality of individual services, but also the price and quality of the range of services offered by the firm is sometimes referred to as "demand side economies of scope".

(b) Second, the company to which a particular consumer is connected has a monopoly over calls to that consumer. If consumers care about the calls they make but not the calls they receive the company may be able to exploit that monopoly by charging a high price for calls terminating with that consumer. This issue is discussed further below.

An access regulation or essential facilities problem arises when we have two complementary activities or services, one of which is competitive and the other of which is non-competitive. The two effects above interact to give rise to the "essential facilities" problem in telecommunications. The fact that consumers care about the range of services they are offered makes "calls to customers on another network" complementary to "calls to customers on the same network". The fact that the other network has a monopoly on calls terminating on that network means that the activity of terminating calls is non-competitive.

If either of these effects were not present the need for interconnection regulation in telecommunications would disappear. If many firms could terminate calls to a given customer (i.e., if (*b*) above did not apply), firms would compete for the opportunity to do so and interconnection regulation would not be necessary, even if customers cared about the range of customers they can contact. On the other hand, even if only one network could terminate calls to a given customer, if consumers could choose the network to use on a call-by-call basis (i.e., if (*a*) above did not apply), they would choose the network which was connected to the subscriber they wished to call – there would be no need for interconnection.

These effects above also lie behind the access and interconnection issues that are explored in more detail in the following sections of this paper. For example, the fact that mobile networks have a monopoly over calls to their subscribers gives rise to the problem of high termination charges for fixed-to-mobile calls discussed below. The fact that consumers care about the range of services offered by the company to which they are connected, gives rise to the demand for national roaming also discussed below.

2.3 Access Pricing Principles

At this point it is useful to recall a number of guiding principles to bear in mind when establishing access prices. These principles will be used later in the paper.

(a) First, access prices may not be able to simultaneously achieve all the possible objectives that policy-makers might have. In certain circumstances it will only be possible to achieve all public policy objectives if other instruments can be brought into play. For example, where final prices are distorted in order to pursue non-commercial service objectives, it may not be possible to simultaneously ensure that access prices are set efficiently and that there will not be incentives for inefficient entry or bypass.

(b) Second, where there is an objective of efficient use of the final products (and incentives for efficient entry and competition in the downstream market) access prices should be set in such a way as to maintain the correct relationships between the final prices of the incumbent and the final prices of the downstream rival. If some final prices are distorted to be above cost or below cost, access prices for goods used to produce substitute final products should also be distorted in the same way. Only in the case where the final services of the rival do not compete at all with the final services of the incumbent is it possible to separate the problem of setting access prices from setting final prices.

Specifically, the correct relationship between final prices is maintained when the access price includes, for each final product of the incumbent, a component reflecting the price-marginal cost margin for that final product multiplied by a factor reflecting the extent to which the sale of a unit of access (and therefore another unit of the rival's final product) leads to substitution away from the incumbent's final product. This formulation can be viewed as a generalisation of the Efficient Component Pricing Rule.

(c) Third, where there is an objective of efficient use of the final products and simultaneously it is necessary to recover the fixed costs of the incumbent through access and final prices, access and final prices should be raised above marginal cost by a factor given by the traditional Ramsey formula[10]. At the same time, price discrimination of all kinds (i.e., charging different prices to different customers, two-part tariffs, peak-load pricing and so on) will typically improve the efficiency of the outcome.

(d) Fourth, where there is an objective of efficiency in production of the non-competitive service and if entry into the non-competitive service is feasible, then for any set of non-competitive services access prices should be neither above stand-alone cost nor below incremental cost for that set of services.

(e) Fifth, where there is an objective of efficient use of the final products, when access is used to produce a product which is a substitute for the incumbent firm's own products, and assuming that retail prices are set efficiently, then any price-discrimination that is present in the retail prices of an incumbent firm should be carefully reflected in the access prices charged by that firm. Where access prices are less differentiated than the incumbent's retail prices there arises a conflict between competition and efficiency. In some cases, this may result in competition being prohibited on the grounds that it undermines efficiency. If competition is allowed:

- different classes of customers are more profitable than others – this has two effects, first the scope for entry is limited (entrants focus only on the profitable customer markets, leaving other markets unserved by new entrants) and second, entrants initiate complaints about predatory pricing, claiming that they are subject to a price squeeze in certain markets;

- entry in the profitable markets has a tendency to push down returns in those markets, which may force prices to be raised in other markets. In other words, there is a tendency for the structure of the access charges to determine the structure of the incumbent's retail tariffs, which may undermine the ability of the incumbent to use efficient, discriminating tariffs.

These principles may sometimes be in conflict with each other. For example, if retail prices for local loop services are below cost, principle (*b*) would imply that the price for access to the local loop should also be below cost, while (*d*) would imply that the price for access to local loop should be "at cost". More generally, these principles can be in conflict even where the incumbent's retail prices are set "efficiently". For example, where there is a sizeable fixed cost, efficient (Ramsey-based) retail prices may be above stand-alone costs. Without additional instruments of control, such prices would induce inefficient entry.

These conflicts can be resolved (as the first principle emphasises) by introducing further instruments such as a ban on new entry or some form of universal service funding mechanism. The funding mechanism would allow access prices to remain at cost, but would use taxes or subsidies on final products to ensure a level playing field for competition in the final market.

3. Competition Issues in the Telecommunications Sector

3.1 Fixed-To-Mobile Charges

In recent years several countries have become concerned about persistently high charges for calls from fixed networks to mobile networks. As an example, in July 1998 the European Commission decided to open an investigation into pricing between fixed and mobile networks. Amongst other things, the Commission said it would focus on:[11]

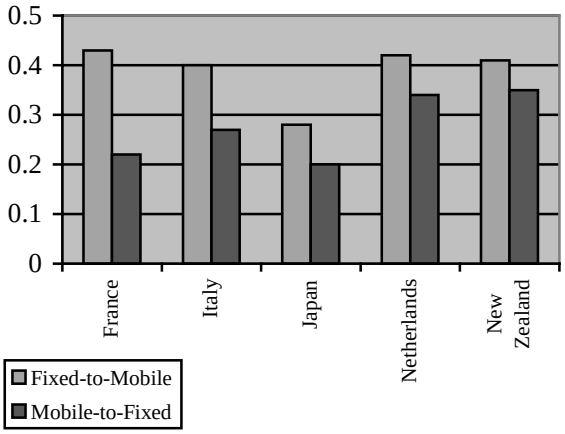
(a) mobile termination rates (the termination fees charged by mobile operators for terminating calls in their networks) – the Commission opened five cases in this regard, two in Italy and three in Germany; and

(b) fixed operators' retention on fixed-to-mobile calls (the difference between the retail price charged to end-users by the fixed network and the termination charge paid by the fixed network) – the Commission opened eight cases, in regard of the incumbent operators in Belgium, Ireland, UK, Austria, Spain, Netherlands, Italy and Germany.

The Commission closed some of these investigations in November 1998 and others in May 1999 following the announcement of pending action by national regulatory authorities or announcements by operators of reduced charges (for example, retention rates declined between 31 and 80 percent). The box on the following page highlights actions taken in other OECD countries to address fixed-to-mobile termination charges.[12]

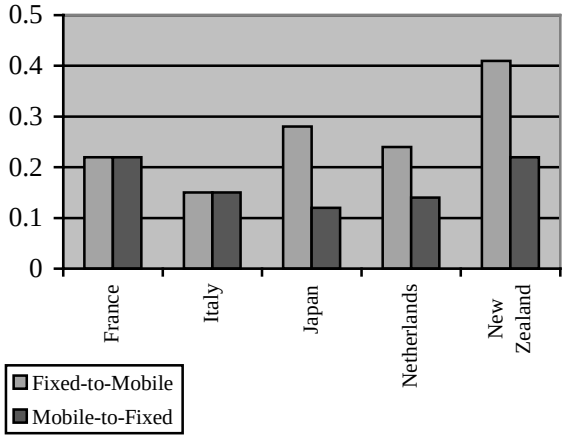
Since it might be expected that competition between mobile operators puts downward pressure on calls from mobile phones to the fixed network, one indication of whether or not fixed-to-mobile call prices are "too high" might be obtained by comparing the prices for fixed-to-mobile calls against the price of mobile-to-fixed calls. The marginal cost of the use of the fixed and wireless networks might be expected to be roughly the same in each case. Therefore the only grounds for differences in these prices would be differences in the elasticities of demand for each service. Are there grounds for considering that the elasticity of demand for fixed-to-mobile calls should be systematically different from mobile-to-fixed calls? The graphs on the following page compares fixed-to-mobile and mobile-to-fixed prices in a few OECD countries.[13]

Price of calls between fixed and mobile networks
(Peak time, February 1999, USD PPP)



Source: OECD (2000b), table 15

Price of calls between fixed and mobile networks
Off-peak, February 1999, USD PPP)



Source: OECD (2000b), table 15

As a side-effect, high fixed-to-mobile charges have created an incentive to re-route fixed-to-mobile traffic internationally. The charges for terminating international telephone calls were historically set using the international accounting rate system. For various reasons that system did not distinguish between termination on fixed and mobile networks. As a result, in many cases the charge for international traffic on a mobile network is lower than the domestic fixed-to-mobile termination charge. This provides a strong incentive for domestic fixed carriers to re-route traffic to mobile networks internationally, in a process known as "tromboning".

As an example, France Telecom pays 33 US cents to terminate traffic on a mobile network for a fixed-to-mobile call, but for terminating calls from neighbouring countries, France Telecom receives eight--nine cents per minute, of which it passes five cents to the mobile operator for terminating the call. This gives a strong incentive for fixed network operators in France to route calls to French mobile networks via foreign fixed networks. The French regulator, the ART, describes this traffic as "artificial".[14]

3.1.1 Access to Mobile Networks

As noted earlier, as long as final subscribers are connected to only one network, each network has a monopoly over calls to its own subscriber. The question arises whether the terminating network has an incentive to use that monopoly to set high termination charges. Armstrong (2001) describes a model in which all calls from mobile networks terminate on the fixed network[15]. He shows that when subscribers (*a*) only care about and pay for the calls they make (and do not care about or pay for calls made to them) and (*b*) do not receive any utility from calls made to them (or care about the welfare of callers to them), then the level of termination charges do not affect demand for the other services of the terminating network or the number of subscribers of that network. As a result, in the absence of regulation, the terminating network has an incentive to set the termination charges at the monopoly level.[16]

Fixed-To-Mobile Termination in Selected OECD Countries

UK[17]

Following concerns expressed by both business and residential consumers, in 1997/1998 Oftel conducted a review into the level of the price of calling mobile phones. In March 1998, Oftel's Director General made a reference to the Monopolies and Mergers Commission (now known as the Competition Commission). The MMC made an inquiry into the prices charged by BTCellnet and Vodafone to fixed network operators for the delivery of calls to mobile phones on their respective networks. In December 1998, the CC concluded that:

- there was insufficient competitive pressure to constrain mobile termination charges and that this was likely to be the case until at least 2002;
- the prevailing charges were substantially in excess of the costs of an efficient operator with 25 percent share of the market; and
- the level of charges acted against the public interest.

The Director General implemented the recommendations of the MMC in March 1999 by modifying the licences of BTCellnet and Vodafone to reduce their weighted average termination charges for 1999/2000 to

a ceiling of 11.7 pence per minute and to provide for further reductions to that ceiling of RPI-nine percent for each of the years 2000/2001 and 2001/2002.

Australia

Under the Australian telecommunications access regime, providers of "declared" services must make access available at terms and conditions which are either negotiated, approved by the ACCC in advance, or arbitrated by the ACCC ex post. Fixed-to-mobile termination services was "declared" in 1997, but disputes over termination charges arose in 1999, leading to a formal consultation process which was concluded in December 2000[18]. The ACCC's conclusions are cited in the body of the text.

Other Countries

In June 1999, OPTA, the telecommunications regulator in the Netherlands observed that the prices for fixed-to-mobile calls were higher in the Netherlands than in other countries and more expensive than mobile-to-fixed calls. As a result it announced that it intended to designate KPN and Libertel as having significant market power, which allows OPTA to control the termination charges for these networks.

In France, in November 2000, following a request from the regulatory authority ART, France Telecom reduced the price of calls from fixed to mobile networks by 21 percent.

Mobile networks compete vigorously for subscribers, so mobile operators are not able to keep any monopoly profits from termination charges but, instead, use them to lower other charges, such as the fixed charge for subscription to a mobile network.[19] Lowering the fixed charge for connection to a mobile network through handset subsidies may have a desirable socially effect – it may increase mobile penetration. Higher fixed-to-mobile termination charges, to the extent that it allows larger handset subsidies, may therefore have some social benefits. This provides some justification for raising termination charges above marginal cost (but not necessarily to the monopoly level).

The incentive to set high termination charges is even stronger when customers of the fixed network do not know or do not pay the termination charges of the mobile company they are calling. For example, even if the retail price for a fixed-to-mobile call depends directly on the termination charge of the mobile network, consumers may not be able to discern in advance of the call the identity of the terminating mobile network. Even in countries where particular mobile numbers were historically linked to particular networks, the implementation of number portability may break down this relationship.[20] One way to model consumer behaviour in this circumstance is simply to assume that consumers behave as though the price they will pay is simply the average of the fixed-to-mobile prices in the market.[21] Alternatively, the fixed operator may itself simply set a single fixed-to-mobile call price, independently of the network called, on the basis of the average termination charges in the market.

If consumers only pay the average price for calls to mobile networks, individual mobile networks have a stronger incentive to raise their price (as the effect on the average price is diminished). Very small networks may have an incentive to raise the average price very high indeed.

Certain effects may serve to offset the tendency for unregulated mobile companies to set high termination charges. Lowering the terminating charges lowers fixed-to-mobile retail prices which raises the welfare of callers to mobiles. If mobile subscribers care enough about their callers (as may be the case in a

close-knit group, such as within a family) they will take this effect into account when choosing a mobile network.

Alternatively, if the price of mobile-to-fixed calls becomes too far out of line with the price of fixed-to-mobile calls, consumers can "arbitrage" these two prices by asking mobile users to call them back.[22]

Finally, since mobile users pay mobile termination charges on mobile-to-mobile calls, is it possible that competitive pressure on mobile-to-mobile call charges will lower mobile termination charges? The economics of such "two-way" access problems is complex and yields relatively few robust results. Armstrong (2001) shows that competition between mobile operators does not necessarily create incentives for lower termination charges. Higher termination charges increases the revenue from other networks from providing termination services, but this revenue is competed away in the form of lower fixed and usage charges offered to the networks own subscribers. In some circumstances, these effects just balance, so that networks are indifferent to the level of termination charges.

Incumbent networks may not be indifferent, however, when the possibility of entry is taken into account. It is possible that higher termination charges may deter entry. While high termination charges imply high call usage prices, a new network has a higher proportion of calls to other networks (which incur the high termination charge) and so is less able to earn the rents necessary to cross-subsidise its fixed charges. New networks therefore have trouble competing with fixed networks when termination charges are high. In one case in Italy two incumbent mobile companies colluded to raise their termination charges, apparently to deter the entry of a third competitor. The Italian competition authority describes the case as follows:

> "[In 1999] Telecom Italia Mobile and Omnitel agreed to raise the cost of interconnection between their respective networks to the highest of the costs that the two mobile operators had separately declared to the Ministry for Communications as applicable to the winner of the bid for the third DCS 1800 technology mobile license. The increase in this cost, during the start-up phase of the new competitor Wind, and before the negotiations for interconnection with the new fixed network operators took place, appeared designed to create barriers to access to the market by producing higher costs for new entrants. In evaluating the degree of restrictiveness of the agreements under investigation, the Authority observed that the objective and effect of such practices had been a substantial restriction of competition in the personal mobile communications market. In view of the seriousness of this conduct, the Authority imposed fines on the two companies amounting to around 100.4 billion lire (51.86 million Euro) for Telecom Italia Mobile and 46.9 billion lire (24.22 million Euro) for Omnitel".[23]

Summing up, the general view is that these offsetting effects are not strong enough to ensure adequate downward pressure on fixed-to-mobile termination charges. The ACCC writes:

> "It is the Commission's view that control over access to GSM termination and consumer ignorance results in mobile carriers sustaining high access prices for GSM termination. The Commission considers that the competitive forces on GSM termination will remain relatively weak, now and in the foreseeable future. The Commission recognises that 'closed' user groups and the possibility of fixed-line callers requesting mobile subscribers to call them back may increasingly place a competitive focus on access prices for GSM termination. However, at this point in time, the Commission considers that the competitive forces on GSM termination are relatively weak".[24]

3.1.2 Possible Solutions

The most straightforward solution to the problem of the exercise of market power in mobile termination charges is simply to regulate these charges. The regulated charges should be set according to the principles set out earlier. As mentioned earlier, the charges for termination might be raised somewhat where there is a concern about promoting mobile penetration.[25]

Some countries have proposed making the mobile subscriber pay for the termination cost (a form of RPP – Receiving Party Pays). As just mentioned, competition between mobile companies would then compete down both the price of mobile-to-fixed calls and the fixed-to-mobile termination charge. [26] However, this approach has two drawbacks – First, consumers are less able to control the size of their mobile bill and therefore may be more reluctant to take up a subscription. There is evidence that countries with RPP (notably the US and Canada) have lower penetration rates as a result.[27] Second, under this approach fixed-to-mobile callers do not pay the full cost and therefore have an excess incentive to make fixed-to-mobile calls. A compromise position might be to make fixed customers pay a large part of (but not all) the fixed-to-mobile termination charge, leaving the mobile customer to pay the rest – in essence such an approach relies on competition to lower fixed-to-mobile termination charges at the margin.

Another alternative might be simply to link fixed-to-mobile prices to mobile-to-fixed prices, perhaps by using mobile-to-fixed prices as a ceiling on fixed-to-mobile prices. This approach uses competitive pressure in the mobile-to-fixed market to place downward pressed on fixed-to-mobile prices.

A final possible solution to the problem of market power in call termination might be to introduce a degree of competition to this market. In principle it is possible for other mobile networks to terminate calls on handsets which subscribe to a different network. However, doing so requires the rival operator to have the details of the customers Subscriber Identity Module (SIM card). Normally this information is not available to rival mobile operators. However, if this information were more widely shared, competing mobile operators could compete to terminate calls on a given handset on a call-by-call basis.

3.2 Mandatory Roaming

As mentioned earlier, the cost of establishing a cellular telephony network is largely dependent on the number of base stations that must be set up to handle the peak load capacity in each geographic area and to provide adequate geographic coverage. The number of base stations required to provide adequate geographic coverage depends on the population density and on geographic conditions. The frequencies used for mobile communications are blocked by hills, land masses and tall buildings. So, to ensure complete coverage more base stations are required in hilly areas, in tunnels, or in the downtown areas of larger cities.

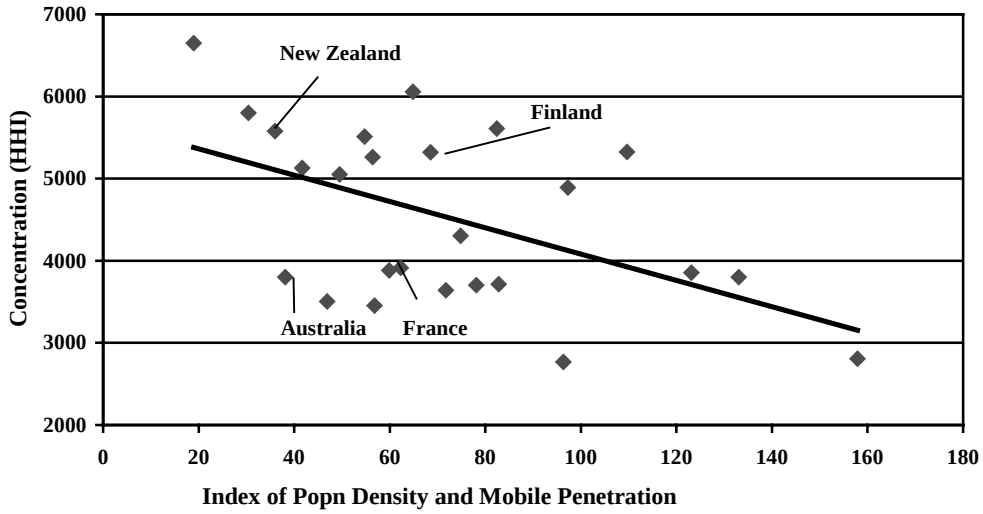
Since the establishment of a cellular network requires substantial fixed costs and (at least at off-peak times) relatively low marginal costs, there is a degree of increasing returns to scale, which limits the number of firms that can survive in equilibrium. In particular, in certain sparsely populated areas (especially hilly areas) the population density may not be sufficient to justify the installation of more than a strictly limited network of cellular base stations on a stand-alone basis.

However, because consumers value the geographic extent of coverage of a mobile service provider it may make economic sense for a mobile provider to cross-subsidise its base stations in remote areas – installing base stations which, while not economic on a stand-alone basis, can be justified by the extra revenue attracted to the network in the more densely populated regions.

The need to cross-subsidise in this way limits the number of mobile operators that can survive in equilibrium. In addition, there is excess investment in remoter areas in the sense that the base stations in remoter areas are not used to capacity. Finally, even though a higher level of competition is possible in densely populated areas, it is not possible to enter these areas without also installing base stations in remote areas.

As a result, we would expect the level of entry to be lower and the market concentration to be higher in countries with low population density and/or low penetration of cellphone use. This is confirmed in the following figure. This graph plots market concentration against an index of population density and cellphone penetration. [28]Those countries with a higher population density and cellphone penetration tend to have a lower market concentration.

Figure 1: Correlation between Concentration and Cost/Demand Factors in the Mobile Market



Source: OECD

3.2.1 Promoting Competition in the Mobile Sector

If the level of competition in the mobile market is determined by cost and demand factors (and not by a scarcity of spectrum) then, at least in some countries – especially those with the lowest population density and mobile usage – the possibility arises that the level of competition that would emerge in equilibrium may not be sufficient to contain market power. This is a question which must be determined in each country on a case-by-case basis. If the level of competition in equilibrium is not enough to effectively control market power then consideration may need to be given to additional regulatory measures to either control that market power through regulation or to promote further competition.

As we noted before, the problem of promoting competition in the mobile sector has the structure of a classic essential facility problem – there are two activities ("mobile service in remote areas" and "mobile service in densely populated areas") which are complementary (consumers desire to purchase both when they choose a mobile operator) and one of which is competitive and one of which is non-competitive or less competitive.

This raises the question whether there is scope for enhancing mobile competition in densely populated areas through a form of access regulation – in this case mandating access to existing mobile operators in remoter areas. This is known as mandatory national roaming.

As an example, a case in Finland concerning mandatory roaming is described in the following box. The UK has also considered the possibility of mandating national roaming. Concerned that existing mobile operators would have a significant comparative advantage over de novo entrants to the market at the time of the auction of spectrum for 3rd-generation mobile services, Oftel proposed that existing 2nd generation mobile service providers would be forced to provide new 3rd generation operators with roaming services outside the service area of the new operator. This requirement would only be available to operators who have already built a network covering 20 percent of the population and would be limited in time – the obligation would expire in 2009. Oftel proposes pricing these services on a retail-minus approach.[29]

National Roaming in Finland: The Telia-Sonera-Radiolinja case[30]

Telia Mobile (a subsidiary of the Swedish incumbent Telia) provides GSM mobile services in three main Finnish cities. However, it does not have a nationwide network and its services have not proven to be attractive to customers. Telia's market share has stayed under one percent compared to its rivals Sonera (61 percent) and Radiolinja (36 percent). A fourth operator Suomen 2G, commenced operation with a nationwide network on 1 February 2001.

During 1998, Telia sought to provide nationwide mobile coverage through a national roaming agreement with either Sonera or Radiolinja. At first, neither Sonera nor Radiolinja was willing to offer roaming. However, after the intervention and mediation of the Ministry of Transport and Communications, both companies made a formal offer. The conditions and prices offered did not satisfy Telia who field a complaint with the Finnish Competition Authority. Telia accused Sonera and Radiolinja of either individually or jointly having abused their dominant positions by charging excessive prices for national roaming. The prices offered by Sonera and Radiolinja to Telia were higher than the prices offered by Sonera and Radiolinja to their own retail customers. In a press release of 17 September 1999 the Finnish Competition Authority observed:

> "The slow process of building a mobile network eliminates a quick entry of new competitors, which serves to protect Sonera and Radiolinja's position in the short term. They have the possibility to considerably complicate and slow down their competitors' entry by the pricing of their network services. …
>
> The FCA estimates that the entry of a new company offering national telecommunications services would increase the use of networks built in the sparsely populated regions of the country and would thus bring efficiency benefits with it. Intensified competition would be likely to accrue to the consumers in the form of improved services and lower prices."[31]

In November 1999, Telia and Radiolinja reached an agreement whereby Telia was able to offer national mobile services as a service provider on Radiolinja's network. The Finnish Competition Authority in its decision on this matter issued in January 2000 found no abuse of a dominant position. Telia appealed and the case is currently pending before the Finnish Competition Council.

The key difference between this problem and the classic essential facility problem is that in most markets there are at least two operators which could offer roaming services in remote areas. The presence of at least some competition in the provision of the "non-competitive" service changes the nature of the problem. In particular, the incentives to deny access (in this case to deny roaming) are reduced. There is an enhanced likelihood that operators may be able reach a commercial agreement.

The incentive to deny access is reduced for the following reason. Granting access provides at least some benefits to the roamed network – the roaming network may be able to attract new customers which enhance the utilisation of the capacity of the roamed network (which we might call the "enhanced utilisation" effect). On the other hand, granting access has the drawback that it the roaming network may steal customers from the roamed network, reducing its profitability (which we might call the "business stealing" effect). An important ingredient is the expectation of the incumbent operators. If the incumbent operators believe that the new entrant is unlikely to obtain roaming from any operator, each has an incentive to deny access (doing so reduces the level of competition). On the other hand, if they expect that a new entrant will succeed in obtaining roaming from some operator, each has an incentive to compete to become that operator (since only one operator will enjoy the "enhanced utilisation" effect, while all suffer from the "business stealing" effect). The larger the number of existing operators, the more likely it is that the incumbent operators will believe that the entrant will obtain roaming from at least one operator. The government can influence this outcome by influencing the belief that the new entrant will obtain roaming from at least one operator.

In other words, private commercial arrangements for roaming are possible and are more likely (*a*) the larger the number of incumbent operators; (*b*) when the new entrant offers a service which is not directly a competitive threat to an existing service (perhaps by targeting an unreached niche of customers) and (*c*) the greater the likelihood that the government will intervene to enforce roaming.

As an illustration, in late 1997 the ACCC considered requiring mandatory roaming in the Australian mobile market. In March 1998 the ACCC announced its decision not to mandate roaming on the grounds that the mobile market was competitive and that roaming would probably be offered commercially. However, the ACCC made an explicit threat not to intervene in the market if roaming was not offered commercially.[32] This may have been a key factor leading to the development of several commercial roaming agreements. In Finland, also, the initiation of an investigation by the Finnish Competition Authority seems to have been sufficient to stimulate a commercial roaming arrangement in the Finnish market.

3.2.2 Regulation of Access to Cellular Base Stations

As always, a key question is the amount to be paid for national roaming. Economic theory shows that where the access service is used to produce a final service which substitutes for the incumbent's own services, the appropriate access price includes two components – a component which reflects the incumbent's foregone contribution to fixed costs due to selling a unit of access to its rival and a component reflecting the rival service's own contribution to fixed costs through a mark-up over marginal cost.

There are two extreme cases to consider. First, consider the unlikely case where the roaming service is used by rival companies to provide a service which does not compete in any way with existing mobile services. In other words, the rivals' service merely "expands the market" without taking any business away from the incumbent operator. The efficient access price in this case is simply based on marginal cost, with a mark-up corresponding to the product's elasticity of demand. There is no need to

make reference to the incumbent's retail prices – except insofar as these give some indication of the appropriate mark-up over marginal cost.

If, as seems more likely, the roaming service will be used by rival companies to provide a service which competes with existing mobile services – i.e., the rival's service will (if roaming is granted) take some business away from the roamed network – then the granting of access to a rival will mean reduced demand for the existing operator's services – fewer subscribers and lower revenue from calls. As a result the existing operator will lose a certain level of contribution to its fixed costs. The optimal price for access to roaming should therefore include a component to reflect this lost contribution to fixed costs.[33] The proportion of these costs that should be taken into account depend on the degree of substitution between the rival's product and the existing operator's product.

One consequence is that the optimal access price will probably exceed the retail price of calls in roaming areas. If the access price is set lower – perhaps on a retail-minus approach as used in the UK – the existing network will face competition in certain areas from rivals which have lower fixed costs (because they have smaller networks). This will allow the rivals to offer lower prices, forcing down the existing network's prices. It is possible that the existing network will not be able to recover sufficient revenue to recover the costs of maintaining its networks. A numerical example is provided in the attached box.

Pricing of Access for Roaming

Suppose that the cost of providing mobile service is $1000 per person per annum in densely populated areas and $1000 per person per annum in remote areas. Suppose that an existing mobile operator charges $1 per minute of airtime and $400 per annum fixed charge. Suppose, finally that, at these prices, a typically user consumes 1400 minutes in densely populated areas and 200 minutes in remote areas.

The total revenue of the existing mobile operator is $400 fixed charge plus $1400 worth of calling in dense areas and $200 in remote areas, for a total of $2000 per person. The total cost of providing the mobile service is $2000, so that the operator breaks even. It is clear, however, that there is cross-subsidisation – the remote area only recovers $200 in revenue, for $1000 in costs.

Suppose that another operator seeks to roam the existing network in remote areas (but to build its own network in dense areas). Suppose that the new operator's service is (with roaming) a perfect substitute for the incumbents and, as a result, the new operator sets the same charges as the incumbent. Suppose, finally, that the regulator mandates roaming at a price of $1 per minute (i.e., a retail-minus approach with the discount off retail of zero per cent).

Under these assumptions, for every customer which is served by the new operator, the new operator will receive no revenue in remote areas (the price for roaming is the same as the retail price) but will receive $400+1400=$1800 revenue in dense areas, for an outlay of $1000, giving a profit of $800 per person. The incumbent operator receives $200 in revenue for which it must incur $1000 in costs, for a loss of $800.

Using the principles set out earlier, when the new service is a perfect substitute for the incumbent's service, the roaming price should include the contribution to fixed costs that the incumbent foregoes in selling access. In this case, by selling access rather than selling directly to its own retail customer the incumbent operator can save $1000 (in not having to supply service in dense areas) but loses $1800 in revenue, implying the loss of a contribution of $800 in fixed costs. This revenue must be recovered in the access charges. If a fixed component to the access charge is not possible, the usage price should be $5. At this price, the incumbent receives 200x$5 = $1000 of revenue and incurs $1000 of costs. The rival receives $2000 in revenue and incurs costs of $1000 and access charges of $1000.

Oftel considers the argument that the price for roaming should be higher than the retail price minus costs saved, as follows:

> "Some network operators have argued that Oftel's proposed retail-minus charge for roaming will not cover costs, including costs of installing capacity, in the more rural areas where traffic is lightest and where roaming is likely to be concentrated. This is because average costs per minute (including the fixed costs) in such areas are higher than the geographically uniform retail charge. In effect, it is argued, it will create an arbitrage opportunity which will allow the new entrant to build a network in the most populous low cost areas and use the incumbent's in the high cost areas, for less than cost"[34]

However, Oftel rejects the argument on the basis that (*a*) roaming traffic is incremental to the roamed network in areas where it would otherwise have spare capacity and (*b*) mobile operators in the UK are sufficiently profitable. I have argued above that roaming traffic is not strictly incremental – instead the roaming traffic allows the entrant to offer a service which is in direct competition with the incumbent's services. For this reason, the access charge should include a component to reflect foregone contribution to

fixed cost. By insisting on the retail-minus approach, Oftel is potentially undermining the profitability of existing operators.

3.3 Local Loop Unbundling

Many countries have expressed concern at the relatively slow rate of development of competition in high bandwidth telecommunications "distribution" services. According to the OECD Communications Outlook 2001, new entrants held only 0.3 percent of the total access lines in 1995, rising to 0.9 percent in 1997 and only three percent in 1999.[35]

As discussed above, the economies of scale and density in broadband fixed-wire telecommunications "distribution" links are such that, although a degree of competition is possible for larger telecommunications users in densely populated areas, the degree of competition that is likely to emerge for smaller users, especially in less densely populated areas, is likely to be limited.

High-bandwidth wireless alternatives may be a partial substitute for some broadband local loop services, especially where wireless services also offer the possibility of mobility. However, wireless services cannot offer the bandwidth that is possible over fixed-wire cables. Although third-generation (3G) wireless services offer the promise of both relatively high bandwidth and mobility, it is likely that the demand for high levels of bandwidth will increase. Indeed, fixed-wire networks will have a strong incentive to foster the demand for bandwidth by creating and promoting applications which demand large amounts of bandwidth. In the longer run, it seems likely that the demand for bandwidth will be such that in the medium term fixed and mobile services will not be in the same market.

Traditionally, local loop services were provided with a simple "twisted pair" copper cable. There remains a substantial amount of this type of cabling in the ground in OECD countries. These cables were not intended to carry high-bandwidth services but with certain technologies (known collectively as "DSL" or Digital Subscriber Line) traditional copper cables can be upgraded to offer moderately high bandwidth services, especially when the distance between the subscriber and the local exchange is not too large. Upgrading the local loop in this way requires the installation of new equipment on each end of the cable which convert digital signals into a format suitable for sending over a twisted copper pair.

Fixed wire local loop or "distribution" service, which were earlier treated as a single service, can be divided into two parts – the physical wire or cable connection, on the one hand, and the electronic equipment on each end of the wire, on the other. These are complementary services, one of which is competitive and the other of which is non-competitive. We therefore have a classic access regulation or essential facility problem.

Mandating access to the non-competitive service (the local loop) – which is also known as "local loop unbundling" has the following potential benefits:

(a) First, local loop unbundling may accelerate the rate of deployment of broadband services by the incumbent operator. It does this in two ways. First, DSL may be a substitute for some of the existing products of the incumbent operator (such as T1 data lines). If those other products are lucrative, the incumbent operator has little incentive to voluntarily make new investments which would make possible faster roll-out of DSL. By mandating local loop unbundling to certain technical specifications the regulator is essentially able to force the incumbent to make any necessary investment to prepare the network for DSL. Having made this investment, and knowing that failure to promote DSL service will result in loss of

market share to rivals, the incumbent has a strong incentive to hasten the take-up of its DSL service.

(b) Second, local loop unbundling may also act to prevent inefficient investment in the form of bypass of the local loop. If priced correctly, local loop unbundling provides incentive to use existing local loop infrastructure for the provision of broadband services rather than installing completely new duplicative networks.

(c) Third, local loop unbundling allows competition to develop in the provision of electronic equipment for upgrading the traditional twisted pair. This is likely to have the effect of increasing the rate of innovation and efficiency in such services. Entirely new technologies for upgrading the twisted pair may come into existence. Local loop unbundling also allows greater competition in the provision of pricing and billing for local loop services, and for combining local loop services with other services.

As of mid 2001, the vast majority of OECD have chosen to mandate local loop unbundling. OFTEL, the UK regulator, which was initially opposed to local loop unbundling, but which subsequently changed its mind writes:

> "Higher bandwidth access is of fundamental importance to development of new information society services. Technologies such as DSL, cable modems, third generation mobile, broadband fixed radio and digital TV will enable services such as always-on unmetered high speed Internet access, interactive audio-visual services and video-on-demand to be accessible to a wide audience. Enabling these services to develop to their full potential is central to Oftel's primary goal of promoting choice, quality and value for money for consumers. … The best way to achieve the variety of services that consumers want at reasonable prices is to promote effective competition in the provision of access to and delivery of these services. … In examining the case for action, Oftel has considered the level of demand in various segments of the market, the supply routes available and whether there are barriers to the competitive delivery of higher bandwidth access and services. The conclusion is that regulatory action is needed to introduce competition into the upgrade of the local loop." [36]

In Australia, following the decision to unbundle the local loop in 1999, by the end of June 2000, Telstra's market share in local loop services had dropped by around nine percentage points to 85 percent, as resellers of its local loop and the facilities-based rival Cable and Wireless Optus gained market share.[37] The approaches of other OECD countries to local loop unbundling is set out in Table 1.

3.3.1 Pricing of Access to Unbundled Local Loop

As is usually the case, the extent to which the benefits and costs of local loop unbundling materialise depends critically on the access price – the price at which rivals have access to the local loop. The problem of pricing access to unbundled local loop is complicated by the following factors:

(a) First, retail prices for services that use the local loop are usually tightly controlled and do not necessarily reflect the costs of the underlying services. In particular, geographic averaging of subscriber fixed charges is common. In many countries retail prices for local loop services are likely to be below cost in some (and in some countries most) areas.

(b) Second, there is substantial geographic variation in the costs of installing local loops. A simple geographically averaged price may well discourage investment in some regions while inefficiently encouraging network duplication in others.

(c) Third, there are substantial economies of scope in the provision of local loops. The average cost per customer of wiring up an entire street or building is substantially lower than the stand-alone cost of a single fixed-wire connection to a customer.

Broadly speaking the approaches of different countries to local loop unbundling can be divided into two categories: those that have chosen to insist that (*a*) prices for unbundled local loop should be "cost-based" (although the definition of this term varies) and (*b*) those that insist that prices for unbundled local loop should be related to the incumbent's final prices (i.e., "retail minus" pricing).

Among those countries that have insisted that prices for unbundled local loop should be cost-based are the UK, Germany and Sweden.[38] In the UK prices for local loops are based on costs plus a mark-up. Denmark is an example of a country which has insisted that prices for unbundled local loop should be related to retail prices (in Denmark the price is equal to the subscriber line price minus 25 percent). In the US both forms of pricing are possible, depending on whether the unbundled local loop is provided in the form of "unbundled network elements" or as "resale" of an existing service.

These two broad approaches can be understood as different ways of resolving a conflict of objectives that arises when there are more objectives than can be simultaneously achieved with just one instrument – access prices. The two desirable objectives are incentives for efficient investment and incentives for efficient entry and competition in local loop services.

3.3.2 Costs and Benefits of Cost-Based vs Retail-Minus Access Prices

Access prices which are based on "cost", in principle send the right incentives for using the incumbent's network rather than installing a duplicate network. If an entrant is considering installing an overlay network, the entrant would compare the cost and capabilities of the new network against the cost and capabilities of providing similar services with local loop unbundling. If the prices for local loop unbundling are set correctly, entrants will not duplicate when it is inefficient for them to do so.

On the other hand, if retail prices are not themselves directly linked to the underlying "cost" (and recall that there is no efficiency reason why they necessarily should be), unbundling local loop at cost-based prices will lead to the familiar problems of restricted entry and pressure on the incumbent to adjust its prices, even if it is not efficient to do so. In particular, new entrants are most likely to request unbundled local loop in low-cost areas, leaving high-cost areas unserved. Some countries which have unbundled local loop at cost-based prices have found that the access prices are above retail prices in some areas. Entry in low-cost areas may force the incumbent to geographically de-average its tariffs.

In other words, access prices which are based on cost achieve the objective of efficient incentives for investment, but fail to achieve the objective of incentives for efficient entry and competition in local loop services.

These latter objectives can be met (at the expense of the former objective) through access prices which are based on the retail prices of the incumbent. Specifically, the access prices should be based on the retail prices of the incumbent less the cost saved by providing the local loop to a competitor and not to an end-user. (This is just one of the ways of stating the Efficient Component Pricing Rule). With such prices, entry can occur in all geographic locations, without threatening the retail price structure of the incumbent.

The primary drawback with this approach is that if the incumbent's retail charges are not directly related to the underlying cost (for example, if the incumbent's subscriber charges are geographically averaged or if charges for residential customers are below cost and charges for business customers above cost) then the resulting access prices will provide incorrect incentives for investment in network duplication. In particular, entrants will have strong incentives to duplicate existing networks in regions where the incumbent's charges are above cost and little incentive to build duplicate networks (even when it is efficient to do so) in regions where the incumbent's charges are below cost.

If it were known for sure that the local network was a natural monopoly, so that any duplication would be inefficient, these problems could be resolved through a simple ban on new network investment. But such a ban is undesirable in the context of the telecommunications industry.

A preferable approach is to set the price for unbundled local loop equal to the "cost" of those loops, and to use taxes on the retail products of the incumbent and its rivals to recover any fixed costs or access deficit. In practice, this would likely imply the establishment of some form of universal service funding mechanism, which "taxed" the revenues of local loop providers in low-cost areas and used those funds to subsidise the activities of local loop providers in high-cost areas.

Note that even when a country says it is using a "cost based" approach, it may in fact be using an approach closer to the "retail minus" approach. Under a "correct' implementation of the cost-based approach, prices for unbundled local loops should reflect the costs of provision of local loops in every geographic area. Ideally, unbundled local loop prices would vary in different geographic areas, with the scale of those geographic areas no larger than the scale of the smallest viable "duplicate" or "overlay" network. Regulators may not have information on the costs of local loops down to this scale. In addition, in most countries retail prices for local service is set on a geographically-averaged basis. It might be feared that true cost-based pricing for local loop would lead to pressure for geographic de-averaging of retail prices.

Even though the UK states that it is using a "cost based" approach, both the UK and Austria have adopted a simple geographically-uniform price for unbundled local loop applying on a national basis. If retail pricing is also geographically uniform, this approach has the advantages and disadvantages of the "retail minus" approach. If retail local loop pricing is not geographically averaged, geographic averaging of access prices will have the advantages of neither approach.

Another important point to note is that in order to capture the benefits of the retail-minus approach, it is important that access prices be structured in the same way as the incumbent's retail prices, i.e., that any price discrimination which is present in retail prices should be reflected in the access prices.

For example, it seems common to price unbundled local loop as a flat fee per month or per year. But if retail usage prices are above marginal cost (and so include a contribution to fixed costs or an access deficit) then a charge for unbundled local loop which takes the form of flat fee per month or per year, will induce entrants to target high usage customers, distorting entry and restricting the take-up of unbundled local loop services.

The reason for this is as follows. If, for whatever reason, usage charges are above cost, the loss of revenue to the incumbent from losing a local loop to a rival is not simply the lost fixed subscriber charges but also the lost contributions from the usage charges. Recognising this, the regulator might seek to set the price (per month or per year) for unbundled local loop to include a component reflecting the average contribution from usage charges. But, in this circumstance, the rival has an incentive to target only the highest-usage subscribers and to avoid subscribers with lower usage. This simultaneously limits the scope for new entry and places the incumbent in a position where it might not be able to recover its fixed costs.

This is an illustration of a general principle – that where there are fixed costs to be recovered any price discrimination used by the incumbent should be reflected in the access prices, otherwise the scope for entry will be limited. This is explained further in the attached box.

Second-Degree Price Discrimination and Access Charges: Part I

The following illustration is the first of two intended to highlight the importance of ensuring that any price discrimination to recover fixed costs that is present in final or retail prices should be reflected in access prices. This box focuses on emphasising, using a simple numerical example, that when the incumbent recovers a contribution to its fixed costs from both its fixed and usage charges, the use of an access charge of the form of either a pure flat fee or a pure usage fee will lead to a trade-off between competition and efficiency.

Suppose an unbundled local loop in a certain region costs $100, and there is an access deficit of $20 per line that needs to be recovered (perhaps because retail prices are below the cost of providing local loop in other regions). Suppose that the retail fixed subscriber charge of the incumbent is $100 and the incumbent's usage charge is in excess of the usage costs by $1. Suppose, finally that there are two types of consumers, type A, which comprise 20 percent of the population which are high users, consuming 60 units of usage and type B (80 percent of the population) which consume ten units of usage.

With this structure of prices and costs the incumbent breaks even – the incumbent recovers 100+60x1=$160 from the high usage customers and 100+10x1=$110 from the low usage customers, which gives an average revenue per line of 20 percent x160 + 80 percent x110 = $120 – sufficient to cover the cost of $100 and the access deficit of $20.

Suppose now that the unbundled local loop price is fixed at $120. This might be deemed as "fair" on the basis that this is an accurate reflection of the average cost of providing a local loop (averaging over high and low cost areas).

With this local loop price, an entrant who targeted a type A customer would receive a profit of 160-120 = $40. On the other hand, an entrant who targeted a type B customer would receive a profit of 110-120 = $10. Clearly, the entrants will be limited to the market for high-usage customers. The incumbent is left carrying only the low usage customers for whom the average contribution of $110 is less than the incumbent's average cost of $120. This is clearly unsustainable. If competition is to be allowed under these terms clearly it is essential to raise the retail charges on type B customers so that they yield $120 in revenue. At the same time competition for class A customers will drive down the revenue from these customers to $120. Clearly the introduction of competition in this context eliminates the discrimination or "cross-subsidisation" with an associated potential loss of efficiency.

Suppose now that the regulator goes to the other extreme and decides to price the local loop entirely on the basis of usage charges. The price of $6 might be deemed as "fair" on the basis that this price would allow a firm taking all of the local loops to just break even (20 percent (60x6) + 80 percent (10x6)= $120). But, with this price for unbundled local loop, if the entrant targets the type A customers (and assuming he offers the same price structure as the incumbent) he would recover 100+60x1-60x6 = $-200. On the other hand, if the entrant targets type B customers, he would recover 100+10x1 – 60 = $50. Clearly the entrant will be limited to the market for low-usage customers. The incumbent's total earnings are only 20 percent (160) + 80 percent (60) = $80 which is less than $120. If competition is to be allowed, the retail prices for type A customers must increase so that they yield $360 in revenue. The introduction of competition now exaggerates the discrimination or "cross-subsidisation" between these customer classes, with an associated potential loss of efficiency.

It is straightforward to check in this example that the only access price for unbundled local loop which would allow the entrant to compete equally for all customers without affecting the retail tariffs is an access price which has a two-part component with the fixed part equal to $100 and the usage part equal to $1. This two-part structure precisely matches the structure of the contributions the incumbent receives towards its costs. This is an illustration of the general principle that when prices are above costs any price discrimination that is present in final prices should be reflected in access prices.

3.3.3 Local-Loop Unbundling And Charges For Long-Distance Call Origination

An interesting question that is related to the issue of local loop unbundling is the question of whether competition should be mandated for long-distance services for the customers of unbundled local loops and, if so, the charges for call origination that will be paid. This question is relevant because, as this paper has argued, the structure of the access charges affect the structure of the retail charges that the (rival) local loop provider can offer.

Consider the following example. Suppose that a rival local loop provider wishes to compete with the incumbent by offering its customers a choice of calling plans – one choice, which is targeted at light users features a lower monthly rental fee and a higher per call fee and the other, targeted at heavy users features a higher monthly rental fee and little or no per call fee. Suppose also, for the sake of simplicity that all calls are long-distance calls. Offering a menu of calling options in this way could be economically efficient – it could entice low-users onto the network (thus increasing penetration), while offering more efficient calling plans to heavy users.

If long-distance companies are allowed to compete for the customers which subscribe to unbundled local loops and if the access charges for call origination are based on a simple per minute fee, independent of the calling plan chosen by the subscriber, then it is clear that customers will be able to get the best of both worlds – they will be able to choose the calling plan with the lower monthly rental fee and then choose a rival long-distance provider to provide cheaper long-distance calls. Recognising this, the rival local loop provider will be forced to withdraw its offering targeted at light users, even if it is efficient to offer such an option. As Laffont and Tirole note "Uniform access pricing deprives the incumbent of its ability to offer an efficient menu of tariffs tailored to the needs of its clientele"[39].

At one level, this result is merely a reflection of the well-known result that low interconnection fees for long-distance customers increase the pace of rebalancing – leading to higher rental fees and lower usage charges. But in this example, this rebalancing is inefficient as it prevents the local loop operator from offering an efficient calling plan. This is another illustration of the principle that when the access charges are less differentiated than retail charges there can be a trade-off between competition and efficiency.

There are two possible solutions to this trade-off, one is to resolve it in favour of efficiency by limiting competition – specifically, subscribers to unbundled local loops might not be offered a choice of long-distance provider, at least when they select the "light user" calling plan. According to Laffont and Tirole (2000), this was the approach adopted by the regulators in the UK and France. In both cases the regulators chose to restrict competition by preventing competing long-distance companies from having access to customers who chose a "light user" scheme.[40]

The other possible solution is to allow more differentiation in the access prices. Specifically, the access prices should depend on the calling plan the user has chosen. Charges for interconnection to long-distance carriers should have a higher fixed component and a lower usage component when the incumbent's retail tariffs have that form and *vice versa*.

In the case of unbundled local loops it may be desirable to allow the rival local loop provider to set these charges for long-distance call origination itself. In making a decision whether to choose an unbundled local loop a subscriber presumably looks at the entire service bundle offered by the rival – including the monthly rental fee and the charges for local and long-distance calls at peak and off-peak times. Competitive pressure between rival local loop providers will ensure downward pressure on these prices. In particular, having an incentive to keep long-distance prices low, rival local loop providers will ensure that charges for long-distance call origination are kept low. In addition, by allowing the rival local loop provider to set these charges itself, the rival local loop provider will be able to establish its own menu of calling plans – efficiently targeting different classes of customers. (It may still be necessary, however, to regulate the charges for long-distance call termination, for the reasons discussed above in the section on fixed-to-mobile charges).

3.4 Access Charges for the Provision of Internet Services

In most OECD countries access to the Internet is still commonly provided over a link provided by a PSTN operator – often a simple dial-up connection. In other words, the provision of Internet services and the provision of local loop services are complementary activities. Moreover, the provision of Internet services is competitive while the provision of local loop services is usually (more or less) not competitive. So we have a classic access regulation or essential facility problem.

In this case we will suppose that the "retail" service corresponds to the provision of Internet services and the "access" services is the provision of local loop services for the origination of the connection to the Internet. We will suppose that the price of the retail service is set by the Internet service provider and the price of access is set by the incumbent local loop operator. In some cases the end-user will pay the access charge directly. In other cases, the end-user will pay only the Internet service provider, which then pays the access charges to the local loop operator. Since these two cases are entirely equivalent, we will assume for simplicity the latter approach – i.e., the end-user pays the Internet service provider who pays the local loop operator for access.

As is usual, the critical question is exactly what should be the structure of the access charges. Since, in most OECD countries, local calls are charged on a per minute basis, at the outset it was conventional to pay for interconnection on a per minute basis. However, subsequently ISP affiliates of incumbent local network operators began offering "flat rate" Internet service – for a single monthly fee users could be connected to the ISP for as long as they like. At the beginning of 2000 users in only five OECD countries had the option of unmetered dial-up Internet access from the incumbent telecommunications carrier, but by the beginning of 2001 this number had grown to 12 countries.[41]

This charging structure has lead to complaints from rival ISPs. For example, in Finland, the incumbent operator offered unmetered Internet access at a fixed charge of 125 FIM/month. Rival operators were required to pay a call origination fees of 0.03 FIM/minute. An average customer uses three hours of access per day, leading to call origination fees of 162 FIM/month. The Finnish Competition Authority is currently in the process of investigating several operator's Internet access tariffs.

The same sort of complaints have also arisen in other markets which do not involve Internet access. For example, a similar situation arose in New Zealand in the mid-1990s in the market for long-distance services. At that time Telecom New Zealand was charging its rival Clear roughly two cents (NZ) per minute for long-distance interconnection per end. Telecom subsequently introduced a new retail tariff which capped off-peak long-distance calls at $NZ 5, independent of the length of the call. This new tariff structure proved popular with customers but lead to complaints from Clear that for calls longer than

roughly two hours in duration the interconnection charges would exceed the revenue Clear could obtain from the call.

The solution to these problems is not simply to lower the access fee so as to allow the rival operator to make a profit on the "average" user. As before, these competition problems arise because of a difference in the degree of discrimination in the access prices relative to the incumbent's retail prices.

Price discrimination requires and has the effect of dividing customers into groups or classes. The incumbent operator can then use the different demand characteristics for those groups to set the pricing structure accordingly, to more efficiently raise the total fixed costs. If the access charges are not sufficiently differentiated, entrants will find that one or more of those groups is more profitable to serve than the others. Assuming that the entrants can engage in the same price discrimination as the incumbents, the entrants will target those groups, to the exclusion of the others, undermining the ability of the incumbent to price discriminate, limiting entry and threatening the profitability of the incumbent.

In particular, if the incumbent is allowed to offer a menu of Internet charging plans (including, possibly, a flat rate unlimited-use plan) and if the entrant is required to pay access charges with a simple two-part structure then some group of customers will appear more attractive to serve than the others, limiting entry, putting pressure on the incumbent to abandon its price structure and possibly leading to allegations of predatory pricing.

For example, suppose in the context above that there are two classes of Internet user – one of which uses the Internet one hour per day and the other 11 hours per day. Suppose that 80 percent of the users fall into the first class and 20 percent into the second. This gives an overall average usage of three hours per day. Now suppose that the incumbent offers two Internet plans, one plan is usage-based fee of three FIM per hour of connect time. The other is a flat-rate unlimited usage of 125 FIM per month. It is clear that the low users will choose the low usage option (since one hour per day @ 3 FIM / hour is only 90 FIM per month) and high users will choose high usage plan (since 11 hours per day is 990 FIM per month).

Now suppose that the incumbent has a fixed cost of 97 FIM per Internet user per month that must be recovered (assume for simplicity that the marginal cost of providing origination services is zero). If the incumbent charges 1.08 FIM per hour for interconnection (0.018 FIM per minute) the incumbent will recover its fixed costs but new entrants will only be able to target low users (11 hours per day of interconnection equals 356 FIM which is larger than 125 FIM). Entry will be restricted. On the other hand, if the incumbent charges a flat fee of 97 FIM, the entrants will only be able to target the heavy users (revenue from low users is only 90 FIM per month which is less than 97 FIM).

So, in either case, the scope for entry is limited and the resulting competition undermines the ability of the incumbent to offer different menus of options. In this case with only two categories of users, it is possible to find a two-part tariff which allows the entrant to compete for both groups (an access charge with a fixed fee of 86.5 FIM and a usage fee of 0.1166 FIM per hour will achieve this), but this is not possible when there are three or more categories of users. This is illustrated in the attached box.

As this paper has argued, the access charges should be as differentiated as the final prices of the incumbent. If the incumbent access provider has a menu of Internet prices – including some price schemes which would be more suitable for low users and others more suitable for high users, the access charges should also reflect this differentiation – with the access charges depending on the particular options chosen by final customers. Laffont and Tirole (2000) write:

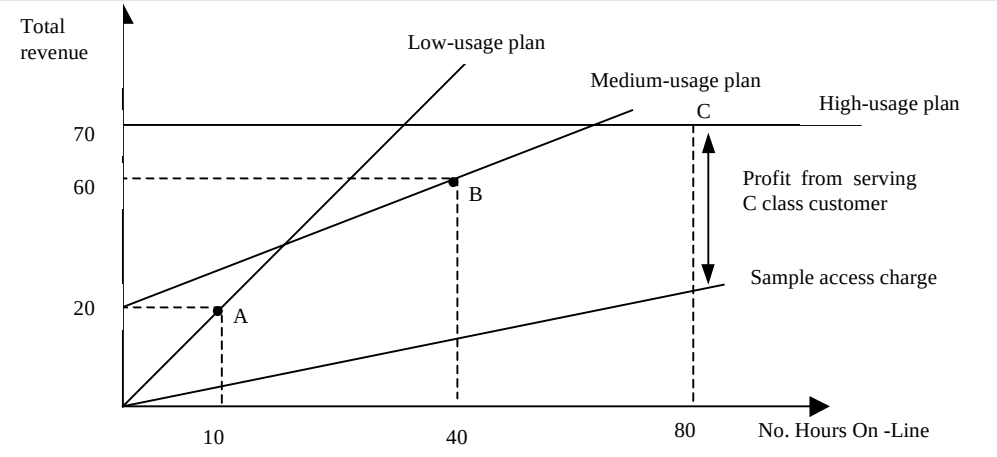
> "Because wholesale prices (access charges) guide retail prices, it is not surprising that the desirability of price discrimination at the retail level translates into a need for price discrimination

for wholesale prices. … Undifferentiated access prices may substantially distort competition and reduce welfare".[42]

Second-Degree Price Discrimination and Access Charges: Part II

This box extends the analysis of the previous box to show that when the incumbent uses a menu of two-part tariff options to divide customers into customer classes according to their usage patterns, the access charges should also reflect that menu of tariff options. The use of a simple two-part tariff will introduce a trade-off between competition and efficiency. Again, the general principle is that the access charges should be at least as differentiated as the retail prices of the incumbent.

Suppose that there are three categories of Internet user – corresponding to low, medium and high levels of usage. The incumbent PSTN owns a subsidiary Internet service provider which offers, correspondingly, three Internet tariff options – targeted at the low, medium and high usage groups, respectively. The low-usage option is a simple usage-only charge of $2 per hour. The medium-usage option involves a fixed charge of $20 per month and a usage charge of $1 per hour. The high usage option involves a flat monthly fee of $70 for unlimited usage. With this menu of options, the low users choose the low-usage plan and consume ten hours per month (at a total cost of $20, point A on the following diagram), medium users purchase the medium-usage plan and consume 40 hours per month (total cost of $60, point B) and the high users purchase the high-usage plan and consume 80 hours per month (total cost $70, point C). This is illustrated in the following diagram.



Suppose, for simplicity, that in the first instance the ISP rivals of the incumbent operator simply match the prices offered by the incumbent. That is, they offer the pricing schemes described above. Suppose also that the costs of providing internet service are independent of the class of customer served and that the marginal cost of providing internet service is zero.

Now suppose that the access charge has a two-part structure, with the ISP paying a fixed charge per customer and a charge per hour that the customer is on-line. The profit that the rivals receive from serving each customer class is then the vertical distance between the points A, B and C and the line corresponding to the access charge. It is clear that with any two-part access charge, some customer classes will be more profitable than the others. The rivals will focusing on serving those customer classes. As a general rule, the lower the usage component of the access charge, the more profitable it will be for the entrants to focus on high-usage customers, and vice versa.

It is clear from the diagram that the only way to make the three customer classes equally attractive to the

rivals is to adopt an access charging structure which "mirrors" the retail prices of the incumbent – i.e., in this case, an access charging which has a marginal price of $2 up to 20 hours, then a marginal price of $1 up to 70 hours and then a marginal price of zero thereafter. The fixed part of the access price should be chosen so as to allow the incumbent to break even overall.

3.5 Price Discrimination, Predatory Pricing and Local Network Competition

The last competition issue that we will examine does not involve access pricing issues. This issue, instead, raises the question of the extent of price discrimination across different geographic markets that should be permitted by an incumbent operator.

This issue is illustrated by a competition case that arose in New Zealand.[43] In New Zealand, a new company called Saturn began installing a broadband network in one New Zealand city with the intention of offering cable television and local telephony services. When the new entrant's network was still relatively small it began offering local telephone services at prices which reflected a substantial discount on the prices of the incumbent, Telecom New Zealand. In response, Telecom New Zealand lowered its own prices, but only in the geographic area in which Saturn was offering its services.

New Zealand's competition authority started an investigation into the possibility of predatory pricing. The question they sought to address was whether or not the price charged by Telecom was below some relevant measure of cost. The authority came to the conclusion that Telecom's prices (even though they represented a discount off Telecom's standard prices) were not below Telecom's incremental costs and therefore were not predatory under New Zealand competition law.

In coming to this conclusion the competition authority was following standard economic lines of reasoning. This standard reasoning argues that the incumbent should be able to respond to new entrants and that consumers benefit from the ensuing competition. Provided the incumbent's prices are not below its "costs" the entrant will be able to survive if it is more efficient or offers a more desirable product than the incumbent. Conversely, placing any higher floor under the incumbent's prices will limit the ability of the incumbent to respond to entry and will allow an entrant to survive even though it is less efficient or offers a lower quality service.

This standard reasoning makes sense in a market which is reasonably competitive in the sense that a reasonable degree of new entry can be expected and economies of scale and scope are limited. But what about the case where sunk costs or the presence of economies of scale and scope limit the scope for new entry? Does allowing the incumbent to price down to his or her "costs" always make sense?

In the telecommunications industry the presence of economies of scale and scope in the provision of local services imply that local entrants will be less likely to achieve the level of efficiency of the incumbent, even when operating in an identical manner. For example, there are economies of density in the provision of local loop services in residential areas. Even a successful entrant is unlikely to achieve the same degree of penetration as the incumbent within a reasonable timeframe. For this reason alone an overlay network is unlikely to achieve the same cost efficiencies as the first network in a region. In this circumstance, allowing the incumbent to lower its prices to its "cost" will act as a deterrent to new entry.

Even if the entrant is not systematically less efficient than the incumbent, the need for sequential or progressive market entry in the presence of economies of scope can deter entry. Suppose that the incumbent provides services in two distinct markets A and B (corresponding, perhaps to two distinct cities or regions), and suppose that there are economies of scope between these two markets so that the entrant does not achieve its full efficiency until both markets are entered. Suppose finally that entry into two

markets simultaneously involves such a large commitment of sunk capital that, in practice it is not feasible. That is, entry occurs sequentially on a market by market basis, or not at all.

Now suppose that the price floor is incremental cost – specifically, suppose that the incumbent is allowed to price down to its incremental cost when the entrant enters one market and down to the incremental cost of A and B combined when the entrant enters both markets. In this case the entrant cannot recover the loss of its fixed costs that it incurs for the period when it operates in just one market. Entry is deterred

Does the presence of cost inefficiencies imply that competition should be prevented? Not necessarily. Even if the entrants are likely to be systematically less efficient than the incumbent, the resulting competition has certain beneficial effects – it (*a*) lowers prices to consumers and (*b*) enhances the incentive for efficiency on the incumbent. These two effects could, over the longer term, more than offset the immediate cost inefficiency of the entrant. Put another way, allowing new entry may reduce the need for reliance on regulation to keep down prices and ensure cost efficiency.

Expressed more technically, allowing additional entry reduces the extent of the incumbent's information advantage with regard to its own costs, allowing for more efficient regulation which allows prices to more closely approach the incumbent's true costs and provides stronger incentives for reducing those costs. This is expressed by Laffont as follows:

> "Under asymmetric information one must think in terms of generalized costs which include informational rents. Then, even if there exists costs of duplication, incurring those costs may be socially valuable because of the yardstick competition effect it entails, decreasing informational rents faster than it increases fixed costs. To defend monopoly provision it is now necessary to argue not only that there exist fixed costs but that these fixed costs are large relative to the potential gains of yardstick competition".[44]

In this circumstance there is clearly a trade-off – a policy of insisting on efficient entry ensures productive efficiency in the short run, at the cost of greater reliance on regulation to ensure allocative efficiency in the short run and productive efficiency in the long run. On the other hand, a policy of encouraging facilities-based competition, sacrifices productive efficiency in the short run with the aim of greater reliance on competition to ensure allocative efficiency and productive efficiency in the long run.

Suppose that policy-makers have made a decision to promote facilities-based competition (this is a judgement which will depend upon the facts specific to each case). In this context, what is the correct floor under the incumbent's prices?

As we saw above, if the incumbent is allowed to price down to its the incremental cost of the market in which the entrant enters, the entrant may not be able to recover any contribution towards its joint costs during the phase of network roll-out or until it achieves a sufficiently high network penetration. This may act as a deterrent to entry.

An argument can be made that the appropriate price floor is not incremental cost in this context, but stand-alone cost. Specifically, the incumbent could be prevented from pricing below its stand-alone cost on the set of markets in which the entrant is competing (with the proviso that the incumbent would never be required to raise its prices on any existing service). With stand-alone cost as a price floor the incumbent is prevented from benefiting from any economies of scope that it might enjoy while the entrant is building out its network. This allows the entrant to recover its fixed and joint costs while building out its network to a viable size.

Alternatively, if the minimum viable size of a competing network could be determined, another possible policy would be to allow the incumbent to discount prices in response to new entry but only over an area at least equal in size to the size of a viable competing network. The appropriate price floor would remain incremental cost, but in this case interpreted as the incremental cost of providing the minimum viable network size. For example, if the minimum viable size of a competing network is an area the size of a city, the incumbent would be prevented from discounting on a suburb-by-suburb or street-by-street basis.

To summarise, in markets where the scope for competition is limited, policy makers face a choice of whether or not to pursue a policy of facilities-based competition (which lessens the regulatory burden at the cost of some productive inefficiency) or a policy of reliance on regulation to ensure allocative and productive efficiency. Facilities based competition involves greater reliance on competition to yield allocative efficiency and productive efficiency in the long-term. Facilities-based competition could be promoted through the use of stand-alone cost as the relevant price floor for predatory pricing. On the other hand, a policy of reliance on regulation can be ensured with a price floor of incremental cost. This policy may limit the scope for new entry, leading to a longer-term reliance on regulation to control prices and costs.

NOTES

1 This definition distinguishes telecommunications from broadcasting, which primarily involves point-to-multipoint communications links. However, because, to an extent, point-to-multipoint services can be constructed with a series of point-to-point services, the boundary between telecommunications and broadcasting is blurred. In most OECD telecommunications networks the only remaining analogue services are services over a non-upgraded traditional copper twisted pair. Over time, analogue services are likely to disappear.

2 i.e., distinguished for the purposes of defining relevant product markets.

3 A brief overview of the telecommunications industry can be found in Laffont and Tirole (2000). In the UK, what I am calling here "transmission" and "distribution" is known respectively as "conveyance" and "access".

4 Here, the word "metropolitan" is used to refer to the part of a city or town outside of the CBD (which contains a dense concentration of large telecommunications users) and which is more densely populated than rural or remote areas.

5 As an illustration, the Australian Productivity Commission reports that although there are as many as ten network providers in the CBDs of Sydney, Melbourne and Brisbane, the CBDs of smaller cities (such as Hobart and Darwin) are served by only one or two providers. There are two broadband metropolitan networks in Sydney, Melbourne and Brisbane, provided by Cable & Wireless Optus and Telstra. Telstra also provides broadband networks in other cities, such as Adelaide and Perth. New carriers also provide broadband networks in some other smaller cities. See PC (2001), page 4.12. The Report of the Telecommunications Service Inquiry, "Connecting Australia" (M. A. Besley, Chairman) notes that "It is no longer accurate to speak of a single homogeneous, telecommunications market. The current telecommunications landscape is complex and can be characterised as a series of matrices in which the effects of geography and population (metropolitan, rural and remote markets) may be overlaid with demand for specific services (mobile telephony and internet markets)". (2000, page 34).

6 Many mobile phone companies also offer no-subscription services, but in this case the user must purchase a mobile handset which usually cannot be switched from one network to another on a call-by-call basis. So, the two-part price structure remains.

7 That is, consumers only choose one link, subject to product differentiation in links – i.e., they might choose one high-bandwidth fixed link and one lower bandwidth mobile link.

8 The period of time must be long enough so that a decision is not made on a call-by-call basis.

9 As a general rule, it is only when consumers are locked in to a single company (perhaps through the strategic use of loyalty programmes or quantity discounts) that customers care about the range of products offered by the same firm – otherwise consumers would "pick and choose" selecting the services they want from different companies.

10 Here it is useful to emphasise that the appropriate mark-up depends on the "super elasticity" and not the simple "own price elasticity". The super elasticity takes into account substitution effects between the entrant's products and the incumbent's final products.

11 This information is taken from OECD (2000b), box 8.

12 Other countries to address this issue include Austria (see DAFFE/CLP(2000)20/02, paragraph 36) and Spain (see DAFFE/CLP(2000)20/06, paragraph 52) and Italy (see DAFFE/CLP(2000)20/12, paragraph 58).

13 Another possibility would be to compare fixed-to-mobile and mobile-to-mobile charges.

14 See OECD (2000b), page 53.

15 This assumption is made to keep the analysis as simple as possible. If a proportion of mobile calls terminate on other mobile networks and if the fixed-to-mobile termination charge is the same as the mobile-to-mobile termination charge, then it is necessary to take into account the incentives that might arise in a two-way access problem.

16 i.e., the level at which a small increase in the termination charge would lead to a drop in termination revenue larger than the corresponding marginal cost.

17 This information is drawn from OFTEL (2001).

18 ACCC (2000)

19 RSL COM, an Australian telecommunications operator, in a submission to the ACCC commented "The dominant mobile networks utilise monopoly pricing of fixed-to-mobile calls in order to subsidise handset charges for mobile customers. As the three dominant mobile networks charge similar prices for fixed-to-mobile call termination, and there is no substitute available for these services, no competition can be said to exist in this market segment". Quoted in Productivity Commission (2000), page 4.27.

20 In contrast, in the UK when a customer changes mobile network but retains the same mobile number, the call is charged as though it is terminated on the original, not the new, mobile network. OECD (2000b), page 50.

21 Through repeated calls to the same customer, consumers could learn the price they expect to pay.

22 If mobile subscribers pay for incoming calls (as is common in the US and Canada) then, since the terminating charges are directly a component of the subscribers' own payments, mobile companies have an incentive to compete by offering lower fixed-to-mobile calls. Here, though, fixed-to-mobile callers make too many calls as they do not face the true marginal cost of terminating calls on the mobile network.

23 Annual Report on Competition Developments in Italy, 1999, DAFFE/CLP(2000)20/12, October 2000

24 ACCC (2000), page 17.

25 The UK's OFTEL reduced the termination charges for BTCellnet and Vodafone by 25% for 1999/2000 and subsequently imposed price reductions of RPI-9% for the years 2000/01 and 2001/02. OFTEL estimates that these price reductions will have saved UK consumers in excess of 1 billion pounds over these three years. OFTEL (2001), page 1. Termination charges need not be raised for all subscribers, but perhaps only for those for whom subsidies are likely to have the biggest impact on penetration.

26 The OECD has identified this as one of the benefits of RPP in OECD (2000b), page 36.

27 See OECD (2000b), page 39.

28 Population density is an imperfect indicator of what is really being measured here. Ideally, we would like an indicator of the density of, say, the 95% densest part of the population. This makes a big difference in countries such as Canada and Australia with large uninhabited territories. For example, in Australia, 95% of the population can be reached by a network which covers only 7% of the geographic area. Productivity Commission (2000), page 15.16.

29 See Oftel (1999a, 1999b and 1999c).

30 This material is drawn from Henrikka Piekkala, "Finnish Telecom Market – Toward Full Competition", conference presentation, March 2001.

31 Finnish Competition Authority, Press Release, 17 September 1999.

32 "The Commission considers that indications of anti-competitive conduct … such as refusal to provide roaming in a timely manner will result in action by the Commission". ACCC (1998), page 33.

33 This can be viewed as an application of the Efficient Component Pricing Rule.

34 Oftel (1999a), paragraph 2.12.

35 OECD (2001b), table 1.3.

36 OFTEL (1999), chapter 2.

37 Productivity Commission (2000), page 4.19.

38 OECD (2000), page 22. "Deutsche Telekom can now charge its rivals $14.62 per month per subscriber for a low-bit rate, copper twisted-pair connection … . The access rate is higher than … Deutsche Telekom's retail rental of $12.29, which is subsidised to remain low", page 27.

39 Laffont and Tirole (2000), page 112.

40 Laffont and Tirole (2000), page 111.

41 OECD (2001b), chapter 1, page 6.

42 Laffont and Tirole (2000), page xv.

43 See New Zealand Commerce Commission, "Termination Report: Telecom's Pricing of Fixed Telephony Services in Lower Hutt", 30 July 1998, Media Release 1998/61.

44 Laffont (1998), page 4.

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Table 1. Local Loop Unbundling

	Regulatory requirement for local loop unbundling
Australia	Required and conditions to be specified by October 2000.
Austria	Implemented on July 1999. Raw copper unbundling only – no bitstream access or line sharing.
Belgium	Consultation process under way.
Canada	Implemented in May 1997. Facilities that were classified as essential are subject to mandatory unbundling. Monthly rates for unbundled local loops were approved in November 1998.
Czech Republic	To be introduced after 2002.
Denmark	Implemented in July 1998.
Finland	Implemented in 1997.
France	Available from 1.01.2001. Includes raw copper unbundling and line sharing.
Germany	Implemented in January 1998.
Greece	Public consultation underway.
Hungary	Obligation for unbundling will be stipulated in the Unified Act on Communications that is expected to enter into force in 2001 or 20002.
Iceland	Came into force on 1 October 2000.
Ireland	Bit stream unbundling available from 2000. Full unbundling on April 2001.
Italy	Expected implementation date Summer 2000.
Japan	Ministry issued an interpretative document in August 1999 by which clarified that incumbent was required to provide interconnection to Main Distribution Frame and line sharing. Prices charged by incumbent are retail prices. Conditions concerning interconnection are under review.
Korea	Not available.
Luxembourg	Unbundling is not required.
Mexico	Not available.
Netherlands	Unbundled access to the local loop available since December 1997. OPTA laid down guidelines indicating the way in which it would settle any disputes over unbundled access in March 1999. Prices under negotiation and regulatory assessment.
New Zealand	Under consideration in context of Ministerial Inquiry on telecommunications.
Norway	Parliament decided in April 2000 to require unbundling. Regulatory provisions are being introduced in the regulatory framework for unbundling.
Poland	The new Telecommunication Law coming into force on 1/1/2001 provides for unbundling.
Portugal	The regulator launched a consultation in 2000.
Spain	Unbundling for ADSL bitstream access was commercially available in September 1999 following an Ordinance by the regulator. Regulations are being prepared for full local loop unbundling.
Sweden	The incumbent has since March 2000 offered access to the copper network but at a price higher than the retail line subscription price. The legal possibility of legally requiring unbundling is under consideration.
Switzerland	In the context of interconnection rules a demand for unbundling can be addressed to the Federal Communications Commission if commercial negotiations are unsuccessful. The incumbent is required to offer bitstream access. The incumbent is required to offer bitstream access.
Turkey	Not available.
United Kingdom	Came into force in August 2000. Full unbundling available and the regulator can set the price for unbundled local loops.
United States	In 1998 the FCC mandated elements of the local loop to be unbundled.

Source: OECD

NOTE DE RÉFÉRENCE

par le Secrétariat

1. Introduction

Le secteur des télécommunications a été totalement transformé par l'introduction de la concurrence. Anciennement structuré comme une société de services aux collectivités protégée, c'est aujourd'hui l'un des secteurs les plus dynamiques et les plus innovants des économies de l'OCDE.

Mais l'introduction de la concurrence ne s'est pas faite sans heurts. Elle a souvent donné lieu à de violentes critiques concernant des comportements anti-concurrentiels. Nombre de ces critiques découlent d'une question fondamentale liée à l'interconnexion ou à l'accès – à savoir quelles installations devraient être mises à disposition, par quelles entreprises, dans quelles conditions. Une connaissance plus approfondie des problèmes d'interconnexion et d'accès dans les télécommunications permet d'éclairer les principales questions liées à la concurrence qui sont apparues ces dernières années dans ce secteur.

Le présent document se concentre sur plusieurs de ces questions. Comme on le verra, la plupart de ces questions ont en commun des interrogations liées à l'accès – quel accès devrait être assuré, par qui et pour qui, et, fondamentalement, dans quelles conditions. Ce document s'intéresse plus particulièrement aux points suivants :

(a) terminaison des appels fixe-mobile : de nombreux pays connaissent une concurrence réelle entre les opérateurs de communications mobiles, mais cette concurrence exerce-t-elle une pression à la baisse adéquate sur les redevances de terminaison des appels fixe-mobile ?

(b) itinérance nationale obligatoire : le fait de rendre obligatoire l'accès aux réseaux des opérateurs de communications mobiles existants faciliterait-il le développement de la concurrence sur le marché des communications mobiles ? Le prix de cet accès devrait-il être supérieur au prix de détail fixé par les réseaux existants pour le même service ?

(c) dégroupage de la boucle locale : est-il possible de déterminer, pour la boucle locale dégroupée, des prix garantissant à la fois un recouvrement efficace des frais fixes et des conditions de concurrence équitables ?

(d) accès des fournisseurs de services Internet : l'introduction d'un service d'accès à l'Internet forfaitaire a soulevé les protestations des fournisseurs de services Internet concurrents et a mis en relief les difficultés qui apparaissent sur le plan de la concurrence lorsque les concurrents paient leur accès à la minute tandis que l'exploitant en place propose un forfait à ses propres clients. Comment fixer le prix de l'accès pour éviter ces difficultés ?

(e) discrimination par les prix et tarifs d'exclusion : les opérateurs locaux en place devraient-ils être autorisés à accorder des réductions pour faire face à la concurrence de nouveaux venus locaux ? Ces réductions décourageraient-elles les nouveaux entrants ?

Ces différents points seront abordés successivement dans la suite du présent document. Celui-ci n'évoquera aucune autre question fondamentale liée à la concurrence dans les télécommunications, telle que les questions ayant trait au contrôle des fusions ou à la convergence croissante des secteurs des télécommunications et de la diffusion audiovisuelle. Comme on l'a déjà observé lors d'un précédent tour de table du Groupe de travail n°2, bien qu'il existe d'autres voies de transmission unidirectionnelles à large bande pour les abonnés résidentiels, il existe relativement peu de solutions de rechange pour les réseaux filaires fixes en matière de communications bidirectionnelles à haut débit. A l'avenir, donc, la diffusion audiovisuelle s'orientant de plus en plus vers les services interactifs à large bande, il est probable que les acteurs en position dominante dans les réseaux filaires à large bande pour les communications fixes détiendront également une position dominante dans la fourniture de services de diffusion audiovisuelle interactifs.

Les grandes orientations de ce document sont les suivantes :

- Le secteur des télécommunications offre des services de communication point à point. Ceux-ci se subdivisent en services de « transmission » ou « dorsaux » et en services de « distribution » ou de boucle locale. Le niveau de concurrence pouvant être supporté sur les marchés de la transmission varie en fonction de facteurs géographiques et de la demande. Dans la plupart des pays, le marché de la transmission supportera une concurrence réelle. Sur le marché de la distribution, l'ampleur de la concurrence dépend de la technologie utilisée pour la connexion à l'utilisateur final ainsi que de facteurs géographiques et de la demande. L'ampleur de la concurrence sur les réseaux filaires à large bande pour les communications fixes est plus importante dans les quartiers d'affaires des grandes villes, plutôt limitée dans les banlieues, voire inexistante dans les zones isolées ou rurales. Dans les services mobiles, l'ampleur de la concurrence dépend également de facteurs géographiques et de la demande. Bien que concurrentiels, les marchés des télécommunications mobiles ont tendance à être concentrés selon des critères traditionnels. Dans les pays où la densité de population et la pénétration des réseaux mobiles sont faibles, le secteur des télécommunications mobiles a tendance à être moins concurrentiel.

- Tant que les abonnés sont connectés à un seul réseau, ce dernier dispose d'un monopole sur les appels qui aboutissent à ces abonnés. Dans certaines circonstances, même si les réseaux se font concurrence pour séduire les abonnés, il peut n'y avoir aucune pression concurrentielle sur les redevances de terminaison. La question s'est notamment posée pour la terminaison sur les réseaux mobiles. Les redevances de terminaison fixe-mobile sont restées élevées malgré l'intensification de la concurrence entre les réseaux mobiles. Même si certaines pressions à la baisse pèsent sur les redevances de terminaison des réseaux mobiles, on estime d'une manière générale qu'elles sont faibles et que des mesures réglementaires supplémentaires doivent être prises pour s'assurer que les redevances fixe-mobile soient définies à un niveau efficient.

- Les abonnés potentiels aux réseaux mobiles préfèrent ceux qui ont la plus vaste couverture géographique. Notamment dans les pays où la densité de population ou la pénétration du mobile est faible, seul un nombre limité de réseaux offrant une couverture nationale sont susceptibles d'être supportés. Dans la plupart des pays de l'OCDE, la concentration observée sur le marché des télécommunications mobiles est élevée si l'on tient compte des critères de mesure conventionnels. Le nombre des réseaux susceptibles d'être supportés pourrait augmenter dans le cas où de nouveaux réseaux parviendraient à conclure des accords d'itinérance avec les réseaux existants. La politique du gouvernement peut renforcer les probabilités de voir de nouveaux entrants réussir à conclure de tels accords. La théorie économique montre que l'itinérance devrait être facturée *plus cher* que le prix de détail des services de téléphonie mobile dans les zones visitées.

- De nombreux pays ont choisi de demander le « dégroupage » de la boucle locale (c'est-à-dire l'obligation de donner accès à la boucle locale de l'opérateur historique) afin de renforcer la concurrence dans les prestations de services de boucle locale et LAN (ligne d'abonné numérique). Les pays diffèrent, toutefois, quant à l'établissement de la tarification de la boucle locale dégroupée. Certains pays insistent pour que le prix des boucles locales soit fonction des coûts, tandis que d'autres insistent pour qu'elle soit établie sur la base du prix de détail de l'opérateur historique moyennant une réduction. Ces deux approches peuvent être considérées comme deux solutions distinctes permettant de résoudre le conflit qui apparaît lorsque qu'on peut atteindre un plus grand nombre d'objectifs grâce à un seul instrument – les prix d'accès. Les prix d'accès basés sur les coûts, en principe, permettent d'encourager effectivement la construction de réseaux de même couverture, mais ne garantissent aucunement que la concurrence s'étendra de la boucle locale à l'ensemble du réseau. L'établissement de prix d'accès par minoration au détail permet une diffusion de la concurrence dans l'ensemble du réseau mais favorise une duplication inefficace de réseaux dans les zones à faible coût. Ce conflit d'intérêts pourrait être évité en recourrant à d'autres outils, comme un dispositif de service universel avec des fournisseurs de boucle locale « imposés » dans les zones à faible coût et des fournisseurs de boucle locale « subventionnés » dans les zones à coût élevé.

- Même lorsqu'il n'y a aucune variation géographique des prix et des coûts de la boucle locale, les entrées concurrentielles pourraient rester limitées dans les cas où les prix d'accès à la boucle locale ne reflètent pas la structure des prix de détail de l'opérateur historique. Si, par exemple, les prix de l'opérateur historique pour l'utilisation de la boucle locale sont supérieurs au coût marginal et que le prix d'accès est structuré comme une simple redevance fixe, les nouveaux entrants sont incités à cibler uniquement les clients ayant la plus forte consommation. Cela aurait pour effet de limiter le nombre des nouvelles entrées, mais aussi de saper la structure de tarification au détail de l'opérateur historique, et donc son efficience. Ce problème peut être résolu en s'assurant que toute discrimination par les prix manifeste dans les prix de détail de l'opérateur historique se reflète dans les prix d'accès – et, dans le cas présent, dans les prix de la boucle locale dégroupée.

- Des inquiétudes analogues sont apparues sur le marché des services Internet. Elles se sont fait jour lorsque les fournisseurs de services Internet détenus par les opérateurs de réseau historiques ont commencé à proposer un accès à l'Internet sur une base forfaitaire pour une consommation illimitée. Au même moment, les fournisseurs de services Internet concurrents versaient à l'opérateur de réseau en place des frais d'accès à la boucle locale basés sur des tarifs d'utilisation à la minute. Cette structure de tarification montre que la cible des fournisseurs de services Internet concurrents se limite essentiellement aux clients ayant une consommation réduite. Ce problème peut être résolu à condition que les fournisseurs de services Internet concurrents se voient proposer un éventail de régimes de tarification de gros correspondant aux régimes de tarification proposés par le fournisseur de services Internet de l'opérateur en place.

- Enfin, il convient d'étudier avec attention les modalités d'application des règles de la concurrence normales dans d'autres secteurs, concurrentiels, à des secteurs où le potentiel de développement de la concurrence est plus limité, comme le secteur des télécommunications. Plus précisément, dans certains pays, on vérifie si l'on est ou non en présence de prix d'éviction sur la base d'un critère permettant à un opérateur historique d'abaisser ses prix pour les ramener au niveau (mais pas en dessous) de ses coûts marginaux. Dans le cadre d'un secteur où les frais liés et communs sont substantiels, ce critère peut avoir un effet dissuasif sur les nouveaux entrants. Si l'organisme de tutelle a choisi de se fier à la concurrence basée

sur les installations plutôt qu'à la réglementation pour réguler la puissance sur le marché, il peut être opportun d'adapter ce critère à la fixation de prix d'éviction. L'opérateur en place, notamment, ne devra pas être autorisé à fixer un prix inférieur à un indicateur précis, comme un coût de fourniture isolée, ni à proposer une réduction sur une zone de dimension inférieure à la plus petite taille possible pour un réseau concurrent.

En guise d'introduction, la partie suivante du document analysera la structure élémentaire du secteur des télécommunications, la nécessité de réglementer l'accès et l'interconnexion et certains principes généraux permettant d'établir les prix de l'accès et de l'interconnexion.

2. Introduction au secteur des télécommunications

2.1 Réseaux de transmission et de distribution dans le secteur des télécommunications

Le secteur des télécommunications repose principalement sur des réseaux de communication point à point de types analogique et numérique[1]. La communication point à point se caractérise par[2] :

(a) l'identité des clients aux points de départ et d'arrivée de la liaison de communication (une liaison de communication entre deux clients A et B ne peut se substituer à une liaison entre A et C) ;

(b) la largeur de bande effective de la liaison de communication dans chaque direction (c'est-à-dire la quantité d'information que la liaison peut transmettre dans chaque direction, en prenant en compte les éventuelles informations perdues en cours de transmission) et la question de savoir si cette bande passante est préservée ou garantie dans le temps ou si elle est fonction du trafic sur le réseau ;

(c) la mobilité des points de départ et d'arrivée (c'est-à-dire, la possibilité physique d'inversion ou non des points de départ et d'arrivée avant ou pendant la liaison de communication et les limites de cette mobilité) et

(d) la qualité du service (par exemple le délai entre l'envoi et la réception d'un élément d'information – certaines formes de communication, comme les conversations vocales bidirectionnelles ou la vidéoconférence, ne tolèrent que de brefs délais de transmission de l'information, tandis que certains types de transfert de données sont compatibles avec des délais de transmission plus longs).

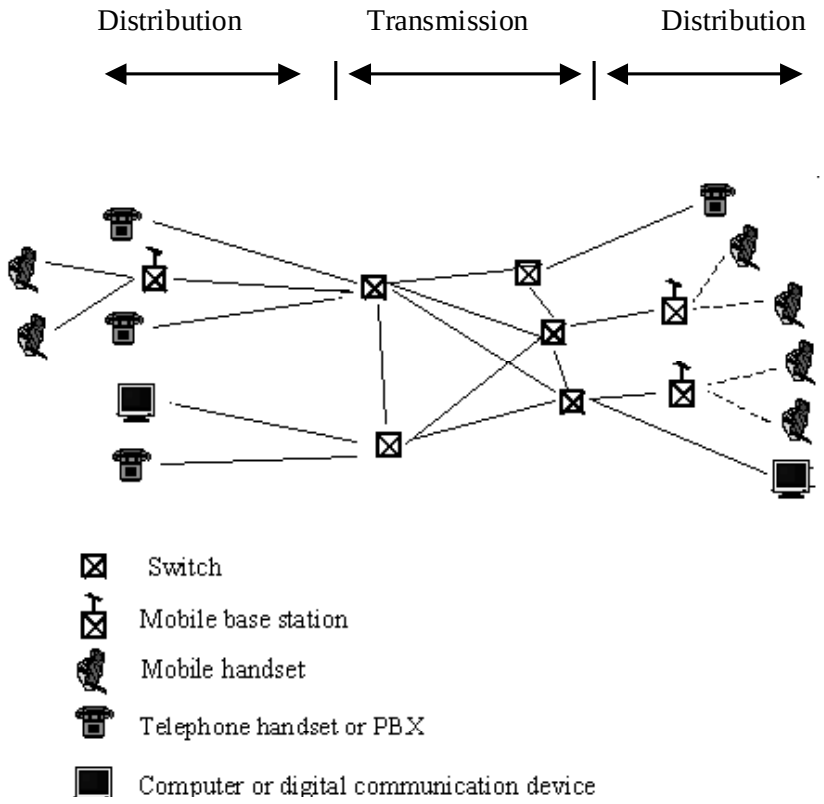
Comme dans toutes les autres industries de réseau, il existe certaines économies d'échelle en matière de fourniture de liaisons de télécommunications qui incitent à rassembler les flux de trafic et donnent à l'industrie son aspect de réseau. Cela entraîne également certaines économies d'envergure et de densité – une fois qu'une liaison est établie avec une localité, il revient normalement moins cher d'établir les liaisons de télécommunication avec les localités voisines.

Comme dans les secteurs de l'électricité, du gaz naturel (et dans une moindre mesure) dans l'industrie aéronautique on peut distinguer ce que l'on appelle les services de « transmission » des services de « distribution ». L'ampleur de la concurrence diffère entre ces deux types de services.

Les services de « transmission » en termes de télécommunication correspondent aux services de réseau étendu haute capacité (grande largeur de bande) qui relient d'importants commutateurs ainsi que des producteurs et consommateurs de télécommunication. Les services de « distribution » correspondent à une

largeur de bande étroite, des liaisons de densité géographique plus forte entre les commutateurs et les petits consommateurs du réseau sans fil ou filaire. On appelle également ces liaisons de distribution le « dernier kilomètre » ou la « boucle locale ». En outre, la connexion sans fil entre un téléphone mobile et la station de base la plus proche forment une partie des services de « distribution ».[3]

Le schéma suivant illustre les différences entre les services de transmission et de distribution :



Pour des raisons de concurrence, il est important de déterminer l'ampleur des économies d'échelle et d'envergure et le niveau de concurrence que chaque segment de l'industrie peut supporter.

Les services de « transmission » peuvent être assurés par connexion filaire (câbles en fibre optique) ou par une connexion sans fil (radio ou infrarouge). La fibre optique offre une haute capacité de transport de l'information mais implique des coûts d'installation élevés qui permettent néanmoins de réaliser d'importantes économies d'échelle. Les connexions sans fil ont des coûts d'installation moins élevés (il est toujours nécessaire d'accéder aux sites pour les antennes de transmission et de réception) mais les coûts de l'ajout d'une plus grande largeur de bande sont supérieurs. La transmission sans fil s'accompagne donc d'économies d'échelle moins importantes.

De manière générale, outre les problèmes d'interconnexion, la fourniture de services de transmission commutés à partir d'infrastructures privées et à grande couverture géographique est par nature probablement une activité oligopolistique. Les coûts irrécupérables d'installation de câbles en fibre optiques diminuent considérablement et étant donné le niveau actuel de la demande les limitations en terme de capacité sont moindres. Dans la plupart des pays de l'OCDE, il y a certainement peu de fournisseurs privés de ce type de services, qui font concurrence aux fournisseurs non commutés et aux fournisseurs point à point de services commutés.

Les services de « distribution » peuvent également être assurés par des technologies filaires et sans fil. Les services de distribution filaires les plus courants comprennent la paire de cuivre, les câbles à fibre optique, les câbles coaxiaux et la combinaison des trois. Les services sans fil comprennent les services « fixes sans fil » (qui fournissent des services de boucle locale sur une zone géographique fixe par voie radio) et les services mobiles (cellulaires).

L'ampleur de la concurrence dans les services de « distribution » varie selon la technologie mise en oeuvre, le niveau de la demande et la densité de population. Le niveau de concurrence prévu varie d'un pays à un autre et d'une région à une autre au sein d'un même pays. Selon les modèles économiques qui s'appliquent aux Etats-Unis, avec les technologies actuelles et les projections en terme de demande, l'ampleur de la concurrence dans le domaine des infrastructures privées sur les réseaux filaires à bande large dans les zones métropolitaines[4] est relativement limitée. Sur le plan économique, il est tout à fait réalisable d'installer un réseau métropolitain à bande large dans chaque ville, mais seuls les quartiers les plus peuplés pourraient espérer avoir deux réseaux concurrents à large bande. Les zones rurales ne disposeraient certainement pas de réseaux filaires du tout étant donné le niveau actuel des prix.[5]

Dans le cas des services cellulaires, bien que les coûts fixes ne soient pas aussi importants que pour un réseau entièrement filaire, les coûts fixes associés à la mise en place d'un réseau de stations de base cellulaires offrant une couverture géographique suffisante restent élevés. L'ampleur de la concurrence est là encore fonction du niveau de la demande et de la densité de population. Alors que dans les grandes villes la densité et la demande suffisent à soutenir de nombreux réseaux de stations de base concurrents, dans les régions de faible densité/à faible demande, l'ampleur de la concurrence est plus restreinte. En pratique, dans certains pays, l'ampleur de la concurrence dans le secteur des services mobiles, est limitée par les contraintes liées à la largeur de la bande de fréquence disponible. Dans d'autres pays de l'OCDE, la bande de fréquence des services cellulaires n'est pas utilisée, ce qui implique que d'autres contraintes s'imposent aux intervenants du marché. Comme on le verra, nous constatons que la concentration des marchés est plus élevée dans les pays à faible densité de population et à faible taux de pénétration cellulaire.

En résumé, l'ampleur de la concurrence est plus grande dans le secteur des services de « transmission », même si ce secteur est probablement de nature oligopolistique. Les économies d'échelle et d'envergure associées à la prestation de services de distribution limitent strictement le nombre d'entrants sur le marché. L'ampleur de la concurrence dans ces services varie d'une région à une autre, selon le niveau de la demande et la densité des consommateurs de services de télécommunication de ces régions. L'ampleur de la concurrence pourrait être plus large dans les services mobiles bien que cela dépende aussi de la zone géographique et du niveau de la demande.

2.2 Les effets de la fidélisation de la clientèle

Comme on vient de le noter, la fourniture de services de distribution entraîne généralement des coûts fixes élevés et des coûts marginaux relativement faibles – c'est-à-dire un certain degré d'économies d'échelle. La règle veut que ces économies d'échelle soient répercutées sur les consommateurs sous la forme d'un tarif de distribution à deux composantes, qui comprend un coût fixe d'abonnement à un service de télécommunication et un coût variable ou coût d'utilisation.[6]

Ce système de tarifs à deux composantes a tendance à fidéliser les consommateurs à un seul réseau de distribution de chaque type à la fois[7]. Cette tendance qui lie les abonnés à une seule entreprise pendant un certain temps[8] a plusieurs conséquences importantes :

(a) Premièrement, la fidélisation du consommateur conduit le client à s'intéresser à la gamme de services proposés par l'entreprise – le consommateur préférera en particulier l'entreprise qui possède un plus grand nombre d'abonnés avec lesquels il est possible d'échanger des appels téléphoniques (en particulier dans le cas des réseaux mobiles) et une couverture géographique plus étendue.[9]

On appelle « économies d'envergure par la demande » le fait que les consommateurs accordent de l'importance non seulement au prix et à la qualité d'un service mais également au prix et à la qualité de la gamme de services proposée par l'entreprise.

(b) Deuxièmement, l'entreprise à laquelle est connecté un consommateur a le monopole sur les appels destinés à ce consommateur. Si les consommateurs se soucient des appels qu'ils donnent et non de ceux qu'ils reçoivent, l'entreprise risque de pouvoir exploiter ce monopole en appliquant un prix élevé aux appels arrivant à ce consommateur. On reviendra plus loin sur cette question.

En présence de deux activités ou de deux services complémentaires, l'un concurrentiel et l'autre non, un problème de réglementation de l'accès ou d'installations essentielles se pose. Les deux problèmes évoqués précédemment interagissent pour donner lieu au problème des « installations essentielles » de télécommunication. Les consommateurs s'intéressant à la gamme de services qui leur est proposée, les « appels hors réseau » sont ainsi un service complémentaire aux « appels sur le réseau ». Le fait que l'autre réseau dispose d'un monopole sur les appels aboutissant sur ce réseau signifie que la terminaison d'appels n'est pas une activité concurrentielle.

Si ces effets n'existaient pas, il n'y aurait plus besoin de réglementer les télécommunications. Si de nombreuses entreprises pouvaient diriger des appels vers un consommateur donné (c'est-à-dire, si le point (b) ci-dessus ne s'appliquait pas), les entreprises voudraient absolument le faire et il ne serait pas nécessaire de réglementer les interconnexions, même si le nombre de consommateurs qu'ils peuvent contacter compte aux yeux des clients. En outre, même si un seul réseau pouvait diriger un appel vers un consommateur donné, si les consommateurs pouvaient choisir le réseau qu'ils souhaitent utiliser à chaque appel (c'est-à-dire, si (a) ci-dessus ne s'appliquait pas), ils choisiraient le réseau auquel est connectée la personne qu'ils souhaitent appeler, il n'y aurait donc pas besoin d'interconnexion.

Les effets présentés ci-dessus sont également à l'origine des problèmes d'accès et d'interconnexion qui seront étudiés plus en détail dans la partie suivante. Par exemple, le fait que les réseaux mobiles disposent d'un monopole sur les appels destinés à leurs clients pose le problème des frais de terminaison élevés, présentés ci-après, pour les appels passés d'un poste fixe vers un mobile. Le fait que les consommateurs accordent de l'importance aux services proposés par l'entreprise qu'ils ont choisie, pose le problème de l'itinérance nationale, qui sera également abordée plus loin.

2.3 Principes de fixation du prix d'accès

Il est bon de rappeler ici certains principes de base pour la fixation des prix d'accès. Ces principes serviront ultérieurement dans ce document.

(a) Premièrement, les prix d'accès peuvent ne pas permettre d'atteindre simultanément tous les objectifs envisagés par les pouvoirs publics. Dans certains cas, il sera seulement possible d'atteindre des objectifs de politique publique si l'on ajoute d'autres instruments. Par exemple, lorsque le prix final est modifié en vue d'atteindre des objectifs de services non commerciaux, il ne sera peut-être pas possible de faire en sorte que les prix d'accès soient

fixés de manière efficace et qu'il n'y aura aucune incitation à une entrée ou à un contournement inefficace.

(b) Deuxièmement, lorsqu'il s'agit de parvenir à une utilisation efficace des produits finaux (et à des incitations à une entrée efficace et à une concurrence sur le marché en aval) les prix d'accès devraient être fixés de manière à conserver un rapport correct entre le prix final de l'exploitant en place et le prix final du concurrent du marché en aval. Si un prix final est modifié en vue d'être supérieur ou inférieur au coût, il faut aussi modifier le prix d'accès aux biens mis en oeuvre pour la production d'un produit final de remplacement. C'est seulement lorsque le service final du concurrent ne fait absolument pas concurrence au produit final de l'exploitant qu'il est possible de séparer le problème de la fixation des prix d'accès de celui de la fixation des prix finaux.

Plus précisément, le rapport correct entre les prix finaux est respecté lorsque le prix d'accès comprend, pour chaque produit final de l'exploitant, une composante qui reflète la marge prix-coût marginal du produit final multiplié par un facteur qui rend compte du processus de substitution par lequel la vente d'une unité d'accès (et donc d'une autre unité du produit final du concurrent) mène à délaisser le produit final de l'exploitant en place. Cette formulation peut être considérée comme une généralisation de la règle de tarification efficace des composants (RTEC).

(c) Troisièmement, lorsque l'objectif est l'utilisation efficace des produits finaux et qu'il est en même temps nécessaire de couvrir les coûts fixes de l'exploitant grâce aux prix d'accès et finaux, les prix d'accès et finaux devraient être augmentés conformément à la formule traditionnelle de Ramsey de manière à être supérieurs au coût marginal[10]. En même temps, la discrimination par les prix quelle qu'elle soit (c'est-à-dire, prix variables selon le client, tarifs à deux composantes, tarification en heure de pointe etc.) va normalement améliorer l'efficacité du résultat.

(d) Quatrièmement, lorsque l'objectif est l'efficacité de production d'un service non concurrentiel et lorsqu'il est possible d'entrer dans ce service non concurrentiel, pour tout ensemble de services non concurrentiels, dès lors les prix d'accès ne devraient donc ni se situer au-dessus du prix intrinsèque ni en dessous du prix différentiel de ces services.

(e) Cinquièmement, lorsque l'objectif est l'utilisation efficace des produits finaux, lorsque l'accès est mis en oeuvre pour la production d'un produit qui vient remplacer les produits de l'opérateur historique et dès lors que les prix de détail sont fixés efficacement, toute discrimination par les prix qui apparaît dans les prix de détail de l'opérateur devrait soigneusement se refléter dans les prix d'accès facturés par cet opérateur. Lorsque les prix d'accès sont moins différenciés que les prix de détail de l'opérateur historique, on se trouve en présence d'un conflit entre concurrence et efficacité. Dans certains cas, on interdit la concurrence car elle compromet l'efficacité. Si la concurrence est autorisée :

- certaines catégories de clients sont plus rentables que d'autres, ce qui a deux effets : d'une part, les perspectives d'entrées sont limitées (les entrants s'intéressent uniquement aux segments de marchés sur lesquels se trouvent les clients rentables) et d'autre part, les entrants déposent des plaintes pour pratique de prix d'éviction, déclarant qu'ils sont confrontés à un effet d'étau sur certains marchés;

- L'entrée sur les marchés rentables tend à faire baisser la rentabilité de ces marchés, incitant ainsi les intervenants à augmenter les prix pratiqués sur les autres marchés.

Autrement dit, la structure du coût d'accès a tendance à déterminer la structure des prix de détail de l'opérateur, l'empêchant ainsi de pratiquer une discrimination par les prix efficace.

Ces principes peuvent parfois être contradictoires. Par exemple, si les prix de détail pour les services de la boucle locale sont inférieurs aux coûts, le principe (b) impliquerait que le prix d'accès à la boucle locale devrait également être inférieur au coût, tandis que le principe (d) impliquerait que le prix d'accès à la boucle locale devrait correspondre au prix coûtant. De manière plus générale, ces principes peuvent être contradictoires même si l'opérateur a fixé les prix de détail de manière « efficace ». Par exemple, lorsque les coûts fixes sont élevés, les prix de détail efficaces (selon la formule de Ramsey) peuvent se situer au-dessus des coûts de prestation isolée. Sans instruments de contrôle supplémentaires, de tels prix impliqueraient une entrée inefficace.

Ces contradictions peuvent être résolues (comme le premier principe le souligne) en mettant en place de nouveaux instruments, comme une interdiction des nouvelles entrées ou une sorte de dispositif de financement du service universel. Le dispositif de financement permettrait aux prix d'accès de ne pas dépasser les prix coûtants mais reposerait sur des impôts ou des subventions sur les produits finaux, créant ainsi une situation équitable pour la concurrence sur le marché final.

3. La concurrence dans le secteur des télécommunications

3.1 Prix des appels de réseau fixe à réseau mobile

Depuis quelques années, plusieurs pays soulèvent le problème du prix des appels de réseaux fixes à réseaux mobiles. La Commission européenne a ainsi décidé, en juillet 1998, de mener une étude sur la tarification entre les réseaux fixes et mobiles. La Commission européenne a annoncé qu'elle s'intéresserait en particulier au(x) :[11]

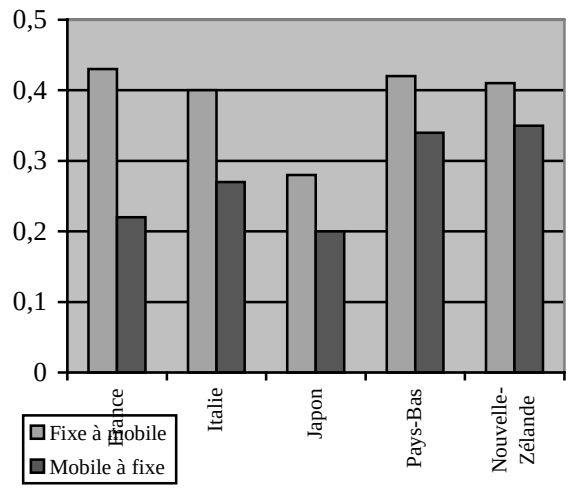
(a) prix de raccordement au réseau mobile (prix pratiqués par les opérateurs de réseaux mobiles pour raccorder les appels à leur réseau) – la Commission a ouvert cinq enquêtes à cet égard, deux en Italie et trois en Allemagne ; et

(b) les sommes retenues par les opérateurs de réseaux fixes sur les appels de fixe à mobile (différence entre le prix de détail payé par les utilisateurs au réseau fixe et les redevances de terminaison d'appels payées par le réseau fixe) – la Commission a ouvert huit enquêtes sur les opérateurs historiques, en Belgique, en Irlande, au Royaume-Uni, en Autriche, en Espagne, aux Pays-Bas, en Italie et en Allemagne.

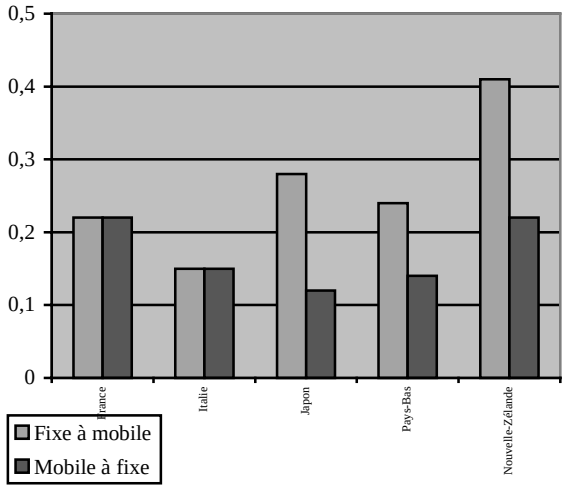
La commission a clos certaines de ces enquêtes en novembre 1998 puis de nouveau en mai 1999, à la suite de l'annonce de l'ouverture d'une action en justice par les autorités de tutelle ou de l'annonce par les opérateurs d'une baisse de prix (par exemple, les taux de rétention ont diminué de 31 à 80 pour cent). L'encadré sur la page suivante présente les différentes initiatives prises dans d'autres pays de l'OCDE pour régler le problème des redevances de terminaison d'appel du réseau fixe au réseau mobile.[12]

La concurrence entre les différents opérateurs de téléphonie mobile étant susceptible de faire baisser le prix des appels entre les réseaux mobiles et les réseaux fixes, il est possible de déterminer si le prix des appels de fixe à mobile est trop élevé en comparant les prix des appels de fixe à mobile aux prix des appels de mobile à fixe. Le coût marginal de l'utilisation du réseau fixe et du réseau sans fil devrait être identique dans chaque cas. Les différences de prix s'expliquent donc uniquement par des différences d'élasticité de la demande de chaque service. Est-on en droit de considérer que l'élasticité de la demande

d'appels de fixe à mobile devrait systématiquement être différente de celle de la demande d'appels de mobile à fixe ? Les graphiques qui suivent comparent les prix des appels de réseaux fixes à réseaux mobiles et de réseaux mobiles à réseaux fixes pratiqués dans différents pays de l'OCDE. [13]



Source: OCDE (2000b), graphique 15



Source: OCDE (2000b), graphique 15

Une autre conséquence du niveau élevé des prix de fixe à mobile est l'incitation à rediriger le trafic du fixe vers le mobile à l'échelle internationale. Les redevances de terminaison d'appels internationaux étaient jusqu'à maintenant déterminés selon le système des taux de répartition internationaux. Pour diverses raisons, ce système ne faisait pas la différence entre la terminaison d'un appel au réseau fixe ou au réseau mobile. La redevance pour un appel international vers le réseau fixe est ainsi souvent plus élevée que la redevance de terminaison d'un appel national de fixe à mobile. Cela incite donc les exploitants nationaux de réseau fixe à rediriger le trafic vers des réseaux mobiles internationaux. C'est ce qu'on appelle le « reroutage ».

Par exemple, pour un appel du fixe au mobile, France Telecom paie 33 cents US pour la terminaison du trafic sur un réseau mobile mais pour la terminaison d'un appel provenant d'un pays voisin, France Telecom reçoit entre huit et neuf cents par minute, dont 5 cents sont reversés à l'opérateur mobile qui assure la terminaison de l'appel. Les opérateurs de réseaux fixes situés en France ont donc tout intérêt à diriger les appels vers les réseaux mobiles français via des réseaux fixes étrangers. L'Autorité de Régulation des Télécommunications française considère cela comme un trafic « artificiel ».[14]

3.1.1 Accès aux réseaux mobiles

Comme on l'a vu précédemment, tant que les abonnés sont connectés à un seul réseau, chaque réseau a le monopole sur les appels de son abonné. La question se pose alors de savoir si le réseau qui assure la terminaison des appels est tenté de profiter de ce monopole pour fixer des redevances de terminaison élevées. Armstrong (2001) décrit un modèle dans lequel tous les appels provenant de réseaux mobiles aboutissent au réseau fixe[15]. Il démontre que lorsque les abonnés (a) ne prennent en considération et ne paient que les appels qu'ils passent (et non les appels qu'ils reçoivent) et que (b) ils ne bénéficient d'aucun service au titre des appels qu'ils reçoivent (et ne se soucient pas du bien-être des personnes qui les appellent), le niveau des redevances de terminaison n'a aucun effet sur la demande d'autres services du

réseau de terminaison ou sur le nombre d'abonnés à ce réseau. Ainsi, en l'absence de réglementation, le réseau de terminaison a intérêt à fixer les redevances de terminaison au niveau du monopole.[16]

Terminaison d'un réseau fixe à un réseau mobile dans un certain nombre de pays de l'OCDE

ROYAUME-UNI[17]

A la suite des préoccupations exprimées par la clientèle d'entreprises et de particuliers, Oftel a mené en 1997-98 une étude sur le niveau du prix d'appel vers les téléphones mobiles. En mars 1998, le Directeur général d'Oftel a renvoyé l'affaire devant la MMC (Commission des monopoles et fusions, devenue Commission de la concurrence). La MMC a mené une enquête sur les redevances demandées par BTCellnet et Vodafone aux opérateurs de réseaux fixes, pour des appels dirigés vers des téléphones mobiles sur leurs réseaux respectifs. En décembre la Commission de la concurrence en a conclu que :

- il n'y avait pas assez de concurrence pour limiter les redevances de terminaison sur les réseaux mobiles et que cela risquait de durer au moins jusqu'en 2002 ;
- les redevances en vigueur étaient trop élevées par rapport aux coûts d'un opérateur efficient détenant 25 pour cent des parts de marché et
- le niveau des redevances allait à l'encontre de l'intérêt public.

Le Directeur général a adopté les recommandations de la MMC en mars 1997, en modifiant les licences de BTCellnet et Vodafone afin de ramener la moyenne pondérée des redevances de terminaison pour 1999-2000 à un plafond de 11,7 pence la minute et d'abaisser ce plafond de prix à concurrence du RPI – neuf pour cent (indice des prix de détail) pour chacune des années 2000-01 et 2001-02.

Australie

Le régime australien d'accès aux télécommunications prévoit que les prestataires de services « déclarés » doivent proposer un accès à des conditions de vente résultant de négociations, préalablement convenues par l'ACCC ou ayant fait l'objet d'un arbitrage ex post par l'ACCC. Les services de terminaison d'appel de fixe à mobile ont été « déclarés » en 1997, mais en 1999, des différends quant aux redevances de terminaison, ont débouché sur une consultation officielle qui s'est achevée en décembre 2000.[18] Les conclusions de l'ACCC sont présentées dans le corps de texte.

Autres pays

En juin 1999, l'OPTA, l'autorité de régulation des télécommunications aux Pays-Bas, a noté que le prix des communications de fixe à mobile était plus élevé aux Pays-Bas que dans d'autres pays et également plus élevé que le prix des communications de mobile à fixe. L'OPTA a donc déclaré son intention de considérer que KPN et Libertel disposaient d'une plus grande puissance sur le marché, ce qui permet à l'OPTA de contrôler les redevances de terminaison pour ces ces réseaux.

En France, en novembre 2000, à la demande de l'Autorité de Régulation des Télécommunications (ART), France Telecom a réduit le prix de ses appels de fixe à mobile de 21 pour cent.

Les réseaux mobiles se livrent une concurrence acharnée pour attirer les abonnés et les opérateurs mobiles ne peuvent donc conserver aucun profit de monopole des redevances de terminaison, mais ils les utilisent pour abaisser d'autres redevances, comme la redevance fixe d'abonnement à un réseau mobile.[19] Le fait de réduire le coût fixe de connexion à un réseau fixe en le subventionnant au moyen des téléphones portables peut avoir un effet socialement souhaitable – cela peut augmenter la pénétration du téléphone

mobile. Facturer des redevances élevées de terminaison d'appel du réseau fixe au réseau mobile, dans la mesure où cela permet d'accroître les subventions provenant du téléphone portable, peut donc présenter certains avantages sur le plan social. Cela justifie dans une certaine mesure de porter les redevances de terminaison à un niveau supérieur au coût marginal (sans pour autant atteindre nécessairement le niveau du monopole).

L'incitation à fixer des redevances de terminaison élevées est d'autant plus forte que les clients du réseau fixe ne connaissent pas ou ne paient pas les redevances de terminaison de la société de téléphone mobile qu'ils appellent. Par exemple, même si le prix de détail d'un appel du réseau fixe vers le réseau mobile dépend directement de la redevance de terminaison du réseau mobile, avant leur appel, les clients peuvent ne pas être en mesure de savoir par avance à quel réseau mobile leur appel est raccordé. Même dans les pays où certains numéros de téléphones mobiles ont toujours été liés à des réseaux mobiles spécifiques, la mise en place de la portabilité des numéros peut rompre cette relation.[20] Une façon de modéliser le comportement des consommateurs dans de telles conditions consiste simplement à considérer qu'ils se comportent comme si le prix qu'ils devront payer correspond simplement à la moyenne des prix fixe à mobile du marché.[21] Autre solution, l'opérateur fixe peut simplement déterminer lui-même le prix d'appel du réseau fixe au réseau mobile, indépendamment du réseau appelé, à partir de la moyenne des redevances de terminaison du marché.

Si les clients paient seulement le prix moyen pour passer un appel vers les réseaux mobiles, les différents réseaux mobiles auront plus intérêt à augmenter leurs tarifs (dans la mesure où l'effet sur le prix moyen est réduit). Les très petits réseaux peuvent avoir effectivement intérêt à relever très fortement leurs tarifs.

Certains effets peuvent servir à compenser la tendance pour les opérateurs mobiles qui ne sont pas réglementés à fixer des redevances de terminaison élevées. Réduire les redevances de terminaison fait baisser le prix de détail des appels de fixe à mobile, ce qui accroît le bien-être des personnes qui passent des appels vers les réseaux mobiles. Si les abonnés des réseaux mobiles se soucient suffisamment des personnes qui les appellent (comme cela peut se produire dans un groupe soudé, tel qu'une famille) ils prendront cet effet en compte lors du choix d'un réseau mobile.

Autre solution, si le prix des appels de mobile à fixe s'écarte trop du prix des appels de fixe à mobile, les clients peuvent procéder à un « arbitrage » entre ces deux prix en demandant aux utilisateurs de mobile de les rappeler.[22]

Enfin, puisque les utilisateurs de mobile paient des redevances de terminaison du réseau mobile pour des appels de mobile à mobile, il se peut que la concurrence qui pèse sur les tarifs d'appels de mobile à mobile fasse baisser les redevances de terminaison du réseau mobile. L'économie de ces problèmes d'accès à deux entrées est complexe et ne permet pas d'obtenir des résultats sérieux. Armstrong (2001) démontre que la concurrence entre les opérateurs de réseaux mobiles ne les incite pas systématiquement à réduire les redevances de terminaison. L'augmentation des redevances de terminaison accroît les revenus en provenance d'autres réseaux au titre de la prestation de services de terminaison, mais ces recettes sont absorbées sous forme d'une baisse des frais fixes et des redevances d'utilisation au bénéfice des propres abonnés des réseaux. Parfois, ces effets s'équilibrent et les réseaux restent donc indifférents au niveau des redevances de terminaison.

Les réseaux historiques peuvent ne pas être indifférents, toutefois, si l'on tient compte des possibilités d'entrée. Il se peut qu'une hausse des redevances de terminaison décourage de nouveaux entrants. Alors que des redevances de terminaison élevées impliquent des redevances d'utilisation élevées, un nouveau réseau compte une plus forte proportion d'appels vers d'autres réseaux (d'où une redevance de terminaison élevée) et il est donc moins en mesure de percevoir les rentes nécessaires pour permettre des

subventions croisées de ses frais fixes. Les nouveaux réseaux ont donc des difficultés à rivaliser avec les réseaux fixes lorsque les redevances de terminaison sont élevées. En Italie, par exemple, deux exploitants de réseaux mobiles historiques se sont entendus pour relever leurs redevances de terminaison, manifestement en vue d'empêcher l'entrée d'un troisième concurrent. L'autorité italienne de la concurrence décrit l'affaire en ces termes :

> « [En 1999] Telecom Italia Mobile et Omnitel sont convenus de relever le coût de l'interconnexion entre leurs réseaux respectifs en le faisant passer au plus élevé des coûts que les deux exploitants de réseaux mobiles avaient déclarés séparément au ministère des Télécommunications comme applicable à l'adjudicataire de la troisième licence mobile de technologie DCS 1800. La hausse de ce coût, au cours de la phase de démarrage du nouveau concurrent Wind et avant que les négociations sur l'interconnexion avec les nouveaux exploitants de réseaux fixes ne soient engagées, semblait être destinée à créer des obstacles à l'accès au marché, par l'application aux nouveaux entrants de coûts plus élevés. En évaluant le caractère restrictif des accords faisant l'objet de son enquête, l'Autorité a constaté que de telles pratiques avaient eu pour objectif et pour effet de restreindre sensiblement la concurrence sur le marché des communications mobiles destinées aux particuliers. Compte tenu de la gravité d'un tel comportement, l'Autorité a condamné les deux sociétés à verser des amendes d'environ 100.4 milliards de lires (51,86 millions d'euros) pour Telecom Italia Mobile et de 46,9 milliards de lires (24,22 millions d'euros) pour Omnitel ».[23]

En résumé, ces effets compensatoires ne sont pas assez nets, de l'avis général, pour garantir une pression à la baisse adéquate sur les redevances de terminaison fixe-mobile. Comme l'a constaté l'ACCC :

> « La Commission estime que le contrôle de l'accès aux terminaisons GSM et l'ignorance des consommateurs permet aux opérateurs de téléphonie mobile de maintenir des prix d'accès élevés pour les terminaisons GSM. La Commission considère que les pressions concurrentielles pesant sur les terminaisons GSM resteront relativement faibles, aujourd'hui et dans un avenir proche. La Commission reconnaît que les groupes d'utilisateurs « fermés » et la possibilité pour les appelants à partir de lignes fixes de demander aux abonnés aux réseaux mobiles de les rappeler pourraient faire de plus en plus jouer la concurrence sur les prix d'accès aux terminaisons GSM. Cependant, à l'heure actuelle, la Commission considère que les pressions concurrentielles pesant sur les terminaisons GSM sont relativement faibles ».[24]

3.1.2 Solutions envisageables

La solution la plus directe au problème de l'exercice d'une puissance sur le marché des redevances de terminaison mobiles serait tout simplement de réglementer ces redevances. Celles-ci devraient alors être fixées selon les principes définis auparavant. Comme on l'a vu précédemment, les redevances de terminaison pourraient être légèrement relevées lorsqu'on souhaite augmenter la pénétration des communications mobiles.[25]

Certains pays ont proposé de faire supporter les redevances de terminaison à l'abonné au réseau mobile (une sorte de facturation au destinataire). Comme on vient de le voir, la concurrence entre les opérateurs de téléphonie mobile tirerait ainsi à la baisse à la fois le prix des appels mobile-fixe et les redevances de terminaison fixe-mobile.[26] Néanmoins, cette approche comporte deux inconvénients. Premièrement, les consommateurs ont moins la possibilité de contrôler le montant de leur facture de communications mobiles et pourraient donc être moins enclins à souscrire un abonnement. Il est avéré que les pays ayant adopté la facturation au destinataire (notamment les Etats-Unis et le Canada) enregistrent en

conséquence des taux de pénétration plus faibles.[27] Deuxièmement, selon cette approche, les appelants fixe-mobile ne supportent pas l'intégralité des frais et ont donc une raison supplémentaire de passer des appels fixe-mobile. Une solution de compromis pourrait être de faire payer les clients des réseaux fixes une large part (mais pas la totalité) des redevances de terminaison fixe-mobile, et de laisser aux clients des réseaux mobiles le soin de régler le solde – en résumé, cette approche compte sur la concurrence pour diminuer légèrement les redevances de terminaison fixe-mobile.

Une autre solution serait d'établir tout simplement un lien entre les prix fixe-mobile et les prix mobile-fixe, en utilisant éventuellement les prix mobile-fixe pour plafonner les prix fixe-mobile. Cette approche utilise les pressions concurrentielles sur le marché mobile-fixe pour tirer à la baisse les prix fixe-mobile.

La dernière solution au problème de la puissance sur le marché des terminaisons des appels serait d'introduire une certaine dose de concurrence dans ce secteur. En principe, les appels passés sur un réseau mobile peuvent aboutir sur les combinés d'abonnés à un autre réseau. Néanmoins, il faudrait pour cela que l'opérateur concurrent dispose des informations contenues sur la carte SIM (Subscriber Identity Module, module d'identification d'abonné) des clients. Normalement, les opérateurs de communication mobiles n'ont pas accès à ces informations. Toutefois, si ces dernières étaient plus largement diffusées, les opérateurs de réseaux mobiles pourraient se faire concurrence au cas par cas pour faire aboutir les appels sur un combiné donné.

3.2 Itinérance obligatoire

Comme on l'a vu précédemment, le coût de mise en place d'un réseau de téléphonie mobile dépend largement du nombre de stations de base devant être installées pour répondre à la capacité en charge maximale dans chaque région et pour offrir la couverture géographique adéquate. Le nombre des stations de base requises pour obtenir une couverture géographique adéquate dépend de la densité de population et des conditions géographiques. Les fréquences utilisées pour les télécommunications mobiles sont bloquées par les collines, les masses continentales et les hauts immeubles. Aussi, pour garantir une couverture totale, les stations de base doivent-elles être installées en plus grand nombre dans les zones vallonnées, les tunnels ou les centre-villes des grandes métropoles.

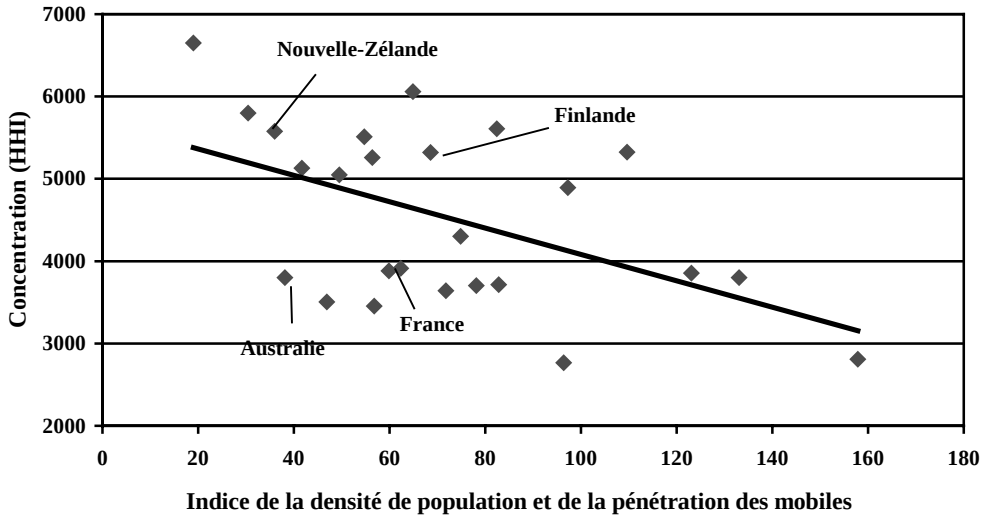
Comme la mise en place d'un réseau mobile induit des coûts fixes substantiels et (du moins pendant les heures creuses) des coûts marginaux relativement faibles, il existe un stade de rendement décroissant, qui limite le nombre des entreprises capables de survivre au point d'équilibre. Dans certaines zones faiblement peuplées, notamment (comme dans les zones vallonnées), la densité de la population peut ne pas être suffisante pour justifier l'installation d'un réseau autre qu'un réseau extrêmement limité de stations mobiles de base indépendantes.

Cependant, les consommateurs appréciant que les prestataires de services mobiles proposent une vaste couverture géographique, ces prestataires pourraient avoir intérêt, sur le plan de la rentabilité, à financer leurs stations de base au moyen de subventions croisées dans les zones isolées – en installant des stations de base qui, sans être rentables individuellement, pourraient se justifier par les recettes supplémentaires générées par le réseau dans les zones de plus forte densité de population.

La nécessité de recourir ainsi aux subventions croisées limite le nombre d'opérateurs de téléphonie mobile capables d'atteindre le point d'équilibre. De plus, les investissements réalisés dans les zones plus isolées sont excessifs, car les stations de base n'y sont pas utilisées à leur pleine capacité. Enfin, même si la concurrence peut être plus vive dans les zones à forte densité de population, il est impossible d'y entrer sans installer également des stations de base dans les zones isolées.

Par conséquent, selon nos prévisions, le nombre des entrées devrait être plus restreint et la concentration du marché plus élevée dans les pays ayant une faible densité de population et/ou une faible pénétration de l'utilisation des téléphones mobiles. C'est ce que confirme le schéma suivant. Ce graphique représente la concentration du marché en fonction d'un indice de densité de population et de pénétration des téléphones mobiles. [28] Les pays où la densité de population et la pénétration des mobiles sont les plus élevées sont ceux où la concentration du marché est la plus faible.

Schéma 1 : Corrélation entre les facteurs Concentration et Coût/Demande sur le marché des télécommunications mobiles



Source : OCDE

3.2.1 Stimulation de la concurrence dans le secteur des télécommunications mobiles

Si le niveau de la concurrence est déterminé, sur le marché des télécommunications mobiles, par des facteurs de coût et de demande (et non par le faible nombre des fréquences), il est possible, dans certains pays du moins – notamment ceux où la densité de population et l'utilisation des réseaux mobiles sont les plus faibles – que le niveau de la concurrence en situation d'équilibre ne suffise pas à maîtriser la puissance sur le marché. Cette question doit être examinée dans chaque pays au cas par cas. Si le niveau de la concurrence en situation d'équilibre n'est pas suffisante pour exercer un contrôle réel sur la puissance sur le marché, il conviendrait peut-être de prendre de nouvelles mesures réglementaires pour contrôler cette puissance sur le marché via la réglementation ou de stimuler plus avant la concurrence.

Comme on l'a vu précédemment, la question de la stimulation de la concurrence dans le secteur des télécommunications mobiles se présente comme un problème d'installations essentielles classique – il existe deux types d'activités (« services mobiles dans les zones isolées » et « services mobiles dans les zones de forte densité de population ») qui sont complémentaires (les consommateurs souhaitent acheter les deux lorsqu'ils choisissent un opérateur de communications mobiles) et l'une est compétitive, et l'autre ne l'est pas ou l'est moins.

Se pose alors la question de savoir s'il est possible de renforcer la concurrence sur le marché du mobile dans les zones de forte densité de population via une forme de réglementation de l'accès – dans ce

cas, en rendant obligatoire l'accès aux réseaux mobiles existants dans les zones les plus isolées. Ce phénomène est plus connu sous celui « d'itinérance nationale obligatoire ».

A titre d'exemple, l'encadré ci-dessous décrit un cas d'itinérance obligatoire en Finlande. Le Royaume-Uni a également envisagé la possibilité de rendre obligatoire l'itinérance nationale. Inquiets à l'idée que les opérateurs historiques de communications mobiles puissent disposer d'un avantage concurrentiel sur les nouveaux entrants au moment de la vente aux enchères des fréquences concernant les services mobiles de 3ème génération, Oftel a proposé que les prestataires existants de services mobiles de 2ème génération soient contraints de fournir aux nouveaux opérateurs de 3ème génération des services d'itinérance en dehors de la zone couverte par le nouvel opérateur. Cette obligation ne s'appliquerait qu'aux opérateurs ayant déjà construit un réseau desservant 20 pour cent de la population et serait limitée dans le temps – l'obligation prenant fin en 2009. Oftel propose de facturer ces services selon la méthode de la minoration au détail.[29]

Itinérance nationale en Finlande : l'affaire Telia-Sonera-Radiolinja [30]

Telia Mobile (filiale de l'opérateur historique suédois Telia) propose des services mobiles GSM dans trois grandes villes finlandaises. Toutefois, elle n'a pas de réseau national et ses services n'ont pas encore séduit les usagers. La part de marché de Telia n'a pas franchi la barre des un pour cent, contrairement à ses concurrents Sonera (61 pour cent) et Radiolinja (36 pour cent). Un quatrième opérateur, Suomen 2G, a lancé son propre réseau national le 1er février 2001.

En 1998, Telia a cherché à proposer une couverture nationale pour les télécommunications mobiles en concluant un accord d'itinérance nationale avec Sonera ou Radiolinja. Dans un premier temps, ni Sonera ni Radiolinja ne se sont montrés disposés à signer un tel accord. Pourtant, après l'intervention et la médiation du ministère du Transport et des Télécommunications, les deux opérateurs ont fait une offre formelle. Les conditions générales et tarifaires proposées n'ont pas satisfait Telia, qui a déposé une plainte auprès de l'autorité finlandaise de la concurrence. Telia a accusé Sonera et Radiolinja d'avoir abusé de leur position dominante séparément ou conjointement en fixant des prix d'itinérance nationale excessifs. Les prix offerts par Sonera et Radiolinja à Telia étaient plus élevés que les prix offerts au détail par Sonera et Radiolinja à leurs propres clients. Dans un communiqué de presse en date du 17septembre 1999, l'autorité finlandaise de la concurrence a indiqué que :

> « Le délai nécessaire à la construction d'un réseau mobile empêche les nouveaux venus d'y entrer rapidement, ce qui contribue ainsi à protéger la position de Sonera et Radiolinja à court terme. Ceux-ci ont la possibilité de compliquer et de ralentir considérablement l'entrée de leurs concurrents en fixant le prix de leurs services de réseau…
>
> L'autorité estime que l'entrée d'une nouvelle société offrant des services de télécommunications nationaux accroîtrait l'utilisation des réseaux construits dans les régions faiblement peuplées du pays et s'accompagnerait ainsi de gains d'efficacité. L'intensification de la concurrence se traduirait probablement par des avantages pour les consommateurs via une amélioration de la qualité des services et une baisse des prix. »[31]

En novembre 1999, Telia et Radiolinja sont parvenus à un accord permettant à Telia de proposer des services mobiles nationaux sur le réseau de Radiolinja. Dans la décision qu'il a rendue sur cette affaire en janvier 2000, l'Autorité finlandaise de la concurrence n'a pas constaté d'abus de position dominante. Telia a fait appel et l'affaire a été portée devant le Conseil de la concurrence finlandais.

La principale différence entre cette question et le problème classique des installations essentielles est que sur la plupart des marchés, il existe au moins deux opérateurs susceptibles d'offrir des services

d'itinérance dans des zones isolées. L'existence si infime soit-elle d'une concurrence dans la fourniture de services « non concurrentiels » change la nature du problème. En particulier, les tentations de refuser l'accès au réseau (dans le cas présent, de refuser l'itinérance) sont moindres. Il y a davantage de probabilités que les opérateurs parviennent à conclure un accord commercial.

Les tentations de refuser l'accès sont moindres pour les raisons suivantes. Autoriser l'accès procure à tout le moins des avantages au réseau visité – le réseau d'attache pouvant attirer de nouveaux clients, ce qui renforce l'utilisation de la capacité du réseau visité (que nous pourrions qualifier d'effet « d'utilisation renforcée »). Par ailleurs, autoriser l'accès présente l'inconvénient que le réseau d'attache pourrait bien voler des clients au réseau visité, réduisant par là sa rentabilité (ce que nous pourrions qualifier d'effet de « vol de contrats »). Les anticipations des opérateurs historiques sont déterminantes. S'ils estiment que le nouveau venu a peu de chances d'obtenir l'accès aux services d'itinérance d'un autre opérateur, chacun sera tenté de lui refuser l'accès à son réseau (ce qui diminue le niveau de la concurrence). Par ailleurs, s'ils pensent qu'un nouvel entrant parviendra à obtenir ces services d'un opérateur, ils seront tentés de se faire concurrence pour prendre cette place (car un seul opérateur bénéficiera de l'effet « d'utilisation renforcée », tandis que tous souffriront de l'effet de « vol de contrats »). Plus les opérateurs historiques seront nombreux, plus il est probable qu'ils estimeront que le nouveau venu obtiendra les services d'itinérance d'un opérateur au moins. Le gouvernement peut aller dans ce sens en accréditant l'idée que le nouvel entrant obtiendra l'itinérance d'un opérateur au moins.

En d'autres termes, la signature d'accords commerciaux d'itinérance entre entreprises est possible et d'autant plus probable (*a*) que le nombre d'opérateurs en place est élevé, (*b*) que le nouveau venu propose un service qui ne représente pas une menace directe pour un service existant (en ciblant, par exemple, une niche de clients inexplorée) et (*c*) que le gouvernement est susceptible d'intervenir pour imposer l'itinérance.

A titre d'illustration, fin 1997, l'ACCC a envisagé de rendre l'itinérance obligatoire sur le marché australien des télécommunications. En mars 1998, l'ACCC a annoncé sa décision de ne pas la rendre obligatoire au motif que le marché des télécommunications mobiles était concurrentiel et que l'itinérance ferait probablement l'objet d'offres commerciales. Toutefois, l'ACCC a menacé explicitement d'intervenir sur le marché si l'itinérance ne faisait pas l'objet d'offres commerciales.[32] Cette décision pourrait avoir pesé de façon positive et déterminante dans la négociation de plusieurs accords d'itinérance. En Finlande, aussi, le lancement d'une enquête par l'Autorité finlandaise de la concurrence semble avoir été suffisant pour qu'un accord commercial d'itinérance soit conclu sur le marché finlandais.

3.2.2 Réglementation de l'accès aux stations de base cellulaires

Comme toujours, se pose la question déterminante du prix de l'itinérance nationale. La théorie économique montre que lorsque le service d'accès est utilisé pour fournir un service final qui équivaut au propre service de l'exploitant historique, le prix d'accès adéquat comporte deux composantes – la première composante reflète la contribution aux coûts fixes dont se prive l'opérateur historique en vendant une unité d'accès à son concurrent, et la deuxième composante la propre contribution du service concurrent aux coûts fixes, via une majoration du coût marginal.

Il existe deux situations totalement opposées. Premièrement, envisageons le cas peu probable, où le service d'itinérance est utilisé par les sociétés concurrentes pour fournir un service qui ne rivalise en aucune façon avec les services mobiles existants. En d'autres termes, le service des concurrents ne fait « qu'élargir le marché » sans priver l'opérateur historique d'un quelconque contrat. Le prix d'accès efficient dans le cas présent est simplement basé sur le coût marginal, moyennant une majoration

correspondant à l'élasticité du produit à la demande. Il n'est pas nécessaire de faire référence aux prix de détail de l'opérateur historique – sauf dans la mesure où ils donnent des indications sur la majoration adéquate du coût marginal.

Si, comme cela est plus probable, le service d'itinérance est utilisé par les sociétés concurrentes pour fournir un service qui rivalise avec les services mobiles existants – c'est-à-dire que le service du concurrent privera (si l'itinérance est autorisée) le réseau visité de certains contrats – le fait d'autoriser l'accès à un concurrent se traduira par une diminution de la demande des services de l'opérateur existant – soit une diminution du nombre d'abonnés et des recettes des appels. En conséquence, l'opérateur existant perdra un certain niveau de contribution à ses coûts fixes. Le prix optimal d'accès aux services d'itinérance devrait donc compter une composante reflétant cette perte de contribution aux coûts fixes.[33] La part de ces coûts devant être prise en compte dépend du degré d'équivalence existant entre le produit du concurrent et celui de l'opérateur existant.

Par conséquent, d'une part, le prix d'accès optimal sera probablement supérieur au prix de détail des appels dans les zones visités. Si le prix d'accès fixé est inférieur – éventuellement selon l'approche de minoration au détail comme c'est le cas au Royaume-Uni – le réseau existant devra rivaliser dans certaines zones avec des concurrents dont les coûts fixes seront inférieurs (car leurs réseaux seront plus restreints). Ces entreprises concurrentes pourront donc proposer des prix plus bas, et exercer une pression à la baisse sur les prix du réseau en place. Il est possible que le réseau existant ne soit pas en mesure de percevoir des recettes suffisantes pour couvrir les coûts de maintenance de ses réseaux. L'encadré ci-joint illustre cet exemple chiffres à l'appui.

Etablissement du prix d'accès pour l'itinérance

Supposons que le coût de fourniture d'un service mobile soit de 1000 $ par personne et par an dans les zones à forte densité de population et de 1000 $ par personne et par an dans les zones isolées. Supposons, en outre, qu'un opérateur mobile existant facture 1 $ par minute d'utilisation et 400 $ par an de frais fixes. Supposons, enfin, qu'à ces tarifs, un utilisateur type consomme 1400 minutes dans les zones fortement peuplées et 200 minutes dans les zones isolées.

Les recettes totales de l'opérateur mobile existant sont de 400 $ de frais fixes et 1400 $ d'appels dans les zones denses et de 200 $ dans les zones isolées, soit un total de 2000 $ par personne. Pour la fourniture du service mobile, le seuil de rentabilité de l'opérateur est de 2000 $. Il est toutefois manifeste qu'il existe des subventions croisées – la zone isolée ne générant que 200 $ de recettes, pour des coûts de 1000 $.

Supposons qu'un autre opérateur cherche à utiliser les services d'itinérance du réseau existant dans les zones isolées (mais à construire son propre réseau dans les zones plus peuplées). Supposons encore que le service du nouvel opérateur soit (via l'itinérance) l'équivalent celui de l'opérateur en place, et que, par voie de conséquence, le nouvel opérateur facture le même prix que l'opérateur en place. Supposons, enfin, que l'organisme de tutelle rende l'itinérance obligatoire, à un prix de une $ par minute (c'est-à-dire selon l'approche de la minoration au détail, avec une réduction de zéro pour cent sur le prix de détail).

Selon ces hypothèses, pour chaque client qu'il desservira, le nouvel opérateur ne percevra aucune recette dans les zones isolées (le prix de l'itinérance étant le même que le prix de détail) mais recevra 400 +1400 $=1800 $ de recettes dans les zones de forte densité de population, pour des dépenses de 1000 $, soit un bénéfice de 800 $ par personne. L'opérateur en place percevra 200 $ de recettes, pour des coûts de 1000 $, soit une perte de 800 $.

Si on applique les principes définis précédemment, lorsque le nouveau service équivaut totalement au service de l'opérateur en place, le prix de l'itinérance devrait tenir compte de la contribution aux coûts fixes dont se prive l'opérateur en place en vendant l'accès à son réseau. Dans le cas présent, en vendant l'accès à son réseau plutôt qu'en vendant directement au détail à son propre client, l'opérateur en place peut économiser 1000 $ (en n'étant pas tenu de desservir les zones à forte densité de population) mais perd 1800 $ de recettes, soit une perte de contribution aux

coûts fixes de 800 $. Ces revenus doivent être récupérés dans les frais d'accès. S'il n'est pas possible d'établir une composante fixe pour les frais d'accès, le prix d'utilisation devrait être de 5 $. A ce prix, l'opérateur en place reçoit 200x5$ = 1000 $ de recettes pour un coût de 1000 $. Son concurrent perçoit 2000 $ de recettes, pour un coût de 1000 $ et des frais d'accès de 1000 $.

Oftel estime que le prix de l'itinérance devrait être supérieur au prix de détail moins les coûts économisés :

> « Certains opérateurs de réseau ont fait valoir que la tarification par minoration au détail proposée par Oftel pour l'itinérance ne couvrira pas les coûts, dont les coûts d'installation des capacités, dans les zones les plus rurales où le trafic est moins dense et où l'itinérance a toutes les chances d'être concentrée. La raison en est que les coûts moyens par minute (coûts fixes inclus) dans ces zones sont plus élevés que le prix de détail toutes zones confondues. En effet, avancent-ils, cela donnera l'occasion de procéder à un arbitrage, qui permettra au nouvel entrant de construire un réseau dans les zones à faible coût les plus peuplées et d'utiliser celui de l'opérateur en place dans les zones à coûts élevés, à moins de frais ».[34]

Pourtant, Oftel réfute cet argument au motif que (*a*) le trafic de l'itinérance vient s'ajouter à celui du réseau visité dans les zones où, sans cela, il aurait des capacités disponibles et que (*b*) les opérateurs mobiles sont suffisamment rentables au Royaume-Uni. J'ai fait valoir précédemment que le trafic de l'itinérance ne constitue pas un volume supplémentaire à proprement parler – mais permet au contraire au nouvel entrant de proposer un service qui soit en concurrence directe avec les services de l'opérateur en place. Pour cette raison, le prix d'accès devrait compter une composante reflétant la contribution aux coûts fixes perdue par l'opérateur historique. En insistant sur l'approche de la minoration au détail, Oftel risque de saper la rentabilité des opérateurs existants.

3.3 Dégroupage de la boucle locale

De nombreux pays ont exprimé leurs inquiétudes quant au rythme relativement lent du développement de la concurrence dans les services de « distribution » des télécommunications à large bande. D'après les Perspectives des communications 2001 publiées par l'OCDE, les nouveaux entrants ne détenaient que 0,3 pour cent de l'ensemble des lignes d'accès en 1995, puis 0,9 pour cent en 1997 et seulement trois pour cent en 1999.[35]

Comme il a été évoqué plus haut, les économies d'échelle et la densité des liaisons de « distribution » dans les télécommunications fixes à large bande sont telles que, même s'il est possible d'assister à la naissance de concurrents pour les gros utilisateurs de télécommunications dans les zones à forte densité de la population, la concurrence susceptible d'apparaître pour les petits utilisateurs, en particulier dans les zones à faible densité de la population, sera probablement limitée.

Des systèmes sans fil à large bande peuvent constituer des solutions de substitution pour certains services à large bande de la boucle locale, surtout lorsque les services sans fil permettent la mobilité. Toutefois, les services sans fil ne peuvent offrir une largeur de bande aussi importante que les réseaux filaires de communication fixes. Ainsi, bien que les services sans fil de troisième génération (3G) font espérer à la fois une assez bonne largeur de bande et de la mobilité, la demande à l'adresse de la très large bande va probablement augmenter. D'ailleurs, les réseaux filaires de communication fixes auront tout intérêt à encourager la demande en largeur de bande en créant et en assurant la promotion d'applications qui exigent d'importantes largeurs de bande. A plus long terme, la demande en largeur de bande va prendre

une telle ampleur qu'à moyen terme, les services de téléphonie fixe et mobile n'appartiendront pas au même marché.

Par le passé, les services de la boucle locale étaient fournis à l'aide d'une simple « paire torsadée » de fils en cuivre. Ce type de fils existe encore en grande quantités dans le sol des pays de l'OCDE. Ils n'étaient pas prévus pour transporter des services à grande largeur de bande mais, grâce à certaines technologies (que l'on englobe sous le terme générique « DSL » ou Digital Subscriber Line), les fils de cuivre classiques peuvent être améliorés pour proposer des services à largeur de bande modérément importante, surtout lorsque la distance entre l'abonné et le central local n'est pas trop grande. Pour améliorer la boucle locale par ce moyen, il faut installer de nouveaux équipements à chaque extrémité du câble qui convertissent les signaux numériques en un format qui puisse être transmis sur une paire torsadée de fils de cuivre.

Les services offerts par la boucle locale ou services de « distribution » sur les réseaux filaires de communication fixe, que l'on regroupait auparavant comme un seul et même type de service, peuvent être scindés en deux catégories – avec d'un côté la connexion filaire ou câblée à proprement parler et, de l'autre, les équipements électroniques à chaque extrémité du câble. Il s'agit de services complémentaires, l'un étant concurrentiel et l'autre non. Nous sommes par conséquent confrontés à un problème classique de réglementation de l'accès ou d'installations essentielles.

L'obligation de donner accès au service non concurrentiel (la boucle locale) – ce que l'on appelle le « dégroupage de la boucle locale », offre les avantages potentiels suivants :

(a) Premièrement, le dégroupage de la boucle locale peut accélérer le rythme auquel l'opérateur historique développe les services à large bande. Le phénomène se déroule de deux manières. Tout d'abord, les technologies DSL peuvent constituer une solution de substitution pour certains produits existants de l'opérateur historique (comme les lignes de données T1). Si ces autres produits sont lucratifs, l'opérateur historique n'est pas motivé pour effectuer volontairement de nouveaux investissements qui faciliterait un déploiement plus rapide des technologies DSL. En soumettant le dégroupage de la boucle locale à des spécifications techniques précises, l'autorité de tutelle peut en premier lieu obliger l'opérateur historique à effectuer les investissements nécessaires pour préparer le réseau aux technologies DSL. Une fois qu'il a fait ces investissements, et sachant que s'il ne fait pas la promotion des services DSL il risque de perdre des parts de marché au profit des concurrents, l'opérateur historique est très motivé pour accélérer l'adoption de ses services DSL.

(b) Deuxièmement, le dégroupage de la boucle locale peut aussi contribuer à empêcher les investissements non productifs sous forme de contournement de la boucle locale. Si son prix est correctement évalué, le dégroupage de la boucle locale incite à utiliser l'infrastructure existante de la boucle locale pour fournir des services à large bande plutôt qu'à installer entièrement de nouveaux réseaux de même couverture.

(c) Troisièmement, le dégroupage de la boucle locale permet à la concurrence de se développer dans le domaine de la fourniture d'équipements électroniques pour l'amélioration des fils torsadés classiques. Ce phénomène entraînera probablement une accélération du rythme d'innovation et de l'efficacité de tels services. Des technologies entièrement nouvelles destinées à améliorer les fils torsadés pourraient voir le jour. Le dégroupage de la boucle locale favorisera également le développement de la concurrence sur le plan de la détermination des prix et de la facturation des services proposés via la boucle locale et permettra de combiner les services de la boucle locale à d'autres services.

A compter du second semestre 2001, la grande majorité des pays de l'OCDE aura décidé de rendre le dégroupage de la boucle locale obligatoire. Selon OFTEL, l'autorité de tutelle britannique, qui au départ était opposée au dégroupage de la boucle locale et a ensuite changé d'avis :

> « L'accès à grande largeur de bande est d'une importance capitale pour le développement des nouveaux services de la société de l'information. Les technologies comme DSL, les modems câbles, les communications mobiles de troisième génération, la radio fixe et la télévision numérique à large bande, permettront à des services comme l'accès à l'Internet à haut débit en connexion permanente non tarifé à la durée, les services audiovisuels interactifs et la vidéo à la demande, d'être accessibles à un public élargi. Favoriser le développement de ces services est l'un des aspects de l'ambition première d'Oftel qui est d'encourager le choix, la qualité et l'optimisation des ressources au profit des consommateurs. … Le meilleur moyen de parvenir à proposer la diversité de services dont souhaitent bénéficier les consommateurs à des prix raisonnables est d'encourager une véritable concurrence pour l'accès à ces services et leur prestation. … En se penchant sur la question en vue de prendre des initiatives, Oftel a étudié le niveau de la demande dans différents segments du marché, les modes de prestation disponibles et l'existence ou non d'obstacles à la fourniture concurrentielle de l'accès à des communications à large bande et des services correspondants. Elle a conclu que des mesures sont nécessaires de la part des autorités de tutelle pour introduire la concurrence dans le processus de modernisation de la boucle locale. » [36]

En Australie, après la décision de dégrouper la boucle locale en 1999, la part de marché de Telstra pour les services proposés par la boucle locale avait reculé à la fin du mois de juin 2000 de neuf points à 85 pour cent, tandis que les revendeurs de sa boucle locale et le concurrent propriétaire de ses propres infrastructures Cable and Wireless Optus gagnaient des parts de marché.[37] Les approches adoptées par d'autres pays de l'OCDE pour le dégroupage de la boucle locale sont exposées dans le tableau 1.

3.3.1 Détermination du prix d'accès à la boucle locale dégroupée

Comme c'est généralement le cas, la matérialisation des avantages et des coûts du dégroupage de la boucle locale est étroitement liée au prix d'accès – le prix auquel les concurrents peuvent accéder à la boucle locale. La difficulté de déterminer le prix d'accès à la boucle locale dégroupée est aggravée par les facteurs suivants :

(a) Premièrement, les prix au détail des services qui passent par la boucle locale sont généralement étroitement contrôlés et ne reflètent pas nécessairement les coûts des prestations correspondantes. Plus précisément, on applique fréquemment une moyenne géographique des frais fixes versés par les abonnés. Dans de nombreux pays, les prix au détail des services sur la boucle locale sont probablement inférieurs aux coûts dans certaines zones (et dans certains pays, c'est le cas dans la plupart des zones).

(b) Deuxièmement, des différences géographiques importantes existent en ce qui concerne les coûts d'installation des boucles locales. Un prix obtenu simplement en fonction d'une moyenne géographique pourrait très bien décourager les investissements dans certaines zones, tout en favorisant de manière inefficace la création de réseaux redondants dans d'autres.

(c) Troisièmement, la création de boucles locales permet d'importantes économies d'échelle. Le coût moyen par utilisateur pour le câblage d'une rue entière ou de tout un immeuble est

nettement inférieur au coût isolé d'une seule connexion à un réseau filaire de communication fixe pour un utilisateur.

De manière générale, les différents pays ont adopté deux types d'approche vis-à-vis du dégroupage de la boucle locale : (*a*) pour certains, les prix de la boucle locale dégroupée devraient être calculés en fonction des coûts (même si l'interprétation de ce concept varie) et (*b*) pour d'autres, les prix de la boucle locale dégroupée devraient dépendre des tarifs finaux de l'opérateur historique (autrement dit, une détermination des prix par « minoration au détail »).

Parmi les pays qui tiennent à une détermination des prix de la boucle locale dégroupée en fonction des coûts, on compte le Royaume-Uni, l'Allemagne et la Suède.[38] Au Royaume-Uni, les prix pour l'accès aux boucles locales sont fondés sur les coûts auxquels vient s'ajouter une majoration. Le Danemark est un exemple de pays qui a tenu à ce que les prix pour la boucle locale soient liés aux prix de détail (Au Danemark, le prix équivaut au tarif de l'abonnement à une ligne dont on déduit 25 pour cent). Aux Etats-Unis, les deux types de détermination des prix sont possibles selon que la boucle locale dégroupée est proposée en tant qu'« éléments d'un réseau dégroupé » ou en tant que « revente » d'un service existant.

Ces deux grands types d'approches peuvent être interprétés comme différentes manières de résoudre un conflit d'objectifs qui survient lorsque l'on se trouve en présence de plus d'objectifs qu'on ne peut en atteindre simultanément par un seul moyen – les prix d'accès. Les deux objectifs souhaitables sont des incitations pour des investissements efficaces et des incitations pour une arrivée efficace sur le marché des services proposés sur la boucle locale et le développement de la concurrence sur ce même marché.

3.3.2 Coûts et avantages des prix d'accès déterminés en fonction des coûts ou par minoration au détail

Les prix d'accès fondés sur les « coûts » ont en principe un bon effet incitatif pour que l'on utilise le réseau de l'opérateur historique au lieu d'installer un réseau redondant. Si un nouvel entrant envisage d'installer un réseau superposé, il comparera le coût et la capacité du nouveau réseau par rapport au coût et aux capacités liés à la prestation de services comparables par le dégroupage de la boucle locale. Si les prix de dégroupage de la boucle locale sont fixés correctement, les nouveaux entrants n'installeront pas de réseaux redondants si le projet risque de s'avérer inefficient.

D'un autre côté, si les prix au détail ne sont pas directement liés aux « coûts » correspondants (rappelons qu'il n'existe aucune raison en termes d'efficience pour que ce soit nécessairement le cas), le dégroupage de la boucle locale à des prix fondés sur les coûts générera les problèmes connus d'une entrée limitée de concurrents sur le marché et exercera des pressions sur l'opérateur historique pour qu'il ajuste ses prix, même si une telle initiative n'est pas efficiente. Plus particulièrement, il y a de fortes chances pour que les nouveaux entrants revendiquent un dégroupage de la boucle locale dans des zones à faibles coûts et ne proposent pas leurs services dans des zones dans lesquelles les coûts sont élevés. Certains pays où la boucle locale dégroupée est proposée à des prix fondés sur les coûts se sont aperçus que les prix d'accès sont supérieurs aux prix de détail dans certaines zones. L'entrée sur le marché dans des zones à faibles coûts pourrait contraindre l'opérateur historique à cesser de calculer ses tarifs en fonction d'une moyenne géographique.

En d'autres termes, les prix d'accès calculés en fonction des coûts atteignent leur objectif en incitant efficacement l'investissement, mais pas celui qui consiste à favoriser efficacement l'entrée et la concurrence sur le marché des services liés à la boucle locale.

Ce dernier objectif peut être atteint (au détriment de premier objectif) au moyen des prix d'accès fondés sur les prix au détail de l'opérateur historique. Plus spécifiquement, les prix d'accès devraient être

fondés sur les prix au détail de l'opérateur historique dont on déduirait les coûts économisés en proposant la boucle locale à un concurrent et non à un utilisateur final. (Il s'agit là d'un des énoncés de la Règle de tarification efficace des composants (RTEC). Avec de tels prix, l'entrée peut se produire dans tous les lieux géographiques, sans que la structure des prix au détail de l'opérateur historique ne soit remise en cause.

Le principal inconvénient de cette approche est que, si les tarifs au détail de l'opérateur historique ne sont pas directement liés aux coûts correspondants (par exemple si les tarifs pour les abonnés de l'opérateur historique sont calculés en fonction d'une moyenne pour lisser les disparités géographiques ou si les tarifs pour les particuliers sont inférieurs aux coûts et les tarifs pour la clientèle d'entreprises supérieurs aux coûts), les prix d'accès en résultant donneront lieu à de mauvaises incitations en favorisant les investissements dans des réseaux redondants. Plus particulièrement, les nouveaux entrants seront très tentés de créer des réseaux redondants par rapport à ceux qui existent déjà dans des zones où les tarifs pratiqués par l'opérateur historique sont supérieurs aux coûts et ne chercheront pas à construire d'autres réseaux (même lorsqu'une telle opération pourrait s'avérer efficace) dans des zones où les tarifs facturés par l'opérateur historique sont inférieurs aux coûts.

Si l'on pouvait être certain que le réseau local était un monopole naturel, autrement dit que toute duplication de réseau serait inefficiente, ces problèmes pourraient être résolus en interdisant purement et simplement de nouveaux investissements dans des réseaux. Une telle interdiction n'est, cependant, pas souhaitable dans le cas du secteur des télécommunications.

Une approche préférable serait de fixer les prix pour la boucle locale dégroupée de telle sorte qu'ils soient équivalent au « coût » de ces boucles et d'utiliser les taxes sur les produits au détail de l'opérateur historique et de ses concurrents pour récupérer toute dépense fixe ou perte liée à l'ouverture de l'accès. En pratique, cela nécessiterait probablement la mise en place d'un mécanisme quelconque de financement de service universel, dans le cadre duquel une « taxe » serait appliquée aux recettes des exploitants de la boucle locale dans les zones à faibles coûts et les fonds serviraient à subventionner les activités des exploitations de la boucle locale dans les zones à coûts élevés.

Il importe de souligner que même lorsqu'un pays affirme recourir à l'approche « fondée sur les coûts », il utilise en fait une approche peut-être plus proche de la « minoration au détail ». Dans le cas d'une application « convenable » de l'approche fondée sur les coûts, les prix pour les boucles locales dégroupées devraient refléter les frais de prestation de boucles locales dans tous les lieux géographiques. Idéalement, les prix des boucles locales dégroupées varieraient d'une zone géographique à l'autre, l'étendue de ces zones géographiques ne dépassant pas la dimension du plus petit réseau viable de « duplication » ou de « superposition ». Les autorités de tutelle ne disposent peut-être pas d'informations relatives aux coûts des boucles locales à cette petite échelle. En outre, dans la plupart des pays, les prix au détail pour les services au niveau local sont déterminés en fonction d'une moyenne destinée à lisser les disparités géographiques. On pourrait craindre qu'une tarification véritablement fondée sur les coût pour la boucle locale ne suscite des pressions en vue d'éliminer la moyenne géographique des prix au détail.

Bien que le Royaume-Uni déclare utiliser une approche « fondée sur les coûts », le Royaume-Uni comme l'Autriche ont adopté pour la boucle locale dégroupée un forfait indépendant du lieu géographique qui s'applique à l'échelle nationale. Si la détermination du prix au détail est elle aussi identique indépendamment du lieu géographique, cette approche comporte les mêmes avantages et inconvénients que l'approche par la « minoration au détail ». Si la détermination des prix au détail de la boucle locale ne procède pas d'une moyenne géographique, l'établissement d'une moyenne géographique pour les prix d'accès n'offrira les avantages d'aucune des deux approches.

Un des autres aspects importants à souligner est que pour bénéficier des avantages de l'approche par la minoration au détail, il est fondamental que les prix d'accès soient structurés de la même manière

que les prix au détail de l'opérateur historique, autrement dit que toute discrimination par les prix qui apparaît dans les prix au détail soit reflétée dans les prix d'accès.

Par exemple, la pratique consistant à appliquer comme tarification pour la boucle locale dégroupée un forfait par mois ou par an semble courante. Mais si les prix d'utilisation au détail sont supérieurs au coût marginal (et comprennent par conséquent une contribution aux frais fixes ou une perte liée à l'accès), un tarif pour la boucle locale dégroupée qui prend la forme d'un forfait par mois ou par an incitera les nouveaux entrants à cibler une clientèle très consommatrice, ce qui créera des distorsions pour les entrées et restreindra la prise en charge de services sur la boucle locale dégroupée.

Ce phénomène s'explique de la manière suivante. Si, pour une raison quelconque, les frais d'utilisation sont supérieurs aux coûts, le déficit en terme de recettes que doit subir l'opérateur historique pour la perte d'une boucle locale au profit d'un concurrent ne s'élève pas uniquement à la perte des frais facturés aux abonnés du réseau de communication fixe, mais aussi à la perte des contributions versées au titre de frais d'utilisation. Si elle prend cet aspect en compte, l'autorité de tutelle pourrait chercher à déterminer le prix (par mois ou par an) de la boucle locale dégroupée de sorte qu'il comprenne la contribution moyenne provenant des frais d'utilisation. Toutefois, dans de telles circonstances, le concurrent est tenté de ne cibler que les plus gros consommateurs parmi les abonnés et d'éviter les abonnés à plus faible consommation. Non seulement cela limite les possibilités de nouveaux entrants, mais place l'opérateur historique dans une position où il pourrait ne pas être en mesure de récupérer ses frais fixes.

On a là l'illustration d'un principe général, à savoir que s'il existe des frais fixes que l'on peut récupérer, toute discrimination par les prix appliquée par l'opérateur historique devrait être répercutée sur les prix d'accès, sinon les possibilités d'entrée seront limitées. Ce point est expliqué plus en détail dans l'encadré joint.

Discrimination par les prix de second degré et frais d'accès : Première partie

L'exemple suivant est le premier de deux illustrations destinées à montrer à quel point il est important que toute discrimination par les prix en vue de récupérer des frais fixes et qui apparaît dans les prix définitifs ou au détail, soit répercutée sur les prix d'accès. Cet encadré a pour but de mettre en évidence, à l'aide d'un simple exemple numérique, le fait que lorsque l'opérateur historique récupère une contribution à ses frais fixes à la fois à partir de ses abonnements fixes et de ses redevances d'utilisation, le recours à une facturation de l'accès sous la forme soit d'un simple forfait, soit d'une simple commission d'utilisation entraînera un arbitrage entre concurrence et efficience.

Supposons que, dans une certaine zone, la boucle locale dégroupée coûte $100, et que le déficit relatif à l'accès qui doit être récupéré s'élève à $20 par ligne (peut-être parce que les prix au détail sont inférieurs aux coûts de prestation de la boucle locale dans d'autres zones). Supposons que le prix fixe au détail par abonné de l'opérateur historique soit de $100 et que la redevance d'utilisation de l'opérateur historique dépasse les coûts d'utilisation de $1. Supposons, enfin, qu'il existe deux catégories d'utilisateurs : la catégorie A, qui recouvre 20 pour cent de la population très consommatrice, qui consomme 60 unités d'utilisation, et la catégorie B (80 pour cent de la population), qui consomme 10 unités d'utilisation.

Avec un telle structure de prix et de coûts, l'opérateur historique parvient à l'équilibre – il récupère 100+60x1=$160 des clients gros consommateurs et 100+10x1=$110 des clients à faible consommation, ce qui donne des recettes moyennes par ligne de 20 pour cent x160 + 80 pour cent x110 = $120 – soit assez pour couvrir le coût de $100 et la perte de $20 liée à l'accès.

Supposons maintenant que le tarif de la boucle locale dégroupée soit fixé à $120. On peut considérer qu'il s'agit d'un « juste » prix puisqu'il reflète avec précision le coût moyen de la prestation de la boucle locale (en effectuant une moyenne entre les zones à coûts élevées et celles à faibles coûts).

Avec un tel tarif pour la boucle locale, un nouvel entrant qui a ciblé un client de catégorie A obtiendrait un bénéfice de 160-120 = $40. En revanche, un nouvel entrant qui a ciblé un client de la catégorie B obtiendrait un résultat de 110-120 = $-10. De toute évidence, les nouveaux entrants seront confinés au marché des clients qui ont une consommation intensive. L'opérateur historique n'a plus qu'à se contenter d'assurer la transmission pour les clients peu consommateurs, dont la contribution moyenne de $110 est inférieure au coût moyen de l'opérateur historique, soit $120. Une telle situation n'est pas viable. Pour ouvrir le marché à la concurrence à ces conditions, il est indispensable d'augmenter les tarifs au détail pour les clients de la catégorie B afin qu'ils puissent fournir des recettes à hauteur de $120. Parallèlement, la concurrence pour les clients de la catégorie A tirera vers le bas les recettes provenant de ces clients à $120. Manifestement, l'ouverture à la concurrence dans un tel contexte élimine la discrimination ou les « subventions croisées », ce qui s'accompagne d'une perte d'efficience potentielle.

Supposons maintenant que l'autorité de tutelle adopte une politique à l'autre extrême en décidant de fonder le prix de la boucle locale entièrement sur les redevances d'utilisation. On pourrait estimer que $6 représentent un « juste » prix étant donné que ce prix permettrait à une entreprise prenant en charge l'ensemble des boucles locales de parvenir exactement au point d'équilibre (20 pour cent (60x6) + 80 pour cent (10x6)= $120). Cependant, à ce prix pour la boucle locale dégroupée, si le nouvel entrant cible les clients de la catégorie A (et si l'on part du principe qu'il propose la même structure de prix que l'opérateur historique), il récupèrerait 100+60x1-60x6 = $-200. En revanche, si le nouvel entrant cible les clients de la catégorie B, il récupérerait 100+10x1 – 60 = $50. De toute évidence, le nouvel entrant sera limité au segment du marché regroupant les clients peu consommateurs. Les gains totaux de l'opérateur historique ne s'établiraient qu'à 20 pour cent (160) + 80 pour cent (60) = $80, soit un montant inférieur à $120. Si le marché est ouvert à la concurrence, les prix au détail pour les clients de la catégorie A doivent augmenter pour qu'ils rapportent $360 de recettes. L'ouverture à la concurrence accentue dans ce cas la discrimination ou les « subventions croisées » entre ces catégories de clients, ce qui s'accompagne d'une perte d'efficience potentielle.

On peut facilement vérifier, par cet exemple, que le seul prix d'accès à la boucle locale qui permettrait à un nouvel entrant de livrer concurrence équitablement pour tous les clients sans que les tarifs au détail en soient affectés, est un prix d'accès constitué de deux composantes, la partie fixe égale à $100 et la partie liée à l'utilisation égale à $1. Cette structure à deux composantes correspond parfaitement à la structure des contributions que reçoit l'opérateur historique pour couvrir ses coûts. Cet exemple illustre le principe général qui veut que lorsque les prix sont supérieurs aux coûts, toute discrimination par les prix qui apparaît dans les prix définitifs devrait se refléter dans les prix d'accès.

3.3.3 Dégroupage de la boucle locale et redevances pour les émissions d'appels longue distance

Dans le cadre du dégroupage de la boucle locale, la question intéressante se pose de savoir s'il faut contraindre la concurrence à proposer des services longue distance aux clients des boucles locales et, le cas échéant, comment procéder pour les redevances liées à l'émission d'appels. La question est pertinente car, comme on l'a vu dans le présent document, la structure des frais d'accès a un impact sur la structure des tarifs au détail que l'exploitation (concurrent) de la boucle locale peut proposer.

Prenons l'exemple suivant. Supposons qu'un exploitant concurrent de la boucle locale souhaite concurrencer l'opérateur historique en proposant à ses clients un choix de programmes d'appels – une des options, qui cible les utilisateurs ayant une faible consommation, prévoit un plus faible abonnement mensuel et des tarifs plus élevés par appel, et l'autre option, qui cible les gros consommateurs, prévoit un abonnement mensuel plus élevé et une faible tarification par appel, voire aucune. Supposons également, pour plus de simplicité que tous les appels soient des appels longue distance. La proposition de plusieurs types de solutions d'appel peut s'avérer efficace sur le plan économique – elle pourrait attirer les utilisateurs ayant une faible consommation sur le réseau (renforçant ainsi le taux de pénétration), tout en proposant des programmes d'appel plus efficients aux utilisateurs à consommation intensive.

Si les sociétés de télécommunications longue distance sont autorisées à se concurrencer pour les clients abonnés aux boucles locales dégroupées et si les redevances d'accès pour l'émission d'appels sont fondées simplement sur une facturation à la minute, indépendamment du programme d'appels choisi par l'abonné, les utilisateurs vont de toute évidence être gagnants sur tous les plans – ils pourront choisir le

programme d'appels assorti du tarif mensuel le plus bas puis se reporter sur un opérateur longue distance concurrent pour obtenir des appels longue distance meilleur marché. Conscient de ce problème, le prestataire concurrent de services de la boucle locale concurrent sera contraint de retirer son offre ciblée sur les utilisateurs à faible consommation, même si cette formule est rentable. Comme l'ont souligné Laffont et Tirole, « la fixation d'un forfait d'accès prive l'opérateur historique de sa capacité de proposer un éventail rentable de tarifs adaptés aux des besoins de sa clientèle »[39].

Dans une certaine mesure, ce résultat ne fait que confirmer ce que l'on savait déjà : lorsque l'on facture des faibles tarifs d'interconnexion aux clients pour les appels longue distance, on accélère le rythme du rééquilibrage – ce qui entraîne une augmentation des redevances de location et une baisse des redevances d'utilisation. Cependant, dans cet exemple, le rééquilibrage est insuffisant étant donné qu'il empêche l'exploitant de la boucle locale de proposer un programme d'appels efficient. On a là une nouvelle illustration du principe suivant : quand les frais d'accès sont moins différenciés que les tarifs au détail, un arbitrage peut avoir lieu entre concurrence et efficience.

Il existe deux solutions pour un tel arbitrage, l'une consiste à le résoudre au profit de l'efficience en limitant la concurrence – plus particulièrement, les abonnés aux boucles locales dégroupées risquent de ne pas disposer du choix de leur prestataire de services longue distance, du moins s'ils optent pour le programme d'appels d'« utilisateurs à faible consommation ». Selon Laffont et Tirole (2000), c'est l'approche qu'ont adoptée les autorités de tutelle au Royaume-Uni et en France. Dans les deux cas, les autorités de tutelle ont choisi de limiter la concurrence en empêchant les sociétés de communications longue distance d'accéder aux clients qui choisissent un programme d'« utilisateurs à faible consommation ».[40]

L'autre solution possible est de permettre une plus grande différenciation des prix d'accès. Plus précisément, les prix d'accès devraient dépendre du programme d'appels que l'utilisateur a choisi. Les redevances d'interconnexion à des opérateurs longue distance devraient avoir une composante fixe plus élevée et une composante d'utilisation plus faible lorsque les tarifs au détail de l'opérateur historique se présentent sous cette forme, et inversement.

Dans le cas des boucles locales dégroupées, il peut être souhaitable d'autoriser l'exploitant concurrent de la boucle locale à fixer lui-même ces redevances pour l'émission d'appels longue distance. En prenant la décision de choisir une boucle locale dégroupée, un abonné examine probablement l'ensemble de l'éventail de services offerts par le concurrent – et notamment les frais de location mensuels et les coûts des appels locaux et longue distance aux heures de pointe et aux heures creuses. Les pressions concurrentielles qui s'exercent entre les opérateurs rivaux de la boucle locale tendront à faire baisser ces prix. Plus spécifiquement, s'ils sont incités à maintenir des tarifs faibles pour les appels longue distance, les exploitants de la boucle locale veilleront à ce que les redevances pour l'émission d'appels longue distance restent basses. En outre, en autorisant l'opérateur concurrent de la boucle locale à fixer lui-même ces redevances, un exploitant de la boucle locale pourra mettre en place sa propre gamme de programmes d'appels – en ciblant efficacement différentes catégories de clients. (Il restera peut-être nécessaire, cependant, de réglementer les redevances pour la terminaison des appels longue distance, pour les raisons évoquées plus haut dans la rubrique sur les prix des appels de réseau fixe à réseau mobile).

3.4 Redevances d'accès pour la prestation des services Internet

Dans la plupart des pays de l'OCDE, l'accès à Internet se fait encore couramment via un lien fourni par un opérateur RTPC, qui est souvent une simple connexion par le réseau commuté. En d'autres termes, la prestation de services Internet et la prestation de services de boucle locale sont des activités complémentaires. De plus, le secteur de la prestation de services Internet est concurrentiel alors que celui

des services de boucle locale ne l'est généralement pas (à des degrés divers). Donc nous faisons face soit à un problème classique de régulation de l'accès, soit à un problème d'infrastructures essentielles.

Dans ce cas, nous allons supposer que les services « de détail » correspondent à la prestation de services Internet et que les services « d'accès » correspondent aux services de boucle locale pour le raccordement à Internet. De plus, nous admettrons que les tarifs des services de détail sont fixés par le prestataire de services Internet et que les tarifs d'accès sont fixés par l'opérateur historique de boucle locale. Dans certains cas, l'utilisateur final paie les redevances d'accès directement, dans d'autres, il ne paie que le prestataire de services Internet, qui paie lui-même l'opérateur de boucle locale. Ces deux cas de figure étant parfaitement équivalents, nous adopterons, par souci de simplicité, la deuxième hypothèse.

Comme toujours, la question essentielle est précisément celle de la structure des redevances d'accès. Dans la mesure où, dans la plupart des pays de l'OCDE, les communications locales sont facturées à la minute, le même système a été repris de façon conventionnelle pour la facturation de l'interconnexion. Mais par la suite, des fournisseurs de services Internet filiales d'opérateurs historiques de boucle locale ont commencé à offrir des services Internet sur une base forfaitaire : en payant un montant mensuel fixe, les abonnés ont pu se connecter au fournisseur aussi longtemps qu'ils le désiraient. Début 2000, les opérateurs de télécommunication historiques de 5 pays de l'OCDE seulement offraient la possibilité d'une connexion Internet par le réseau commuté non facturée à la durée, mais début 2001, ce chiffre s'élevait à 12.[41]

Cette structure de tarification a donné lieu à des plaintes de fournisseurs de services Internet concurrents. En Finlande par exemple, l'opérateur historique offrait un accès illimité contre un forfait de 125 FIM/mois. Les opérateurs concurrents devaient payer des redevances de raccordement de 0,03 FIM/minute. Or, l'utilisateur moyen se connecte trois heures par jour, soit une redevance totale de 162 FIM/mois. L'Autorité finlandaise de la concurrence examine actuellement les tarifs d'accès à Internet de plusieurs opérateurs.

Le même type de plaintes a fait son apparition sur d'autres nouveaux marchés qui n'impliquent pas d'accès à Internet. En Nouvelle-Zélande par exemple, au milieu des années 90, une situation similaire s'est présentée dans le secteur des services longue distance. A cette époque, Telecom New Zealand facturait à son concurrent Clear environ deux cents (NZ) par minute pour une interconnexion longue distance pour chaque extrémité. Telecom a ensuite lancé un nouveau tarif au détail plafonnant les appels longue distance en heures creuses à 5$NZ, quelle que soit la durée de la communication. Si cette nouvelle structure de tarification a eu du succès auprès des abonnées, elle a donné lieu à une plainte de Clear arguant que pour les appels excédant environ deux heures, les redevances d'interconnexion étaient plus élevées que ses recettes.

Ces problèmes ne peuvent se résoudre par une simple réduction des tarifs d'accès qui permettrait aux opérateurs concurrents de réaliser des bénéfices sur l'utilisateur "moyen". Comme précédemment, ces problèmes de concurrence découlent de la différence entre le degré de discrimination des redevances d'accès et celui des tarifs au détail pratiqués par l'opérateur historique.

La discrimination par les prix nécessite et entraîne une répartition des clients en groupes ou catégories. L'opérateur historique peut alors utiliser les caractéristiques de la demande de chacune de ces catégories, en fonction desquelles il pourra fixer la structure de tarification et augmenter les redevances fixes totales de façon plus efficiente. Si les redevances d'accès ne sont pas suffisamment différenciées, les entrants constateront qu'il est plus rentable de proposer leurs services à un ou plusieurs de ces groupes. En admettant que les entrants puissent appliquer la même discrimination par les prix que les opérateurs historiques, ils cibleraient alors exclusivement ces catégories d'utilisateurs, empêchant ainsi l'opérateur historique de recourir à la discrimination par les prix, limitant par la même l'entrée sur le marché et mettant en danger la rentabilité de l'opérateur historique.

Plus précisément, si l'opérateur historique est autorisé à proposer une panoplie de régimes de tarification (dont, éventuellement, un accès forfaitaire illimité) et si l'entrant doit payer des redevances d'accès basées sur une simple structure à deux tarifs, il sera alors plus intéressant pour ce dernier d'offrir ses services à une catégorie d'utilisateurs plutôt qu'aux autres, limitant ainsi l'entrée sur le marché, obligeant l'opérateur historique à abandonner sa structure de tarification et l'exposant éventuellement à des accusations de tarification d'éviction.

Supposons par exemple qu'il y ait, dans le contexte ci-dessus, deux catégories d'utilisateurs Internet : une catégorie utilise Internet une heure par jour, l'autre 11 heures par jour. En admettant que 80 pour cent des utilisateurs appartiennent à la première catégorie et 20 pour cent à la deuxième, on obtient un temps d'utilisation quotidien moyen de trois heures. Supposons par ailleurs que l'opérateur historique propose deux régimes de tarification Internet, l'un étant basé sur le temps d'utilisation, au tarif de trois FIM par heure de connexion, et l'autre offrant un accès illimité contre un forfait de 125 FIM par mois. Il est évident que les utilisateurs dont la consommation est faible choisiront l'option de facturation horaire (sachant qu'une heure de connexion quotidienne à trois FIM/heure coûte seulement à 90 FIM par mois) et les autres l'option de facturation forfaitaire (sachant que onze heures de connexion quotidiennes équivalent à 990 FIM par mois).

Faisons maintenant l'hypothèse que l'opérateur historique doive supporter des coûts fixes de 97 FIM par utilisateur Internet et par mois (par souci de simplicité nous admettrons que les coûts marginaux liés à la prestation de services de raccordement sont nuls). S'il facture l'interconnexion à 1,08 FIM par heure (0,018 FIM par minute), il couvrira ses coûts fixes, mais les nouveaux entrants ne pourront cibler que les utilisateurs dont la consommation est faible (à 11 heures d'interconnexion par jour, les redevances s'élèveraient à 356 FIM, soit un montant supérieur au forfait de 125 FIM payé par cette catégorie d'utilisateurs). L'entrée s'en trouverait donc restreinte. A l'inverse, si l'opérateur applique une tarification forfaitaire de 97 FIM par mois, les entrants ne pourront cibler que les gros consommateurs (les recettes générées par les utilisateurs dont la consommation est faible ne représentant que 90 FIM par mois).

Donc dans les deux cas, les possibilités d'entrée sur le marché sont limitées et la concurrence qui en résulte empêche l'opérateur historique d'offrir différentes options de tarification. Dans le cas où nous n'aurions que deux catégories d'utilisateurs, il est possible de trouver une structure basée sur deux régimes tarifaires et qui permettrait à l'entrant de concurrencer l'opérateur historique sur les deux groupes d'utilisateurs (une redevance d'accès forfaitaire de 86,5 FIM et un tarif horaire de 0,1166 FIM permettraient cela) ; mais une telle structure est impossible à mettre en place lorsqu'il y a trois catégories d'utilisateurs ou plus. Ce cas de figure est illustré dans l'encadré ci-dessous.

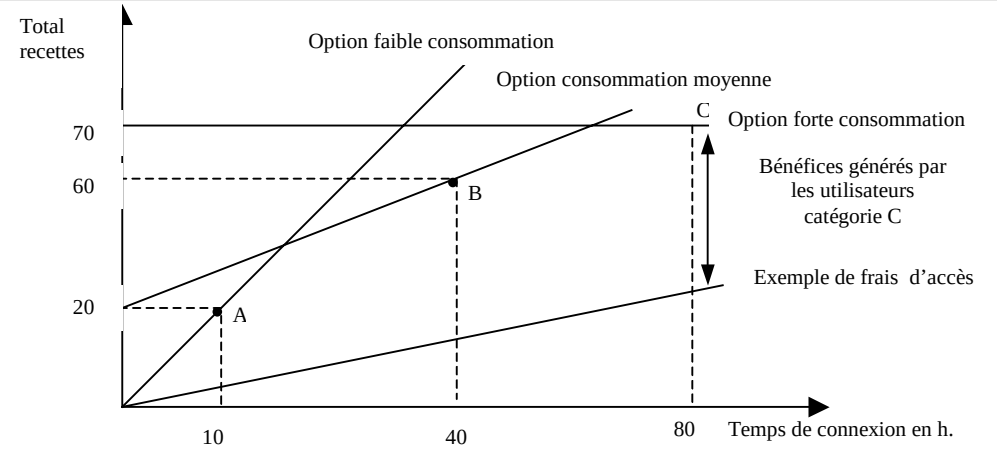
Comme tend à le démontrer cette étude, les redevances d'accès devraient être aussi différenciées que les prix au détail proposés par le fournisseur historique d'accès Internet. S'il offre une panoplie d'options tarifaires (dont certaines seraient plus adaptées aux gros utilisateurs et d'autres mieux adaptées aux utilisateurs dont la consommation est limitée) cette différenciation devrait se refléter dans les redevances d'accès, c'est à dire qu'elles devraient dépendre du tarif choisi par l'utilisateur. Laffont and Tirole (2000) soulignent que :

> « Comme les prix de gros (redevances d'accès) servent de référence aux prix de détail, il n'est pas surprenant que l'intérêt d'effectuer une discrimination par les prix au niveau du détail se traduise par la nécessité d'opérer une discrimination par les prix au niveau des prix de gros. (…) La non-différenciation des prix d'accès pourrait entraîner une sérieuse altération de la concurrence et du bien-être des consommateurs ».[42]

Discrimination du second degré par les prix et redevances d'accès : partie II

Cet encadré approfondit l'analyse entamée dans l'encadré précédent afin de démontrer que lorsque l'opérateur historique propose une panoplie d'options de tarification à deux composantes afin de répartir les clients en catégories selon leurs habitudes d'utilisation d'Internet, les redevances d'accès devraient refléter cette structure d'options tarifaires. L'utilisation d'un tarif à deux composantes introduira un compromis entre concurrence et efficience. Comme cela a déjà été souligné, le principe général est que les redevances d'accès devraient être au moins aussi différenciées que les prix au détail pratiqués par l'opérateur historique.

Supposons qu'il y ait trois catégories d'internautes correspondant à une consommation faible, moyenne et forte. L'opérateur RTPC a une filiale qui fournit des services Internet et qui offre, par conséquent, trois options tarifaires ciblant les catégories d'internautes ayant respectivement une consommation faible, moyenne et forte. L'option faible consommation est facturée au temps de connexion au tarif de 2$ par heure. L'option consommation moyenne comprend un forfait de 20$ et des frais d'utilisation de 1$ par heure. L'option consommation élevée correspond à un forfait de 70$ pour un temps de connexion illimité. Avec ce choix d'options, les utilisateurs de la première catégorie choisissent l'option faible consommation et consomment 10 heures par mois (soit un coût total de 20$, représenté par le point A sur le graphique suivant) ; les utilisateurs de la deuxième catégorie choisissent l'option consommation moyenne et consomment 40 heures par mois (coût total de 60$, point B) ; et les utilisateurs de la troisième catégorie choisissent l'option consommation élevée et consomment 80 heures par mois (coût total de 70$, point C). Ce cas de figure est représenté par le graphique suivant.



Par mesure de simplicité, supposons que dans un premier temps, les fournisseurs de services Internet concurrents de l'opérateur historique calent leur tarifs sur ceux de ce dernier, c'est-à-dire qu'ils proposent la structure de tarification décrite ci-dessus. Admettons par ailleurs que les coûts de prestation de services Internet soient indépendants de la catégorie de clients desservis et que les coûts marginaux de prestation de services Internet soient nuls.

Partons maintenant du principe que les redevances d'accès ont deux composantes, le fournisseur payant un forfait par client d'une part et des frais dépendant du temps de connexion du client d'autre part. Les bénéfices dégagés par les concurrents pour la prestation de service à chacune des catégories de clients sont représentés par la distance des points A, B et C respectivement par rapport à la droite représentant les redevances d'accès. Quel que soit le montant de chacune des deux composantes de la redevance d'accès, il est évident que certaines catégories de clients seront plus rentables que d'autres. Les concurrents s'efforceront de cibler ces catégories. En règle générale, moins la composante horaire est importante dans les redevances d'accès, plus il sera rentable pour les entrants de cibler les internautes ayant une consommation élevée et vice-versa.

Le graphique montre que la seule façon de rendre les trois catégories de clients également intéressantes pour la concurrence, est d'adopter une structure de redevances d'accès qui reflète les tarifs au détail appliqués par l'opérateur historique, autrement dit, dans ce cas particulier, des redevances d'accès dont le coût marginal est de 2$ jusqu'à 20 heures, puis un coût de 1$ jusqu'à 70 heures et un coût marginal nul au-delà. La composante forfaitaire des redevances d'accès devrait être fixée de façon à ce que l'opérateur historique rentre dans ses frais dans l'ensemble.

3.5 Discrimination par les prix, prix d'exclusion et concurrence des réseaux locaux

Le dernier problème de concurrence que nous allons étudier est sans rapport avec les redevances d'accès. Il porte plutôt sur le degré de discrimination par les prix qu'un opérateur historique devrait être autorisé à pratiquer sur différents marchés géographiques.

Ce problème est illustré par un différend relatif la concurrence qui a éclaté en Nouvelle-Zélande.[43] Une nouvelle société avait commencé à installer un réseau à large bande dans une ville, avec l'intention d'offrir des services de télévision câblée et de téléphonie locale. Le nouvel entrant a commencé à proposer des services de téléphonie locale, alors que son réseau était encore assez peu étendu, à des tarifs nettement moins élevés que ceux de l'opérateur historique, Telecom New Zealand. En réaction, Telecom New Zealand a baissé ses tarifs, mais uniquement dans la zone géographique desservie par Saturn.

L'Autorité de la concurrence néo-zélandaise a commencé à examiner le cas afin d'établir si l'on était en présence de prix d'éviction. Ils ont cherché à savoir si les tarifs pratiqués par Telecom étaient inférieurs à un certain indicateur pertinent de coûts. Ils ont conclu que les tarifs de Telecom (même s'ils étaient en dessous de ceux habituellement pratiqués par l'opérateur) restaient supérieurs à leurs coûts marginaux et ne pouvaient donc être qualifiés de tarifs d'éviction aux termes de la loi de la concurrence néo-zélandaise.

En tirant cette conclusion, l'Autorité de la concurrence restait dans la droite ligne d'un raisonnement économique classique. Selon ce raisonnement, l'opérateur historique doit pouvoir réagir à l'arrivée de nouveaux entrants et les consommateurs doivent pouvoir profiter de la concurrence qu'elle génère. Dans la mesure où l'opérateur historique ne propose pas des tarifs inférieurs à ses "coûts", l'entrant pourra se maintenir s'il se montre plus efficient ou offre un produit plus intéressant que l'opérateur. À l'inverse, imposer un plancher plus élevé aux tarifs de l'opérateur historique permettrait à un entrant de survivre, même s'il est moins efficient ou offre des services d'une qualité inférieure.

Ce type de raisonnement est sensé sur un marché suffisamment compétitif, dans la mesure où l'on peut s'attendre à de nouvelles entrées sur le marché et que les économies d'échelle et d'envergure sont limitées. Mais qu'en est-il lorsque des coûts irrécupérables ou la présence d'économies d'échelle ou d'envergure limite les possibilités d'entrée sur le marché ? Est-il toujours logique de permettre à l'opérateur historique de ramener ses tarifs au niveau de ses « coûts » ?

Dans le secteur des télécommunications, en raison de la présence d'économies d'échelle et d'envergure pour la prestation de services locaux, les nouveaux entrants locaux ont moins de chances de parvenir à atteindre la même efficience que l'opérateur historique, même s'ils fonctionnent de manière comparable. Par exemple, il existe des économies de densité pour la prestation de services de la boucle locale dans les zones résidentielles. Même un nouvel entrant qui réussit n'obtiendra probablement pas le même taux de pénétration que l'opérateur historique dans un lapse de temps raisonnable. Pour cette seule raison, il est peu probable qu'un réseau superposé atteigne la même efficience que le premier réseau d'une zone. Dans ces conditions, si l'on autorise l'opérateur historique à baisser ses prix au niveau de son « coût », cela dissuadera de nouvelles entrées sur le marché.

Même si le nouvel arrivant n'est pas systématiquement moins efficient que l'opérateur historique, la nécessité d'une entrée séquentielle ou progressive sur le marché face à des économies d'envergure peut être dissuasive pour de nouvelles entrées. Supposons que l'opérateur historique fournisse des services sur deux marchés distincts, A et B (correspondant, éventuellement, à deux villes ou zones distinctes), et supposons qu'il existe des économies d'envergure entre ces deux marchés de sorte que le nouvel entrant ne

parvient pas à une efficience totale avant de s'être implanté sur les deux marchés. Supposons enfin que l'entrée simultanée sur les deux marchés nécessite d'engager un tel volume de capitaux irrécupérables que, en pratique, l'opération ne soit pas viable. Autrement dit, l'entrée se produit séquentiellement selon les conditions du marché, ou pas du tout.

Maintenons, supposons que le plancher de prix soit égal au coût marginal – et plus précisément, supposons que l'opérateur historique soit autorisé à réduire son prix au niveau de son coût marginal lorsque le nouvel entrant pénètre un des marchés et à réduire son prix au niveau du coût marginal de A et B combiné lorsque le nouvel entrant pénètre les deux marchés. Dans ce cas, le nouvel entrant ne peut récupérer la perte de ses frais fixes qu'il encourt pendant la période où il exerce ses activités sur un seul marché. Le phénomène est dissuasif pour les entrées.

L'existence d'inefficiences de coûts signifie-t-elle qu'il faille empêcher la concurrence ? Pas nécessairement. Même s'il est probable que les nouveaux entrants seront systématiquement moins efficients que l'opérateur historique, la concurrence qui en découle a certains effets bénéfiques – (*a*) elle fait baisser les prix pour les consommateurs et (*b*) elle incite davantage l'opérateur historique à être efficient. Ces deux effets pourraient, à long terme, compenser très largement l'inefficience des coûts immédiats du nouvel entrant. En d'autres termes, permettre de nouvelles entrées pourraient éviter de recourir à la réglementation pour modérer les prix et garantir l'efficience des coûts.

Sous un angle plus technique, le fait d'autoriser de nouvelles entrées réduit l'avantage dont dispose l'opérateur historique en termes d'informations sur ses propres coûts, d'où une réglementation plus efficace, qui permet aux prix de se rapprocher des véritables coûts de l'opérateur historique et incite davantage celui-ci à les réduire. Laffont exprime cette idée en ces termes :

> « En cas d'asymétrie de l'information, il convient de penser en termes de coûts généralisés qui incluent les rentes informationnelles. Par conséquent, même s'il existe des coûts redondants, le fait de supporter ces coûts pourrait avoir un intérêt sur le plan social, parce que cela permettant d'instaurer une concurrence en fonction de critères de référence, en provoquant une baisse des rentes informationnelles plus rapide que l'augmentation des coûts fixes. Pour défendre l'existence d'un monopole, il faut donc arguer aujourd'hui non seulement qu'il existe des coûts fixes, mais que ces coûts fixes sont importants par rapport aux avantages potentiels de la concurrence en fonction des critères de référence ».[44]

Dans ces conditions, un arbitrage s'impose – une politique mettant l'accent sur une entrée efficiente garantit une efficience productive à court terme, au prix d'une plus grande dépendance vis-à-vis de la réglementation qui doit assurer l'efficience allocative à court terme et l'efficience productive à long terme. En revanche, une politique visant à encourager la concurrence basée sur les installations sacrifie l'efficience productive à court terme, afin de s'en remettre plus à la concurrence pour garantir l'efficience allocative et l'efficience productive à long terme.

Supposons que les pouvoirs publics aient pris la décision de promouvoir la concurrence basée sur les installations (cette décision sera fonction des spécificités de chaque situation). Dans ce contexte, quel plancher doit-on fixer en dessous des prix de l'opérateur historique ?

Comme on l'a vu plus haut, si l'opérateur en place est autorisé à baisser ses prix jusqu'à son coût marginal sur le marché sur lequel entre le nouvel entrant, ce dernier peut ne pas être en mesure de récupérer une quelconque contribution à ses coûts communs durant la phase de déploiement du réseau ou jusqu'à ce qu'il parvienne à une pénétration du réseau suffisamment forte. Cela pourrait avoir un effet dissuasif sur les entrées.

On peut faire valoir que dans ce contexte, le plancher de prix convenable n'est pas le coût marginal, mais le coût de prestation isolé. Plus précisément, on pourrait interdire à l'opérateur historique de fixer un prix inférieur à son coût isolé sur l'ensemble des marchés où le nouvel entrant est présent (à condition qu'il ne soit jamais demandé à l'opérateur historique d'augmenter ses prix au titre de quelque service existant que ce soit). Si le plancher de prix retenu est le coût isolé, l'opérateur historique n'a pas la possibilité de profiter des économies d'envergure dont il pourrait bénéficier pendant que le nouvel entrant déploie son réseau. Cela permet au nouvel entrant de récupérer ses coûts fixes et communs tout en déployant son réseau pour atteindre une dimension viable.

Autre cas de figure, si on pouvait déterminer la dimension viable minimale d'un réseau concurrent, les pouvoirs publics pourraient autoriser l'opérateur historique à réduire ses prix pour faire face à une nouvelle entrée, mais seulement dans une zone dont la dimension serait au moins égale à celle d'un réseau concurrent viable. Le plancher de prix convenable serait là aussi le coût marginal mais, dans ce cas, il serait interprété comme le coût marginal pour parvenir à la dimension viable minimale du réseau. Par exemple, si la dimension viable minimale d'un réseau concurrent correspond à une zone de la taille d'une ville, l'opérateur historique n'aurait pas le droit de réduire ses prix banlieue par banlieue ou rue par rue.

En résumé, sur les marchés où les perspectives de concurrence sont limitées, les pouvoirs publics ont le choix entre deux politiques : soit une politique de concurrence basée sur les installations (ce qui limite les contraintes réglementaires au prix d'une certaine inefficience productive), soit une politique de dépendance vis-à-vis de la réglementation qui est chargée d'assurer l'efficience allocative et productive. La concurrence basée sur les installations fait plus largement appel aux mécanismes de marché pour atteindre l'efficience allocative et l'efficience productive à long terme. Il serait possible de promouvoir la concurrence basée sur les installations en utilisant le coût isolé comme plancher de prix pertinent pour définir le prix d'éviction. En revanche, une politique s'appuyant sur la réglementation peut être mise en œuvre moyennant un plancher de prix égal au coût marginal. Cette politique risque de limiter les perspectives de nouvelles entrées, ce qui implique de s'en remettre plus durablement à la réglementation pour contrôler les prix et les coûts.

NOTES

1 Cette définition fait la distinction entre les télécommunications et la diffusion, qui implique principalement des liaisons de communication point à multipoint. Mais étant donné que les réseaux point à multipoint peuvent être, dans une certaine mesure, établis avec une série de réseaux point à point, la limite entre télécommunications et diffusion est floue. Les seuls services analogiques encore utilisés dans la plupart des réseaux de télécommunication des pays de l'OCDE utilisent une paire de fils de cuivre classique améliorée. Avec le temps, les services analogiques sont voués à disparaître.

2 Définie dans le but de distinguer différents marchés de produits.

3 Vous trouverez une présentation générale du secteur des télécommunications dans Laffont et Tirole (2000). Au Royaume-Uni, les concepts de « transmission » et de « distribution » sont désignés respectivement par les termes « conveyance » et « access ».

4 Ici, les zones métropolitaines font référence aux parties de la ville extérieures au quartier d'affaires (où la concentration de gros utilisateurs de services de télécommunication est élevée) et qui ont une densité de population plus forte que les zones rurales ou reculées.

5 A titre d'exemple, selon l'Australian Productivity Commission, alors qu'il existe 10 opérateurs de réseau dans les quartiers d'affaires de Sydney, Melbourne et Brisbane, les quartiers d'affaires des petites villes (comme Hobart et Darwin) ne comptent qu'un ou deux exploitants. A Sydney, Melbourne et Brisbane, il existe deux réseaux métropolitains à large bande, fournis par Cable & Wireless Optus et Telstra. Telstra est également opérateur de réseau à large bande dans d'autres villes, comme Adelaïde et Perth. D'autres exploitants fournissent également des services à large bande dans des villes plus petites. Cf. PC (2001), page 4.12. D'après le rapport du Telecommunications Service Inquiry, intitulé « Connecting Australia » (M. A. Besley, Président) « On ne peut plus parler d'un seul marché homogène des télécommunications. Le paysage des télécommunications tel qu'il est aujourd'hui est complexe et peut être défini comme une série de matrices dans lesquelles on voit s'ajouter aux effets de la situation géographique et de la population (marchés urbains, ruraux ou isolés) une demande de services spécifiques (services de téléphonie mobile et services Internet) ». (2000, page 34).

6 De nombreuses entreprises de téléphonie mobile proposent également des services sans abonnement, auquel cas l'utilisateur doit acheter un téléphone qui ne permet généralement pas de changer de réseau entre deux appels. La structure de prix à deux composantes continue donc d'être appliquée.

7 En fait, les consommateurs choisissent seulement un réseau en fonction de la différenciation des produits du réseau, par exemple ils peuvent choisir un réseau fixe à large bande et un réseau mobile à bande étroite.

8 Cette période doit être suffisamment longue pour que la décision ne soit pas prise d'un appel à l'autre.

9 De manière générale, c'est seulement lorsque les clients sont fidélisés à une seule entreprise (peut-être grâce aux programmes de fidélisation, aux tarifs dégressifs selon la quantité achetée) qu'ils s'intéressent à sa gamme de produits – sinon, les client iraient chercher auprès de différentes entreprises les services qui les intéressent.

10 Il faut préciser que la hausse de prix convenable dépend de la « superélasticité » et non simplement de « l'élasticité du prix ». La superélasticité prend en compte les effets de substitution qui ont lieu entre les produits du nouvel arrivant et les produits finaux de l'opérateur historique.

11 Information extraite de OCDE (2000b), encadré 8.

12 Les autres pays qui se sont attaqués à ce problème sont l'Autriche (cf. DAFFE/CLP(2000)20/02, paragraphe 36), l'Espagne (cf. DAFFE/CLP(2000)20/06, paragraphe 52) et l'Italie (cf. DAFFE/CLP(2000)20/12, paragraphe 58).

13 On pourrait également comparer les prix de fixe à mobile et de mobile à mobile.

14 Cf. OCDE (2000b), page 53.

15 Cette hypothèse est posée pour permettre l'analyse la plus simple possible. Si une part des appels des mobiles aboutissent sur d'autres réseaux mobiles et si les redevances de terminaison pour les appels de fixe à mobile sont identiques aux redevances de terminaison pour les appels de mobile à mobile, il faut prendre en compte les incitations qui peuvent résulter d'un problème d'accès dans les deux sens.

16 Autrement dit, le niveau auquel une légère augmentation des redevances de terminaison entraînerait une baisse des recettes de terminaison supérieure au coût marginal correspondant.

17 Information émanant d'OFTEL (2001).

18 ACCC (2000)

19 RSL COM, un opérateur de télécommunication australien, faisait le commentaire suivant dans un dossier déposé auprès de l'ACCC : « Les réseaux mobiles dominants se servent de leur situation de monopole pour établir les prix des appels de fixe à mobile afin de subventionner les coûts de téléphone mobile facturés à leur client. Comme les trois réseaux mobiles dominants appliquent des redevances de terminaison comparables pour les appels du réseau fixe vers le réseau mobile et qu'il n'existe pas de services de substitution, il ne saurait être question de concurrence sur ce segment du marché. » Citation extraite de Productivity Commission (2000), page 4.27.

20 En revanche, au Royaume-Uni, lorsqu'un usager change de réseau de communication mobile mais conserve le même numéro, l'appel est facturé comme s'il aboutissait sur le réseau initial, et non sur le nouveau réseau. OCDE (2000b), page 50.

21 En appelant souvent le même client, les consommateurs pourraient connaître le prix qu'ils devront payer.

22 Si les abonnés à un réseau mobile paient les appels qu'ils reçoivent (comme c'est souvent le cas aux Etats-Unis et au Canada), puisque que les redevances de terminaison sont une composante directe des propres factures des abonnés, les sociétés de téléphonie mobile sont incitées à se concurrencer en proposant des appels du réseau fixe au réseau mobile meilleur marché. Dans ce cas, néanmoins, les appelants du réseau fixe au réseau mobile passent trop d'appels car ils ne supportent pas le coût marginal réel correspondant aux appels qui aboutissent sur le réseau mobile.

23 Rapport annuel sur l'évolution de la concurrence en Italie, 1999, DAFFE/CLP(2000)20/12, octobre 2000

24 ACCC (2000), page 17.

25 Au Royaume-Uni, OFTEL a diminué les redevances de terminaison pour BTCellnet et Vodafone de 25 pour cent pour 1999/2000, et par conséquent imposé des réductions de prix égales à l'Indice des prix de détail – neuf pour cent pour 2000/01 et 2001/02. OFTEL estime que ces réductions de prix auront permis aux consommateurs britanniques d'économiser plus d'un milliard de livres sterling sur ces trois années. OFTEL (2001), page 1. Les redevances de terminaison ne doivent pas nécessairement être augmentées pour tous les abonnés, mais peut-être seulement pour ceux pour lesquels les subventions sont susceptibles d'avoir le plus gros impact en termes de pénétration.

26 L'OECD a identifié cet élément comme étant l'un des avantages de la facturation au destinataire dans OCDE (2000b), page 36.

27 Cf. OCDE (2000b), page 39.

28 La densité de population ne permet pas de rendre compte parfaitement des éléments mesurés ici. L'idéal serait de disposer d'un indicateur de densité, disons, des 95 pour cent les plus denses de la population. La différence est de taille dans des pays comme le Canada et l'Australie, où les territoires inhabités sont vastes. En Australie, par exemple, 95 pour cent de la population peut être jointe par un réseau qui couvre sept pour cent seulement de la zone. Productivity Commission (2000), page 15.16.

29 Cf. Oftel (1999a, 1999b et 1999c).

30 Ces informations sont tirées de l'intervention d'Henrikka Piekkala, "Finnish Telecom Market – Toward Full Competition", lors d'une conférence qui s'est tenue en mars 2001.

31 Autorité de la concurrence, Communiqué de presse, 17 septembre 1999.

32 « La Commission estime que toute manifestation de comportement anti-concurrentiel … comme le refus d'offrir des services d'itinérance en temps utile, amènera la Commission à engager une action en justice. » ACCC (1998), page 33.

33 On peut considérer cela comme une application de la Règle de tarification efficace des composants (RTEC).

34 Oftel (1999a), paragraphe 2.12.

35 OCDE (2001b), tableau 1.3.

36 OFTEL (1999), chapitre 2.

37 Productivity Commission (2000), page 4.19.

38 OCDE (2000), page 28. « Deutsche Telekom (DT) peut désormais facturer ses rivaux 14.62 dollars par mois par abonné pour une connexion à faible débit par paire de cuivre torsadée... Le

tarif d'accès est plus élevé que... les 12.29 dollars facturés par DT pour la location de détail, maintenue faible par subvention ».

39 Laffont et Tirole (2000), page 112.

40 Laffont et Tirole (2000), page 111.

41 OCDE (2001b), chapitre 1, page 6.

42 Laffont et Tirole (2000), page xv.

43 Voir New Zealand Commerce Commission, "Termination Report: Telecom's Pricing of Fixed Telephony Services in Lower Hutt", 30 July 1998, Media Release 1998/61.

44 Laffont (1998), page 4.

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Tableau 1. Dégroupage de la boucle locale

	Conditions réglementaires pour le dégroupage de la boucle locale
Allemagne	Mis en œuvre en janvier 1998.
Australie	Demandé, les conditions devant être précisées en octobre 2000.
Autriche	Mis en œuvre en juillet 1999. Dégroupage du réseau de cuivre nu uniquement – pas d'accès de « train d'octets » ou de partage de lignes.
Belgique	Processus de consultation en cours
Canada	Mis en œuvre en mai 1997. Des installations qui étaient considérées comme essentielles sont soumises à l'obligation de procéder au dégroupage. Les tarifs mensuels pour les boucles locales dégroupées ont été approuvés en novembre 1998.
Corée	Non disponible.
Danemark	Mis en œuvre en juillet 1998.
Espagne	Le dégroupage de l'accès « train d'octets » ADSL est commercialement possible depuis septembre 1999 suite à une Ordonnance émanant de l'autorité de tutelle. Une réglementation est en préparation pour le dégroupage intégral de la boucle locale.
Etats-Unis	En 1998, la FCC a rendu obligatoire le dégroupage d'éléments de la boucle locale.
Finlande	Mis en œuvre en 1997.
France	Possible à compter du 1.01.2001. Concerne le dégroupage du réseau de cuivre nu et le partage de lignes.
Grèce	Consultation publique en cours.
Hongrie	L'obligation de procéder au dégroupage sera stipulée dans la Loi unifiée sur les communications qui entrera en vigueur en 2001 ou en 2002.
Irlande	Dégroupage du « train d'octets » possible depuis 2000. Dégroupage intégral en avril 2001.
Islande	Entré en vigueur le 1er octobre 2000.
Italie	Mise en œuvre prévue pour l'été 2000.
Japon	Le ministère a publié un document interprétatif en août 1999 dans lequel il est précisé que l'opérateur historique doit fournir l'accès aux Principaux systèmes informatiques de distribution et le partage de lignes. Les prix facturés par l'opérateur historique sont les tarifs au détail. Les conditions relatives à l'accès sont à l'étude.
Luxembourg	Le dégroupage n'est pas nécessaire.
Mexique	Non disponible.
Norvège	Le Parlement a décidé en avril 2000 d'exiger le dégroupage. Des dispositions réglementaires sont introduites dans le projet de réglementation relatif au dégroupage.
Nouvelle Zélande	Envisagé dans le cadre d'une Enquête ministérielle sur les télécommunications
Pays-Bas	Accès dégroupé à la boucle locale possible depuis décembre 1997. L'OPTA a formulé des directives précisant de quelle manière ils réglerait tout différend sur l'accès dégroupé en mars 1999. Prix en phase de négociation et évaluation
Pologne	La nouvelle Loi sur les télécommunications entrée en vigueur le 12/5/2001 prévoit le dégroupage.
Portugal	L'instance de tutelle a lancé une consultation en 2000.
République tchèque	Introduction prévue après 2002.
Royaume-Uni	Entré en vigueur en août 2000. Dégroupage intégral possible et l'autorité de tutelle peut fixer le prix des boucles locales dégroupées.
Suède	L'opérateur historique a proposé depuis mars 2000 l'accès au réseau de cuivre, mais à un prix supérieur au prix de détail de l'abonnement au réseau. La possibilité de demander le dégroupage dans un cadre juridique est à l'étude.
Suisse	Dans le cadre de la réglementation sur l'accès, une demande de dégroupage peut être adressée à la Commission fédérale des Communications dans le cas où des négociations commerciales n'aboutissent pas. L'opérateur historique est tenu de proposer un accès « train d'octets ».
Turquie	Non disponible.

Source : OCDE

QUESTIONNAIRE SUBMITTED BY THE SECRETARIAT

The OECD already collects a substantial amount of statistical information from member countries on the telecommunications industry. Much of this information is available in the Communications Outlook (published biennially). The country responses to the questionnaire used to prepare the Communications Outlook are also available on the OECD's website (http://www.oecd.org/dsti/sti/it/cm/index.htm**)**. We are eager not to duplicate that effort. The questions below are not intended to be answered individually, as in a questionnaire. Rather, we invite you to prepare, from a competition policy perspective, a narrative which responds in broad terms to the questions set out below. These questions ask for a summary of the most important regulatory changes that have occurred in the last five years, a description of your regulatory regimes governing access and interconnection and dominance and a review of the most important competition cases that have arisen.

These questions are intended to apply to all of the traditional public telecommunications markets. Specifically, the local fixed-wire voice telephony market (including service to rural and urban households, small and medium-sized businesses and large corporate customers), the long-distance and international voice telephony markets, the market for data services (including leased lines, DSL and Internet services), and wireless services (including GSM, PCS and third-generation services). You may also wish to discuss any regulatory issues that might arise in closely related markets such as the provision of "in-house" networks (Intranets) or communications services used in the provision of broadcast or other program content services.

Countries with a federal structure may have several layers of different domestic telecommunications regimes (although it seems that this problem arises less often in telecommunications because this sector is typically regulated at the federal level). Countries in this situation are invited to respond by discussing the main developments at the federal level and highlighting some of the more interesting state-level developments where these are relevant.

1. Regulatory Developments Since 1995

(1) Please summarise what are, in your view, the most important regulatory developments from a competition policy perspective in the telecommunications sector in your country since 1995 (including any imminent developments) in each of the major markets (local, long-distance, international, data and mobile). Attached as an Appendix to these questions is a list of questions that you might like to think about in summarising the most important regulatory changes.

In the case of EU countries (for which regulatory reform has primarily been a matter of implementing the relevant EC Directives) we invite you to focus on the approaches you have chosen to comply with the Directives or where you have gone further than the minimum required by the Commission.

2. Specific Issues: Access Regulation and Dominance

(2) Focusing more specifically on issues of access and interconnection, please describe how your regime for access and interconnection affects the development of competition. In particular, you might like to address the following questions. These questions are intended to cover all the services for which the regulatory does or could mandate access including, for example, access to pipes or ducts, local loop unbundling, resale and roaming.

(a) For what services can the regulatory authority mandate that access or interconnection be provided? Does the regulatory authority have the power to add or remove services from the list of services for access or interconnection must be provided? What is the process for doing that? Do telecommunications operators have the right to request that access or interconnection be mandated for specific services? Which operators can be forced to provide access?

(b) Does the regulatory authority determine access or interconnection terms and conditions *ex ante* (perhaps by approving tariffs filed by the regulated firm) or only *ex post* (after a dispute arises)? If ex post, what period of time must elapse before the regulatory authority intervenes? For comparison, are final (retail) prices set ex ante or ex post?

(c) Is there any attempt to link access/interconnection price regulation and final price regulation? Are these prices set at the same time? Do they form part of the same overall price cap? Are interconnection prices set by reference to final prices, as in the Efficient Component Pricing Rule?

(d) What costs have to be covered through the revenue received from access and interconnection prices (other than the marginal costs of providing the access/interconnection service)? – The fixed costs of the access service? The joint and common costs of the regulated firm? The costs of providing non-commercial services? Other costs?

(e) Are access/interconnection prices individually set by the regulator or does the regulated firm have some flexibility to adjust its access/interconnection prices subject to some constraint (such as a ceiling on the price of a basket of services)? What is the nature of that constraint?

(f) Do access prices differentiate between peak and off-peak or between different times of the day or week? Do access prices differ according to the use to which the access service is put (i.e., whether access is for the purpose of providing value-added services, Internet services, call-termination for mobile services, and so on)? Do access prices differ according to the class of end-customer being supplied (e.g., do they differentiate between business and residential customers)? Do access prices have a two-part or a non-linear form? Are there discounts for quantity? Are there rules which explicitly limit the ability of the incumbent to discriminate in its access prices? Looking at these questions again, are access prices more differentiated or less differentiated on the whole than final (retail) prices?

(g) In the case where the regulatory authority sets individual prices what is the primary basis used for setting those prices – marginal cost (plus a mark-up)? Incremental cost (plus a mark-up)? average cost or fully-distributed cost? ECPR? a discount off retail? Prices in other countries? In the case of cost-based prices – how is the cost for the service determined? How is the mark-up determined?

(h) How does the regulatory authority ensure that the regulated firm behave as though it faces the same access/interconnection prices as its rivals? For example, are there rules which require that the services (or bundles of services) offered by the incumbent must be able to be reproduced by rivals using the standard published access charges? Have you addressed specific cases where access/interconnection prices were used in an anti-competitive way (perhaps through a "price squeeze")? (For example, has the incumbent been forced to offer wholesale access to the Internet at a flat-rate, when it offers such a service retail?)

(3) Please describe how the concept of dominance is applied in the telecommunications sector. In your answer you may like to discuss:

(a) Is a telecommunications operator subject to specific regulation if it is dominant? What different regulations apply to a dominant firm? Do these regulations only apply within the market (defined by product and geographic market) in which the firm is dominant?

(b) What are the conditions that a firm must satisfy to be held to be dominant? Are these the same conditions that apply to the concept of dominance (if one exists) in the competition laws?

3. Competition Concerns and Competition Law Enforcement

(4) What have been the most important competition concerns that have arisen over the past five years? How were these concerns addressed – through action by the regulatory authority, through action by the competition authority, through advocacy or through other legal processes?

(5) Focusing more specifically on violations of competition law (or competition law principles, where those principles are set out in the telecommunications-specific law) – what were the major cases that emerged in the last five years? What were the major issues in those cases? Were there issues related to marked definition? How were these cases dealt with? What has been the resulting outcome in the market? What were the respective roles of the competition authority and the regulatory authority in these cases?

4. Appendix

In answering question (1) you may like to think about changes in the following policy areas:

(a) Entry controls – How have entry controls been liberalised in the last five years? How might they be further improved? Have new controls be introduced on, say, the carriage of voice over data services (e.g. voice on the Internet)? Has the time, cost, or procedure for obtaining a licence to provide telecommunications services changed?

(b) Structural policies – Have rules governing the structure of the industry changed over the last five years? Have any new separation requirements (including accounting, corporate or ownership separation) been imposed? Have firms in the industry voluntarily chosen to change their structure (e.g., the wholesale/retail split proposed by BT or the proposed separation of AT&T)? Have there been changes to line of business restrictions or ownership restrictions? Have their been any changes to cross-ownership rules (such as rules permitting telecommunications operators to provide cable television services or vice versa)? Have mergers or concentrations significantly changed the structure of the industry?

(c) Interconnection and access policies – (Specific questions about these policies are asked in question 2);

(d) Price control policies – Have there been any changes to the scope or range of prices which are controlled? Have their been changes to the way those prices are controlled (e.g., ex ante approval versus ex post oversight)? Have price controls been applied to a firm which was previously uncontrolled (e.g., due to the emergence of dominance) or vice versa? How has the nature of price controls changed (e.g., from rate of return to fixed-price, from regulating individual prices to regulation of a basket of prices)? Have there been any significant changes to the definition of how the costs of the regulated firm are defined (e.g., changes in the definition of the regulatory asset base, replacement cost versus optimised deprival value, changes to the calculation of the cost of capital, changes to the allowed forms of depreciation)? Have controls been placed on, say, price-discrimination or the extent to which the regulated firm can vary certain prices?

(e) Access to scarce resources – Have there been any developments in policies regarding the allocation of spectrum? Have there been any developments regarding the allocation of telephone numbers or number-portability? Have there been any developments regarding access to pipes and ducts or sites for cellular antennas or base stations? Has the definition of other services to which access must be granted been expanded or narrowed?

(f) Universal service or non-commercial service policies – How has the definition or scope of universal/non-commercial services changed over the period? How has the method of financing these services changed? Has the method of choosing the designated universal service provider changed?

(g) The role or application of competition law principles – Has there been a greater reliance on general competition law principles in this sector (as opposed to sector-specific principles)? Has there been a change in the legal basis for the regulation of competition in the telecommunications sector (in other words, has the primary legal control of anticompetitive behaviour shifted from the sector-specific law to the general competition law or vice versa)? Have there been any controls on anti-competitive behaviour introduced in the sector-specific laws governing this sector? Have their been any sector-specific changes to rules regarding control of mergers or collusive activity in this sector?

(h) The institutional arrangements governing the telecommunications industry: the industry regulatory authority – Has a new regulatory authority been established? Have the powers of an existing regulatory authority been changed? Has the governance structure of the regulatory authority, the extent of independence, or the powers of appeal changed? Has the regulator adopted new regulatory procedures or policies regarding transparency? Has the role of the regulator been challenged in court? What was the outcome? Has the budget or staffing of the regulator significantly changed over this period?

(i) The institutional arrangements governing the telecommunications industry: the competition authority – has the role of the competition authority in this sector changed at all? Have changes in the competition law or the telecommunications law altered the role of the competition authority? Have changes in the structure, governance or independence of the competition authority affected its role in the telecommunications industry? Have there been any changes to the budget or staffing the competition authority allocates to the telecommunications industry? Have there been any developments in the interaction and/or co-operation between the competition authority and the telecommunications regulatory authority (e.g., a formal memorandum of understanding or co-operation agreement)?

QUESTIONNAIRE SOUMIS PAR LE SECRETARIAT

L'OCDE recueille déjà auprès de ses pays Membres un volume important d'informations sur l'industrie des télécommunications. Une bonne partie de ces informations est disponible dans les Perspectives des Communications (publiées tous les deux ans). Les réponses des pays au questionnaire utilisé pour préparer les Perspectives des Communications sont également disponibles sur le site Web de l'OCDE (http://www.oecd.org/dsti/sti/it/cm/index.htm) et nous souhaitons éviter de dupliquer cet effort. Les questions qui suivent ne sont pas destinées à faire l'objet de réponses une par une, comme dans un questionnaire. Nous vous invitons plutôt à préparer, dans l'optique de la politique de concurrence, un texte répondant en termes généraux aux questions présentées ci-dessous. Il s'agit de récapituler les changements réglementaires les plus importants intervenus au cours des cinq dernières années, de décrire le régime réglementaire régissant l'accès et l'interconnexion de même que la position dominante, et de présenter les affaires de concurrence les plus importantes qui ont été jugées.

Ces questions visent l'ensemble des marchés traditionnels des télécommunications publiques, c'est-à-dire le marché de la téléphonie vocale filaire fixe locale (notamment la desserte en zone rurale et urbaine des ménages, PME/PMI et grandes entreprises), les marchés de la téléphonie vocale longue distance et internationale, le marché des services pour données (notamment ligne louées, DSL et services Internet) et services mobiles (notamment GSM, PCS et services de troisième génération). Il est également possible d'évoquer toutes les questions réglementaires susceptibles de se poser sur des marchés très proches, comme la fourniture de réseaux "internes" (Intranets) ou de services de communications utilisés dans l'offre de services de radiodiffusion et autres services de programmation de contenus.

Dans les pays à structure fédérale, les télécommunications intérieures ne sont parfois pas soumises au même régime sur l'ensemble du territoire du pays (bien que ce problème semble être moins fréquent dans les télécommunications, du fait que ce secteur est en général réglementé au niveau fédéral). Les pays dans ce cas sont invités à répondre en analysant les principales évolutions au niveau fédéral puis en mettant en lumière certaines des évolutions les plus intéressantes au niveau des Etats, lorsque celles-ci sont pertinentes.

1. Evolutions de la réglementation depuis 1995

1) Veuillez récapituler les évolutions à votre avis les plus importantes dans l'optique de la politique de concurrence qui sont intervenues dans le secteur des télécommunications de votre pays depuis 1995 (y compris les évolutions attendues sous peu) pour chacun des principaux marchés (local, longue distance, international, données et mobile). Vous trouverez jointe en annexe à ces questions une liste de points qui peut vous aider dans votre réflexion pour résumer les évolutions les plus importantes au plan réglementaire.

   Dans le cas des de l'UE (pour lesquels la réforme de la réglementation a surtout consisté à transposer les Directives pertinentes de l'UE), nous vous invitons à préciser surtout les approches retenues pour respecter les Directives, ou le niveau atteint si vous être allés au-delà du minimum exigé par la Commission.

2. Questions spécifiques : réglementation de l'accès et position dominante

2) En privilégiant plus particulièrement les questions d'accès et d'interconnexion, veuillez décrire comment votre régime en matière d'accès et d'interconnexion influe sur le développement de la concurrence. Vous pouvez si vous le souhaitez vous baser sur les questions ci-après. Celles-ci doivent permettre de couvrir tous les services pour lesquels le régime réglementaire pourrait imposer ou impose effectivement l'accès, notamment, par exemple, l'accès aux gaines et conduites, le dégroupage de la boucle locale, la revente et l'itinérance.

a) Pour quels services l'autorité de réglementation peut-elle imposer que l'accès ou l'interconnexion soit assuré ? L'autorité de réglementation a-t-elle le pouvoir d'ajouter ou retirer des services dans la liste des services pour lesquels l'accès ou l'interconnexion doit être assuré ? Quelle est la procédure à cet effet ? Les opérateurs de télécommunications ont-ils le droit de demander que l'accès ou l'interconnexion soit imposé pour des services spécifiques ? Quels sont les opérateurs qui peuvent être contraints d'assurer l'accès ?

b) L'autorité de réglementation fixe-t-elle les conditions et modalités d'accès ou d'interconnexion au préalable (par exemple en approuvant les tarifs déposés par l'entreprise réglementée) ou uniquement a posteriori (lorsqu'un litige survient) ? Dans ce dernier cas, quelle est la période qui doit s'écouler avant qu'intervienne l'autorité de réglementation ? A titre de comparaison, les prix pour l'utilisateur final (tarif de détail) sont-ils fixés a priori ou a posteriori ?

c) Existe-t-il un mécanisme pour lier la réglementation des prix de l'accès/interconnexion avec la réglementation des prix de détail ? Ces tarifs sont-ils fixés en même temps ? Font-ils partie du même plafond global de tarifs ? Les prix de l'interconnexion sont-ils fixés par rapport aux prix de détail, comme dans la règle de tarification efficace des composantes ?

d) Quels sont les coûts qui doivent être couverts par les recettes tirées des tarifs d'accès et d'interconnexion (autres les coûts marginaux de la prestation du service d'accès ou d'interconnexion) ? - les coûts fixes du service d'accès ? les coûts communs et liés de l'entreprise réglementée ? Les coûts de la prestation de services non commerciaux ? D'autres coûts ?

e) Les prix de l'accès ou de l'interconnexion sont-ils fixés individuellement par le régulateur ou l'entreprise réglementée bénéficie-t-elle d'une certaine souplesse pour ajuster ses prix d'accès ou d'interconnexion sous réserve de certaines contraintes (comme le plafonnement du prix d'un panier de services) ? Quelle est la nature de cette contrainte ?

f) Les tarifs d'accès sont-ils modulés en fonction de la période (pointe/hors pointe), de la tranche horaire ou du jour de la semaine ? Les tarifs d'accès sont-ils modulés en fonction de l'usage qui est fait du service (selon que l'accès sert à la prestation d'un service à valeur ajoutée, à des services Internet, à la terminaison d'appels par des mobiles, etc.) ? Les tarifs d'accès sont-ils différents selon la catégorie d'utilisateurs auquel s'adresse le service (par exemple sont-ils modulés entre abonné résidentiel et abonné professionnel) ? Les tarifs d'accès sont-ils des tarifs binômes ou non linéaires ? Existe-t-il des remises en fonction du volume ? Existe-t-il des règles qui limitent explicitement la possibilité dont dispose l'opérateur historique d'instaurer des discriminations dans ses tarifs d'accès ? En reprenant ces questions, peut-on dire que les tarifs d'accès sont globalement plus ou moins diversifiés que les tarifs de détail ?

g) Lorsque l'autorité de réglementation fixe individuellement les tarifs, quel est le principal élément utilisé dans ce calcul - coût marginal (plus marge) ? Coût incrémental (plus marge) ? Coût moyen ou coûts pleinement répartis ? Tarification efficace des composantes ? Prix de détail minorés ? Tarifs pratiqués dans les autres pays ? Dans le cas de tarifs calculés sur la base des prix de revient - comment le coût du service est-il calculé ? Comment la marge est-elle déterminée ?

h) Comment l'autorité de réglementation fait-elle en sorte que l'entreprise réglementée se comporte comme si elle devait supporter des tarifs d'accès ou d'interconnexion identiques à ceux de ses concurrents ? Par exemple, existe-t-il des règles stipulant que les services (ou bouquets de services) proposés par l'opérateur historique doivent pouvoir être reproduits par ses concurrents en appliquant les prix du catalogue publié ? Comment avez-vous abordé certaines affaires dans lesquelles les tarifs d'accès ou d'interconnexion ont été utilisés de façon anticoncurrentielle (éventuellement pour une éviction par les tarifs) ? (Par exemple, l'opérateur historique a-t-il été contraint de proposer un accès de gros à Internet pour un tarif forfaitaire, quand il offre lui-même un tel service à l'utilisateur ?)

3) Veuillez indiquer comment la notion de position dominante s'applique dans le secteur des télécommunications. Dans votre réponse, vous pouvez éventuellement aborder les aspects suivants :

a) L'opérateur de télécommunications est-il soumis à des réglementations spécifiques lorsqu'il est en position dominante ? Quelles sont les réglementations particulières qui s'appliquent à une entreprise dominante ? Ces réglementations s'appliquent-elles uniquement sur le marché (défini en termes de produits ou de zone géographique) dans lequel l'entreprise occupe une position dominante ?

b) Quelles sont les conditions que l'entreprise doit remplir pour être considérée en position dominante ? Ces conditions sont-elles identiques à celles applicables au concept de position dominante (s'il existe) dans la législation sur la concurrence ?

3. Problèmes de concurrence et application du droit de la concurrence

4) Quels ont été les principaux problèmes de concurrence qui se sont posé au cours des cinq dernières années ? Comment ces problèmes ont-ils été réglés - par une action de l'autorité de réglementation, par une action de l'autorité de concurrence, par la persuasion ou par d'autres procédures juridiques ?

5) En traitant plus spécifiquement des manquements au droit de la concurrence (ou des principes du droit de la concurrence, quand ces principes sont énoncés dans la loi sur les télécommunications), quelles ont été les principales affaires qui sont apparues au cours des cinq dernières années ? Quelles ont été les principales questions abordées à l'occasion de ces jugements ? Les questions étaient-elles liées à la définition des marchés ? Quelle a été l'issue de ces affaires ? Qu'en a-t-il résulté sur le marché ? Quels ont été les rôles respectifs de l'autorité de concurrence et de l'autorité de réglementation dans ces affaires ?

4. Appendice

Pour la réponse à la question 1), vous pouvez vous inspirer des suggestions proposées concernant les évolutions possibles dans les domaines ci-après :

a) *Contrôles à l'entrée* - Les contrôles à l'entrée ont-ils été libéralisés au cours des cinq dernières années ? Comment pourraient-ils être encore améliorés ? De nouveaux contrôles ont-ils été introduits concernant par exemple les services de transport de la voix sur données (téléphonie IP) ? Les délais, les coûts ou les procédures ont-ils été modifiés pour l'obtention d'une licence d'exploitation de services de télécommunications ?

b) *Politiques structurelles* - Les règles régissant la structure de l'industrie ont-elles été modifiées au cours des cinq dernières années ? De nouvelles obligations en matière de séparation (notamment comptable, fonctionnelle ou juridique) ont-elles été imposées ? Des entreprises du secteur ont-elles volontairement choisi de modifier leur structure (par exemple séparation entre activités de gros et de détail proposée par BT, ou proposition de séparation d'AT&T) ? Des changements ont-ils été introduits dans les restrictions quant aux domaines d'activités ou aux prises de participation ? Des changements ont-ils été introduits dans les règles en matières de participations croisées (comme les règles autorisant les opérateurs de télécommunications à offrir des services de télévision par câble et inversement) ? Les fusions et concentrations ont-elles sensiblement modifié la structure de l'industrie ?

c) *Politiques d'interconnexion et d'accès* - (Des questions spécifiques sur ces politiques sont posées dans la question 2)

d) *politiques de contrôle des prix* – Des changements sont-ils intervenus quant au nombre et à la diversité des prix qui sont contrôlés ? La façon dont ces prix sont contrôlés a-t-elle évolué (par exemple approbation préalable plutôt que vérification à posteriori ? Des contrôles de prix ont-ils été appliqués à une entreprise qui n'était auparavant pas contrôlée (par exemple suite à l'acquisition d'une position dominante ou inversement ? Comment la nature des contrôles de prix a-t-elle évolué (par exemple taux de retour remplacé des prix fixes, réglementation individuelle des prix remplacée par la réglementation d'un panier de tarifs) ? Des changements significatifs ont-ils été introduits dans la façon dont sont définis les coûts de l'entreprise réglementée (par exemple changements dans la définition de la base des actifs réglementés, coûts de remplacement par opposition à la valeur optimisée de privation, changements dans le calcul du coût du capital, changements dans les formes d'amortissement autorisées) ? Des contrôles ont-ils été institués sur, par exemple, la discrimination par les prix ou la mesure dans laquelle l'entreprise réglementée peut faire varier certains prix ?

e) *Accès à des ressources rares* – Des évolutions sont-elles intervenues concernant les politiques d'allocation du spectre ? Concernant l'allocation des numéros de téléphone et la portabilité des numéros ? Concernant l'accès aux gaines et conduites, ou aux sites pour les antennes et relais cellulaires ? La définition des autres services auxquels l'accès doit être accordé a-t-elle été élargie ou réduite ?

f) *Politiques en matière de service universel ou de services non commerciaux* – Comment la définition ou le champ du service universel ou des services non commerciaux ont-ils évolué sur la période ? Comment la méthode de financement de ces services a-t-elle évolué ? La méthode utilisée pour choisir le prestataire désigné du service universel a-t-elle changé ?

g) *Rôle ou application des principes du droit de la concurrence* – Les principes généraux du droit de la concurrence sont-ils davantage utilisés comme référence dans ce secteur (plutôt que des principes propres au secteur) ? Des changements sont-ils intervenus dans les fondements juridiques de la régulation de la concurrence dans le secteur des télécommunications (en d'autres termes, les comportements anticoncurrentiels relèvent-ils juridiquement avant tout maintenant du droit général de la concurrence plutôt que d'une législation spécifique ou inversement) ? Des mesures de contrôle des comportements

anticoncurrentiels ont-elles été introduites dans les législations spécifiques régissant ce secteur ? Des changements propres au secteur ont-ils été introduits dans les règles régissant le contrôle des fusions ou la collusion dans ce secteur ?

h) *Arrangements institutionnels régissant l'industrie des télécommunications : Autorité de régulation du secteur* – Une nouvelle autorité de régulation a-t-elle été créée ? Les pouvoirs de l'autorité de régulation en place ont-ils changé ? La structure de direction de l'autorité de régulation, son degré d'indépendance, ou les possibilités d'appel ont-ils changé ? Le régulateur a-t-il adopté de nouvelles procédures réglementaires ou politiques concernant la transparence ? Le rôle du régulateur a-t-il été contesté devant les tribunaux ? Quelle en a été l'issue ? Le budget ou le personnel de l'autorité de régulation ont-ils sensiblement évolué au cours de la période ?

i) *Arrangements institutionnels régissant l'industrie des télécommunications :Autorité de concurrence* - Le rôle de l'autorité chargée de la concurrence dans ce secteur a-t-il changé d'une quelconque manière ? Des changements dans le droit de la concurrence ou la législation sur les télécommunications ont-ils modifié le rôle de l'autorité de concurrence ? Des changements dans la structure, la direction ou l'indépendance de l'autorité de concurrence ont-ils influé sur son rôle dans l'industrie des télécommunications ? Des changements sont-ils intervenus dans le budget ou le personnel que l'autorité de concurrence affecte à l'industrie des télécommunications ? Des changements sont-ils intervenus dans les échanges et/ou la coopération entre l'autorité de régulation des télécommunications et l'autorité chargée de la concurrence (par exemple mémorandum d'accord ou accord de coopération officiel) ?

AUSTRALIA

1. Regulatory Developments Since 1995

The major development in the regulatory arrangements for telecommunications in Australia over this period was the liberalisation in July 1997 of entry to the industry. Until July 1997, only three carriers were licensed in Australia. Telstra, the incumbent operator, and Optus, which entered the market in 1991, offered both fixed and mobile telephone services. Vodafone offered mobile-only services.

1.1 The July 1997 changes

In July 1997, the Government introduced a package of legislation to give effect to a policy that would provide a more competitive telecommunications industry.

The package of legislation, comprising eleven separate acts, included substantial amendments to the *Trade Practices Act 1974* (TPA) and a new *Telecommunications Act 1997.* This legislation removed regulatory barriers to market entry, revised technical regulation of the industry and introduced into the Trade Practices Act telecommunications-specific competitive safeguards (Part XIB) and a telecommunications access regime (Part XIC).

Regulatory arrangements were restructured so that the Australian Competition and Consumer Commission (ACCC) would have responsibility for competition and economic regulation of telecommunications, while technical regulation would rest with the Australian Communications Authority (ACA). Previously, the Australian Telecommunications Authority (AUSTEL) and the Spectrum Management Agency (SMA) were the sole telecommunications regulators. They, in turn, were established following the corporatisation of the then Telecom in the late 1980s and the removal of the regulatory functions vested in Telecom itself. AUSTEL and the SMA were wound up in 1997 and their functions allocated to the ACCC and the ACA.

(a) Entry controls post July-1997

The *Telecommunications Act 1997* establishes open market access for both telecommunications infrastructure providers (carriers) and service providers. Restrictions on the installation of telecommunications infrastructure which previously existed under the 1991 Act were removed and carrier licences are required only from persons wishing to use certain infrastructure to provide services to the public.

Any person may apply for a carrier licence. Licences are subject to certain conditions listed in Schedule 1 to the Act, compliance with any standard access obligation under the telecommunications access regime which apply to the carrier, and additional conditions imposed by the Minister for Communications.

The carrier licensing arrangements reflect three policy principles:

- Carrier licences should be available on application with no technical or financial entry hurdles. There should be no limit on the number of carriers or any infrastructure roll-out requirements;

- Persons who own a network unit must hold a carrier licence if the unit is used to provide services to the public, but there should be scope for responsibility to be transferred from the owner of the unit to a carrier;

- There should be one type of carrier licence which is to apply to any network unit irrespective of whether it is used for fixed, mobile, broadband or other services.

By April 2001, 72 carrier licences had been issued by the Australian Communications Authority.

(b) Structural policies

Structural separation of telecommunications companies operating in both wholesale and retail markets is not mandated in Australia.

Section 50 of the TPA prohibits acquisitions which would have the effect, or be likely to have the effect, of substantially lessening competition in a substantial market in Australia, unless a public benefit sufficient to outweigh the impact of the reduction in competition is judged likely to result.[1] Consequently, the ACCC examines proposals for mergers of companies in telecommunications and related markets.

The new regulatory accounting framework which will be administered by the ACCC provides for horizontal and vertical separation of carriers' accounts.[2] The previous record-keeping rules required only a horizontal accounting separation regime, where each carrier provided financial data for each of its major retail services. The new reporting framework introduces a wholesale layer and provides for indicative profit and loss reports for external wholesale and internal retail 'businesses'.

(c) Interconnection and access policies

Under the telecommunications access regime, the ACCC may 'declare' eligible services where this is found to be in the long-term interests of end-users.[3] Declaration results in an obligation on providers of the service to supply the declared services and specified ancillary services to carriers or carriage service providers seeking the services. The operation of the telecommunications access regime is described in the response to Question 2 below.

(d) Price control policies

Retail price controls apply only to Australia's major full-service telecommunications operator (and former incumbent monopoly provider), Telstra. The price controls take the form of a price cap (CPI-X) on a basket of basic access and call services, with a range of sub-caps.[4] Compliance with the controls is monitored by the ACCC.

The controls have been reviewed and subsequently adjusted on four occasions since their introduction in July 1989.[5] The ACCC recently reviewed the continuing need for the price controls and made a series of recommendations to the Government, which are now under consideration.

The ACCC monitors retail charges for telecommunications services across a range of operators and reports annually on those charges to the Minister for Communications.

(e) Access to scarce resources

Australia's radiofrequency spectrum is managed by the Australian Communications Authority (ACA). The Authority's Spectrum Marketing Group is responsible for the economically efficient pricing of radiofrequency spectrum resources, market based allocation of access to spectrum resources and implementation of spectrum licensing. Auctions were held in 2000 for spectrum capable of supporting new mobile telephone services (1.8GHz), wireless local loop and other services (3.4GHz) and broadband wireless services (26.5 - 27.5 GHz), and were recently concluded for broadband wireless spectrum (3G).[6] The ACCC advises the Minister for Communications on whether the acquisition by particular carriers of particular types of spectrum in particular markets is likely to raise competition issues.

The telecommunications numbering plan is also administered by the ACA. Since 1997, the ACA has been closely monitoring the take up of geographic telephone numbers in large population areas, asking carriers to justify requests for numbers, particularly in areas where numbers are running out. The ACCC may direct the ACA to make rules concerning number portability where it has determined that portability is in the long term interests of end-users. Since 1997, the ACCC has made directions in respect of local, national rate, premium rate and mobile number portability. Full local number portability is available and mobile number portability is expected to commence in September 2001. The ACCC has also developed and published pricing principles for number portability.

Regulatory responsibility for the installation and access of telecommunications facilities is split between the ACA and the ACCC. The ACCC is primarily responsible for administering the provisions of the Telecommunications Act dealing with access to supplementary telecommunications facilities. The ACA is primarily responsible for administering the provisions dealing with access to telecommunications towers and underground facilities, including enforcement of a Code which has been developed by the ACCC (see below). The ACA is also responsible for administering the provisions dealing with the installation of a telecommunications facility.

The *Code of Access to Telecommunications Transmission Towers, Sites of Towers and Underground Facilities*, made and formally issued by the ACCC in October 1999, sets out the administrative arrangements for applying for access to facilities. The facilities access regime has since operated with minimal regulatory intervention.

(f) Universal service or non-commercial service policies

The Government recently established a framework for greater competition in the provision of universal service. The universal service regime is intended to ensure that all people in Australia, wherever they reside or carry on business, have reasonable access, on an equitable basis, to standard telephone services, payphones and prescribed carriage services. Previously, Telstra was the sole universal service provider and was recompensed for the costs involved from a levy on all carriers.

Under the new arrangements, multiple universal service providers will be able to compete to provide universal service obligation (USO) services and access USO subsidies in designated areas. Regional contestability pilots will be conducted from July 2001 in regional areas of Victoria, South Australia, New South Wales and Queensland.

Where competing providers enter the market, consumers will have the choice of leaving Telstra for another service provider and accessing the standard telephone service or an alternative USO service. Telstra will be required to continue to offer the standard telephone service in contestable USO markets, with appropriate compensation for its increased commercial risk. The USO will continue to be funded by the industry through the Universal Service Fund. However, under the new arrangements, carriage service providers as well as carriers will contribute to the fund.[7]

(g) The role or application of competition law principles

Both general and telecommunications-specific provisions of the TPA concerning anti-competitive conduct have been invoked in respect of telecommunications operators (see responses to Questions 4 and 5 below).

(h) The institutional arrangements governing the telecommunications industry: the industry regulatory authority

Complementing the functions of the ACCC in respect of the telecommunications industry, the ACA is the other principal regulator of the Australian communications industry. Formed on 1 July 1997, the ACA regulates telecommunications consumer and technical matters, and manages radiocommunications. The ACA's responsibilities include the following:

- issuing of carrier licenses and regulation of service providers;
- annual and quarterly reporting of the performance of carriage service providers with reference to consumer satisfaction, consumer benefits and quality of service;
- registration, with safety-net style enforcement powers, of industry (including consumer, operations and technical) codes of practice;
- setting of industry standards where codes fail or fail to be created;
- monitoring of delivery of the Universal Service Obligation (USO) (currently involving the supply of standard telephone and pay-phone services) and costing delivery of the USO.

Three industry bodies play important roles in the telecommunications regulatory framework.

- The Australian Communications Industry Forum (ACIF) represents industry concerning the development of technical, operational and consumer industry codes of practice and standards.
- The Telecommunications Access Forum (TAF) is an industry self-regulatory body, including carriers and carriage service providers, and is approved by the ACCC. TAF's role includes recommending which services should be subject to the telecommunications access regime, and generating and updating an access code.
- The Telecommunications Industry Ombudsman (TIO) is an independent dispute resolution forum for complaints made by residential and small business consumers of telecommunications services. The TIO is funded through charges levied on carriers and service providers on the basis of complaints received against them.

(i) The institutional arrangements governing the telecommunications industry: the competition authority

The ACCC has had sole responsibility for competition regulation in telecommunications since July 1997. In the early part of that period, that responsibility was exercised by establishing and enforcing the conditions under which competition could emerge in a market which, until then, had consisted of only two fixed and three mobile telephone carriers.

The legislation administered by the ACCC has remained essentially unchanged over that period, although a number of amendments to the telecommunications-specific provisions of the TPA took effect from July 1999. The amendments strengthened the operation of the competition notice regime in Part XIB and introduced additional flexibility to certain arbitral processes under Part XIC.[8]

The ACCC's telecommunications activities have, however, changed since 1997 as the market itself has changed. Following the declaration of 11 distinct services[9] (including through the operation of transitional deeming provisions) over the first two years of the regime, no new services have been declared under the access regime for more than 18 months.[10] Several inquiries currently in progress relate to the limitation, rather than the extension, of existing regulation. Pricing principles have been finalised for a number of major services. The number of disputes notified to the ACCC for arbitration has, however, continued to increase, price monitoring is becoming more complex as the range of services, service bundles and service providers increases, and investigations of possible breaches of the anti-competitive conduct provisions have absorbed considerable resources.

The structure of the ACCC's Telecommunications Group has remained largely unchanged since 1997. Staffing and budgets have changed in mix, and generally risen somewhat, over that period.[11]

2. Access Regulation

(a) Services for which access or interconnection can be mandated

The telecommunications access regime (Part XIC of the TPA) establishes a process whereby providers of carriage services, and of content services supplied by means of carriage services, can obtain access to particular (input) services. There is no general right of access. Rather, the ACCC must first declare the service.

The access regime confers power on the ACCC to declare 'eligible services'. An eligible service is:

- a carriage service between two or more points, at least one of which is in Australia; or
- a service that facilitates supply of such a carriage service.

On transfer to the current regulatory regime, the ACCC prepared and published a 'deeming' statement, which provided that specific 'eligible services' were declared.[12] The services included all those covered by access arrangements registered under the previous regime, except where the ACCC was satisfied that specification would not promote the long term interests of end users. They included originating and terminating access to public fixed and mobile networks, as well as a number of other services. (A full list of declared services is included below.)

Under the telecommunications access regime, the ACCC can declare eligible services in one of two ways:

- in accordance with a recommendation from the industry self-regulatory body, the Telecommunications Access Forum (TAF); or

- after holding a public inquiry, if it is satisfied that declaration would promote the long term interests of end users of carriage services or services provided by means of carriage services.

The ACCC expects requests to hold a public inquiry to come from service providers seeking access to an eligible service or from the industry forum.[13] However, the ACCC will consider a request from anyone as long as supporting information is provided.

When deciding whether to declare a service the ACCC must have regard to the long-term interests of end-users of carriage services or services provided by means of carriage services. In assessing whether declaration is likely to promote the long-term interests of end-users, the ACCC is required to have regard to the objectives of:

- promoting competition in the market for carriage services or services provided by means of carriage services;

- achieving any-to-any connectivity in relation to carriage services that involve communications between end-users; and

- encouraging the economically efficient use of, and investment in, infrastructure in terms of productive, allocative and dynamic efficiency.[14]

Once a service has been declared, 'standard access obligations' apply to all those supplying the service to themselves or others (access providers). The obligations apply equally to incumbent and non-dominant firms.

The ACCC can grant exemptions from the access obligations (under ss.152AS and 152AT of the TPA) but cannot substantially vary or revoke a service declaration unless it has held a public inquiry. Subject to this inquiry process, the ACCC can revoke or vary a declaration where it is no longer satisfied that it is in the long term interests of end users.

The AMPS (analogue mobile phone) service declaration was recently revoked, following closedown of the service. Currently under consideration for possible exemption in particular geographic areas are inter-capital transmission services and a local call resale service (the local carriage service).

The ACCC keeps a public register of declared services, variations and revocations and copies of inquiry reports. A list of services currently under declaration follows.[15]

Deemed declared services

- domestic public switched telephone network (PSTN) originating and terminating access;

- domestic digital mobile (GSM) originating and terminating access;

- transmission;

- digital data access service;
- conditioned local loop service; and
- broadcasting access service.

Services declared under Part XIC of the TPA

- analogue subscription television broadcast carriage service;
- unconditioned local loop service;
- local PSTN originating service;
- local PSTN terminating service;
- local carriage service;
- integrated services digital network (ISDN) originating service;
- integrated services digital network (ISDN) terminating service; and
- domestic transmission capacity service.

(b) Terms and conditions of access and interconnection

The emphasis of the access regime is on encouraging access providers and access seekers to negotiate access to declared services. In line with this, it provides for:

- the industry to establish an access code approved by the ACCC[16]; and
- access providers to give undertakings to the ACCC setting out the terms and conditions of access. Once approved by the ACCC, such undertakings establish the terms and conditions which will be applied in the absence of a negotiated arrangement.

If such arrangements are in place, individual access arrangements can be established without the need for direct regulatory intervention.

Where an access undertaking is given to the ACCC, the ACCC is required to accept or reject the undertaking (acceptance criteria are set out in the Act). Telstra has submitted two undertakings relating to PSTN access, but the ACCC rejected both on the grounds that the proposed prices were unreasonably high.[17] Where commercial negotiation fails and there is no approved undertaking in operation, the ACCC can conduct compulsory arbitration.

There is no specified period of time after which negotiations are deemed to have failed. Arbitration may take place once one, or both, of the parties have notified the ACCC of a dispute.

Carriers are not required to file the details of commercially negotiated agreements with the ACCC, and the ACCC is not required to approve such agreements.

There is no means of comparing the determination of access prices with that of final (retail) prices. With the exception of Telstra's price-controlled services, final prices are not subject to direct regulation in Australia.

(c) Link between access/interconnection price regulation and final price regulation

As mentioned earlier (see response to Question 1), Telstra is the only Australian carrier subject to retail price controls. The controls take the form of a price cap (CPI-X) and are regulated under the *Telecommunications (Consumer Protection and Service Standards) Act 1999*.

There is no formal link between final price regulation under Telstra's price controls and access/interconnection price regulation under the telecommunications access regime. However, the ACCC considers the impact of retail price controls in the way it administers the access regime.

In the case of PSTN origination and termination, Telstra is currently allowed to include an access deficit contribution in the interconnect access price for using the PSTN. This is based on it having an access deficit as a consequence of retail price controls that prevent it from achieving full cost recovery on the provision of customer access lines.[18]

In the case of the local carriage service (currently a declared service), the resale of local calls is based on the retail-minus approach where the wholesale price is equal to the retail price minus Telstra's cost of retailing. This has been interpreted by the Productivity Commission as an application of the efficient component pricing rule (ECPR).[19]

(d) Costs recovered from access/interconnection revenue

The Australian legislation does not specify directly what costs have to be recovered from interconnect access charges. However, the legislation establishing the access regime includes criteria relevant to the determination of access charges.[20]

Where charges for PSTN origination and termination are arbitrated by the ACCC, the charges are based on the ACCC's estimate of total service long-run incremental cost (TSLRIC), encompassing the attributable operating and capital costs of the inter-exchange network.

The basic TSLRIC is supplemented by an indirect cost contribution (relating to common costs that cannot be attributed to the PSTN) and an access deficit contribution (see response to Question 2(c) above).

The model used by the ACCC to calculate these costs assesses Telstra's PSTN costs on an efficient, forward-looking basis, but takes as given the existing configuration of certain basic network elements.[21] This is characterised as a 'scorched node' rather than 'scorched earth' approach.

(e) Flexibility or otherwise of access/interconnection prices

Generally, when the ACCC makes access price determinations in its role as arbitrator, it specifies the actual price that is to be paid. This reflects the requirements of access providers and access seekers for certainty concerning the price.

The possible exception to this is the proposed means of determining charges for GSM termination. This service is offered by the three largest competitors in the Australian mobile market and two smaller recent entrants. The ACCC has proposed that for each carrier's GSM termination, access charges must reduce in line with changes to an index of its mobile retail charges. In this way it is hoped to link price changes in the more competitive (retail) element of the market with the less competitive

(termination) element. This proposal is in draft form only and a final decision on regulation of termination charges is yet to be reached.[22]

The ACCC expects that access providers and access seekers will seek greater diversity in the form of access price determinations as the access regime matures, including the option of two-part pricing.

(f) Price differentiation

There is no reason why access providers and access seekers could not negotiate any mutually acceptable arrangement for the provision of a particular service. However, the ACCC's approach in arbitrations so far has been to set access prices that do not differentiate between peak and off-peak periods. Similarly, the ACCC has set prices for particular services that are to apply irrespective of the intended use and users of the services. Therefore, the access prices are generally non-differentiated. This is in contrast to retail offerings that often involve a complex set of differentiated prices.

It should be noted, however, that the access services whose prices have been set by the ACCC are the basic origination and termination voice network services. These services tend to be provided in much the same form to all access seekers and so lack the differentiation which would justify any cost-based price differentiation. For this reason, they are sometimes referred to as 'vanilla' offerings.

Access prices set by the ACCC do not have a two-part tariff or non-linear structure in the strict sense of having both traffic-sensitive and non traffic-sensitive components. However, because of the way the access deficit is allocated, the PSTN originating and terminating access charges incorporate both a flagfall charge and a per-minute charge. Although this is not strictly a two-part tariff, it does imply a discount for longer held calls.[23] Generally the arbitrated charge will not vary with the amount of access supplied.

(g) Basis for price-setting by the ACCC

The access prices determined by the ACCC are usually cost based. A price based on forward looking total service long run incremental cost (TSLRIC) is considered to be consistent with the price that would prevail if the access provider faced effective competition, and usually that which best promotes the long-term interests of end-users. It is also considered to protect the legitimate business interests of efficient access providers and the interests of those with a right to use the declared service.

However, the cost based methodology set out in the ACCC's pricing principles[24] is intended to apply to services that are well developed, necessary for competition in dependent markets and where the forces of competition work poorly in constraining prices to efficient levels. The pricing of other declared services is to be considered on a case by case basis. For example, the proposed GSM pricing principles are not explicitly cost based.

See also the response to *(d)* above.

(h) Non-discriminatory access

The provider of a service which has been declared by the ACCC under the telecommunications access regime must supply that service, if requested to do so by an access seeker, on non-discriminatory terms and conditions. Both price and non-price terms and conditions are covered by this requirement.

The standard access obligations require the access provider to take all reasonable steps to ensure that the technical and operational quality of the service and ancillary services (fault detection, handling and rectification, and the timing of those services) is equivalent to that which it provides to itself. The standard access obligations are enforceable by the parties.

While price discrimination is not explicitly prohibited under Australian competition law, price discrimination which reduces efficient competition is likely to be inconsistent with the 'long-term interests of end-users' and 'reasonableness' criteria of the access regime.[25] However, this does not imply that there must be uniform prices, or that different price-quality trade-offs cannot be offered to access seekers. Price differentials which reflect differences in the cost of supplying different access seekers are not regarded as discriminatory.

Commercial agreements between access providers and access seekers concerning the supply of declared services (including service bundles) are not subject to ACCC scrutiny. The ACCC does not establish formal reference tariffs, although for basic ('vanilla') PSTN services it has developed *de facto* reference price points as a result of its assessments of Telstra's undertakings for those services.[26] However, such prices can only be mandated through bilateral arbitral processes.

If anti-competitive pricing practices (such as a wholesale-retail price squeeze) are suspected, the ACCC can respond in one of two ways:

- Where the service in question is a declared service, and where a dispute is notified for arbitration, the ACCC can determine the price of the service directly in order to ensure that the price is similar to that which it is estimated that the access provider charges to itself;

- Where the service in question is not regulated, the ACCC can use its powers under the telecommunications-specific anti-competitive conduct provisions of the Act.

Several cases of this kind have been dealt with by the ACCC since 1997.[27]

3. Dominance

(a) Relevance of concept of dominance

Australia's competition legislation uses the concept of market power, rather than dominance. While a dominance test was incorporated in the assessment of mergers of acquisitions between 1977 and 1993, it was subsequently replaced with a test based on the likelihood of a substantial lessening of competition.[28] Market power is judged both in terms of structural measures such as market share, and behavioural and other factors in the market.

Most of the regulation relating to telecommunications operators in Australia applies equally to all operators, regardless of their market power. However, in a number of circumstances, the attributes of a particular operator may bring it within the range of legislation. For example, Telstra, as the incumbent telecommunications operator, is subject to retail price controls, as described in Questions 1 and 2 above. Other operators are not subject to similar controls. In a further example, the telecommunications-specific anti-competitive conduct provisions apply to operators judged to have a substantial degree of market power in a telecommunications market and to have taken advantage of that power with the effect, or likely effect, of substantially lessening competition in that or any other telecommunications market.

(b) Conditions for dominance

Not applicable in Australia.

3.1 Competition Concerns and Competition Law Enforcement

(4) Important recent competition concerns

Probably the main competition concern since 1997 has been the potential for exploitation of market power by the incumbent telecommunications operators, particularly Telstra, and particularly in wholesale operations. This is because such activity can stifle competition in a different market (generally a downstream or retail) market. Concerns have also arisen in relation to the conduct of some newer entrants in business-to-consumer relations.

More generalised concerns have arisen about the likely impact on competition of a number of proposed mergers of telecommunications and/or Internet operators, the extent of consumer understanding of the new competition arrangements, and consumers' ability to compare offerings across the (now large) number of companies operating in the market and make informed decisions. In 1999, the ACCC opposed the proposed merger of Optus and AAPT, then the second and third operators in the fixed telephone market, and last year it indicated serious concerns about the proposed merger of Telstra and Australia's second largest Internet service provider OzEmail, resulting in the abandonment of the proposal. Concern has also been expressed in some areas about the speed with which competition is developing in markets outside the major metropolitan areas and the extent to which consumers in regional areas are benefiting from competition.

A variety of mechanisms are available to Australian regulators to deal with such concerns. Under the TPA, the ACCC can take action against anti-competitive conduct under telecommunications-specific provisions and under general provisions. Both have been used since 1997. The ACCC has considered several merger proposals involving telecommunications companies, and rejected a number on the basis that they were likely to result in a substantial lessening of competition in the market. The ACCC has also issued directions to the Australian Communications Authority to mandate local, premium-rate, mobile and other categories of number portability, and has used its powers to require carriers to develop a reporting framework and to mandate regular reports on a specific matter (ADSL rollout) from Telstra.

Other regulators have also taken a stand on some of these issues where they relate to their own jurisdictions. The industry-funded Telecommunications Industry Ombudsman has dealt with complaints concerning billing and charging by telecommunications operators and ISPs. In 2000, the Government commissioned inquiries into telecommunications service standards, the continuing need for industry-specific competition regulation and the continuing need for Telstra-specific retail price controls.

(5) Major recent cases, issues, action and outcomes

Major cases since 1997 have related to:

- the timely provision of access to (Telstra) facilities enabling competition in downstream markets (customer transfer, directory information, exchange access);
- the terms and conditions of access to such facilities, especially pricing and collocation (many disputes have been notified to the ACCC for arbitration);
- the quality and timeliness of information provided to the regulator;

- misleading and deceptive conduct by telecommunications operators and ISPs (e.g. advertising by ISPs of 'unlimited download' options, subsequently amended to include so-called acceptable use policies);

- customer acquisition methods (unconscionable practices, including 'slamming');

- billing and charging (including 'dumping').

A listing of major investigations undertaken under Part XIB of the TPA is attached.

The ACCC has also investigated complaints of difficulty accessing pay television content from prospective developers of telecommunications infrastructure outside metropolitan areas, due to exclusive contracting by certain pay television operators. It was claimed that such exclusive contracts reduce the potential viability of new telecommunications infrastructure (particularly broadband infrastructure) in regional areas. Details of these investigations, together with the issues they raise, are contained in the ACCC's submission to the Telecommunications Service Inquiry.[29]

The major issues in these cases included abuse of market power, misleading, deceptive and unconscionable conduct and refusal to deal. Issues of market definition arose particularly where the exertion of market power in one market was considered likely to have its effect in another market. For example, in the customer transfer case referred to above, Telstra's market power lay in the customer access network, but the activities of concern affected the call resale market.

Both the general and the telecommunications-specific anti-competitive conduct provisions of the Trade Practices Act have been applied by the ACCC. Competition notices alleging breaches of the competition rule[30] were issued to Telstra using the telecommunications-specific anti-competitive conduct provisions in two cases (customer transfer processes and Internet peering). In other cases, action was taken by the ACCC in the Federal Court against a number of companies. In others again, court-enforceable undertakings were sought and received from companies following ACCC investigation. In one case, the ACCC has sought regular reports from Telstra (concerning progress of its ADSL rollout). In others, it has worked with the industry self-regulatory body, Australian Communications Industry Forum (ACIF), to develop industry-based solutions to identified problems.

In all cases, modification of the conduct which was the subject of ACCC concern has been achieved. In several cases (customer transfer, 'slamming'), the companies involved contributed sums of money towards longer-term resolution of the problems. (For example, in the customer transfer case, Telstra agreed in February 2000 on a $4.5 million package for service providers who use Telstra's commercial churn process. In the 'slamming' case, two companies each agreed in the Federal Court to pay $500 000 towards a public awareness campaign aimed at stamping out unauthorised customer transfers.)

A summary of the outcomes of the major investigations undertaken under Part XIB is included in the attachment.

Most cases were clearly within the jurisdiction of the ACCC and did not require action to be co-ordinated with other regulators.

ATTACHMENT

Major investigations under the telecommunications-specific anti-competitive conduct provisions

Date	Matter	Issues	Outcome
1997	*International audiotex* (Investigation commenced by AUSTEL and continued by ACCC)	• Alleged that Telstra used its market power to make audiotex services provided by its subsidiary more attractive to content providers whilst reducing the viability for existing and potential competitors. • ACCC identified the relevant market as 'the supply of underlying carriage services in Australia to content service providers for distribution of information to overseas callers.' • Telstra submitted that the relevant market was 'the supply of international audiotex services.' In Telstra's view, this was an international market and Telstra competed with carriers in other countries.	• Telstra advised the ACCC in December 1997 that it had decided to withdraw from the Australian terminating audiotex business because the expenditure required to maintain the audiotex services was not justified in light of the decline in revenue of the services. • No evidence to sustain a breach of the competition rule or that Telstra had contravened section 46 of the TPA.
1997/98	*PhoneAway*	• Service providers alleged that Telstra was pricing the local call component of its PhoneAway tariff anti-competitively in the market for pre-paid phone card services. • Service providers claimed that, to compete with PhoneAway they had to be able to match its 40 cent local call price, and the price they paid for use of Telstra's 1800 services, which they required to provide competing phone cards, prevented them from matching that price.	• ACCC found there was no breach of the competition rule. • The pre-paid services market was found to be highly competitive, with low barriers to entry. Some of Telstra's competitors had achieved substantial market shares.

Date	Matter	Issues	Outcome
1997/98	*One.Tel / Optus GSM*	• One.Tel alleged that Optus was misusing its market power in the wholesale GSM market. • One.Tel provided GSM services to end-users, carried exclusively by the Optus network. One.Tel alleged that it was constrained by exclusivity requirements from Optus, and because the lack of number portability prevented One.Tel from moving its existing customers to different carriers.	• ACCC formed a 'reason to suspect' that Optus was contravening the competition rule. • Matter was resolved by commercial negotiation between One.Tel and Optus.
1997/98	*Telstra's confidentiality requirements*	• Macquarie alleged that Telstra was seeking to delay renegotiation of the terms and conditions of supply to Macquarie, and to deny Macquarie the right and opportunity to refer complaints to the ACCC. • Macquarie alleged Telstra was contravening the competition rule by using its market power to refuse to negotiate the terms and conditions of an agreement with Macquarie unless Macquarie agreed to be bound by an unreasonable confidentiality agreement.	• ACCC found no breach of the competition rule. • However, the ACCC raised the matter with Telstra. • ACCC noted it may use its information gathering powers if investigations are impeded by confidentiality agreements.
1997/98	*One.Tel override*	• One.Tel alleged that Optus was misusing its market power by refusing to condition its network so as to permit One.Tel to use four digit dial codes to route long distance traffic from its customers to its preferred long distance carrier. • One.Tel alleged that Optus had market power in the market for GSM services.	• ACCC found no breach of the competition rule. • Given the issues regarding the Numbering Plan, One.Tel was advised that the mater was more appropriately dealt with by the ACA.

Date	Matter	Issues	Outcome
		• Optus alleged that the proposed use of the short dial access codes was illegal under the Telecommunications Numbering Plan 1997.	
1998	*Permitted attachment private lines (PAPLs)*	• ACCC received a number of complaints that Telstra had advised its PAPL customers that their data services could be adversely affected by changes to Telstra's network. Service providers understood this to mean Telstra was withdrawing support for DC continuity. • DC continuity is required for attaching high speed data technology, called xDSL. • Service providers alleged that Telstra had taken advantage of its power in upstream markets with the effect or likely effect that service providers would be forced to discontinue providing high speed data services over PAPLs.	• In September 1998 Telstra offered a number of safeguards guaranteeing the continuity of service to existing wholesale customers, which were modified to meet the ACCC's concerns. • ACCC continues to monitor Telstra's conduct concerning the deployment of xDSL technology and upgrading its network. • ACCC requested the TAF to examine developing a code to address industry-wide network modernisation issues.
1997/98	*ISDN and OnRamp Xpress services*	• Service providers complained that Telstra was withdrawing the supply of ISDN semi-permanent circuit services to service providers before providing its alternative OnRamp Xpress service. • Service providers were also concerned that the proposed price for the replacement OnRamp Xpress service was substantially more than the semi-permanent circuit service.	• After the ACCC made Telstra aware of its concerns, Telstra invested in infrastructure to supply semi-permanent circuit services prior to the introduction of the replacement service in areas where the replacement service was not yet available.

Date	Matter	Issues	Outcome
			• Telstra also announced prices for its proposed replacement service that were considerably lower than its previous indicative prices. • In light of Telstra's changes, ACCC formed the view that there was insufficient evidence that Telstra's conduct would substantially lessen competition. • ACCC decided that consideration needed to be given to whether ISDN services should be regulated under Part XIC. ACCC announced an ISDN declaration inquiry.
1998/99	*Telstra's capped $3 STD product*	• AAPT alleged that it was providing a competing product to Telstra's $3 capped STD product at a loss because of the structure of Telstra's interconnection prices charged to AAPT. • AAPT alleged that, through the capped rate and disparities between peak and off-peak wholesale and retail charges, Telstra was imposing a price squeeze on its competitors, and prevented AAPT from competing effectively in the residential market for long distance national services.	• ACCC concluded that Telstra's conduct did not contravene the competition rule.

Date	Matter	Issues	Outcome
1999	*Payphones*	• TriTel Australia Pty Ltd, a small payphone company, alleged that Telstra had effectively refused to negotiate with it on a range of issues affecting TriTel's ability to provide private payphone services.	• ACCC's investigations were suspended after Telstra and TriTel announced they would resume commercial negotiations.
1999	*Payphones and smartcards*	• Vanguard Holdings Limited, trading as PocketMoney alleged that Telstra engaged in anti-competitive conduct in denying PocketMoney access to a commercial wholesale rate for pre-paid payphone calls.	• ACCC's investigations were suspended after Telstra and PocketMoney commenced commercial negotiations.
1998/1999	*Internet third line forcing*	• It was alleged that Ninemsn had engaged in third line forcing conduct with Telstra's Big Pond Internet service in contravention of the competition rule. • It was alleged that access to the 'members only' content of the Ninemsn website was conditional upon customers being registered Big Pond users.	• ACCC formed the view that the conduct did not breach the competition rule.

NOTES

1 ACCC, *Merger Guidelines*, June 1999.

2 ACCC, *Telecommunications Industry Regulatory Accounting Framework – Information Paper on Draft Instrument*, November 2000 (http://www.accc.gov.au).

3 In assessing whether such an action is likely to promote the long-term interests of end-users, the ACCC is required to have regard to (a) the objective of promoting competition in markets for listed services, (b) the objective of achieving any-to-any connectivity in relation to carriage services that involve communications between end-users, and (c) the objective of encouraging the economically efficient use of, and the economically efficient investment in, the infrastructure by which listed services are supplied.

4 The broad basket currently includes digital cellular mobile telephone services, fixed-line connections, domestic leased lines, international leased lines, line rentals, local calls, trunk calls and international calls. See ACCC, Review of Price Control Arrangements – An ACCC Discussion Paper, September 2000 and ACCC, Review of Price Control Arrangements – An ACCC Draft Report, December 2000.

5 The four sets of controls operated from (respectively) July 1989 to July 1992, July 1992 to June 1995 (extended by six months to December 1995), January 1996 to December 1998 (extended by six months to June 1999), and July 1999 to June 2001 (current period). The changes made in each case are summarised in Appendix E to the ACCC's *Review of Price Control Arrangements – An ACCC Draft Report*, December 2000

6 Details of spectrum auctions conducted by the ACA since 1997 are listed on the ACA's website (http://www.aca.gov.au).

7 Department of Communications, Information Technology and the Arts, *New Legislative Framework for Universal Service Obligation – Factsheet*, April 2000 (http://www.dcita.gov.au).

8 The amendments are listed in Section 1.4.4 of the ACCC's *Submission to the Productivity Commission Review of Telecommunications Specific Competition Regulation*, August 2000, published at www.pc.gov.au

9 A list of declared services is included in the response to Question 2(a) below. Additional inquiries were also held over this period to vary existing declared services.

10 Additional inquiries were also held over this period to vary existing declared services.

11 See the ACCC's *Annual Reports* from 1998 to 2000.

12 ACCC, *Deeming of telecommunications services – A statement pursuant to s.39 of the Telecommunications (Transitional Provisions and Consequential Amendments) Act 1997*, 30 June 1997

13 In fact, no such requests have been received from the TAF.

14 For more information on these objectives, see ACCC, *Telecommunications services – declaration provisions, a guide to the declaration provisions of Part XIC of the Trade Practices Act*, July 1999.

15 The register of declared services is available on-line at the ACCC's website, www.accc.gov.au

16 An access code sets out model terms and conditions of access, but is not obligatory on the parties. It must be consistent with (and does not replace) the standard access obligations.

17 See ACCC, *A Report on the Assessment of Telstra's Undertaking for the Domestic PSTN Originating and Terminating Access Services,* July 2000.

18 ACCC, *ibid.*

19 See Productivity Commission, *Telecommunications Competition Regulation: Draft Report,* March 2001.

20 See ACCC, *Access Pricing Principles, Telecommunications – A Guide*, 1997, for a prospective interpretation of these criteria.

21 See National Economic Research Associates (n/e/r/a), *Estimating the Long Run Incremental Cost of PSTN Access: Final Report for the ACCC,* London, 1999, for an outline of the model on which current approaches are based.

22 See ACCC, *Pricing Methodology for the GSM Termination Service: Draft Report,* December 2000.

23 For more detail on the ACCC's approach to PSTN access pricing, see ACCC, *A report on the assessment of Telstra's undertaking for the Domestic PSTN Originating and Terminating Access services,* July 2000.

24 ACCC, *Access pricing principles: telecommunications – a guide,* July 1997

25 Sections 152AB and 152AH respectively of the Trade Practices Act.

26 See ACCC, *A Report on the Assessment of Telstra's Undertaking for the Domestic PSTN Originating and Terminating Access Services,* July 2000.

27 For example, Telstra's $3 capped long-distance call offering suggested that Telstra was charging itself for basic PSTN originating and terminating access at a lower rate than it was offering to competitors. The ACCC responded by stipulating lower access charges for these services in arbitrations. A possible wholesale price squeeze has also been investigated in relation to unbundled local loop (ULL) charges to potential ADSL competitors. The ACCC is again responding in the context of arbitral proceedings concerning the ULL service and in separate action using the anti-competitive conduct provisions.

28 ACCC, *Mergers – Guidelines* (http://www.accc.gov.au)

29 ACCC, *Submission to the Telecommunications Service Inquiry, Part 2,* June 2000 (available at http://www.tsi.gov.au).

30 The competition rule states that a carrier or carriage service provider must not engage in anti-competitive conduct (s 151AK). A carrier or carriage service provider will be taken to have engaged in anti-competitive behaviour:

- where it has a substantial degree of power in a telecommunications market and takes advantage of that power with the likely effect of substantially lessening competition in that or any other telecommunications market;

- if it engages in conduct relating to a telecommunications market, being conduct which contravenes s 45, s 45B, s 46, s 47 or s 48.

CZECH REPUBLIC

1. Introduction

The telecommunications sector in the Czech Republic is regulated by the Act No. 151/2000 Coll., on telecommunications and on amendments to certain Acts (hereinafter referred to as the Telecommunication Act), which came into force on the 1st July 2000.

The Telecommunication Act regulates the conditions for installation and operation of telecommunication devices and telecommunication networks, conditions for provision of telecommunication services as well as execution of Civil Service including regulation. An independent regulator represented by the Czech Telecommunication Office (hereinafter referred to as well as CTO) was established by the Telecommunication Act, having the position of the administrative authority for execution of Civil Service including regulation in the issues of telecommunication[1)]. The CTO is seated in Prague.

The protection of competition in the Czech Republic is regulated by Act No. 63/1991 Coll., on the protection of competition, as amended (hereinafter referred to as the Competition Act). On the basis of the Competition Act and the Act No. 273/1996 Coll. on the scope of the Office for the Protection of Competition, as amended, the Office for the Protection of Economic Competition (hereinafter referred to as the Competition Office) is the central authority of the Civil Service for the support and the protection of competition against its prohibited restriction. In 2001 the Czech parliament adopted new Competition Act[2)], which will secure full compatibility of Czech law on the protection of competition with the competition rules of the EC. The Act shall come into effect on the 1st July 2001. The Competition Office is seated in Brno.

The present and new Competition Acts relate to all natural and legal persons, who participate in competition, although they do not represent business subjects, and to all the economic sectors, hence also the telecommunication sector. Special Acts or special regulatory bodies settle special conditions for the access to the market and consequential operation on a given market. In the event that the competitors act in accordance with special Acts, or with decisions of regulatory bodies and do not exceed the frame of distortion of competition, which is established by these special legal regulations or by decisions of regulatory bodies, even if such an action had the attributes of distortion of competition according to competition rules, the above mentioned action does not represent the breach of competition rules and the Competition Office shall not have the possibility to proceed according to the Competition Act. In the event that the subject – the competitor, by its action exceeds the frame of the authorisation resulting from the special Act or from the decision of the regulatory body, i.e. acts without any grounds included in the special Act or in the decision of such a body, it is possible to make it subject to competition rules without any exception.

The above mentioned principle also fully governs the application of the Competition Act in the sector of telecommunications. Certain actions of telecommunications operators may be under certain circumstances independently assessed by the Czech Telecommunication Office from the viewpoint of the

Telecommunication Act as well as by the Office for the Protection of Competition from the viewpoint of the Competition Act.

Relations between the Office for the Protection of Competition and the Czech Telecommunication Office are not regulated by any Act. In January 2001, a Memorandum on Co-operation was signed by the chairmen of both institutions, which envisages, among others, mutual consultations on the cases that fall within the scope of both authorities, transfer of information on applications of individual competitors with the aim to forego interference into competencies of the other authority and co-operation in the area of legislation.

2. Development of regulation since 1995

Regulation of the telecommunication sector was, before the coming into effect of the Act No. 151/2000 Coll., (i.e. till 30th June 2000) regulated by the Act No. 110/1964 Coll., on telecommunication, as amended, especially the substantial amendment No. 150/1992 Coll. In the course of the period from 1992´s amendment on, till the coming into effect of the new Telecommunication Act, the market of telecommunications with the exception of the voice telephone services through the public firm telecommunication network was gradually opened to competition. The new Telecommunication Act, adopted by the parliament of the Czech Republic in May 2000 with effect from the 1st July 2000, also enabled, from the 1st January 2001 on, full liberalisation of the voice telephone services via the public fixed telecommunication network. Therefore, since 1st January 2001, exclusive provision of the voice service in the interurban and international operation by the ČESKÝ TELECOM, corp., has been terminated and the telecommunication services are also provided by other fixed lines operators since the mentioned date. The customers may choose the operator according to the conditions offered by the individual operators. Approximately 47 licenses have been granted at the time of writing for the provision of the voice telephone services through the public fixed telephony networks.

IP telephony is the part of the telecommunication market since 1998, based on CTO decision that IPT is not a classical voice telephony service.

3. Access regulation and dominant position

In accordance with the new Telecommunication Act, all the operators of the public telecommunication networks are under a legal duty to provide access or interconnection to the public telecommunication network. Thereby the principle “Open Network Provision” (ONP) is fully implemented.

The Czech Telecommunication Office specifies the conditions for access or for mutual interconnection of the telecommunication network ex post, i.e. only in situations, when a dispute between the operators of telecommunication networks arises, as regards the conditions of access or mutual interconnection. If the operator of the public telecommunication network is requested by another operator, a duty accrues for the operator to conclude an agreement in writing on interconnection of the networks or on the access to the network within 90 days from the day of delivering the proposal to enter the agreement. If the parties to the agreement fail to conclude an agreement in writing within the term, the dispute shall be settled by the Czech Telecommunication Office. The term of 90 days may be reduced, in that each of the parties to the agreement may apply to the CTO with a request for dispute settlement as regards the price. Decision of the CTO replace the agreement on interconnection of networks or on the access to the network.

Final prices for customers for the telephone services provided within the frame of universal service are, on the contrary, specified *ex ante* by the price decision of the CTO.

Actual experience demonstrates, that there is some endeavour to combine the regulation of price for access, or the interconnection with the regulation of final price. The Czech Telecommunication Office nevertheless did not accept this combination. These prices, i.e. prices for the access, or the interconnection and final prices are not specified in the same moment, nor they are a part of the same price limit.

The operating expenditures, overheads and reasonable profit must be covered by the revenue followed from the prices for access and interconnection. The expenditures for the connection are excluded from the total value of historical expenditures.

The access to the network is in accordance with the article 37, par. 2 of the Telecommunication Act realised at the expense of the applicant for access and for a fee. As regards the price for the connection to the telecommunication network, it was not necessary till these days for the CTO to enter the negotiations between the applicant and the network operator, forasmuch those subjects have always reached certain level of mutual compliance.

As regards the prices for mutual interconnection, they have to be negotiated by the contractual parties in so far as they do not discriminate neither any of the contractual parties, nor the other operators of connected public telecommunication networks and as they enable verification of the manner of their calculation. In the event the parties fail to reach a consent on prices for interconnection, they shall the use the method of price calculation specified by the CTO in the price decision. The Czech Telecommunication Office has issued the Price decision No. 01/PROP/2000, by which it specified the method of price calculation for the connection of the public telecommunication networks. Since even after this action the subjects on the market failed to reach consent in the issue of prices for interconnection, the CTO issued the Price decision No. 02/PROP/2001, by which it has specified the maximum prices for interconnection of the public telecommunication networks. The price for interconnection is henceforth specified on the basis of consent of the parties and the maximum price, specified by the Price decision may not be exceeded. The Czech Telecommunication Office further issued Price decision No. 03/PROP/2001, by which it established that the maximum prices are specified for the transport of the call up to the terminal point of the network connected, to which the subscriber´s terminal equipment is connected.

The Telecommunication Act and the Decree[3] clearly distinguish between connection and interconnection. As regards the prices for interconnection, they differ in the time of strong and weak duty as well as they depend on the purpose of interconnection.

Where the prices are specified by the Czech Telecommunication Office, the main starting point for the calculation of prices is represented by fully distributed costs and all is based on fully allocated historical cost model. The additional charge for the prices for interconnection is given as six percent from the capital contributed to the elements of the network.

The principle of reciprocity is applied at specification of the price for interconnection, i.e. all the companies on the telecommunication market are subject to the same rules. At present, the Czech Telecommunication Office deals with a suspicion that in a concrete case the prices for interconnection, or the access were used in the anticompetitive manner. This case has not, however, been closed yet. A duty of operator with significant market power to derive its prices from the economically qualified expenditures and a reasonable profit follows from the Act No. 526/1990 Coll., on the prices, as amended.

The new Telecommunication Act does not use the concept of dominance in relation to the companies providing telecommunication services. The Telecommunication Act uses the category of a firm with significant market power – SMP). This term relates to providers, who possess at least the share of 25 percent of the relevant market, geographically determined by the territory, on which the provider is authorised to perform its activity. The market share is specified on the basis of difference of revenues from

the public telephone service, including the incomes from interconnection and expenses for interconnections paid to the other providers of the public telephone service.

As regards the regulatory framework specified by the Telecommunication Act, the firms with significant market power are subject to several additional duties. A firm possessing significant market power must e.g. publish a "reference interconnection offer". The licensed firms with SMP which are operating public telephone networks or providing "leased lines" service are obliged to provide the access or interconnection on request. There are no other differences between the regulation of a firm with SMP and the rest of companies. All the companies are subject to the duty to interconnect their networks or grant the access to them on the basis of request.

The Competition Act on the contrary deals with the concept of dominance, specifying that abuse of dominant position at disadvantage of other competitors, consumers or at disadvantage of public interest is prohibited. The dominant position is in the present Act specified as a state, when an undertaking does not face substantial competition on the market. It is presumed that dominant position is held by undertaking with the share of at least 30 percent of the relevant market. The new Competition Act, which shall come into effect on the 1st July 2001, also uses the concept of dominant position. According to the new definition, dominant position shall be deemed to be held by a competitor or more competitors jointly (joint dominance), to whom their market power gives the possibility to act to the considerable extent independently on their competitors and consumers. For the purpose of dominant position determination shall be newly used the market power as the multicriteria magnitude, in which the market share of the competitor represents an important, but not the only criterion. The market power according to new Competition Act shall be assessed on the basis of the market share and other criteria, represented by the economic and financial power of the competitors, legal and other barriers to the access to the market for other competitors, the level of vertical integration of competitors, market structure and size of the market shares of the immediate competitors.

Since, as mentioned above, the present, as well as new Competition Act relates to all the undertakings in all the sectors, the concept of dominant position is used also for the competitors operating in the telecommunication sector. Therefore from the viewpoint of application of legal prohibition of abuse of dominant position the criteria specified in the Act on the protection of competition are decisive, not the limits of significant market power, which is applicable in the regulation of the telecommunication sector according to the Telecommunication Act.

4. Competition Concerns and Competition Law Enforcement.

The Office for the Protection of Competition dealt with an important case of imperilment of the competition in the sector of telecommunications. It was the case of abuse of dominant position by the dominant operator on the market of operation of unified telecommunication network (UTN) by ČESKÝ TELECOM, corp.

The Competition Office intervened in the case of the procedure of the present dominant operator against competing company DATTEL, corp., which provides telecommunication services through UTN on the territory of Prague. The Competition Office assessed the action of ČESKÝ TELECOM, corp. as an abuse of dominant position, by which the dominant competitor aspired to exclude the competitor from efficient competition in relation to billing of special tariff for connection to Internet. Abuse of dominant position was found by the Competition Office in the fact that the dominant operator refused to sign amendment to previously concluded contract on interconnection, which should deal with division of fees for interconnection of networks even in the case of account of special lowered tariff for connection to

Internet (tariff Internet 99) when the network of ČESKÝ TELECOM, corp. was simultaneously used by the DATTEL corp.

The competitor of the dominant operator was disadvantaged by not receiving from the ČESKÝ TELECOM corp. the interconnection fees for the call incoming from the network of ČESKÝ TELECOM corp. in the case of billing of lowered tariff for connection of customers to the Internet. Telephone operator DATTEL, corp. was by above mentioned action forced to provide its transfer network for Internet calls with lowered tariffs completely free of charge.

Above mentioned action led also to disadvantage of a part of its customers, who were not able to use the lowered tariff in the course of this illegal action, their Internet Service Provider was connected to the telephone network of DATTEL corp.

Imperilment of competition was in given case dealt with solely by the procedure of the Competition Office, with regard to the fact that the regulatory body – the Czech Telecommunication Office – in its decision (decision on granting exemption from numbering plan for both the operators), which involved the issue of access to Internet through the telephone line for lowered tariff, treated only the technical part of the matter with expectation that the issues related to interconnection of the networks in the case of special (lowered) tariff would be solved by the operators in the contracts on interconnection, which was subsequently refused by the dominant operator.

The Competition Office by its decision in the case of abuse of dominant position played certain regulatory part, which can nevertheless, within the scope and competencies of the Competition Office be only of single nature and focused on the specific case. The administrative proceeding was in this case commenced in 1999, when previous Telecommunication Act No. 110/1964 Coll., as amended, was still in effect, not containing regulation of competition principles. At present, the case is proceeded by the High Court, on the basis of the action taken against the decision of the Competition Office.

NOTES

1 The Czech Telecommunication Office was established in 1992 within the scope of the Ministry of Economy. In November 1996, all the scope in the area of telecommunication sector regulation was delegated to the Ministry of Transport and Communications and the Czech Telecommunication Office began its operation within the scope of the latter ministry.

2 Act No. 143/2001 Coll.

3 Decree of the Ministry of Transport and Communications No. 198/2000 Coll.

FINLAND

1. Regulatory developments

The liberalisation of the Finnish telecommunications market began in the late 1980's by gradually liberating services such as data transmission and services for business customers. Full liberalisation of local, long distance and international services was carried out in 1994. At the time, new service providers were licensed and carrier prefixes and pre-selection for long distance and international services were introduced.

The state owned *Telecom Finland* (nowadays *Sonera Corporation*) was the only mobile operator until 1990 when a competing GSM 900 licence was granted to *Radiolinja*. More than 30 operators obtained a GSM 1800 licence in 1995 but only a dozen local networks were built. Third generation licences were granted in 1999 after a beauty contest to Sonera, Radiolinja, *Telia Mobile* and *Suomen 3G*. The telecommunications market act was amended in 2000 in order to give the third generation mobile operators roaming rights to the GSM networks on a temporary basis.

In 1996, the discretionary powers of the authorities in granting telecommunications licences were limited. In 1997, the licensing system was limited to cover only the construction of mobile communications networks and a simple notification procedure was introduced for other networks and services. In 1998, some minor forms of mobile telecommunications (incl. AutoNet, ARP and Paging) were exempted from licences and transmission of international telecommunications to Finland was mainly exempted from the notification duty. Further exemptions from the notification duty have been granted to minor services.

Local loop unbundling was introduced already in 1996. In 2000, fixed network operators were obliged to lease the upper bandwidth (line sharing) and to allow co-location of competitors equipment in relevant sites.

End-user price control was abolished in 1996. The Telecommunications Market Act contains pricing rules only in connection to SMP operators providing local loop unbundling and interconnection services. Pricing of those services must be non-discriminatory and cost oriented but the authorities have not given any detailed cost accounting rules. The national regulatory authority (Telecommunications Administration Centre) has the power to investigate local loop and interconnection prices of the SMP operators *ex post*.

In 2001, operator pre-selection was expanded into local calls and to calls from fixed to mobile. New communications legislation is currently under preparation and its aim is to create an equal legislative framework for all communications networks.

2. Market structure

The liberalisation of the telecom market has attracted market entry and numerous newcomers have started business. Among them are the Swedish incumbent *Telia* and subsidiaries of multinational telecom firms such as *RSL Com* and *Facilicom*. At the moment, there are over 120 market players in the Finnish telecom market. The market has remained rather concentrated, however. The two biggest companies, *Sonera* and *Elisa Communications*, cover 94 percent of the long distance markets, 80 percent of the international service markets and 76 percent of the Internet service markets.

From the competition point of view, the most problematic market is the local service market, where incumbent local operators are still dominant with 90 percent market shares and up. At the local level, competition has reached only major corporate customers. The Ministry of Transport and Communications has noted that local competition cannot be promoted through further legislative measures, although amendments to some minor regulations would assist and will be studied. Local competition is hindered by monopoly pricing of the local loop, binding co-operative membership rebates, price squeezes and other anti-competitive behaviour that can be attacked by means of competition law.

In the mobile networks market, the two established players *Sonera* and *Radiolinja* are facing increasing competition since the licensing of the third nationwide GSM network operator *Suomen 2G* on January 2000. The third network started operations on 1 February 2001. *Telia Mobile* has a GSM 1800 network that covers the Helsinki metropolitan area, Turku and Tampere, but it has not been able to fully compete with nationwide networks.

The mobile service market has welcomed new entrants during the year 2000. Operating without their own network, service operators lease capacity from Sonera or Radiolinja. *Jippii Group* and *Telia Mobile* try to attract private and corporate customers by aggressive pricing, whereas *RSL Com* concentrates on multinational corporations. *DNA Finland*, a joint venture of 36 provincial TOs and an affiliate to Suomen 2G, begun to provide mobile services in February 2001, using the network of Suomen 2G. In 1999, Sonera had 64 percent of the mobile market and has been found to be dominant. Radiolinja has won markets over the years, reaching 34 percent in 1999. Due to the recent start-up of the service providers, no official figures of their market shares are available.

3. Current competition problems

At the moment, the FCA has some 30 competition restraint cases pending in the telecom sector. Approximately half of the cases concern the right to gain access to a unique physical infrastructure, service or immaterial rights governed by the competitor. Generally, the object of the complaint is the alleged discriminatory nature or unreasonableness of access pricing and other terms. Complaints on monopoly pricing are another important group of cases. The two problems may also appear in the context of the same case, as excessive pricing is one efficient way of preventing competitors from exploiting e.g. their right to lease subscriber lines. The majority of the FCA's cases on access and pricing concern the local fixed network.

3.1 Local loop unbundling

Even though local loop unbundling was enacted in Finland already in 1996, it has not contributed to the local competition as much as the legislator expected, due to incumbent operators' resistance. The FCA has studied the local loop pricing of *Elisa Communications*, *Turun Puhelin* and *Salon Seudun Puhelin*. In all three cases, severe competition restrictions were found.

The incumbents had been leasing lines to corporate customers for years. When the local loop unbundling obligations came into force, the line rental fees suddenly faced mark-ups from 50 percent to 300 percent. Some operators applied higher line rental fees for competing operators than for retail customers. Operator price lists contained volume discounts of up to 30 percent but the scale of the volume rebates made it virtually impossible for anyone but the incumbent itself to benefit from the rebates.

After the FCA referred the cases to the Competition Council, the incumbents abandoned double pricing and excessive rebates. Still, the price of local loop is at the same level as or only slightly lower than line rental fees for retail customers. The FCA argues that cost accounting methods of the incumbents produce artificially high costs that do not agree with reality. The main reasons for faulty results are too short write-off period for network elements, exaggerated replacement value of the fixed network leading to excessive annual depreciations as well as unreasonably high return on investment. Also Telecommunications Administration Centre (TAC) has investigated Elisa's local loop pricing and has reached the same conclusions as the FCA.

The cases are pending at the Competition Council.

3.2 Membership rebates

Many of the local telecom operators are co-operatives owned by their customers. Originally, the roll-out of fixed telecom networks was funded mainly through co-operative contributions. In order to attract investments, the co-operatives offered low-price fixed subscriptions to their members. Even today more than twenty local Finnet operators grant rebates to their member customers and about 25 percent of all fixed subscriptions benefit from such rebates. The monthly fees of member subscriptions are 40-60 percent below non-member prices.

The membership rebates restrict competition by tying customers and by blocking competitors out of the markets. The co-operatives compensate investors only by offering them local telecom services at reduced prices. Should a member change his local service provider, he would no longer receive any return on invested capital. Therefore member customers have strong incentives not to change their local service provider. In addition, membership rebates keep local price levels artificially below costs, making competing services unprofitable. Combined with the local loop pricing, membership rebates are effectively barring competition from local markets.

The FCA has investigated the membership rebates of one Finnet operator, *Päijät-Hämeen Puhelinosuuskunta,* and the case is pending at the Supreme Administrative Court.

3.3 Broadband access and Internet services

Demand for high speed Internet services has been rapidly growing in the past few years. The competition in the Internet service market is fierce, but the access to Internet services is still largely in the hands of local incumbents. Some local operators have been accused of taking advantage of their dominant position in the fixed network market by cross-subsidising their affiliate Internet service providers and by applying retail prices leading to price squeeze. Most of the problems occur in connection to broadband access services, e.g. ISDN and ADSL.

The local incumbent operator offers Internet access at a fixed price (e.g. 125 FIM/month) including unlimited surf-time. Fixed price applies only for access through the local operator's affiliate Internet service provider. If a customer wants to use the services of another Internet service provider, he must pay per-minute charges for the surf-time.

The local incumbent does not offer interconnection at a fixed price. If a competing operator wants to offer Internet access at a fixed price, it must buy interconnection at per-minute prices. The incumbent has set its own fixed access charge at a level that undercuts interconnection prices. The FCA is currently investigating several incumbent local operators' Internet access tariffs. Evidence of price squeeze, discrimination and tying has been found.

3.4 National roaming

Telia Mobile owns local GSM networks in three main Finnish cities and offers local mobile services in those areas. Local mobile services have not proven to be attractive as customers demand nationwide coverage and Telia's market share has stayed under one percent. Telia has a license for nationwide GSM 1800 network but it has not been willing to invest in extensive network roll-out. During the year 1998, Telia negotiated the possibility to offer nationwide services via national roaming in Sonera's or Radiolinja's network. At first, neither Sonera nor Radiolinja was willing to offer roaming at all but after intervention and mediation of the Ministry of Transport and Communications both companies gave a tender. The conditions and prices offered did not satisfy Telia who filed a complaint to the FCA. Telia accused Sonera and Radiolinja of either individually or jointly having abused their dominant positions by charging excessive prices for national roaming. In November 1999, Telia and Radiolinja reached an agreement whereby Telia begun to offer national mobile services as a service provider in Radiolinja's network.

The FCA gave a decision in the matter on January 2000.[1] The relevant product market was defined as access to national mobile networks. Access could be implemented through at least three different ways, i.e. through national roaming, virtual network operator agreement or service provider agreement. Neither of the two network operators was found to be in dominant position individually nor was there any evidence of joint dominance. Sonera and Radiolinja had not been acting as a single economic entity – the given tenders were different in terms of pricing as well as of other contractual conditions and Radiolinja did offer service provider agreement in terms acceptable to Telia. The FCA found that even if the market was concentrated, the possibility of collusion was weakened by rapid technological changes, differences in cost structures and financial resources of the network operators as well as increasing demand leading to instability in the market. In the absence of dominance, no abuse was found.

Telia appealed and the case is currently pending at the Competition Council.

1 FCA decision of 12 January 2000 (Dnro 817/61/98). An English translation of the decision is available.

FRANCE

1. Développements Réglementaires depuis 1995

Depuis 1995, le secteur des télécommunications s'est considérablement transformé passant d'une organisation de marché monolithique (téléphonie fixe) et monopolistique à un secteur multiforme (fixe, mobile, Internet) et concurrentiel.

Cette transformation est due pour l'essentiel à la baisse accélérée des coûts de réseau, liée à l'évolution technologique, au développement de la demande et à la diversification de l'offre de services, à l'arrivée massive de capitaux et à l'introduction de la concurrence. Elle a favorisé la baisse généralisée des tarifs entraînant la croissance des volumes, mais aussi provoqué un déplacement de la valeur ajoutée du cœur de réseau (le marché des communications longue distance) vers l'extrémité du réseau (le marché de la boucle locale) où se concentrent désormais les enjeux économiques et réglementaires.

2. La fin du monopole et l'ouverture à la concurrence

Le mouvement de libéralisation, qui a transformé le secteur des télécommunications depuis le début des années 1990, a essentiellement reposé sur la conviction que l'introduction de la concurrence dans un secteur jusqu'alors dominé par un monopole devait se traduire rapidement par une amélioration généralisée du service.

Cette conviction domine tant les directives communautaires qui ont lancé le mouvement au début des années 1990 que la législation nationale qui les transpose.

Ainsi, la loi du 26 juillet 1996 de réglementation des télécommunications assigne aux autorités en charge de la régulation dans le secteur des télécommunications le soin de veiller à *« l'exercice au bénéfice des utilisateurs d'une concurrence effective et loyale entre les exploitants de réseau et les fournisseurs de services de télécommunications »*.

C'est cet objectif que le Gouvernement, le Conseil de la concurrence et l'Autorité de régulation des télécommunications (ART, cf. annexe n°1) se sont fixé.

Après trois années de concurrence, le bilan de l'évolution des marchés de la téléphonie fixe, de la téléphonie mobile et de l'accès à Internet apparaît largement positif.

2.1 La téléphonie fixe

Le foisonnement des formules tarifaires et la baisse globale de la facture de téléphone sont les conséquences les plus visibles de l'ouverture à la concurrence du marché de la téléphonie fixe.

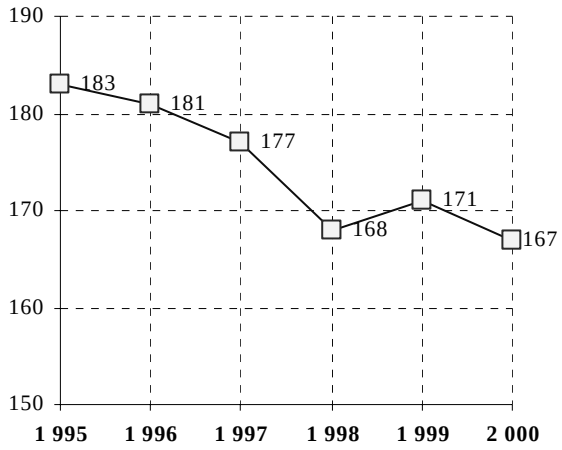
Durant la période de monopole public réglementé, la tarification des télécommunications était basée sur d'importantes subventions croisées, à la fois entre les différents segments de marché (accès au réseau et communications locales - communications longue distance nationales et internationales) et entre les différents types d'utilisateurs (professionnels et particuliers). Ce système était fondé sur un déséquilibre des prix, caractérisé par une sous-tarification de l'accès au réseau (appelé déficit d'accès) et financé par les recettes issues des communications longue distance. Cette tarification, si elle a permis de raccorder la majorité de la population au téléphone, a également conduit à des transferts financiers massifs, non transparents et non forcément maîtrisés, entre agents économiques et entre services qui ont éloigné l'économie du secteur de son optimum.

L'introduction d'une concurrence totale dans les télécommunications à partir du 1er janvier 1998, en France et dans les autres États de l'Union européenne, a conduit à la remise en cause de ce système de tarification. Les nouveaux entrants se sont concentrés sur le marché des communications longue distance, ce qui a rendu inopérant le système de subventions croisées, et la résorption du déficit d'accès est devenue une condition nécessaire à l'introduction de la concurrence sur la boucle locale. En effet, la sous-tarification de l'accès au réseau par l'opérateur historique constitue une barrière à l'entrée incontournable pour les nouveaux opérateurs, ceux-ci ne pouvant y développer leurs activités de façon rentable.

L'introduction de la concurrence a donc conduit à augmenter progressivement le tarif de l'abonnement de base, passé de 45 F (6,86 €) par mois en 1995 à 82,30 F (12,55 €) en 2000, et à baisser le prix des communications, qui a été, en moyenne, divisé par deux.

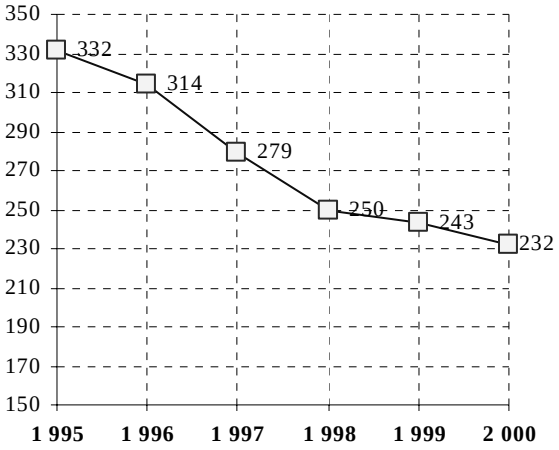
Les diverses études réalisées jusqu'à présent mettent en évidence, pour un panier-type de communications locales et nationales, une baisse significative des prix de France Télécom, tant pour les entreprises que pour les ménages. Les données actualisées pour l'année 2000 montrent, sur la période 1995-2000, une baisse de dix pour cent environ de la valeur du panier de base des ménages et de 30 pour cent de celle du panier de base des entreprises, comme l'illustrent les graphiques suivants.

Valeur du panier de base des ménages
(en francs TTC par mois)



Source : France Télécom, ART

Valeur du panier de base des entreprises
(en francs HT par mois)



Source : France Télécom, ART

Les grands bénéficiaires de cette évolution sont les entreprises, mais également tout ménage résidentiel consommant un volume de communications suffisant.

Pour les utilisateurs économiquement fragiles, le législateur a instauré un service universel (cf. annexe 2) des télécommunications. Dans ce cadre, des tarifs sociaux spécifiques ont été mis en œuvre. Ainsi, la concurrence reste encadrée et ses éventuels effets défavorables sont très limités.

Par ailleurs, pendant une phase de transition entre une situation de monopole et une situation de concurrence totale, le législateur a souhaité mettre en place un contrôle des tarifs de détail de l'opérateur historique (cf. annexe n°3). Un tel dispositif vise à atteindre les objectifs complémentaires de protection du consommateur, s'agissant des tarifs relevant du service universel, et de développement de la concurrence, s'agissant des autres tarifs.

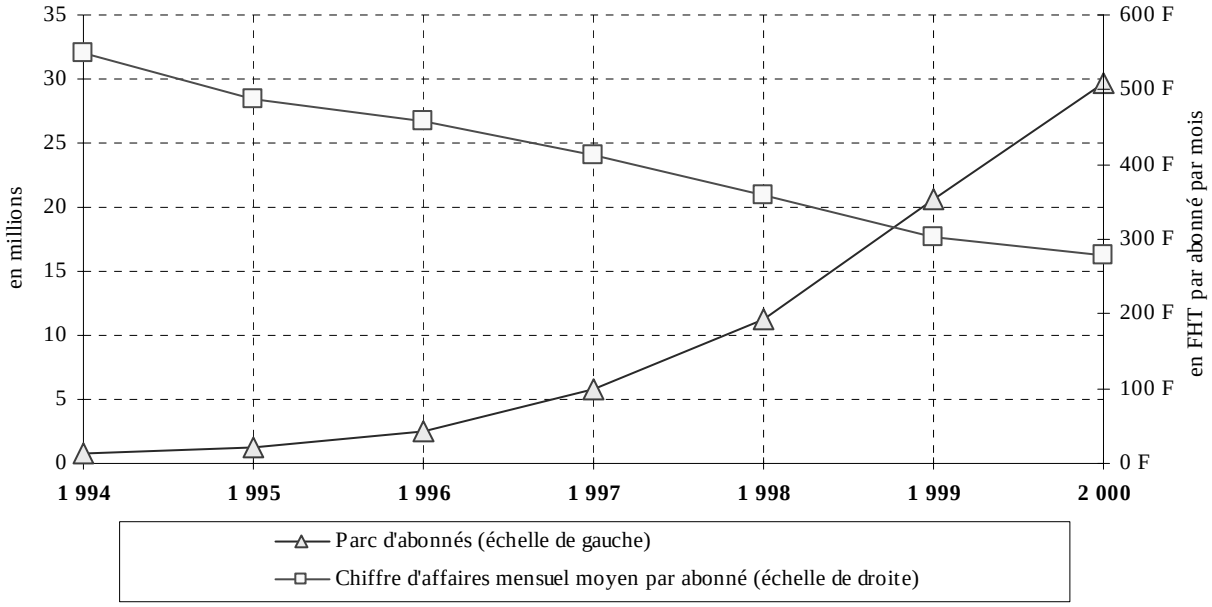
2.2 La téléphonie mobile et l'accès à Internet

Les années 1990 ont été marquées par le développement conjoint de l'offre et de la demande en services de télécommunications. Les succès de la téléphonie mobile et de l'accès à l'Internet sont les deux exemples les plus marquants de cette évolution.

Sur le marché de la téléphonie mobile, l'introduction précoce de la concurrence, avec l'attribution d'une licence GSM à la Société Française du Radiotéléphone en 1991 et, surtout, à Bouygues Télécom en 1994, a incontestablement permis un développement rapide et une croissance sans précédent du nombre d'utilisateurs de services mobiles.

Ainsi, entre 1994 et 2000, le parc d'abonnés mobiles a connu une croissance annuelle moyenne de plus de 80 pour cent, passant d'un peu moins d'environ 800 000 à près de trente millions. Cette forte croissance s'est accompagnée d'une baisse très significative des prix, ce que met en évidence la chute du chiffre d'affaires mensuel moyen par abonné (cf. graphique).

Evolution du parc d'abonnés à une offre de téléphonie mobile et du chiffre d'affaires mensuel moyen par abonné (1994 – 2000)

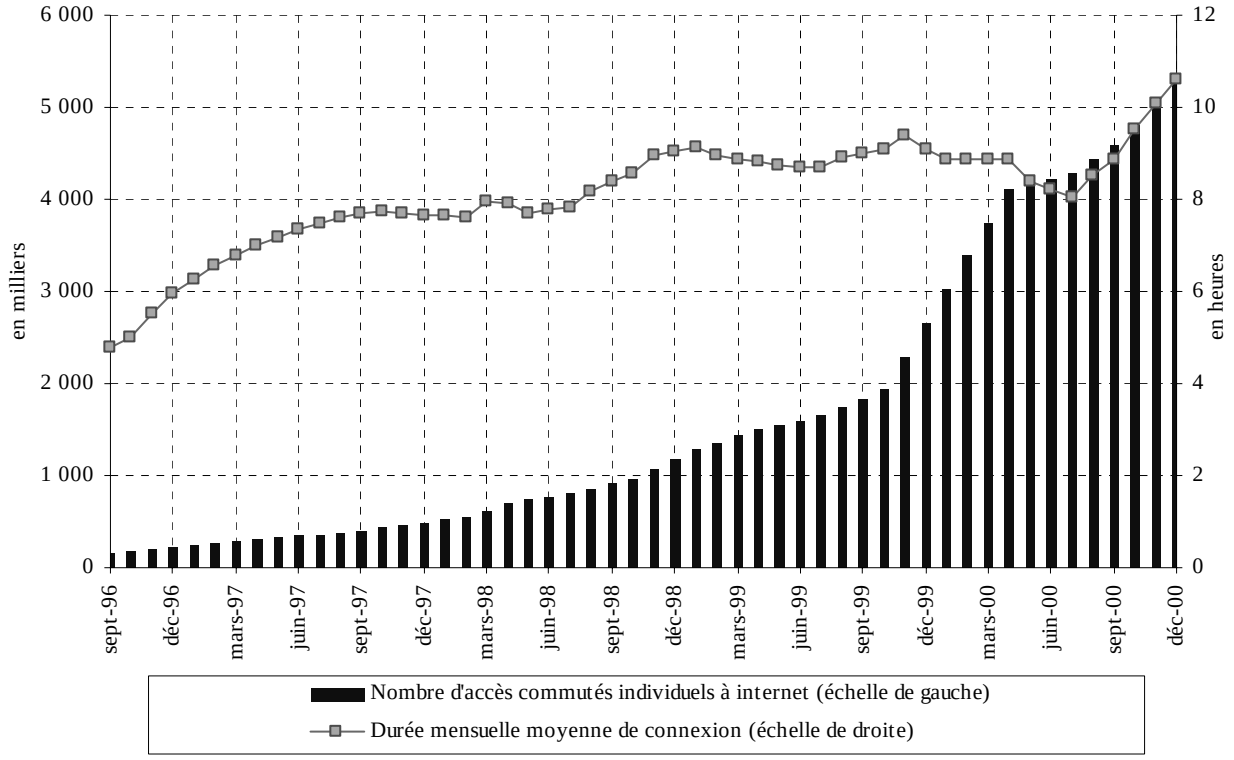


Source : France Télécom, ART

Sur le marché de l'accès à l'Internet, la position dominante de l'opérateur historique, tant sur le segment de l'accès (boucle locale) que sur celui du transport de données et sur celui de l'accès à Internet proprement dit, fait l'objet d'une concurrence très agressive. De nombreuses décisions du Conseil de la concurrence ont appuyé cette évolution (décision n°98-MC-03 du 19 mai 1998 relative à l'accès à Internet dans les écoles, décision n°99-MC-06 du 23 juin 1999 relative à la commercialisation des offres d'accès à Internet à haut débit par la technologie ADSL).

Selon les données de l'association française des fournisseurs d'accès à Internet (AFA), le parc d'abonnés disposant d'un accès à Internet s'établissait en fin 2000 à plus de cinq millions (cf. graphique infra). D'autres sources (Institut Médiamétrie) indiquent qu'en fin d'année 2000, plus de huit millions de foyers français disposaient d'un accès régulier à Internet. La plupart d'entre eux bénéficient de formules tarifaires forfaitaires : par exemple 100 F (15,24 €) pour 20 heures de communications d'accès à Internet. Ceci a été rendu possible grâce à un régime d'interconnexion spécifique, qui impose à l'opérateur historique de vendre sa prestation de collecte de trafic à un tarif orienté vers ses coûts, et non fixés librement par le marché.

Evolution du parc d'abonnés à une offre d'accès à Internet et de la durée mensuelle moyenne de connexion (septembre 1996 – décembre 2000)



Source : Association Française des fournisseurs d'accès à Internet (AFA)

Le débat porte désormais sur les modalités d'accès à Internet à haut débit. Dans sa décision n° 00-MC-01 du 18 février 2000, le Conseil de la concurrence a fixé les conditions d'un développement loyal de la concurrence sur ce marché en enjoignant l'opérateur historique de fournir une offre d'accès à sa boucle locale.

La concurrence a jusqu'à présent essentiellement concerné les communications ou le transport de données à longue distance. Or ces marchés ont aujourd'hui tendance à se banaliser et deviennent moins rémunérateurs pour les professionnels que celui des communications locales.

Par ailleurs, les réseaux d'accès à haut débit deviennent le canal d'offres qui ne sont plus limitées aux télécommunications. Les opérateurs qui détiennent le contact et la connaissance de l'abonné ont les moyens de capter de la valeur en proposant des services ou des produits très différents des télécommunications traditionnelles : publicité, ventes de produits ou de services… Ces nouvelles sources de revenus représentent un réservoir de croissance très important et la plus forte opportunité actuelle du secteur des télécommunications.

2.3 L'accès à l'abonné devient une question cruciale

La question de l'accès à l'abonné, fixe ou mobile, devient donc centrale. Le Conseil de la concurrence a apporté une première série de réponses à cette question dans ses décisions n° 00-MC-01 (cf. supra) et n° 00-MC-17 du 7 décembre 2000 relative aux modalités d'accès à l'Internet mobile. Dans cette décision, le Conseil a notamment indiqué qu'en imposant aux constructeurs une clause de verrouillage des terminaux qu'ils commercialisent, France Télécom Mobiles et SFR ont pu mettre en œuvre des pratiques susceptibles d'être qualifiées d'entente ou d'abus de position dominante.

Par ailleurs, les évolutions réglementaires en cours permettront aux nouveaux entrants de se positionner sur le marché local. Ainsi, les modalités de dégroupage de la boucle locale de France Télécom ont été fixées par le décret n° 2000-881 du 12 septembre 2000, lequel est conforté par le règlement européen du 18 décembre 2000.

Enfin, le développement de réseaux alternatifs (boucle locale radio, UMTS, satellites) devrait permettre d'élargir les possibilités d'accès à l'abonné.

3. Point particulier : la régulation de l'accès et de l'interconnexion

3.1 Principes généraux

Le marché de l'interconnexion, dont la valeur s'est établie en 1999 à quatre milliards de francs (en progression de 84 pour cent par rapport à 1998), est essentiel au bon développement de la concurrence puisqu'il sous-tend l'offre de services des opérateurs tiers.

Sur la base d'un panier de consommation, les prix moyens des services d'interconnexion de France Télécom ont évolué de la façon suivante depuis 1998 :

centimes/min.	**1 998**	**1 999**	**2 000**	**2 001**	**2001/2000**	**2001/1998**
Local	6,09	4,64	4,37	**4,04**	**-7,6%**	-33,7%
Régional	12,78	10,08	8,89	**8,21**	**-7,6%**	-35,8%
National	17,57	14,19	12,58	**11,51**	**-8,5%**	-34,5%
Ensemble	11,44	8,99	7,99	**7,38**	**-7,6%**	-35,5%

Source : ART

La régulation de l'interconnexion constitue l'un des facteurs essentiels au bon développement de la concurrence dans le secteur des télécommunications. Le code des postes et télécommunications prévoit des dispositions importantes dans ce domaine.

Ainsi, les exploitants de réseaux ouverts au public sont tenus de faire droit aux demandes raisonnables d'interconnexion des autres opérateurs de réseaux ouverts au public et des prestataires de téléphonie au public.

De plus, les opérateurs possédant une influence significative sur le marché et désignés comme tels par l'ART sont soumis à des obligations renforcées en la matière: ils doivent publier une offre de référence (catalogue d'interconnexion), décrivant les principaux services d'interconnexion ainsi que les prix associés. Les tarifs d'interconnexion de ces opérateurs doivent être fondés sur les coûts.

Ce catalogue contient des conditions différentes pour répondre d'une part aux besoins d'interconnexion des exploitants de réseaux ouverts au public et, d'autre part, aux besoins d'accès au réseau des fournisseurs de service téléphonique au public. L'ART définit les prescriptions applicables aux conditions techniques et financières d'interconnexion.

L'ART peut, lorsque cela est indispensable pour garantir l'égalité des conditions de concurrence ou l'interopérabilité des services, après avis du Conseil de la concurrence, demander la modification des conventions d'interconnexion.

En vertu de l'article L. 36-8 du code des postes et télécommunications, l'ART est compétente pour trancher les différends relatifs au refus d'interconnexion, à la conclusion et à l'exécution des conventions d'interconnexion et aux conditions d'accès à un réseau de télécommunications. Elle doit se prononcer dans un délai de trois mois et peut porter ce délai à six mois afin de procéder ou faire procéder à toutes investigations ou expertises nécessaires.

Le code des postes et télécommunications fixe à un mois le délai dont disposent les parties pour former, devant la Cour d'appel de Paris, un recours non suspensif contre les décisions de règlement de différend prise par l'ART.

La loi ne confère pas à l'ART de pouvoir d'investigation spécifique pour l'instruction des demandes de règlement de différend. Cette procédure repose sur la communication volontaire des pièces par les parties, ces dernières ayant intérêt à fournir tous les éléments susceptibles de justifier leurs demandes. Le règlement intérieur de l'ART prévoit que son président peut, en respectant le principe du contradictoire, procéder à toute mesure d'instruction qui lui paraîtrait utile et, s'il l'estime nécessaire, convoquer les parties à une audience.

L'article L. 36-9 du code des postes et télécommunications prévoit que l'ART peut également être saisie d'une demande de conciliation pour tous les litiges ne relevant pas de la procédure de règlement de différend. Elle peut être saisie par toute personne physique ou morale, par toute organisation professionnelle ou association d'usagers concernée ou par le ministre chargé des télécommunications. Le Conseil de la concurrence est informé de l'engagement de la procédure de conciliation et est saisi du litige en cas d'échec, si ce litige relève de sa compétence.

Toutefois, les autorités chargées de la concurrence conservent leurs compétences générales, et les parties peuvent notamment porter leurs litiges devant le Conseil de la concurrence s'ils s'estiment victimes de pratiques relevant des articles L. 420-1 (ententes prohibées), L. 420-2 (abus de position dominante) ou L. 420-5 (prix abusivement bas) du code de commerce, ou des articles 81 et 82 du Traité de Rome.

3.2 Le catalogue d'interconnexion

Le catalogue d'interconnexion constitue l'élément principal de la régulation de l'interconnexion. Il doit donner la visibilité nécessaire au marché, en intégrant les prestations d'interconnexion courantes nécessaires aux opérateurs et en réduisant les risques de contentieux avec France Télécom.

Dans son exercice annuel d'approbation des services d'interconnexion offerts par France Télécom, l'ART veille à ce que le catalogue d'interconnexion puisse, dans ses versions successives, être complété pour répondre aux attentes des divers acteurs ; ainsi en 1998, le catalogue a permis l'émergence d'offres de téléphonie longue distance alternatives. En 1999, l'accent a été porté sur un certain nombre de services spéciaux et en 2000 il a notamment intégré la question de l'accès commuté à Internet.

3.3 Principes de transparence et de non-discrimination

Le catalogue d'interconnexion est l'un des éléments assurant la mise en œuvre du principe de transparence énoncé à l'article L. 34-8 du code des postes et télécommunications ; un certain nombre de prestations dites *« standards »* ont donc vocation à s'y retrouver. De même, le respect du principe de non-discrimination impose que les prestations soient fournies dans les mêmes conditions aux différents opérateurs et doivent trouver leur place dans le catalogue d'interconnexion.

3.4 Principe d'orientation vers les coûts

En vertu du II de l'article L. 34-8, les tarifs d'interconnexion des prestations figurant au catalogue doivent rémunérer l'usage effectif du réseau et refléter les coûts correspondants.

La méthode de calcul des tarifs d'interconnexion est définie par l'article D. 99-19 du code des postes et des télécommunications. Cet article précise que *« les tarifs d'interconnexion pour une année donnée sont fondés sur les coûts moyens comptables prévisionnels pertinents pour l'année considérée, évalués par l'Autorité de régulation des télécommunications en prenant aussi en compte :*

- l'efficacité des nouveaux investissements réalisés ou prévus par l'opérateur au regard des meilleures technologies industriellement disponibles ;

- les références internationales en matière de tarifs d'interconnexion. »

3.5 Les compléments apportés au catalogue en fonction des demandes du marché

L'ART veille à ce que les versions successives du catalogue puissent être complétées en fonction des besoins de la communauté des opérateurs afin de faciliter l'émergence d'offres alternatives et contribuer au développement de nouveaux marchés.

Le marché français n'a pas encore atteint un niveau de concurrence qui pourrait justifier que soit abandonnée l'approbation annuelle d'un catalogue d'interconnexion laissant les discussions sur les ajouts ou les modifications des prestations d'interconnexion au libre jeu des seules négociations bilatérales.

Lors des réunions du comité de l'interconnexion, les opérateurs peuvent exprimer les attentes du marché en terme d'évolution fonctionnelle du catalogue d'interconnexion, dont des éléments essentiels sont pris en compte dans la décision d'approbation du catalogue d'interconnexion rendue par l'ART.

3.5.1 Tarifs d'interconnexion et tarifs de détail

A ce stade, la mise en œuvre d'une relation directe entre la fixation des prix d'interconnexion ou de gros et les prix de détail demeure au stade de la réflexion.

3.5.2 Coûts de référence

L'ART prend en compte les coûts comptables prévisionnels pertinents (famille des coûts historiques complètement distribués mais avec prise en compte d'une partie des coûts historiques et d'une

partie des coûts prévisionnels). Les articles D. 99-12 et D. 99-18 du code des postes et télécommunications définissent les coûts pertinents à prendre en compte dans la détermination des tarifs d'interconnexion. Il s'agit :

- des coûts de réseau général ;
- des coûts spécifiques aux services d'interconnexion ;
- des coûts communs pertinents.

Sont exclus des coûts pertinents les coûts spécifiques aux services autres que l'interconnexion ainsi que les coûts communs non pertinents.

Ces coûts sont généralement précisés par l'ART dans sa décision d'approbation du catalogue d'interconnexion.

S'agissant des coûts de réseau général, l'ART s'appuye sur les comptes audités de France Télécom, sur des prévisions de volume de trafic pour l'année à venir et sur des gains estimés de productivité de l'opérateur à volume constant.

La détermination des coûts de réseau général met en jeu un taux de rémunération du capital : celui-ci s'applique à la valeur comptable nette des investissements et rend compte de la juste rémunération des capitaux utilisés pour financer les immobilisations (pour l'année 2001, le taux de rémunération du capital utilisé est de 12,1 pour cent).

S'agissant des coûts spécifiques aux services d'interconnexion, ceux-ci sont pris en compte chaque année dans les tarifs des services commutés sur la base d'un mark-up appliqué aux catégories des coûts de réseau général intégrés dans les charges à la minute ou à l'appel.

Enfin, la prise en compte des coûts communs se fait par l'utilisation d'un mark-up (majoration de 5,58 pour cent en 2001) appliquée à la fois aux coûts de réseau général et aux coûts spécifiques.

3.5.3 Les tarifs d'interconnexion

La tarification des services d'acheminement du trafic commuté comporte trois éléments : une charge à l'appel ; une charge à la minute ; une charge fixe annuelle à la capacité calculée par bloc primaire numérique ou BPN.

Cette tarification permet de mieux rendre compte de l'économie du réseau et de l'utilisation effective des différents éléments de réseau mis en jeu par un service d'interconnexion donné.

La charge à l'appel a été mise en place pour le catalogue d'interconnexion 2000 et permet de mieux distinguer les coûts liés à la durée de l'appel, qui sont pris en compte dans les tarifs à la minute, des coûts relatifs à son établissement qui seront recouvrés par la charge d'appel. La charge au BPN couvre principalement les coûts liés aux ressources dédiées pour le raccordement de l'opérateur, à savoir le coût des ports d'entrée des commutateurs.

Les coûts sont imputables aux quatre facteurs suivants : la partie efficace des appels aboutis (*i)* ; la partie inefficace des appels aboutis (*ii*) ; le raccordement (*iii*) ; les appels inefficaces (*iv).*

Les coûts (*i*) sont intégrés au tarif à la minute, les coûts (*ii*) à la charge à l'appel et les coûts (*iii)* à la charge fixe annuelle. Les coûts (*iv*) sont répartis sur l'ensemble des autres coûts de réseau général. Pour 2001, 40 pour cent des coûts de commutation sont ventilés dans la catégorie (*iii*).

Les coûts par service d'interconnexion sont déterminés comme la moyenne pondérée par les facteurs de routage des coûts de réseau par élément. Les coûts unitaires de ces derniers, par minute, par appel et par BPN, sont établis à partir des coûts totaux, sur la base des volumes prévisionnels de trafic en minutes, de BPN et d'appels pour 2001.

Au terme de ces calculs, sont établis des coûts d'élément de réseau général par service de base d'interconnexion (intra-CA, simple transit, double transit) pour différents types d'inducteur de coût.

3.6 Modulation horaire

La modulation horaire fait intervenir des gradients qui permettent de déterminer les tarifs sur les trois plages horaires : heures pleines, heures creuses et bleu-nuit. Les gradients utilisés pour 2001 sont les mêmes que ceux utilisés pour le catalogue 2000.

3.6.1 Evaluation des coûts d'accès à la boucle locale

S'agissant des modalités d'évaluation des tarifs d'accès à la boucle locale de France Télécom, l'article D. 99-24 du code des postes et télécommunications dispose :

« Les tarifs de l'accès à la boucle locale sont orientés vers les coûts correspondants. Ils sont établis conformément aux principes suivants :

1. les tarifs doivent éviter une discrimination fondée sur la localisation géographique ;

2. les coûts pris en compte doivent être pertinents, c'est-à-dire liés par une forme de causalité, directe ou indirecte, à l'accès à la boucle locale ;

3. les éléments de réseaux sont valorisés à leurs coûts moyens incrémentaux de long terme ;

4. les tarifs pratiqués pour l'accès partagé ne peuvent être inférieurs à ceux de l'accès totalement dégroupé diminués du montant de l'abonnement au service téléphonique au public ;

5. les tarifs incluent une contribution équitable aux coûts qui sont communs à la fois à l'accès à la boucle locale et aux autres services de l'opérateur ;

6. les tarifs incluent la rémunération normale des capitaux employés pour les investissements utilisés fixée dans les conditions prévues à l'article D. 99-22.

L'Autorité de régulation des télécommunications établit et rend publique la nomenclature des coûts pertinents. Elle définit et publie la méthode de calcul des coûts moyens incrémentaux de long terme.

Les opérateurs mentionnés au premier alinéa de l'article D. 99-23 sont tenus de communiquer à l'Autorité de régulation des télécommunications, à sa demande, tout élément d'information lui permettant de vérifier que les tarifs pratiqués sont orientés vers les coûts. »

La mise en œuvre, à partir du 1er janvier 2001, de l'accès à la boucle locale est un enjeu majeur pour le développement de la concurrence sur le marché français des services de télécommunications.

Cette mise en œuvre se traduira pour tous les acteurs par des engagements et des prises de risque réels :

- ce sera le cas pour France Télécom, amenée à adapter ses infrastructures et ses modes d'exploitation pour être en mesure, concrètement, de faire une offre de référence aux autres opérateurs ;

- ce sera le cas également pour ces derniers qui seront conduits à engager des investissements importants, souvent irréversibles, pour déployer leur réseau de manière à être en mesure de bénéficier de l'accès à la boucle locale.

Dans ce contexte, la tarification de l'accès à la boucle locale constitue un facteur important :

- elle doit assurer une juste rémunération des investissements d'adaptation consentis par France Télécom, des coûts d'usage des infrastructures utilisées et des coûts d'exploitation encourus ;

- elle ne doit pas être de nature à constituer une barrière à l'entrée mais, au contraire, procéder d'une logique contractuelle entre parties s'engageant à long terme ; à cet égard, le recouvrement de coûts fixes sur une courte période ou sur un périmètre étroit, s'il peut être légitime dans certains cas comme celui de la création de salles de colocalisation, peut ne pas être approprié dans d'autres, notamment quand la demande est incertaine ;

- elle doit être lisible et inspirer la confiance.

C'est en ayant à l'esprit ces enjeux que l'ART s'est attaché à établir la nomenclature des coûts pertinents et à définir la méthode de calcul des coûts moyens incrémentaux de long terme.

Les tarifs de l'accès à la boucle locale ne donnent pas lieu de sa part à une approbation préalable. Lorsque France Télécom a publié son offre de référence, l'ART est chargée de vérifier l'orientation vers les coûts des tarifs de cette offre et fait connaître ses conclusions.

Plusieurs principes guident l'ART : l'orientation des tarifs vers les coûts, le principe d'efficacité, le principe de non-discrimination, le principe de concurrence loyale et durable.

3.6.1 Sur l'orientation des tarifs vers les coûts

Les coûts, tels qu'ils sont évalués, incorporent une rémunération normale des capitaux immobilisés. Dès lors, tout revenu supplémentaire dégagé au-delà des coûts ainsi calculés n'est pas légitime au regard de l'orientation vers les coûts.

Pour une prestation déterminée, l'orientation des tarifs vers les coûts se traduit donc par l'égalité entre les revenus retirés de la fourniture de cette prestation, tels qu'ils résultent de l'application des tarifs à la demande satisfaite et les coûts encourus pour la fourniture de cette prestation, sur la base des mêmes hypothèses ou constats de demande satisfaite.

Toutefois, cette condition n'implique pas que les tarifs puissent être déterminés mécaniquement à partir des coûts sans autre hypothèse :

- certains postes de coûts ne peuvent pas être alloués à une prestation particulière faisant l'objet d'un tarif déterminé, d'autant qu'un compromis doit souvent être recherché en matière d'évaluation de coût, entre détail de l'évaluation et précision ;

- d'autres postes de coûts présentent un caractère fixe (leur valeur est indépendante du volume de production) ou la caractéristique de n'être encourus qu'une fois ;

- la demande à laquelle est rapportée un coût peut être incertaine ;

- le choix de la structure tarifaire peut être dans une certaine mesure indépendant de la structure des coûts ; ainsi les opérateurs ont souhaité la forme d'un tarif récurrent pour le service après vente alors que l'on pourrait considérer que les coûts du service après vente ne sont encourus qu'au moment d'un dérangement.

Même si, en principe, les coûts non récurrents doivent être recouvrés à travers un tarif non récurrent et les coûts récurrents à travers un tarif récurrent :

- les tarifs non récurrents peuvent constituer une barrière à l'entrée. Les coûts non récurrents sous-jacents à de tels tarifs doivent être amortis sur une période raisonnable compte tenu du caractère nécessairement pérenne de l'engagement entre les parties ;

- en particulier, quand il s'agit de coûts d'exploitation, les tarifs non récurrents doivent être pleinement justifiés au regard des coûts effectivement encourus par France Télécom de manière à assurer une parité entre les dépenses d'exploitation effectivement engagées et les revenus non récurrents correspondants ; ainsi les coûts de branchement ne devraient être facturés que pour autant qu'ils correspondent à des travaux effectivement réalisés à l'occasion d'une demande de dégroupage ;

- les coûts fixes, c'est-à-dire indépendants du volume de la prestation, doivent être recouvrés sur une base large et, quand ils sont encourus une seule fois, sur une période de temps raisonnable, que l'ART fixe à 5 ans au vu des pratiques européennes. De tels coûts pourraient être rapportés au chiffre d'affaires prévisionnel relatif à l'ensemble des prestations de dégroupage et actualisés sur la période considérée ; ils donneraient lieu à une majoration applicable à l'ensemble des tarifs du dégroupage.

- les coûts d'utilisation de la paire de cuivre sont annualisés par un calcul d'amortissement et donnent lieu, dès lors, à un tarif récurrent d'usage ; toutefois, dans le cas de travaux encourus par France Télécom pour créer ou étendre des infrastructures à l'exclusion du cas du branchement (travaux de génie civil, de pose de câble ou de points de répartition), l'ART estimerait équitable que cette prestation fasse l'objet d'un préfinancement par l'opérateur demandeur sur la base des coûts d'investissement effectivement consentis par France Télécom et ramenés à une paire. Ce préfinancement constituerait un avoir sur les prestations d'accès à la boucle locale.

Enfin, l'ART examine les tarifs du dégroupage, et notamment le tarif récurrent de l'accès totalement dégroupé, au regard des éléments de coût du réseau local fournis par France Télécom dans le cadre de l'évaluation du coût du service universel, ainsi qu'au regard des comparaisons internationales de tarifs du dégroupage.

3.6.2 Sur le principe d'efficacité

Les coûts pris en compte doivent correspondre à ceux encourus par un opérateur efficace ; à cet égard, les coûts exposés par l'opérateur sont comparés, dans la mesure du possible et au moins sur la base des tarifs correspondants, à ceux d'autres opérateurs fournissant des prestations comparables. Des modélisations du type *benchmark* sont également développées.

3.6.3 Sur le principe de non-discrimination

Les tarifs unitaires applicables pour l'accès à la boucle locale doivent être équivalents pour les opérateurs tiers et les propres services ou filiales de France Télécom. Ainsi, lorsque les prestations d'accès à la boucle locale sont utilisées par une filiale ou un service de France Télécom dans des conditions équivalentes à celles qui sont offertes aux opérateurs tiers, cette utilisation doit être valorisée selon des règles elles-mêmes équivalentes à celles utilisées à l'égard des opérateurs tiers. Ce principe s'applique tant à l'accès à la boucle locale, dans ses deux acceptions, accès totalement dégroupé et accès partagé, qu'aux prestations qui y sont associées.

Ce principe de non-discrimination figure également dans l'article 18 du cahier des charges de France Télécom approuvé par le décret n° 96-1125 susvisé, qui prévoit que *« les activités, services et éléments de réseaux utilisés par France Télécom sont valorisés à leur prix de cession externe ou, à défaut, par référence aux tarifs pratiqués par France Télécom à l'égard des utilisateurs ou des opérateurs qui s'interconnectent à son réseau. »*

3.6.4 Sur le principe de concurrence loyale et durable

Les règles de tarification doivent promouvoir une concurrence loyale et durable ; ceci implique notamment que les tarifs ne créent pas d'obstacle à l'entrée sur le marché. En particulier, ils doivent être établis de manière à éviter la survenance d'effets de ciseau tarifaire entre les prix de l'accès à la boucle locale et les prix pratiqués par France Télécom pour ses services de détail.

Peuvent être considérés comme pertinents à cet égard les marchés de services de téléphonie fixe et de services de transmission de données à haut débit. D'autres marchés peuvent être identifiés en fonction des caractéristiques de l'offre et de la demande telles qu'elles seront constatées.

L'ART a établi (cf. annexe 4) la nomenclature des coûts pertinents en s'appuyant sur les réflexions menées avec l'ensemble des opérateurs dans le cadre du groupe de travail *« Accès à la paire de cuivre nue »* mis en place à la fin de l'année 1999 et sur les échanges à caractère bilatéral avec France Télécom mais avant que France Télécom ait produit son offre de référence. Cette nomenclature est susceptible d'être complétée ou précisée.

Par ailleurs une telle nomenclature ne se comprend qu'au travers de règles de pertinence qui précisent les coûts qu'il est légitime de prendre en compte pour établir les tarifs.

3.6.5 Sur la méthode de calcul des coûts moyens incrémentaux de long terme

L'ART a retenu par souci de pragmatisme et d'efficacité une méthode compatible avec la modélisation élaborée par France Télécom.

La définition de la méthode retenue par l'ART (cf. annexe 5) présente également les grandes lignes de la modélisation réalisée par France Télécom.

3.6.5.1 Respect du principe de non-discrimination

France Télécom dispose d'un système de calcul des coûts de revient, conformément à l'article 18 de son cahier des charges approuvé par le décret n° 96-1225 du 27 décembre 1996. Ce système est alimenté par la comptabilité générale et analytique de France Télécom et porte sur l'ensemble des produits et services : il présente ainsi des garanties de complétude, de sincérité et de cohérence. Enfin, il est adapté à l'établissement de comptes prévisionnels construits en cohérence. Ce système a connu de profondes modifications à partir des comptes de 1997 et fait régulièrement l'objet d'un audit.

4. Point particulier : la Domination et la Puissance

Les questions de position dominante, qui, à ce stade, n'ont concerné que France Télécom, sont traitées selon les dispositions du droit de la concurrence dès lors qu'un abus est constaté. Par ailleurs, le dispositif de régulation mis en place permet d'organiser le marché.

Ainsi, la transposition des directives communautaires a conduit à introduire dans le droit français la notion nouvelle d'opérateurs considérés comme *« exerçant une influence significative sur le marché. »*. Cette notion diffère de celle de la position dominante, laquelle s'appuie sur une analyse complexe basée en particulier sur la capacité d'une entreprise donnée à s'abstraire de la concurrence et n'est pas, à l'instar de l'influence significative, fondée sur l'existence d'un quelconque seuil de parts de marché.

Le Code des postes et télécommunications prévoit (art. L.36-7-7°) que *« l'Autorité de Régulation des Télécommunications (...) établit chaque année, après avis du Conseil de la Concurrence publié au BOCCRF, la liste des opérateurs [assujettis à des obligations de transparence renforcées en matière d'interconnexion] et considérés comme exerçant une influence significative sur un marché pertinent du secteur des télécommunications (...). »*

L'ART établit la liste des opérateurs qui seront tenus pour l'année considérée de publier une offre technique et tarifaire d'interconnexion à des tarifs en rapport avec leurs coûts. Ses choix reposent sur plusieurs éléments d'analyse, l'un d'entre eux étant l'appréciation que le Conseil de la Concurrence porte sur l'influence des divers opérateurs sur leurs marchés respectifs. D'autres facteurs peuvent être pris en compte, tels que les ressources financières des opérateurs et leur expérience sur le marché.

Les marchés pertinents identifiés par l'ART sont le marché de détail des services de téléphonie fixe, le marché de détail des lignes louées, le marché de détail des services de téléphonie mobile et le marché national de l'interconnexion. L'enquête annuelle menée en 2000 par l'ART auprès de l'ensemble des opérateurs détenteurs d'une licence L. 33-1[2] et/ou L. 34-1[3] en vue de désigner les opérateurs puissants

2 Opérateurs fournissant des services de téléphonie publics au grand public ou des services de réseaux au moyen de leur propre réseau de transmission de télécommunications (fixe ou sans fil)

pour l'année 2001 vise à mesurer leur activité sur chaque marché identifié, en valeur (chiffre d'affaires) et en volume (nombre d'abonnés et nombre de minutes commutées.

Les opérateurs mobiles exerçant une influence significative sur leur marché de détail sont tenus de répondre à toute demande raisonnable de connexion à leur réseau. Egalement déclarés puissants, depuis 1999, sur le marché national de l'interconnexion, France Télécom Mobiles et SFR sont tenus d'orienter leurs tarifs d'interconnexion vers leurs coûts mais n'ont pas l'obligation de soumettre à l'ART un catalogue de leurs tarifs.

Tout en s'assurant de l'orientation vers les coûts des tarifs d'interconnexion des opérateurs mobiles déclarés puissants, l'ART souhaite prendre les précautions nécessaires pour ne pas obérer à terme la rentabilité globale des opérateurs mobiles. En effet, le niveau des tarifs d'interconnexion, qui conditionne en grande partie le niveau des tarifs de détail des appels émis d'un poste fixe vers un mobile, ne doit pas compromettre la pérennité d'un ou plusieurs opérateur(s) car le maintien de la concurrence est, sur la durée, la garantie du meilleur prix pour les consommateurs.

Par décision en date du 13 octobre 2000, l'ART s'est prononcée sur un différend entre MFS Communications (filiale du groupe américain MCI Worldcom) et France Télécom Mobiles (FTM) relatif au niveau des tarifs proposés par FTM pour la terminaison sur son réseau des appels provenant du réseau de MFS.

L'ART a choisi de n'orienter que progressivement ces tarifs vers les coûts, une évolution trop rapide pouvant déstabiliser le marché français de la téléphonie mobile, et en particulier Bouygues Télécom. France Télécom Mobiles a donc dû baisser les tarifs d'accès à son réseau de 20 pour cent au 1er novembre 2000 (ce qui représente un tarif de 1,26 F HT par minute en heure pleine). Cette baisse est du même niveau que celle de Juillet 1999. Ce tarif nominal, avec une première minute indivisible, s'appliquera tant au trafic national et qu'au trafic en provenance des réseaux étrangers.

L'ART a indiqué qu'elle estimait qu'une nouvelle diminution du prix des appels vers les mobiles devrait intervenir dans un délai d'un an.

4.1 Conditions de désignation

Le 7° de l'article L. 36-7 du code des postes et télécommunications dispose que : *« [L'Autorité de régulation des télécommunications] établit chaque année la liste des opérateurs concernés par les dispositions du II de l'article L. 34-8 et considérés comme exerçant une influence significative sur un marché pertinent du secteur des télécommunications concerné par ces mêmes dispositions. Est présumé exercer une telle influence tout opérateur qui détient une part supérieure à 25 pour cent d'un tel marché. L'Autorité de régulation des télécommunications tient aussi compte du chiffre d'affaires de l'opérateur par rapport à la taille du marché, de son contrôle des moyens d'accès à l'utilisateur final, de son accès aux ressources financières et de son expérience dans la fourniture de produits et de services sur le marché. »*

3 Opérateurs qui fournissent des services de télécommunications publics au moyen d'un réseau (fixe ou sans fil) appartenant à un tiers , à l'exclusion des fournisseurs de services de téléphonie vocale qui ne fournissent pas de téléphonie vocale au sens du droit communautaire, tels que simples revendeurs, fournisseurs de services de cartes d'appel et opérateurs de rappel.

5. Problématiques concurrentielles et application du droit de la concurrence

Au cours de la période 1995 – 2000, le Conseil de la concurrence a fréquemment eu à connaître de contentieux portant sur le secteur des télécommunications. Les principales affaires contentieuses en la matière sont les suivantes :

i) Le 5 juillet 1995, la société BT France a déposé une plainte, sur le fondement des articles 81 et 82 du traité CE et des articles 7 (L. 420-1 du code de commerce, entente prohibée) et 8 (L. 420-2 du code de commerce, abus de position dominante) de l'ordonnance du 1er décembre 1986 contre France Télécom et Transpac. La plainte portait sur une offre tarifaire commune formulée par France Télécom et sa filiale Transpac au groupe d'assurance Axa en 1993, pour le transport de données sur le réseau Transpac via le canal D de Numéris, système sur lequel l'opérateur public détenait un monopole légal d'exploitation et qui se trouve en concurrence avec la technologie du VSAT, commercialisée par la plaignante. BT France estimait que cette concertation tarifaire avait une nature abusive dès lors qu'il était consenti à Axa une gratuité de l'accès à l'offre Numéris, un abonnement sans frais de deux mois et un rabais rétroactif au titre de l'ancien contrat liant Axa à Transpac, subordonné à l'acceptation de cette nouvelle offre.

Dans sa décision n° 97-D-53 du 1er juillet 1997, le Conseil de la concurrence a considéré que le marché sectoriel concerné était circonscrit, à l'époque des faits, aux services de transmission de données assurés sur le territoire national par le réseau Transpac accessible par le canal D de Numéris et par les réseaux VSAT.

Le Conseil a estimé que le comportement des entreprises incriminées était destiné à fidéliser un client qui avait fait du tarif un élément essentiel de son choix, et qu'il avait nécessairement faussé le marché dès lors que BT France ne pouvait proposer un avantage similaire puisqu'il n'était pas encore implanté sur le marché où l'entité France Télécom - Transpac n'avait qu'à adopter un réseau terrestre déjà existant. En outre, Transpac s'est rendue coupable d'un comportement abusif en consentant un rabais de fidélité visant à lier le client par des avantages inégaux pour l'empêcher de se fournir auprès de la concurrence.

Le Conseil de la concurrence a condamné les entreprises incriminées sur le fondement des articles 7 et 8 de l'ordonnance du 1er décembre 1986 (articles L. 420-1 et L. 420-2 du code de commerce) et 81,82, ex 85, 86 du Traité de Rome, cette condamnation, confirmée par la Cour d'appel de Paris, était assortie d'une sanction pécuniaire d'un montant total de 30 millions de francs.

ii) Le 22 avril 1998, l'association française des opérateurs privés de télécommunications (AFOPT) a déposé une plainte, sur le fondement des articles 82 du traité CE et 8 (L. 420-2 du code de commerce, abus de position dominante) de l'ordonnance du 1er décembre 1986 contre France Télécom. La Plainte, assortie d'une demande de mesures conservatoires, portait sur une offre tarifaire formulée par France Télécom pour la fourniture aux établissements scolaires d'un accès à Internet, jugée prédatrice.

Dans sa décision n° 98-MC-03 du 19 mai 1998, le Conseil de la concurrence précise que l'émergence de la concurrence dans le secteur des télécommunications suppose le respect scrupuleux par l'opérateur historique disposant d'une position dominante sur la boucle locale des dispositions des articles 8 de l'ordonnance de 1986 (article L. 420-2 du code de commerce) et 82 du traité CE et qu'il y avait lieu de retenir l'existence d'un risque sérieux d'atteinte à la concurrence lorsque les pratiques en cause compromettent le développement de solutions alternatives, alors que celles-ci sont nécessairement tributaires d'un étalement dans le temps.

En l'espèce, le Conseil constate qu'une utilisation intégrale du forfait tarifaire proposé par France Télécom pouvait caractériser une pratique d'exclusion, au regard des tarifs d'interconnexion offerts à ses concurrents, ce qui en justifiait la suspension.

A titre conservatoire, le Conseil enjoint à France Télécom de suspendre l'application de son offre jusqu'à ce que cette société propose aux opérateurs longue distance une offre tarifaire spécifique et non discriminatoire d'interconnexion à son réseau de télécommunications locales pour l'accès à Internet des établissements scolaires.

In fine, l'AFOPT a retiré sa plainte car France Télécom a renoncé à son offre.

iii) Le 18 novembre 1998, l'association française des opérateurs privés de télécommunications (AFOPT) a déposé une plainte sur le fondement de l'article 8 de l'ordonnance du 1er décembre 1986 (article L. 420-2 du code de commerce) contre France Télécom. NC Numéricâble est l'un des trois opérateurs assurant la gestion commerciale des réseaux du plan Câble, propriété de France Télécom, qui en exerce l'exploitation technique et sur lequel l'opérateur public développe également une activité commerciale par le biais de sa filiale, France Télécom Câble. NC NumériCâble dénonçait le montant excessif de la hausse de la redevance exigée au 1er janvier 1999 par France Télécom dans le cadre de la renégociation des conventions d'exploitation des sites du réseau du plan Câble. Le plaignant soutenait que les nouvelles modalités de calcul de la redevance impliquait une charge financière correspondant à 52 pour cent du chiffre d'affaires par abonné au lieu de 20 pour cent antérieurement, ce qui manifestait de la part de France Télécom une exploitation abusive d'une infrastructure essentielle à son activité, de nature à compromettre rapidement et définitivement sa viabilité.

Dans sa décision n° 99-MC-01 du 12 janvier 1999, confirmée par la Cour d'appel de Paris, le Conseil de la concurrence souligne que pour chaque site du plan Câble exploité par le plaignant, il n'existe qu'un seul réseau câblé sur lequel celui-ci peut faire transporter ses programmes audiovisuels, réseau dont France Télécom est propriétaire. Selon le Conseil, il ne peut donc être exclu que l'accès à ces infrastructures revête pour NC NumériCâble le caractère d'une facilité essentielle, indépendamment du fait que ces deux entreprises ne sont pas concurrentes sur le marché de l'exploitation commerciale des sites concernés.

En outre, le Conseil souligne que France Télécom Câble concurrence le plaignant sur le marché de l'exploitation commerciale des réseaux sur lequel les demandeurs sont les collectivités locales et les offreurs les exploitants et les câblo-opérateurs.

En conséquence, et même si la volonté d'une entreprise d'améliorer la rentabilité des actifs inscrits à son bilan ne présente pas en soi un caractère anticoncurrentiel, le Conseil conclut qu'il ne peut être exclu que l'ampleur et la brutalité de la hausse de la redevance demandée constituent un abus de la position dominante que détiendrait France Télécom sur le marché de l'acheminement des signaux sur les réseaux du plan câble, ou de la situation de dépendance économique dans laquelle elle tiendrait la plaignante. Cet abus pourrait avoir pour objet ou pour effet d'éliminer cette dernière entreprise des marchés de l'exploitation commerciale des réseaux du plan et de restreindre le jeu de la concurrence potentielle sur les marchés de la téléphonie fixe et de l'accès à Internet, sur lesquels France Télécom détient une position dominante sur le plan national (NC NumériCâble propose aussi un service d'accès en ligne tel Internet sur l'un des réseaux qu'elle exploite).

A titre conservatoire, le Conseil enjoint à France Télécom de ne pas suspendre les signaux audiovisuels du plaignant dans l'attente d'une décision au fond, dès lors que NC NumériCâble lui versera

mensuellement une provision égale au montant de la redevance mensuelle qui serait due si cette redevance était déterminée selon le même mode de calcul que celui utilisé en 1998.

Cette affaire a mis en évidence la question du déficit structurel de France Télécom dans le cadre de la gestion des réseaux du Plan Câble, du fait du mode de calcul des redevances, initialement favorable aux diffuseurs, et de la faible pénétration des chaînes câblées dans les foyers domestiques. Cette question est en cours de règlement dans le cadre du rachat des réseaux correspondants.

iv) Le 15 janvier 1999, l'AFOPT et l'AOST (Association des opérateurs de services de télécommunications) ont déposé une plainte contre France Télécom sur le fondement des articles 82 et 8 de l'ordonnance du 1er décembre 1986 (article L. 420-2 du code de commerce). La plainte, assortie d'une demande de mesures conservatoires, portait sur le lancement par France Télécom d'une opération promotionnelle de durée limitée consistant à offrir à tout nouvel abonné à un forfait de téléphonie mobile « Ola » ou « Loft » du service Itinéris un abonnement de gratuit de six mois à l'option tarifaire « Primaliste longue distance », permettant d'obtenir des réductions de prix sur certaines communications longue distance au départ de la ligne fixe de l'abonné. Les saisissants considèraient que la commercialisation d'une offre octroyant la gratuité temporaire d'un service relevant de la téléphonie fixe lors de l'achat d'un terminal et d'un abonnement de téléphonie mobile constituait un abus de position dominante de l'opérateur public.

Dans sa décision n° 99-MC-04 du 10 mars 1999, le Conseil de la concurrence observe que la position dominante de France Télécom sur le marché de la téléphonie fixe longue distance est telle que qu'il est probable qu'un nouvel abonné à un forfait « Ola » ou « Loft » d'Itinéris soit déjà abonné aux services de téléphonie fixe longue distance dudit opérateur. L'attractivité de cette nouvelle offre résulte ainsi du fait que ce nouvel abonné n'a pas à changer d'opérateur pour en bénéficier.

Le Conseil estime que cette offre pourrait constituer une remise de couplage constitutif d'un abus de domination de l'opérateur historique. Toutefois, le Conseil de la concurrence a rejeté la demande de mesures conservatoires eu égard au fait que l'avantage tarifaire proposé par France Télécom avait un caractère limité dans son montant et sa durée.

Cette affaire fait l'objet d'une instruction au fond, qui devrait permettre de lever la difficulté consistant à apprécier si les modalités de cette offre couplée permettaient aux concurrents de l'opérateur historique d'y répliquer, dans des conditions de concurrence équitables, au moyen d'offres comparables ou substituables sachant que France Télécom leur a offert la faculté d'user de cette promotion pour leur propre compte.

v) Le 26 mai 1999, la société Grolier Interactive Europe a déposé une plainte, assortie d'une demande de mesures conservatoires, contre France Télécom, sur le fondement de l'article 8 de l'ordonnance du 1er décembre 1986 (article L. 420-2 du code de commerce). Cette plainte portait sur les conditions d'expérimentation par le groupe France Télécom d'un service d'accès rapide à Internet par la technique ADSL. Le saisissant contestait le fait que l'expérimentation de ce service d'accès à Internet, d'une performance technique inégalée, ait été réservée par France Télécom à sa filiale France Télécom Interactive (FTI) et soutenait que les contraintes d'adaptation de ce procédé par les concurrents de FTI ne leur permettaient pas de commercialiser auprès des utilisateurs d'Internet une même offre dans un délai comparable à celui annoncé par France Télécom.

Dans sa décision n° 99-MC-06 du 23 juin 1999, le Conseil de la concurrence estime qu'il n'est pas exclu que l'expérimentation sur quatre sites durant plus d'un an d'un service associant une connexion de

type ADSL à un accès Internet, ait pu permettre à FTI d'acquérir des informations techniques et commerciales dont ne disposent pas les autres fournisseurs d'accès à Internet.

De même, il n'est pas exclu que la position dominante dont dispose France Télécom sur l'accès à la boucle locale lui permette de favoriser le choix, par le consommateur désireux de recourir à la technique ADSL, du service d'accès Wanadoo proposé par sa filiale FTI.

Le Conseil considère alors que, si le projet de France Télécom consiste à introduire sur le marché une offre innovante constituant un progrès pour le consommateur, les risques que le jeu de la concurrence soit durablement faussé sur le marché des services d'accès à Internet justifient une mesure de suspension de l'offre de France Télécom.

A titre conservatoire, le Conseil a enjoint France Télécom de suspendre le lancement de la commercialisation de son offre pour une période maximale de quinze semaines, durant laquelle les autres fournisseurs d'accès à Internet devront obtenir de l'opérateur public les informations nécessaires au lancement de leurs propres offres.

Cette plainte a soulevé la nécessité d'éviter tout abus de position dominante sans compromettre les préoccupations d'efficience économique dans les obligations imposées à France Télécom.

vi) Le 29 octobre 1999, l'association professionnelle Ténor a déposé une plainte, assortie d'une demande de mesures conservatoires, contre France Télécom, sur le fondement de l'article 8 de l'ordonnance du 1er décembre 1986 (article L. 420-2 du code de commerce). Cette plainte faisait suite à l'instauration par France Télécom d'une majoration tarifaire de 25 centimes pour le service d'accès aux Publiphones (cabines téléphoniques publiques) à partir des cartes prépayées à codes. Le saisissant reprochait à France Télécom d'avoir maintenu à un niveau inchangé le prix de détail des communications accessibles par ses propres cartes prépayées à puces (télécartes) et donc de ne pas s'imputer des coûts comparables à ceux de ses concurrents dans la commercialisation de ses cartes téléphoniques. Il estimait que cette pratique introduisait un effet de ciseau tarifaire constitutif d'un abus de domination.

Dans sa décision n° 99-MC-08 du 7 décembre 1999, le Conseil de la concurrence considère qu'une substituabilité relative existe pour les utilisateurs entre les cartes à puces et les cartes à codes ; qu'ainsi les pratiques dénoncées sont susceptibles de se dérouler sur un marché des services de téléphones fixes prépayés sur lequel France Télécom pourrait détenir une position dominante.

Les données disponibles en l'état du contentieux ne démontrant pas l'intégration du coût d'usage des Publiphones dans les tarifs de communications passées avec des télécartes, le Conseil n'exclut pas l'existence d'un effet de ciseau tarifaire de nature à empêcher les concurrents de France Télécom de pénétrer ou de se maintenir sur le marché des services des téléphoniques fixes prépayés.

Toutefois, le Conseil de la concurrence a rejeté la demande de mesures conservatoires considérant que l'effet de ciseau tarifaire repose sur des hypothèses non vérifiées et qu'à les supposer pertinentes, il n'en résulterait pas pour les émetteurs de cartes prépayées l'impossibilité de conserver une activité rentable sur certaines destinations, notamment à l'international et qu'aucune donnée n'établit un risque de disparition d'un nombre significatif d'opérateurs.

L'examen au fond de cette affaire doit démontrer de manière certaine si les deux types de cartes prépayées, à puce et à code, constituent deux segments d'un même marché de référence.

Le test économique fourni par l'ART - concluant au respect par France Télécom du principe d'orientation vers les coûts dans l'imputation du coût d'usage des Publiphones dans les tarifs de télécartes - et celui du saisissant - concluant à un effet de ciseau tarifaire - reposent sur des hypothèses différentes qui en conditionnent les résultats. Le Conseil observe toutefois que, dans son analyse, l'ART a omis de prendre en compte certains coûts (redevances au titre des autorisations délivrées, frais de fabrication et de publicité des cartes, frais généraux).

vii) Le 29 novembre 1999, la société 9 Télécom Réseau a déposé une plainte, assortie d'une demande de mesures conservatoire contre France Télécom, sur le fondement des articles 82 du traité CE et 8 de l'ordonnance du 1er décembre 1986 (article L. 420-2 du code de commerce). Cette plainte faisait suite à l'extension par France Télécom du périmètre géographique de commercialisation des offres « Netissimo » et « Turbo-IP », relatives à la fourniture d'accès à Internet à haut débit par la technologie ADSL.

La plaignante estimait notamment que l'offre formulée par France Télécom en contrepartie de cette extension, consistant à proposer à ses concurrents de devenir distributeurs du service « Netissimo » à travers une offre de revente moyennant ristourne, ne permettait pas aux opérateurs concurrents de France Télécom d'être effectivement présents sur le marché de l'accès à Internet à haut débit par la technologie ADSL et constituait un abus de position dominante.

Dans sa décision n° 00-MC-01 du 18 février 2000, confirmée par la Cour d'appel de Paris, le Conseil de la concurrence a observé que l'offre d'accès d'un abonné à Internet s'appuie sur des prestations distinctes : l'acheminement de la communication sur le réseau local auquel est raccordé l'utilisateur final, d'une part, l'acheminement de cette communication jusqu'au serveur du fournisseur de service Internet sur un réseau national de transport de données, d'autre part, et enfin l'accès au service Internet par le fournisseur de service qui assure la gestion de l'abonné.

Il a souligné que France Télécom intervient à ces différents niveaux, en quasi monopole sur la boucle locale, comme principal fournisseur des opérateurs en transport de données et en tant que leader français des fournisseurs d'accès à Internet, via sa filiale Wanadoo.

Le Conseil a alors constaté que France Télécom manifestait une attitude dilatoire dans la négociation des contrats de revente du service « Netissimo » auprès d'opérateurs tiers. Il a estimé qu'il n'était pas exclu que le refus de France Télécom de permettre à ces derniers d'accéder au marché en qualité de fournisseurs de services concurrents, et non pas seulement comme distributeurs de ses propres produits, soit de nature de fausser le jeu de la concurrence entre France Télécom et les autres opérateurs de Télécommunications.

A titre conservatoire, le Conseil enjoint à la société France Télécom de proposer aux opérateurs tiers, dans un délai maximum de huit semaines à compter de la notification de sa décision, une offre technique et commerciale d'accès au circuit virtuel permanent (option du dégroupage de la boucle locale)pour la fourniture d'accès à Internet à haut débit par la technologie ADSL ou toute autre solution technique et économique équivalente permettant aux opérateurs tiers l'exercice d'une concurrence effective, tant par les prix que par la nature des prestations offertes.

viii) Le 11 août 2000, la société Wappup a déposé une plainte, assortie d'une demande de mesures conservatoires, contre les sociétés France Télécom Mobiles et SFR, sur le fondement des articles 81 du traité CE et 7 et 8 de l'ordonnance du 1er décembre 1986 (articles L. 420-1 et L. 420-2 du code de commerce). Dans sa plainte, Wappup, fournisseur d'accès à Internet mobile, fait valoir que les conditions d'accès à son service à partir des terminaux paramétrés par les constructeurs mobiles et commercialisés respectivement par les opérateurs mobiles France

Télécom et SFR ne permettent pas aux concurrents de ces opérateurs d'être présents sur le marché de l'accès à Internet mobile, et que cette situation constitue, de la part de ces acteurs, un abus de position dominante et qu'elle porte en outre atteinte de manière grave et immédiate à la concurrence sur le marché concerné.

Toutefois, les pratiques de verrouillage des terminaux mobiles ont fait l'objet de deux décisions judiciaires. Par une ordonnance en date du 30 mai 2000, le tribunal de commerce de Paris a retenu, après avoir mis hors de cause les constructeurs et les distributeurs, la responsabilité de France Télécom en considérant que les pratiques de verrouillage incriminées pouvaient avoir pour effet d'évincer des entreprises telles que Wappup.com ou les membres de l'Association Française pour l'Internet Mobile (AFIM) du marché de la fourniture d'accès à Internet par les téléphones mobiles.

Dans sa décision n° 00-MC-17 du 7 novembre 2000, le Conseil de la concurrence a déclaré cette plainte recevable mais a rejeté la demande de mesures conservatoires. Le Conseil a notamment considéré le jugement du tribunal de commerce de Paris qui a fait interdiction à FTM de commercialiser des terminaux qui ne comporteraient pas la possibilité d'être facilement déverrouillés, jugement confirmé par l'arrêt de la Cour d'appel de Paris du 13 juillet 2000 laquelle considérait que ce dispositif assurait une protection suffisante du marché et de la concurrence loyale. Il a aussi observé que les détenteurs de terminaux Wap commercialisés par FTM et SFR disposaient de différentes possibilités d'accéder au portail de Wappup. Enfin, tenant compte des engagements respectifs pris par FTM et SFR s'agissant de la commercialisation de terminaux dotés de la fonctionnalité de reparamétrage par le biais de messages courts (SMS) et non préalablement verrouillés sur leur passerelle, qui devait intervenir avant la fin de l'année 2000, le Conseil, sans préjudice d'un examen au fond des pratiques reprochées à FTM et SFR, a jugé l'ensemble de ces mesures suffisant et conclut qu'aucun danger grave et immédiat pour l'entreprise saisissante, le secteur, pour l'économie générale ou pour l'intérêt des consommateurs n'était établie.

Dans chacune de ces affaires, le Conseil de la concurrence a été amené, conformément aux dispositions de l'article L. 36-10 du code des postes et télécommunications, à saisir pour avis l'Autorité de régulation des télécommunications.

ANNEXE N°1
COMPÉTENCES DE L'AUTORITÉ DE RÉGULATION DES TÉLÉCOMMUNICATIONS

En application des directives européennes, la loi du 26 juillet 1996 a ouvert le secteur des télécommunications à une concurrence totale à compter du 1er janvier 1998. Elle prévoit ainsi que les activités de télécommunications s'exercent librement. La régulation consiste en l'application, par l'autorité compétente, de l'ensemble des dispositions juridiques, économiques et techniques qui permettent aux activités de télécommunications de s'exercer effectivement.

Pour que la régulation soit équitable, elle doit être assurée en toute indépendance à l'égard des différents opérateurs présents sur le marché. Comme l'ensemble des législations des Etats membres de l'Union européenne, la loi française a établi cette séparation en créant une instance de régulation indépendante : l'ART. Cette création répond à trois objectifs :

i) L'objectif de neutralité : au sein de l'Etat, qui s'est engagé à préserver le statut d'entreprise publique de France Télécom, la même autorité ne peut être actionnaire de l'opérateur public et régulateur. L'indépendance de l'Autorité de régulation est un gage de neutralité et d'impartialité à l'égard de tous les acteurs du marché.

ii) L'objectif de continuité : le régulateur a pour mission de favoriser le développement durable du marché au bénéfice des utilisateurs. Pour ce faire, il doit susciter la confiance et incarner la stabilité, dans son fonctionnement comme dans ses décisions. Son indépendance et le mode de désignation des membres de son Collège lui permettent d'inscrire son action dans la continuité.

iii) L'objectif d'efficacité : une autorité indépendante peut aussi disposer de compétences qui ne se rattachent pas aux formes traditionnelles d'intervention du pouvoir exécutif. Le règlement des litiges, la conciliation et le pouvoir de sanction figurent ainsi parmi les éléments décisifs d'une régulation efficace.

Les décisions de l'ART sont soumises à de multiples contrôles :

- *Contrôle des pouvoirs publics* : l'Autorité remet chaque année un rapport public d'activité au Gouvernement et au Parlement. Elle est entendue par les commissions permanentes du Parlement ; elle entretient en outre des relations régulières avec la Commission supérieure du service public des postes et télécommunications.

- *Contrôle du juge* : les décisions de l'Autorité sont, selon les cas, susceptibles de recours devant la Cour d'appel de Paris ou le Conseil d'Etat.

- *Contrôle du marché et du consommateur* : c'est en définitive le marché - investisseurs et consommateurs - qui apprécie la pertinence des décisions de l'Autorité, car c'est bien à lui, au bout du compte, que doit profiter l'action du régulateur.

En France, la loi assigne plusieurs objectifs à la régulation:

- favoriser « l'exercice au bénéfice des utilisateurs d'une concurrence effective et loyale ». La concurrence n'est pas une fin en soi ; elle a pour objectif de fournir aux consommateurs une meilleure qualité de service à de meilleurs prix ;

- veiller *« à la fourniture et au financement de l'ensemble des composantes du service public des télécommunications »*, dont la loi a réaffirmé le principe dans un environnement concurrentiel. La concurrence doit être compatible avec l'égal accès de tous au service téléphonique ;

- veiller *« au développement de l'emploi, de l'innovation et de la compétitivité dans le secteur des télécommunications »*. La concurrence ne vaut que si elle est un facteur de développement du marché ;

- prendre en compte *« l'intérêt des territoires et des utilisateurs dans l'accès aux services et aux équipements »*. La concurrence doit contribuer à l'aménagement du territoire.

Pour que ces objectifs soient atteints, le législateur a pris soin d'établir des mécanismes qui garantissent l'indépendance du régulateur. Celle-ci est assurée par le mode de désignation des cinq membres de l'Autorité de régulation. Trois d'entre eux sont désignés par le Président de la République. Les deux autres sont respectivement désignés par le Président de l'Assemblée Nationale et le Président du Sénat. Nommés pour une durée de six ans, les membres de l'Autorité sont irrévocables et non renouvelables.

L'Autorité dispose de compétences propres et en partage d'autres avec le ministre chargé des télécommunications.

1. Des compétences partagées avec le ministre chargé des télécommunications

L'ART est consultée sur les projets de loi ou de règlements relatifs au secteur des télécommunications et participe à leur mise en oeuvre.

L'ART peut préciser certaines règles à caractère technique en matière d'exploitation de réseaux et de services, d'interconnexion et de terminaux ; ses décisions sont ensuite homologuées par le ministre.

L'ART instruit, pour le compte du ministre chargé des télécommunications, les demandes de licences d'établissement et d'exploitation de réseaux ouverts au public, ainsi que les demandes de licences de fourniture du service téléphonique au public. Elle instruit aussi les demandes de licences nécessaires à la fourniture au public de services utilisant des fréquences hertziennes. Elle transmet les dossiers instruits au ministre, qui est chargé de délivrer les autorisations. Depuis sa création, l'Autorité a instruit 144 dossiers pour près de 90 opérateurs autorisés.

L'ART propose l'évaluation du coût net du service universel et le montant des contributions des opérateurs au ministre, qui les constate.

L'ART émet des avis sur les tarifs et les objectifs tarifaires pluriannuels du service universel, ainsi que sur les tarifs des services pour lesquels il n'existe pas de concurrents sur le marché.

S'agissant des aspects internationaux, l'Autorité veille au respect de l'égalité de traitement des opérateurs autorisés à fournir des services internationaux. Elle est également associée, à la demande du ministre, aux négociations communautaires et internationales.

2. Des compétences propres

L'ART délivre les autorisations d'ouverture et d'exploitation des réseaux indépendants, qui sont destinés à la fourniture de services de télécommunications réservés à des groupes fermés d'utilisateurs (réseaux internes à des entreprises ou à des administrations, par exemple).

L'ART établit et gère le plan de numérotation national ; elle attribue les ressources en fréquences et en numérotation aux opérateurs et aux utilisateurs, dans des conditions objectives, transparentes et non discriminatoires.

Les opérateurs de réseaux ouverts au public dont la part de marché est supérieure à 25 pour cent sont déclarés « puissants » et doivent à ce titre publier un catalogue d'interconnexion. L'Autorité en établit chaque année la liste et approuve leur catalogue d'interconnexion. Elle peut aussi demander la modification des conventions d'interconnexion conclues entre deux opérateurs, lorsque cela est nécessaire pour garantir l'égalité des conditions de concurrence ou l'interopérabilité des services.

L'ART assure la responsabilité du dispositif d'évaluation de conformité des équipements terminaux (postes téléphoniques, télécopieurs, répondeurs, modems, etc.) connectés aux réseaux. Dans ce cadre, l'Autorité désigne les laboratoires d'essai habilités à effectuer des tests sur les produits. Elle est aussi chargée de délivrer les attestations de conformité.

L'ART est chargée du règlement des différends entre opérateurs dans trois domaines :

- le refus d'interconnexion, la conclusion et l'exécution des conventions d'interconnexion et les conditions d'accès à un réseau de télécommunications ;

- la mise en conformité des conventions comportant des clauses excluant ou apportant des restrictions de nature juridique ou technique à la fourniture de services de télécommunications sur les réseaux câblés;

- les possibilités et les conditions d'une utilisation partagée des installations existantes situées sur le domaine public ou sur une propriété privée ;

L'ART peut être saisie d'une demande de conciliation pour régler les litiges qui ne relèvent pas de la procédure de règlement des différends. Outre le ministre chargé des télécommunications, toute personne morale ou physique, toute organisation professionnelle ou association de consommateurs peut ainsi saisir le régulateur, qui en informe le Conseil de la concurrence.

L'ART peut enfin sanctionner tout manquement des opérateurs aux dispositions législatives et réglementaires. Elle peut ainsi prendre des mesures de suspension temporaire ou définitive d'une licence ou infliger une amende pouvant aller jusqu'à cinq pour cent du chiffre d'affaires de l'opérateur en cas de récidive.

Les méthodes utilisées pour conduire l'action de régulation déterminent, pour une large part, son efficacité et sa pertinence. La visibilité que l'Autorité doit apporter au marché exige une concertation

permanente et une volonté de transparence. La concertation passe par la réunion périodique d'instances consultatives : commissions consultatives des radiocommunications et des réseaux et services de télécommunications, comité de l'interconnexion ; elle repose également sur l'organisation régulière d'auditions et de consultations publiques (UMTS, Téléphonie sur IP, Développement de la concurrence sur le marché local, Accès à Internet par le réseau téléphonique).

ANNEXE 2
DÉFINITION DU SERVICE UNIVERSEL

La loi du 26 juillet 1996 affirme le principe du maintien d'un service public des télécommunications et organise sa compatibilité avec les objectifs de la concurrence.

Le service universel fournit à tous un service téléphonique de qualité à un prix abordable. Il assure l'acheminement gratuit des appels d'urgence, la fourniture d'un service de renseignements et d'un annuaire d'abonnés sous formes imprimée et électronique. Il garantit la desserte du territoire en cabines téléphoniques sur le domaine public. Le service universel prévoit des conditions tarifaires et techniques spécifiques, adaptées aux personnes qui rencontrent des difficultés d'accès au service téléphonique en raison de leur handicap ou de leur faible revenu.

Les obligations de France Télécom en matière de cabines téléphoniques sont fixées par son cahier des charges. L'opérateur a l'obligation d'installer une cabine dans chaque commune de moins de 1 000 habitants, puis une cabine supplémentaire par tranche de 1 500 habitants jusqu'à 10 000. Pour les communes de plus de 10 000 habitants, en revanche, l'opérateur a pour seule obligation de mettre à disposition des habitants au moins une cabine publique. Dans les communes de moins de 2 000 habitants, France Télécom doit obtenir l'accord du maire pour supprimer une cabine téléphonique.

L'article L. 35-1 de la loi définit le service universel comme étant la fourniture à tous d'un service de qualité à un prix abordable. Il inclut l'acheminement gratuit des appels d'urgence, la fourniture d'un service de renseignements et d'un annuaire imprimé et électronique, ainsi que la desserte du territoire en cabines téléphoniques sur le domaine public. Il prévoit également des conditions tarifaires et techniques spécifiques adaptées aux personnes qui présentent des difficultés d'accès au service téléphonique en raison de leur handicap ou de leur niveau de revenu.

Le service universel est une de trois composantes du service public des télécommunications.

La loi du 26 juillet précise que le service public des télécommunications est assuré dans le respect des principes d'égalité, de continuité, et d'adaptabilité et qu'il comprend trois composantes :

- le service universel des télécommunications ;

- les services obligatoires des télécommunications. Ils comprennent une offre, sur l'ensemble du territoire, d'accès au réseau numérique à intégration de services, de liaisons louées, de commutation de données par paquet, de services avancés de téléphonie vocale et de service télex ;

- les missions d'intérêt général dans le domaine des télécommunications, en matière de défense, de sécurité, de recherche publique et d'enseignement supérieur.

La loi n'a pas seulement énoncé des principes ; elle s'est également attachée à définir les conditions effectives de prestation du service universel. En effet, même si aux termes de l'article L. 35-2, *« tout opérateur acceptant de fournir le service universel sur l'ensemble du territoire et capable d'assurer cette prestation* » peut être chargé de fournir le service universel, le législateur a désigné France Télécom comme l'opérateur public chargé du service universel.

L'ART détermine les conditions du financement du service universel des télécommunications

La loi a prévu que le coût de cette prestation de service universel, qui est supporté par France Télécom, soit partagé et financé de manière équitable entre l'ensemble des opérateurs de télécommunications et financé au prorata de leur trafic.

Le coût du service universel comporte cinq composantes :

i)le coût lié au déséquilibre de la structure courante des tarifs de France Télécom : cette composante est transitoire, elle couvre la phase de rééquilibrage des tarifs de France Télécom. Elle est supprimée depuis le 1er janvier 2000. Les opérateurs mobiles en sont exemptés en contrepartie d'engagements de couverture du territoire ;

ii) le coût de la péréquation géographique, c'est à dire celui lié à la desserte du territoire pour que tous les abonnés aient accès au téléphone à un même prix sur l'ensemble du territoire ;

iii) les tarifs sociaux : il s'agit de la charge liée à l'obligation de fournir une offre de tarifs particuliers, destinée à certaines catégories de personnes en raison notamment de leur faible niveau de revenu ou de leur handicap ;

iv) la desserte du territoire en cabines téléphoniques ;

v) l'annuaire universel et le service de renseignements correspondant.

Le coût du service universel est défini comme le coût net supporté par l'opérateur en charge du service universel du fait de son obligation de fournir ce service. Il s'agit donc d'évaluer dans les comptes de l'opérateur la différence entre deux situations :

- une situation où l'opérateur ne supporterait pas l'obligation de service universel et où, par conséquent, il agirait selon une logique purement commerciale ;

- la situation où l'opérateur remplit ses obligations de service universel.

Dans cette deuxième situation, l'opérateur supporte généralement des coûts plus élevés que dans la première : il est en effet amené à desservir par exemple des territoires ou des utilisateurs auxquels il ne se serait pas intéressé dans une logique commerciale. Cependant, du fait qu'il dessert un plus grand nombre de personnes, il bénéficie de recettes plus élevées que dans le premier cas. Le calcul économique doit dès lors tenir compte du solde net entre les coûts supplémentaires supportés et les recettes supplémentaires obtenues. Il faut noter qu'un tel calcul est rendu complexe dans la mesure où il doit faire appel à une situation de référence, celle d'un opérateur animé par des motivations purement commerciales, par définition hypothétique.

1. Mode de financement

Jusqu'au 31 décembre 1999, deux modes de financement ont coexisté.

Les contributions des opérateurs sont perçues au moyen d'une rémunération additionnelle à la rémunération d'interconnexion et par des versements à un fonds de service universel.

Ces deux modes de financement ont coexisté durant la période transitoire qui s'est achevé après que le déséquilibre de la structure actuelle des tarifs a été résorbé, c'est à dire le 1er janvier 2000 comme l'a décidé le secrétaire d'Etat à l'industrie sur proposition de l'ART.

Au cours de cette période transitoire, le coût des deux premières composantes (déséquilibre tarifaire de France Télécom et péréquation géographique) ont donné lieu à une rémunération additionnelle aux tarifs d'interconnexion.

Le coût des trois dernières composantes ont donné lieu à des versements à un fonds géré par la Caisse des dépôts et consignations ; ils sont ensuite reversés par celle-ci à France Télécom, qui est chargée d'assurer le service universel.

A partir de 2000, les opérateurs contribuent au coût du service universel par des versements au fonds de service universel. Les quatre composantes restantes (péréquation géographique, tarifs sociaux, cabines publiques et annuaire universel) seront financées grâce au seul fonds de service universel.

ANNEXE N°3
MODALITÉS DE CONTRÔLE DES TARIFS DE DÉTAIL DE FRANCE TÉLÉCOM

La procédure d'homologation des tarifs de France Télécom relève du cadre juridique de la régulation du secteur des télécommunications, régulation qui accompagne le développement de la concurrence dans ce secteur.

1. Le cadre général de l'homologation tarifaire

I.1 L'objet et le cadre juridique de la procédure

I.1.1 La finalité de la procédure

La procédure d'homologation des tarifs s'exerce tant dans le souci d'évaluer *a priori* les effets concurrentiels des offres tarifaires de France Télécom sur les nouveaux entrants, que dans la recherche de l'intérêt et de la protection du consommateur.

Le contrôle tarifaire vise à s'assurer que les tarifs proposés par France Télécom respectent les règles du droit de la concurrence, tant au regard des dispositions applicables en droit interne, qu'au regard des règles posées par le Traité de Rome (articles 85 à 90 du Traité de Rome, devenus les articles 81 et suivants du Traité d'Amsterdam).

Les Pouvoirs Publics français s'attachent également à examiner les propositions tarifaires sous l'angle de l'intérêt pour le consommateur, notamment en ce qui concerne les tarifs du service universel, et plus généralement les tarifs des services où France Télécom détient une position très largement dominante.

Ce contrôle tarifaire se justifie pleinement dans la phase d'ouverture du secteur des télécommunications à la concurrence. C'est seulement dans les pays européens qui ont une expérience concurrentielle relativement longue, et où les parts de marché de l'opérateur historique ont diminué de manière significative (Royaume-Uni, Suède), que l'on peut noter un assouplissement du contrôle *a priori* des tarifs de détail de ce dernier.

En revanche, la majorité des États de l'Union Européenne, qui ont ouvert l'ensemble de leurs services de télécommunications à la concurrence au cours des trois dernières années, recourent à une procédure d'homologation des tarifs de détail, conjuguée à un objectif de *« price-cap »*. Tel est le cas notamment de l'Allemagne, des Pays-Bas, de l'Italie ou de l'Espagne.

I.1.2 Le cadre juridique

En application de la loi du 2 juillet 1990 et de la loi de réglementation des télécommunications du 26 juillet 1996, le contrôle tarifaire de l'opérateur historique est prévu par le décret n°96-1225 du 27 décembre 1996, portant cahier des charges de France Télécom[4].

Selon l'article 17-2 du cahier des charges de France Télécom, la procédure d'homologation tarifaire s'applique en ce qui concerne *« les modalités d'évolution des tarifs du service universel et des services pour lesquels il n'existe pas de concurrents sur le marché. »*

Les décisions tarifaires individuelles soumises à homologation, ainsi que les objectifs tarifaires pluriannuels, donnent lieu à un avis public de l'Autorité de régulation des télécommunications (ART).

I.2 Principes méthodologiques applicables

I.2.1 La définition du marché pertinent

L'application des tests concurrentiels dans le secteur des télécommunications suppose la détermination préalable du marché pertinent. Celle-ci s'opère sur la base des éléments d'analyse traditionnels en ce domaine.

Le marché est défini comme un lieu sur lequel se rencontrent l'offre et la demande pour un produit ou un service spécifique. Sur un marché pertinent, les unités offertes sont parfaitement substituables pour les acheteurs, qui peuvent arbitrer entre les offreurs lorsqu'il y en a plusieurs, ce qui implique que chacun de ces derniers est soumis à la concurrence par les prix des autres offreurs.

La frontière du marché pertinent se trouve délimitée par le fait qu'un offreur sur ce marché n'est pas directement contraint par les stratégies de prix des offreurs sur des marchés différents, dès lors que ces derniers commercialisent des produits ou des services qui ne répondent pas à la même demande, et qui ne constituent donc pas des produits substituables pour les acheteurs[5].

Parmi les éléments à prendre en compte pour définir un marché pertinent figurent notamment les caractéristiques propres des produits, leurs conditions d'utilisation technique, leurs coûts d'usage ou de mise à disposition, et la stratégie de leurs offreurs.

La pratique montre qu'on ne peut établir *a priori* une liste des marchés pertinents dans un secteur donné, mais seulement procéder à une analyse au cas par cas.

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4 Décret du 27 décembre 1990 portant approbation du cahier des charges de France Télécom.

5 Peuvent ainsi être considérés comme substituables, et comme se trouvant sur un même marché pertinent, les produits ou services dont on peut raisonnablement penser que les demandeurs les considèrent comme des moyens alternatifs entre lesquels ils peuvent arbitrer pour satisfaire une même demande.

I.2.2 Les tests concurrentiels

Les tests concurrentiels ont, entre autres pour objet de déceler d'éventuels effets de forclusion ou de prédation qui peuvent aboutir à une captation de clientèle susceptible de constituer un abus de position dominante.

Le test de forclusion a pour objet de s'assurer de la compatibilité des tarifs de détail de France Télécom avec les coûts d'un opérateur entrant efficace. Il s'agit de mesurer si un opérateur entrant efficace peut conserver la possibilité de demeurer compétitif au niveau des tarifs de détail, même s'il doit acheter son trafic auprès de France Télécom à un tarif de gros ou utiliser le réseau de France Télécom à un tarif d'interconnexion.

Le test de prédation vise à vérifier que les tarifs proposés par France Télécom sont supérieurs à ses coûts.

Par ailleurs, les Pouvoirs publics français sont particulièrement attentifs à ce que les offres tarifaires soumises à homologation ne prévoient pas de clauses de groupage anticoncurrentielles.

La conduite des tests concurrentiels repose sur des données auditées à échéances régulières. Ces données sont disponibles pour les tarifs du service universel ainsi que pour d'autres services.

A l'appui de chacune des décisions tarifaires qui le justifient, France Télécom fournit un compte d'exploitation prévisionnel, établi sur la base des coûts de revient moyens audités. La fourniture d'un tel compte d'exploitation permet de disposer d'un diagnostic raisonnablement précis sur l'impact concurrentiel d'un tarif.

I.2.3 - Le suivi du plafond de prix (« price-cap »)

Le contrôle tarifaire participe également du suivi des objectifs tarifaires pluriannuels du service universel, et permet de vérifier que les exigences de qualité de service requises, en matière de service universel et pour les services obligatoires sont remplies.

La cohérence des décisions tarifaires par rapport aux objectifs de « *price-cap* » fixés dans la convention tarifaire entre l'État et France Télécom est tout particulièrement examinée.

La convention tarifaire signée entre l'État et France Télécom, pour la période 1997-2000, prévoit une évolution du prix d'un panier global des services de téléphonie fixe inférieure à la hausse des prix à la consommation d'au moins neuf pour cent en moyenne par an en 1997 et 1998 et d'au moins 4,5 pour cent en moyenne par an en 1999 et en 2000.

2. Le champ de l'homologation tarifaire

2.1 Les tarifs du service universel

Le périmètre des services relevant du service universel découle de la loi n°96-659 de réglementation des télécommunications du 26 juillet 1996.

L'article L-35-1 du Code des postes et télécommunications précise en effet que *« le service universel fournit à tous un service téléphonique de qualité à un prix abordable. Il assure l'acheminement des communications téléphoniques en provenance ou à destination des points d'abonnement, ainsi que l'acheminent gratuit des appels d'urgence, la fourniture d'un service de renseignement et d'un annuaire d'abonnés sous forme imprimée et électronique et la desserte du territoire national en cabines téléphonique installées sur le domaine public ».*

Au titre du service universel des télécommunications sont ainsi homologués l'ensemble des tarifs de base de la téléphonie fixe qui sont offerts par l'opérateur de service universel (abonnements, communications locales interurbaines et internationales, tarifs sociaux), auxquels s'ajoutent les services d'annuaires et de renseignements nationaux, ainsi que les tarifs des appels passés à partir des cabines publiques. Les options tarifaires, les offres promotionnelles et les offres expérimentales concernant les tarifs du service universel sont également soumises à homologation.

Il convient de rappeler qu'au titre du service universel les offres éventuelles de tarifs sociaux par des opérateurs concurrents de France Télécom doivent aussi être soumises à l'homologation du ministre chargé des télécommunications, après avis de l'ART (article R. 20-34 du code des postes et télécommunications).

2.2 Les services pour lesquels il n'existe pas de concurrents

2.2.1 L'appréciation du degré de concurrence sur le marché

Si le champ des tarifs du service universel peut être défini *a priori*, il n'en est pas de même du champ des tarifs des services pour lesquels il n'existe pas de concurrents. En effet, des services traditionnellement soumis à homologation peuvent cesser de l'être du fait du développement de la concurrence, et, inversement, de nouveaux services, pour lesquels il n'existe pas de concurrents, peuvent entrer dans le champ de l'homologation.

En tout état de cause, l'homologation des services pour lesquels il n'existe pas de concurrents ne concerne pas seulement les services offerts aux utilisateurs finaux, mais également les services de télécommunication intermédiaires.

L'existence d'un seul concurrent ayant une part de marché marginale ne peut à l'évidence suffire pour considérer un marché comme concurrentiel. L'existence d'une concurrence effective sur le marché pertinent considéré s'analyse au cas par cas, au vu de critères tels que le nombre des opérateurs présents sur le marché, l'importance de leurs parts sur le marché et la couverture géographique de leurs offres.

Il est assez largement admis que les services pour lesquels les concurrents, considérés dans leur ensemble, ne disposent pas de plus de 20 pour cent du marché (appréhendé selon le cas en valeur ou en volume) ou ne sont pas en mesure d'offrir ces services sur plus de dix pour cent du territoire ou à plus de dix pour cent de la population, ne peuvent généralement être considérés comme des services pour lesquels il existe des concurrents.

2.2.2 Les nouveaux services au regard du champ de l'homologation

La mise en place de nouveaux services pose la question de leur statut au regard du champ de l'homologation tarifaire. En l'espèce, deux cas de figure sont à distinguer :

- les services nouveaux, pour lesquels tous les opérateurs qui le souhaitent sont en mesure de proposer une offre,

- et les services techniquement ou commercialement innovants, qui font généralement l'objet d'une expérimentation préalable par France Télécom, avant leur généralisation.

A. Les nouveaux services sur des marchés où la concurrence est susceptible de se développer rapidement

Le développement de la société de l'information et de la concurrence sur les marchés des télécommunications entraîne l'apparition de nouveaux services et suscitent de nombreuses innovations tarifaires.

De nouveaux marchés sont ainsi apparus récemment, tels que, sur le marché de la téléphonie fixe, la vente en gros de services téléphoniques longue distance, ou encore, dans le cas de l'accès à Internet via le RTC, les services d'accès à Internet sans abonnement, ainsi que des services de collecte de trafic pour le compte des fournisseurs d'accès à Internet.

Sur ces nouveaux marchés concernant des services que tous les opérateurs peuvent potentiellement offrir, directement ou par l'intermédiaire d'une offre d'interconnexion de France Télécom, il est *a priori* difficile de préjuger de la place qu'y occupera l'opérateur historique. *A priori*, il n'y a donc pas lieu de soumettre à homologation les offres considérées. Une procédure d'homologation ne devrait être envisagée qu'*a posteriori*, s'il apparaissait que France Télécom acquiert une position dominante.

B. Les offres innovantes

La plupart des offres de France Télécom qui sont techniquement ou commercialement innovantes font l'objet d'une expérimentation préalable.

Les offres expérimentales, fournies à un nombre restreint d'abonnés ou sur une zone géographique délimitée, sont soumises à homologation lorsqu'elles concernent un service pour lequel il n'y pas de concurrent sur le marché. La période d'expérimentation peut permettre de prendre la mesure des besoins d'information et des enjeux concurrentiels que ne manquera pas de poser la demande d'homologation définitive.

Cette phase d'expérimentation est en effet essentielle pour pouvoir repérer les problèmes concurrentiels susceptibles de se poser lors de la généralisation de l'offre (accès à des infrastructures essentielles, gestion d'interfaces, extension de l'offre d'interconnexion, conventions à prévoir avec les opérateurs concurrents dans la cadre de services fixe-mobile, décalage dans le temps de la mise en œuvre de l'offre définitive correspondante, etc.).

France Télécom peut ainsi être informée au plus tôt de tout ou partie des conditions préalables à remplir avant l'homologation définitive. Il peut notamment être demandé à France Télécom de présenter un bilan de l'expérimentation lorsqu'une nouvelle décision tarifaire est soumise à homologation pour assurer la généralisation de l'offre ou son déploiement progressif.

3. La procédure d'instruction des décisions tarifaires de France Télécom

3.1 La procédure d'homologation

3.1.1 L'Instruction

L'instruction d'un dossier tarifaire donne lieu à des discussions entre l'opérateur historique et les Pouvoirs publics français. Conformément à la jurisprudence en matière de procédures administratives, le délai d'homologation court lorsque le dossier est considéré comme complet sur la base des réponses complémentaires apportées par France Télécom. Il est de bonne gestion que les demandes complémentaires d'information soient adressées rapidement à France Télécom.

Il appartient à l'ART de rendre un avis dans un délai de trois semaines, une fois le dossier complet parvenu. En l'absence d'avis de l'ART dans les délais prévus par le cahier des charges, les ministres ont la possibilité de mettre en demeure l'ART de rendre un avis après fixation d'un nouveau délai. Si l'ART n'a toujours pas rendu d'avis à l'issue de ce second délai, les ministres sont fondés à prendre une décision concernant la demande d'homologation.

L'association des opérateurs à l'examen des décisions tarifaires n'est pas prévue par les textes instaurant la procédure. Néanmoins, pour éclairer la décision des ministres, les services ne s'interdisent pas de conduire des consultations informelles le cas échéant. L'instruction des propositions tarifaires de France Télécom s'effectue dans tous les cas dans le respect du secret des affaires.

3.1.2 La décision

Une fois la décision instruite, et l'avis de l'ART communiqué aux services du ministère de l'Economie, des Finances et de l'Industrie, l'homologation tarifaire peut être accordée selon deux modalités : soit tacitement à l'expiration du délai d'homologation, soit explicitement sous la forme d'une lettre adressée à France Télécom, ou bien refusée, également sous la forme d'une lettre adressée à France Télécom.

Dans la pratique, une décision tacite d'homologation intervient généralement lorsque la décision tarifaire n'appelle pas d'observation et que l'ART a donné un avis favorable. La décision d'homologation est explicite, lorsque, à la suite d'une suspension de la décision, France Télécom a pris des engagements de nature à lever les réserves initiales.

Ces engagements de France Télécom pour répondre à des réserves sont matérialisés sous la forme de lettres d'engagement ou bien par la communication des pages modifiées du catalogue de prix par rapport aux propositions initiales.

La décision d'homologation peut également prévoir la réalisation d'un bilan de l'offre tarifaire proposée par France Télécom dans les cas où les données disponibles au moment de l'homologation n'apparaissent pas suffisantes (trafic réalisé pour les forfaits, par exemple).

Les décisions d'homologation ou de refus d'homologation, ainsi que les engagements complémentaires éventuels pris par France Télécom feront l'objet d'une information sur le site Internet

www.telecom.gouv.fr. Le catalogue des prix de France Télécom est également disponible sur le site Internet *www.francetelecom.fr* et régulièrement actualisé en fonction des décisions homologuées.

3.2 La procédure de notification pour information

En revanche, les nouveaux services en développement sur de nouveaux marchés en concurrence n'ont pas à être soumis à l'homologation. Du fait également du développement de la concurrence, un nombre croissant de services jusqu'alors considérés selon les critères précédents comme étant sans concurrents n'auront plus à être soumis à l'homologation.

3.2.1 La sortie du périmètre de l'homologation

Si France Télécom estime qu'une décision tarifaire ne relève plus du champ de l'homologation, il appartient au Département, en liaison avec l'ART, d'étudier le bien-fondé de cette demande.

Au cas par cas, les services du ministère de l'Economie, des Finances et de l'Industrie peuvent demander à l'ART de conduire une investigation afin d'appréhender l'intensité de la concurrence sur le marché pertinent considéré. Comme rappelé ci-dessus, cette enquête n'est pas publique, ce qui n'exclut pas que les services de l'ART ou ceux du ministère de l'Economie, des Finances et de l'Industrie puissent prendre l'initiative d'interroger au besoin les opérateurs concurrents, dans le strict respect du secret des affaires.

Pour les services passant en situation de concurrence effective, afin d'éviter des effets d'aller et retour entre les deux procédures, le constat des parts de marché des concurrents devra être fait sur une période suffisamment longue.

3.2.2 Les services n'ayant pas a être homologués à priori

Pour les services nouveaux, où il n'y pas lieu de préjuger a priori de la part de marché de France Télécom, un bilan de la part de marché acquise par France Télécom pourra être effectué à échéances régulières.

S'agissant des services nouveaux, une vigilance particulière sera assurée à travers l'étude de bilans d'application de l'offre, et le cas échéant d'un suivi du marché sur lesquels le service est offert.

L'absence de procédure d'homologation ne dispense pas France Télécom de soumettre aux services du ministère de l'Economie, des Finances et de l'Industrie et à l'ART les éléments d'information nécessaires au suivi d'un marché. A cet égard, les ministres peuvent également demander au Président de l'ART que ses services conduisent une investigation sur l'évolution des marchés concernés.

On ne peut exclure que la part de marché de France Télécom sur certains segments de marché s'accroisse significativement, et que France Télécom se retrouve dans une position dominante justifiant l'homologation d'un service ayant cessé d'être soumis à homologation, ou ne l'ayant pas été *a priori*. Dans ces conditions, le Département se réserverait le droit de demander à France Télécom de soumettre toute nouvelle décision tarifaire concernant de tels services.

3.3 Saisine du Conseil de la Concurrence

Tant en ce qui concerne les offres homologuées que non homologuées, le Département se réserve la possibilité de saisir le Conseil de la concurrence, soit pour avis, soit à titre contentieux, s'il apparaît, à quelque titre que ce soit, que des pratiques anticoncurrentielles se développent ou que les conditions concrètes de mise en œuvre de ces offres commerciales non homologuées sont susceptibles de porter atteinte à l'exercice d'une concurrence loyale.

Cette possibilité vaut naturellement pour les services qui seraient considérés comme ne relevant pas de la procédure d'homologation. Une décision d'homologation n'exclut pas non plus que le Ministre de l'Économie puisse ultérieurement saisir le Conseil de la concurrence, soit pour avis, soit à titre contentieux, afin d'examiner si la mise en œuvre pratique par France Télécom du tarif ainsi homologué génère des effets anticoncurrentiels.

Le Président de l'ART dispose par ailleurs d'un pouvoir autonome de saisine du Conseil en vertu de l'article L. 36-10 du Code des postes et télécommunications.

Un large contrôle tarifaire *a posteriori* sous l'égide du Conseil de la concurrence devrait progressivement se substituer au contrôle tarifaire au fur et à mesure du développement de la concurrence.

Dans les conditions actuelles, de l'avis général, un certain équilibre entre régulation tarifaire *a priori* et régulation *a posteriori* paraît nécessaire. Au demeurant, une certaine complémentarité de ces outils de régulation peut être actuellement observée, à la mesure des évolutions en cours, qui font apparaître un fort besoin de régulation concurrentielle de la part des Pouvoirs Publics.

ANNEXE N°4
NOMENCLATURE DES COÛTS RELATIFS À L'ACCÈS À LA BOUCLE LOCALE

Selon l'article D. 99-24 du code des postes et télécommunications, "*l'Autorité de régulation des télécommunications établit et rend publique la nomenclature des coûts pertinents*" de l'accès à la boucle locale.

Selon l'article D. 99-23 du code, " *l'accès à la boucle locale se traduit (…) :*

- *"soit par la mise à disposition de la partie de réseau précitée", c'est-à-dire la partie métallique "comprise entre le répartiteur principal et le point de terminaison situé dans les locaux de l'abonné (accès totalement dégroupé à la boucle locale)";*

- *"soit par la mise à disposition des fréquences non vocales disponibles sur cette partie du réseau (accès partagé à la boucle locale)".*

Il "*inclut en outre les prestations associées et notamment la fourniture des informations nécessaires à la mise en œuvre de l'accès à la boucle locale, une offre de colocalisation des équipements et une offre permettant la connexion de ces équipements aux réseaux des demandeurs d'accès*".

1. Description du réseau local de France Télécom

2. Nomenclature

a) Les coûts de l'accès totalement dégroupé

L'accès totalement dégroupé comprend les coûts suivants :

- coûts d'utilisation des infrastructures ;

- coûts de mise à disposition de la paire de cuivre ;

- coûts correspondant à la relève des dérangements.

i. Coûts d'utilisation des infrastructures

Les infrastructures comprennent le génie civil (enterré ou aérien), les câbles de transport, de distribution et les points de répartition : répartiteur principal, sous-répartiteur, point de concentration.

Ces coûts comprennent :

- les coûts d'investissement correspondant aux éléments d'infrastructures considérés (réalisation de tranchées, installation des équipements et pose des câbles) ; ces coûts résultent d'un calcul en coût de remplacement. Ils sont annualisés par un calcul d'amortissement ;

- les coûts d'exploitation et de maintenance de ces infrastructures (par exemple : remplacement de câbles usagés, entretien des points de répartition).

ii. Coûts de mise à disposition de la paire de cuivre

Ces coûts non récurrents comprennent :

- d'une part, les coûts correspondant à l'administration de la commande hors adaptation du système d'information ;

- d'autre part, des coûts correspondant aux opérations de nature technique nécessaires pour fournir et poser les jarretières et selon les cas pour mettre à disposition une paire de cuivre existante ou bien construire et livrer une paire de cuivre déterminée de bout en bout. Ils comprennent, quand il y a lieu, les coûts de réalisation du branchement (y compris, le cas échéant, fourniture du DTI - dispositif de terminaison intérieur).

iii Coûts correspondant à la relève des dérangements

Il s'agit des coûts correspondant à la relève de dérangements (réception des appels, traitement des appels et diagnostic, rétablissement de la ligne) hors coûts d'adaptation du système d'information. Ces coûts sont non récurrents ; ils peuvent cependant donner lieu à un recouvrement récurrent par un calcul s'appuyant sur une évaluation de la fréquence des dérangements.

b) Les coûts de l'accès partagé

L'accès partagé ne donne jamais lieu à une construction, même partielle, de paire. La nomenclature des coûts de l'accès partagé est la suivante.

i. Coûts d'utilisation des infrastructures

Dans le cas de l'accès partagé, ce coût, défini au *i* du a) précédent est de la nature d'un coût commun à l'accès à la boucle locale et au service téléphonique au public de France Télécom.

ii. Coûts de mise à disposition des fréquences non vocales

Ces coûts non récurrents comprennent :

- d'une part, des coûts correspondant à l'administration de la commande, hors adaptation du système d'information ;

- d'autre part, des coûts correspondant aux opérations de nature technique nécessaires pour fournir et poser les jarretières et pour mettre à disposition les fréquences non vocales.

iii. Coûts correspondant à la relève des dérangements

Il s'agit des coûts correspondant à la relève de dérangements (service de réception des appels, diagnostic, rétablissement de la ligne) hors coûts d'adaptation du système d'information. Ces coûts sont non récurrents ; ils peuvent cependant donner lieu à un recouvrement récurrent par un calcul s'appuyant sur une évaluation de la fréquence des dérangements.

iv. Coûts techniques spécifiques à l'accès partagé

Il s'agit des coûts de fourniture, d'installation et d'entretien de baies, pré-équipées en filtres, entre le répartiteur général de France Télécom et le câble de renvoi vers le répartiteur de l'opérateur.

c) Les coûts liés à la fourniture des informations nécessaires à la mise en œuvre de l'accès à la boucle locale

Les informations nécessaires à la mise en œuvre de l'accès à la boucle locale sont de deux types :

- des informations " préalables " sur le réseau de boucle locale (adresse des sites et zones d'emprise des répartiteurs notamment) ;
- des informations propres à une paire.

Les coûts en question sont les coûts de nature administrative. Ils sont non récurrents.

d) Les coûts liés à la prestation de colocalisation

Il s'agit :

- des coûts non récurrents correspondant :
- à l'aménagement des locaux hébergeant les opérateurs tiers (hors équipements d'énergie, de climatisation ou de télécommunications), y compris la sécurisation de l'accès, la fourniture de badges ;
- à l'installation des équipements d'énergie, de climatisation et de télécommunications ;
- à la fourniture et à l'installation du répartiteur cuivre opérateur et du répartiteur optique opérateur ;
- à la fourniture et à la pose d'un câble de renvoi entre le répartiteur principal de France Télécom et le répartiteur cuivre opérateur en cas de colocalisation physique ;
- au tirage et au raccordement du câble de renvoi en cas de colocalisation distante ;
- à la fourniture et à la pose d'un câble de renvoi entre le répartiteur optique de France Télécom et le répartiteur optique opérateur ;
- à la fourniture et la pose de réglettes ;
- et des coûts récurrents correspondant :

- le cas échéant, à l'exploitation et à la maintenance correspondant aux postes cités ci-dessus ;

- à l'usage des surfaces immobilisées par les opérateurs tiers, entretien compris ;

- à la fourniture en énergie des opérateurs tiers.

Dans certains cas, certains de ces coûts pourront ne pas être encourus par France Télécom (par exemple les coûts de fourniture d'équipements quand ceux-ci sont apportés par l'opérateur demandant le dégroupage).

e) Les coûts liés à la prestation de connexion des équipements aux réseaux des demandeurs d'accès (hors colocalisation distante)

Il s'agit des coûts d'utilisation des infrastructures mises en place par France Télécom pour établir la connexion des équipements aux réseaux des demandeurs d'accès (chambre 0, fourreau jusqu'à la chambre 0, pénétration éventuelle dans la chambre 0).

f) Les autres coûts pertinents

i. Les coûts de création d'applications propres à l'accès à la boucle locale et les coûts d'adaptation des systèmes d'information existants

Afin d'assurer une offre de dégroupage, France Télécom doit développer des applications informatiques spécifiques à l'accès à la boucle locale et réaliser des adaptations d'applications informatiques existantes.

Ces coûts d'adaptation sont par nature non récurrents.

ii. Les coûts relatifs aux entités qui sont spécifiquement chargées au sein de France Télécom de la mise en œuvre de l'accès à la boucle locale

Ce sont les coûts correspondant à ces entités.

NOTA : pour les rubriques *i* et *ii* ci-dessus, il convient d'éviter les doubles comptes qui pourraient résulter de l'incorporation de ces coûts dans les coûts d'usage.

iii.. Les coûts de facturation de l'accès à la boucle locale

France Télécom sera amenée à facturer l'ensemble des prestations d'accès à la boucle locale. Les coûts correspondants sont pertinents et peuvent donner lieu de ce fait à recouvrement par France Télécom à travers les tarifs de l'accès à la boucle locale.

iv. Les coûts communs

Le cinquième alinéa de l'article D.99-24 indique que "*les tarifs incluent une contribution équitable aux coûts qui sont communs à la fois à l'accès à la boucle locale et aux autres services de l'opérateur*".

Est exclue des coûts communs ici mentionnés la contribution établie dans le cas de l'accès partagé, aux coûts d'utilisation des infrastructures définies au b) i.

3. Règles de pertinence

Les présentes règles ont simplement pour objet de déterminer les coûts que l'opérateur peut légitimement recouvrer à travers les tarifs de l'accès à la boucle locale, sans préjuger du mode précis de recouvrement.

a) Les coûts de l'accès totalement dégroupé

Ces coûts doivent donner lieu à un recouvrement intégral par France Télécom à travers les tarifs de l'accès à la boucle locale.

Dans le cas où un client résilie le service dont il disposait auprès d'un opérateur tiers pour reprendre un service de France Télécom, les coûts encourus par France Télécom à cette occasion sont à sa charge.

b) Les coûts de l'accès partagé

Les coûts d'utilisation des infrastructures sont communs au service téléphonique de France Télécom et à l'accès partagé à la boucle locale. Ceci vaut pour les éléments de réseau effectivement utilisés conjointement par les deux services.

Economiquement, ce coût a vocation à être recouvré par une contribution de chacun de ces deux services, que l'article D. 99-24 du code qualifie d'équitable.

L'Autorité considère à ce stade :

- qu'il pourrait être opportun que les services à hauts débits ne se voient pas imputés d'une telle contribution dans une phase de démarrage ;

- qu'à tout le moins, cette contribution doit s'appliquer à l'offre Netissimo de France Télécom.

Les autres coûts doivent donner lieu à un recouvrement intégral par France Télécom à travers les tarifs de l'accès à la boucle locale.

Dans le cas où un client résilie le service dont il disposait auprès d'un opérateur tiers pour reprendre un service de France Télécom, les coûts encourus par France Télécom à cette occasion sont à sa charge.

c) Les coûts liés à la fourniture des informations nécessaires à la mise en œuvre de l'accès à la boucle locale

Ces coûts doivent donner lieu à un recouvrement intégral par France Télécom à travers les tarifs de l'accès à la boucle locale.

d) Les coûts liés à la prestation de colocalisation

Ces coûts doivent donner lieu à un recouvrement intégral par France Télécom à travers les tarifs de l'accès à la boucle locale.

e) Les coûts liés à la prestation de connexion des équipements aux réseaux des demandeurs d'accès

Ces coûts peuvent donner lieu à un recouvrement intégral par France Télécom à travers les tarifs de l'accès à la boucle locale.

f) Autres coûts pertinents

Plusieurs postes de coût présentent des caractéristiques qui font qu'ils ne peuvent être directement imputés à un tarif déterminé.

- les coûts d'adaptation encourus par France Télécom ;
- les coûts relatifs aux entités spécifiquement chargées de la mise en œuvre de l'accès à la boucle locale ;
- les coûts de facturation ;
- les coûts communs à plusieurs prestations d'accès à la boucle locale ou communs à l'accès à la boucle locale et aux autres services de France Télécom.

Les coûts d'adaptation

Les coûts de création d'applications spécifiques à l'accès à la boucle locale, les coûts d'adaptation des systèmes d'information existants sont pertinents en soi et doivent donner lieu de ce fait à recouvrement par France Télécom à travers les tarifs de l'accès à la boucle locale.

Toutefois, il convient d'éviter les doubles comptes qui pourraient résulter de l'incorporation de ces coûts dans les coûts d'usage des applications informatiques. C'est pourquoi, à défaut de dispositions écartant clairement le risque de doubles comptes, les coûts d'adaptation des applications informatiques existantes seront imputés à l'ensemble des usages de ces applications.

Les coûts relatifs aux entités spécifiquement chargées de la mise en œuvre de l'accès à la boucle locale

Ces coûts doivent donner lieu à un recouvrement intégral par France Télécom à travers les tarifs de l'accès à la boucle locale.

Les coûts de facturation

France Télécom sera amenée à facturer l'ensemble des prestations d'accès à la boucle locale. Les coûts correspondants sont pertinents et doivent donner lieu de ce fait à recouvrement par France Télécom à travers les tarifs de l'accès à la boucle locale.

Les coûts communs

Le cinquième alinéa de l'article D. 99-24 indique que "les tarifs incluent une contribution équitable aux coûts qui sont communs à la fois à l'accès à la boucle locale et aux autres services de l'opérateur".

ANNEXE N°5
MÉTHODE DE CALCUL DES COÛTS MOYENS INCRÉMENTAUX DE LONG TERME RELATIFS À L'ACCÈS À LA BOUCLE LOCALE DÉFINIE EN APPLICATION DE L'ARTICLE D.99-24 DU CODE DES POSTES ET TÉLÉCOMMUNICATIONS

L'article D. 99-24 du code des postes et télécommunications prévoit que " *les éléments de réseaux sont valorisés à leurs coûts moyens incrémentaux de long terme*".

1. Les coûts moyens incrémentaux de long terme

1.1 Définition

La méthode des coûts *incrémentaux* vise à évaluer les coûts supplémentaires induits pour la production d'un service par rapport aux coûts déjà induits par la production d'un portefeuille d'autres services. Les coûts incrémentaux d'un service ou élément *A* représentent en quelque sorte l'économie de coûts qui résultent de la non production ou non mise en œuvre de *A*, ou en d'autres termes, les coûts encourus pour produire *A* en sus du portefeuille de produits existants. Dans cette acception, les coûts incrémentaux se rapprochent de la notion de coût marginal, sauf que le coût marginal correspond aux coûts nécessaires pour la production supplémentaire d'une petite quantité d'un produit déjà produit par ailleurs.

La notion de *long terme* consiste à prendre les coûts occasionnés en se plaçant sur une perspective à long terme, c'est-à-dire en considérant également les coûts d'investissements nécessités par le service ou l'élément. L'idée est de rendre le plus possible "variables" les coûts fixes entraînés par une production ou une mise en œuvre. Les coûts incrémentaux de long terme d'un service ou d'un élément *A* représentent donc l'ensemble des coûts qui pourraient être évités si *A* n'était pas produit ou mis en œuvre. Les coûts incrémentaux comprennent donc l'ensemble des coûts directement attribuables à *A*, qu'ils soient variables (dépendant du niveau de production) ou fixes (constitutifs de la capacité) : c'est du fait de la prise en compte des coûts fixes directement attribuables à *A* que les coûts incrémentaux sont qualifiés de *moyens*.

Mais *A* peut également recourir à des éléments, services ou fonctions nécessités par d'autres services ou éléments. Les coûts incrémentaux, même de long terme, *stricto sensu*, ne prennent pas en compte le partage de ces coûts dits joints ou communs selon qu'ils s'appliquent à un sous-ensemble de la production d'une firme ou qu'ils concernent l'ensemble de la production. Les coûts incrémentaux sont retenus par les économistes en ce sens qu'ils forment le critère de décision de la firme pour produire *A* : si les recettes espérées de l'offre de *A* sont supérieures aux coûts incrémentaux de long terme dans un rapport qui couvre le coût attendu du capital, alors, la firme a intérêt à se lancer dans la production de *A*.

Néanmoins, les coûts incrémentaux, tels qu'ils sont définis *stricto sensu*, peuvent difficilement servir de base à la tarification de l'accès au service ou à l'élément dans la mesure où ils ne couvrent qu'une partie des coûts. Dès lors que *A* utilise également d'autres "coûts", il est nécessaire de les considérer, pour autant qu'une relation de causalité existe, c'est-à-dire que *A* ne pourrait être produit sans la mise en œuvre

des services, éléments ou fonctions qui suscitent ces coûts. Il convient donc d'allouer les coûts joints et communs pertinents selon des méthodes d'allocation qui doivent être précisées. L'article D. 99-24 du code des postes et télécommunications mentionne d'ailleurs que "*Les tarifs incluent une contribution équitable aux coûts qui sont communs à la fois à l'accès à la boucle locale et aux autres services de l'opérateur"* et qu'il considère comme fondements des coûts les "*éléments de réseau*".

Enfin, l'Autorité considère que la notion de long terme renvoie nécessairement à une évaluation des coûts sur la base des coûts dits " prospectifs " (*Forward Looking*) ou " actuels ", c'est-à-dire les coûts qui seraient encourus si on reconstruisait l'appareil de production au jour du calcul.

1.2 Mise en œuvre

Les CMILT résultent ainsi d'une modélisation et par conséquent d'un ensemble de choix de facteurs (technologie, architecture, capacités, prix) s'affranchissant du référentiel des comptes de l'entreprise. En principe, l'ensemble de ces facteurs interagissent dans la recherche de la solution la plus efficace. En pratique, les choix sont successifs :

- *la technologie* : un bon point de départ est la technologie mise en œuvre par l'opérateur car on peut s'attendre à ce que l'opérateur retienne, au moins dans le cadre de ses investissements récents, la technologie la plus adaptée ; en effet, même si l'activité correspondant à cette technologie est en situation de quasi monopole, on peut s'attendre à ce que l'opérateur soit incité à des choix efficaces dans cette activité pourvu que la pression concurrentielle sur l'ensemble de ses autres activités soit suffisante ;

- *l'architecture et les capacités* : reprendre l'architecture de réseau de l'opérateur régulé ainsi que les capacités installées constitue un bon point de départ. Cette façon de faire assure un certain réalisme en garantissant que le réseau ainsi modélisé est compatible avec la production ;

- *les prix* : les acteurs (fournisseurs, opérateurs) peuvent souhaiter ne pas dévoiler la réalité des prix au régulateur ; les prix observés par l'opérateur régulé dans le cadre d'opérations récentes peuvent constituer une bonne estimation.

Toutefois, le choix de la meilleure technologie est contraint pour l'opérateur en place : par exemple, il doit tenir compte de la présence de technologies plus anciennes dans son réseau, ce qui peut le conduire à imposer des règles de compatibilité, ou adopter des règles d'exploitation ou d'ingénierie qui tiennent compte de l'histoire. Il en en est de même en ce qui concerne l'architecture et les capacités où, là également, les choix faits par l'entreprise, mêmes les plus récents, peuvent être contraints par son histoire. Enfin, en ce qui concerne les prix, il convient de veiller attentivement aux conditions de leur observation en se posant la question de savoir si les opérations observées sont comparables en terme de contexte (effet de volumes) ou de contenu (par exemple, incorporation ou pas dans les prix observés de prestations ou de règles non pertinentes) à celles que l'on souhaite modéliser.

C'est pourquoi, la méthodologie des CMILT doit être mise en œuvre selon deux types de modèles :

- un modèle *top-down* fourni par l'opérateur historique. Celui-ci est basé sur son réseau actuel et est alimenté par les données de sa comptabilité analytique. Cependant, il valorise les équipements selon une méthode de coûts actuels et intègre les évolutions prévisibles du réseau en l'adaptant selon des hypothèses déterminées ;

- un modèle *bottom-up* : ce modèle technico-économique imagine un réseau optimisé qu'un opérateur pourrait construire avec la meilleure technologie disponible pour répondre à la même demande que l'opérateur historique et en évalue le coût. Les équipements sont évalués à leurs coûts actuels.

Les modèles *top-down* et *bottom-up* partent en pratique tous deux d'hypothèses qui les rendent proches malgré leur méthodologie différente ; les résultats des deux modèles sont donc réconciliables à condition de définir *a priori* les conventions communes adéquates.

C'est une méthode préconisée par la Commission Européenne. Elle part du constat qu'un modèle *bottom-up* répond mieux au principe d'efficacité à long terme, en étant moins dépendant des choix de l'opérateur et plus proche des meilleures pratiques du marché. Néanmoins, ce type de modèle n'est pas assez robuste pour être utilisé seul. La confrontation des deux approches permet d'obtenir des résultats réalistes grâce aux éléments du modèle *top-down*, moins satisfaisant en théorie mais plus proche de l'expérience historique réelle.

1.3 Valorisation des investissements

Une formule classique relie l'annuité d'amortissement d'un actif à sa valeur nette :

$$A_t = (1 + a) * K_{t-1} - K_t$$

Dans cette formule :

- K_t est la valeur (nette) de l'actif au moment t ;
- a est le taux de rémunération du capital ;
- A_t est l'annuité d'amortissement, c'est-à-dire la rémunération normale de l'usage de l'actif entre t-1 et t.

On vérifie que cette annuité d'amortissement A_t, supposée payée à la fin de la période *[t-1,t]* augmentée de la valeur en fin de période, K_t, est égale à la valeur actualisée de la valeur de l'actif en début de période.

Formulé autrement, $At = a*Kt-1 + (Kt-1 – Kt)$, l'annuité d'amortissement fait apparaître deux termes : le premier correspondant à la rémunération du capital immobilisé ; le second correspondant à la dépréciation.

Ainsi, la valorisation de la rémunération d'usage de cet actif est liée à celle de la valeur nette de l'actif, et à la méthode employée pour cette valorisation.

Plusieurs méthodes peuvent être employées pour établir la valeur d'un actif.

La méthode comptable

Un actif, de coût d'achat I_o et de durée de vie comptable T, est généralement valorisé dans les comptes de l'entreprise selon la formule :

$$K_t = \frac{(T-t)}{T} * I_0$$

Toutefois, une telle méthode n'a pas de véritable fondement économique : elle ne fait que refléter les conventions comptables adoptées par l'entreprise, même si cette valorisation comptable doit en principe refléter une valorisation économique de l'actif.

La méthode des coûts de remplacement

La valeur *Kt* d'un actif âgé de *n* années, de durée de vie *d* (*n<d*) à une date *t*, provient du fait que sa possession permet de différer l'investissement d'un actif neuf équivalent. Cette valeur est donc égale à la différence entre :

- le coût actualisé de la filière « à neuf » : où il est nécessaire d'investir à la date *t*, puis de renouveler l'investissement par un actif équivalent toutes les *d* années ;

- le coût actualisé de la filière « de maintien » : l'actif est conservé pendant une période égale à sa durée de vie résiduelle, c'est-à-dire pendant *(d-n)* années, cet équipement étant ensuite renouvelé toutes les *d* années.

Cette méthode peut faire appel à un *taux de progrès technique g* rendant compte des baisses de prix que l'on peut observer, ou prévoir, au fil du temps pour l'acquisition d'un même actif. Par même actif, il faut entendre un actif rendant les mêmes services (même capacité de production, même niveau de fonctionnalités d'exploitation et de maintenance).

$$I_t = \frac{I_0}{(1+g)^t}$$

Ainsi, un actif acheté neuf I_o au moment $t = 0$ est supposé coûter à l'achat neuf au moment t : .

Cette méthode ainsi exposée suppose, outre l'adoption d'un taux d'actualisation *a*, l'évaluation d'un taux de progrès technique *g*, la définition d'une durée de vie *d*, la détermination de l'âge de chaque actif et celle de sa durée de vie résiduelle.

En fait, la valeur de l'annuité d'amortissement *At* ne dépend pas de l'âge de l'actif considéré.

Ainsi, la valeur de l'annuité d'amortissement pour une année considérée peut être établie, selon cette méthode, en considérant la valeur à neuf de l'actif au début de l'année, et une valeur résiduelle en fin d'année déterminée par la méthode des coûts de remplacement.

La seule différence entre les deux modes de calcul porte sur la répartition entre la rémunération du capital et la dépréciation. Dans le cas où l'on considère l'âge effectif des actifs, on détermine par la méthode des coûts de remplacement leur valeur « actuelle » ; dans le cas où l'on considère un renouvellement complet du réseau, on établit une valeur « à neuf » (ainsi qu'une valeur de revente en fin d'année). La valeur « à neuf » est supérieure à la valeur « actuelle » et engendre un terme de rémunération du capital supérieur. A l'inverse, le terme de dépréciation est inférieur.

2. Le modèle employé par France Télécom

Le coût des éléments de réseau est la somme de deux termes :

- le coût d'investissement. Celui-ci comprend le coût des équipements mais peut également comprendre des coûts d'exploitation correspondant à la mise en exploitation de ces équipements ;

- le coût d'exploitation des infrastructures, hors coûts d'exploitation pris en compte dans le coût d'investissement.

2.1 Les coûts d'investissement

France Télécom a développé un modèle *top-down* permettant de déterminer les coûts de capitaux de l'accès à la paire de cuivre nue (hors partie branchement).

Le modèle de France Télécom comporte 12 éléments de réseau :

- 3 éléments de génie civil : génie civil en conduite, en pleine terre et aérien ;

- 6 éléments de câble : câbles en conduite, en pleine terre ou en aérien, distingués entre la distribution et le transport ;

- 3 éléments de répartition : les répartiteurs, les sous-répartiteurs et les points de concentration.

Pour chacun de ces 12 éléments de réseau, France Télécom a défini une unité d'œuvre, a mesuré ou calculé un volume d'unités d'œuvre sur le périmètre de son réseau ainsi qu'un investissement unitaire.

Les *volumes d'unités d'œuvre* correspondent à l'ensemble du parc de France Télécom installé.

Le *coût unitaire d'investissement* considéré est celui de la meilleure technologie disponible, défini comme la technologie la moins chère actuellement disponible dans les catalogues des constructeurs et des prestataires. Le modèle prend en compte le fait que France Télécom se voit parfois rétrocéder à titre gratuit du génie civil par les tiers.

Le *coût d'investissement en masse* est obtenu en appliquant le coût unitaire d'investissement au volume d'unité d'œuvre.

Le *coût annuel d'investissement* est égal à la première annuité d'amortissement, calculée selon la méthode des coûts de remplacement, correspondant au coût total d'investissement. Ce calcul fait intervenir le taux d'actualisation, un taux de progrès technique et une durée d'amortissement propres à chaque poste d'investissement.

Le total pour tous les postes d'investissements des coûts annuels d'investissements est rapporté à l'ensemble des paires supportant un service de télécommunications (que ce service soit analogique ou numérique) afin d'obtenir un coût total unitaire par paire. Le modèle intègre donc, pour chaque élément de réseau, l'existence de capacités de réserve.

2.2 Les coûts d'exploitation

Ceux-ci ne font pas l'objet d'une modélisation CMILT mais proviennent des coûts constatés dans la comptabilité de France Télécom.

3. La méthode de calcul des coûts moyens incrémentaux de long terme définie par l'Autorité

Dans le cadre du dégroupage, et devant l'obligation pour France Télécom de proposer des tarifs au 1er décembre 2000, l'Autorité retient pour l'année 2001 une méthode reposant sur la modélisation de France Télécom, à savoir un modèle *top-down* établi sur la base de l'architecture existante du réseau de France Télécom et dont les coûts d'investissements sont évalués selon la méthode des coûts de remplacement et les coûts d'exploitation proviennent de la comptabilité.

L'Autorité considère qu'à l'avenir la méthodologie CMILT devra être " unifiée ", c'est-à-dire porter à la fois sur les coûts d'investissements et sur les coûts d'exploitation.

L'Autorité estime également qu'un rapprochement d'approches dites "*top-down*" et "*bottom-up*" sera à l'avenir le plus approprié pour fixer, à partir de l'année 2002 les tarifs d'accès à la paire de cuivre. En conséquence ces tarifs devront résulter du rapprochement de deux modèles : le modèle développé par France Télécom de type *top-down* et un modèle *bottom-up* développé par l'Autorité.

3.1 La modélisation en éléments de réseau

La modélisation retenue comporte douze éléments de réseau :

- trois éléments de génie civil : génie civil en conduite, en pleine terre et aérien ;
- six éléments de câble : câbles en conduite, en pleine terre ou en aérien, distingués entre la distribution et le transport ;
- trois éléments de répartition : les répartiteurs, les sous-répartiteurs et les points de concentration.

3.2 Les paramètres de la modélisation

3.2.1 L'incrément

L'incrément est l'ensemble du réseau des paires de cuivre de France Télécom, quel que soit le service qu'elles supportent : partie accès des liaisons louées, lignes d'abonnés analogiques, lignes d'abonnés numériques.

GERMANY

1. Germany has fully opened its telecommunications market

1.1 Voice telephony liberalised in 1998

Since 1 January 1998, the German telecommunications market has been opened up to competition without any restrictions. As in most of the EU countries, that day saw the end of the monopoly on voice telephony. A year and a half before that, the entry into force of the Telecommunications Act on 1 August 1996 had already abolished the monopoly on transmission lines.

Germany opted for a strict competition-based policy. Since 1 January 1998, it has been possible to use a five-digit carrier identification number to select a cheaper provider than the incumbent for long-distance calls, either on a call-by-call basis or permanently (by preselection). Also, the operator of the local loop was obliged to collect the payments for the calls made via call-by-call or preselection. This made it possible for the consumer to take advantage of the benefits of competition right from the start and without additional effort.

I.2 Ongoing dynamic market development

Today, 180 companies are providing voice telephony services in Germany. Roughly 100 firms are trying to offer customers not only calls, but also subscriber lines. The market share held by the competitors (i.e. the incumbent's competitors) in the local network is 1.5 percent – in terms of telephone lines. When it comes to carrying long-distance calls, the competitors have a substantially larger market share: more than 40 percent of the minutes of national long-distance calls and foreign calls are carried by competitors of the incumbent. In total, therefore, the competitors have a market share of 22 percent.

In detail, competition has resulted in the following macroeconomic developments:

- Falling prices: Since the market liberalisation, the price of long-distance calls has dropped by up to 95 percent. There have also been substantial reductions in the cost of mobile phone calls and Internet access. The prices for long-distance calls, Internet use charged by the minute, and mobile telephony are amongst the lowest in Europe.

- Expanding market: Thanks to low costs and a growing enthusiasm for technology, Germany now has the most online and mobile phone customers in Europe. The use of the fixed network increased by 60 percent overall between 1 January 1998 and the end of 2000.

- Market volume: Last year, turnover from telecommunications services exceeded the 100 billion mark level for the first time. Since the end of 1998, the market has been growing by almost ten percent a year – despite the substantial price cuts.

- Billions invested: Deutsche Telekom and its competitors have invested several billion marks in the establishment of new capacities and the development of innovative products and services, with the competitors alone investing over DM 5 billion. Germany's four mobile telephony providers have spent DM 14 billion over the last three years, largely on optimising their networks.

Six providers have paid DM 100 billion to obtain licences to build third-generation mobile services (UMTS). Establishing the networks will cost another DM 60 billion. On top of this come billions of investment in creating alternative infrastructures like broad-band cable, powerline or wireless local loop.

- High rate of innovation: The firms operating in Germany are investing a great deal in new technologies for the fixed and mobile networks. As a result, Germany now has a leading position in terms of the number of broad-band Internet customers; compared with the rest of Europe, German mobile phone users send the largest number of SMS messages.

- Positive effects on employment: The investment by the new firms is having a positive impact on the labour market. New job opportunities have been created both directly and indirectly. The job-shedding by Deutsche Telekom has been *more than offset* by the new jobs with the competitors.

- Productivity: Deutsche Telekom has also benefited greatly from competition: according to its own figures, its productivity rose by more than 13 percent a year on average in the last three years. At almost 26 percent, the rise in productivity was greatest in 1998, i.e. immediately after the introduction of competition. In the two previous years, according to the company, the productivity gain averaged six percent.

2. Market-oriented regulation

The comprehensive approach to market liberalisation is the main driving force behind this dynamic competitive development. Other key factors are the absolute size of the German market, the level of the initial prices and the openness of the capital market. Quite a few firms have profited from the Neuer Markt and have acquired sufficient venture capital for their investment in the capital-intensive telecommunications sector.

2.1 Focus on fee regulation

These pro-competition sector-specific and external framework conditions were backed up by market-oriented regulation. Germany has a system of *dual regulation*: prices for voice telephony consumers on the one hand and charges for scarce resources on the other have to be authorised by the Regulatory Authority before they take effect. With this policy, Germany has gone beyond the EU requirements.

2.2 Charges for consumers

The approval of charges for final consumers takes place in the form of a price cap system. Here, several services are packaged together in a basket. The price level of the whole basket must be reduced within a set period by a certain productivity factor minus the inflation rate. In Germany, two baskets have been formed: one for private customers, and one for business customers. In the first price cap period of

1998/1999, the level of charges had to be cut by 4.3 percent (with an assumed productivity factor of six percent), and in the second price cap period, which concludes at the end of this year, by 5.6 percent.

2.2.1 Problems of implementation

The price cap approach was mainly introduced as an instrument to control price levels. The central issue is whether the dominant company tries to skim off profits from consumers via excessive prices. However, the price cuts by Deutsche Telekom since market liberalisation have easily exceeded the requirements. So there is a question mark over the justification for the price cap as a means to prevent excessive pricing by the dominant company. In contrast, options and packages have become a more popular way to offer services: these are of far greater significance in terms of their impact on competition and need to be dealt with in regulatory terms.

2.3 Fees for interconnection and special network access

The public debate has focused less on the decisions on customer charges and more on the stipulation of upstream charges. The main issue has been the rates charged for the interconnection of networks and unbundled access to the local loop.

In general, German law provides for negotiations between operators of public telecoms networks on agreements on interconnection. Only if they fail to agree on the conditions – including the charges – for interconnection does each party have the right to appeal to the Regulatory Authority. Alternatively, both parties can ask the Regulatory Authority for arbitration. The Authority must then impose interconnection on one or both parties at the latest ten weeks after the lodging of the appeal. The interconnection fees must be oriented towards the efficient provision of services, must not contain any surcharges, and must not discriminate or impede competition.

1. The interconnection charges in force so far have been based on an international market comparison. From 1 January 1998 to 31 January 2000, an average charge of 2.7 pfennigs per minute was in force. The current average rate is 2.04 pfennigs per minute. Both rates were distance-based and differentiated according to the time of day. From 1 June 2001, according to a decision by the Regulatory Authority dated 8 September 2000, element-based charging on the basis of an efficient two-level network, i.e. the normal fee system in other countries, is to be introduced. However, the instruction by the Regulatory Authority has been suspended in a ruling by the Münster Higher Administrative Court. The element-based rates were set on the basis of a cost model prepared by the Wissenschaftliches Institut für Kommunikationsdienste in Bad Honnef.

2.3.1 Problems of implementation

In the view of the Federal Ministry of Economics, the public debate has tended to attach excessive significance to the impact on competition of the absolute level of interconnection charges. The high initial prices charged by Deutsche Telekom and the possibility to select a carrier for each call has unleashed a competitive dynamism here which could not have arisen from low interconnection charges alone.

Also, only very few carriers still have to pay the most expensive interconnection fees in Germany. Even though German law on telecommunications does not require any construction of infrastructure, some firms have invested in the establishment of infrastructure and have in many cases rendered themselves independent of Deutsche Telekom at long-distance network level. A comparison of

the interconnection fees which are actually paid is therefore much more meaningful than a comparison of formally stipulated rates.

2.4 Fees for the unbundled local loop

In addition to the setting of the interconnection price, the debate about greater competition in the telecommunications sector has also centred on the Regulatory Authority's decision on fees for unbundled access to the local loop. The Regulatory Authority (in fact, still the Federal Ministry for Posts at the time) stated that as of 1 January 1998 – earlier than the other liberalised EU countries – there was a general entitlement for the non-incumbents to unbundled access to the local loop, and it subsequently set a price for this service. The right to unbundled access to the local loop was confirmed by the highest court in April 2001.

The charges were initially set for the period up to 31 March 2001. Since that date, and for the period up to 31 March 2003, the charges for leasing the local loop have been cut by roughly five percent. This places Germany in the middle of the international rankings. In Germany, city carriers have now hired more than 300 000 local loops from Deutsche Telekom.

2.4.1 Problems of implementation

The stipulation of cost-oriented charges has proved extremely difficult. Whilst competitors in urban areas base their calculations on lower costs, Deutsche Telekom does not regard the rates stipulated as covering its costs, since they do not cover the average costs. Further areas of dispute between Deutsche Telekom and its competitors have included appropriate interest payments on capital and the level and scope of the attributable overheads.

2.5 Line sharing

In the light of an EU regulation, the incumbents must enable joint access to the local loop. This basically permits non-incumbents to offer telephone customers of Deutsche Telekom a broad-band Internet connection via a DSL line. In a decision from March 2001, the Regulatory Authority stipulated that Deutsche Telekom must make a corresponding offer to the competitors. Fee rates have yet to be set.

2.6 Preconditions for more competition on Internet access

Two regulatory decisions have placed the non-incumbents in a better position regarding the provision of Internet access. Firstly, the Regulatory Authority made it possible to provide complete services to customers. Since then, Internet users have concluded contracts only with Internet service providers, who in turn pay the relevant telecommunications costs directly to the carriers. In this way, they have been able to offer their customers Internet access at a single price. Since November 2000, Deutsche Telekom has also been obliged to grant its competitors a flatrate for unmetred access. The variety of prices to be found in Germany has helped to ensure that the growth in the number of Internet users was more dynamic last year than in the USA, Britain or France.

2.7 Even more important in future: the correct market definition

The regulatory approach taken in Germany is that, in general, only dominant companies are regulated. Against the background of increasing competition and a concomitant differentiation of the markets, and in view of international mergers and alliances, it is becoming more important to define the market precisely. Otherwise, the intention of the legislator to remove the telecoms market from sector-specific regulation, and to subject it to general competition law as soon as sector-specific instruments lose their justification, will have no effect. The Regulatory Authority has now presented a concept on the application of market definition procedures and the ascertainment of a dominant position, and has launched intensive public consultations.

3. Central problem: a lack of competition in the local network

As on the other regulated telecommunications markets, the implementation of competition in the local loop is the greatest challenge. However, this is not due to a lack of regulation. In Germany, the legal and regulatory preconditions for greater competition exist both in voice telephony and in Internet access. The obligation imposed on the dominant company to grant unbundled access to its local loop, and the admission of resellers to the market, give the competitors the opportunity to offer alternatives to the telephone service of Deutsche Telekom. At the same time, the obligation to introduce a flatrate for unmetred access and the obligation to permit line sharing have created good preconditions for more competition in narrow-band and broad-band Internet access.

In addition to competition-oriented regulation, therefore, the stance taken by the competitors which are active or potentially active on the local loop level is a key factor in the creation of competition at local level. It can be assumed that the establishment of alternative communication technologies (broad-band cable, powerline, WLL, UMTS) will sharply increase the potential competitive pressure. In addition to offering a reasonably priced alternative, however, the competitors must also succeed in establishing themselves on the market with an attractive product range.

4. Transition to competition

The German Government’s long-term goal is an institutional shift from sector-specific regulation to general competition law – but only once functioning competition without sector-specific intervention is assured. The existing regulatory framework has already laid the foundations for this step through its use of the market definition prescribed by competition law and its rules on the dominant position. In the medium term, the Government believes there are indications of possibilities for a partial reduction of the sector-specific regulation. A revision of the current regulatory framework is envisaged in 2003.

IRELAND

1. Introduction

This document has been compiled by the Irish Competition Authority and Office of the Director of Telecommunications Regulation (ODTR). The structure of the document is as follows. Section 2 outlines the legislative and regulatory background. Section 3 describes the regulation of access and interconnection and focuses on access rights, interconnection charges, the ODTR's dispute resolution role, the relationship between interconnection charges and retail prices and incumbent behaviour. In Section 4 the concept of significant market power (SMP) is examined. Finally, Section 5 deals with competition concerns, dealing first with initiatives from the ODTR, the Competition Authority and finally private initiatives.

2 Legislative and Regulatory Background

2.1 Derogations

In 1996, the EC decided to complete the liberalisation of the telecommunications market in Member States by January 1998 but allowed some member States, including Ireland, to apply for derogations. Ireland sought and was granted the following derogations:

- full liberalisation of voice telephony and the associated public telecommunications networks by 1 January 2000;
- international interconnection of mobile telephony networks by 1 January 1999; and
- provision of alternative infrastructure for liberalised services by 1 July 1997.

Further liberalisation took place in 1997 with the adoption by the Minister for Public Enterprise of regulations dealing with alternative infrastructure provision, removal of monopoly on provision of satellite-based telecommunications services and the supply of liberalised telecommunications services over cable TV networks. In 1998, the Interconnection, Licensing and Leased Lines Directives were all transposed into national law.

The Minister made the decision in May of 1998 to end the derogations early and to introduce competition from 1 December 1998. The decision to end the liberalisation derogations was largely driven by the fact that telecommunications is a necessary input to the world class, high-tech industrial base that Ireland has succeeded in attracting. Ireland had engaged in a huge effort to upgrade its telecommunications infrastructure (through digitalisation) during the 1980s. The necessary regulations were subsequently adopted to allow these derogations to end.

2.2 The EU Agenda

The EU agenda of regulatory reform has two focuses: *1)* liberalisation and the opening of domestic markets to competition; and *2*) harmonisation of the conditions of access in Member States to public telecommunications networks, i.e. Open Network Provision (ONP). In Ireland, therefore, regulatory reform has concentrated on liberalisation, as well as adopting the ONP framework.

2.3 The ODTR

Regulation was separated from ownership with the establishment of The Office of the Director of Telecommunications Regulation (ODTR) under the Telecommunications (Miscellaneous Provisions) Act, 1996. The Director, Etain Doyle, took up her functions on 30th June 1997. These functions consist of the implementation of national and EU legislation that facilitates the policy agenda of regulatory reform and liberalisation of the sector. Such independent regulation has enabled both domestic and overseas firms to compete on a level playing field in the Irish telecommunications market. It has also made regulation more explicit and transparent.

Up until 1999, Telecom Eireann held 75 percent ownership of Dublin's local monopoly cable TV network and service provider (Cablelink), when it was obliged to sell its stake by the Government. It also has full ownership of Eircell, Ireland's largest mobile phone network and service provider, though the recent decision to sell the mobile division to Vodaphone should be noted. Telecom Eireann was privatised in 1999 (hence the name change to *eircom*) in the form of a public share offering. *eircom* remained a vertically integrated company and as such EU Directives imposing vertical accounting separation have played a significant role in effectively regulating the company.

2.4 Licensing

Liberalisation has occurred at all levels of the vertical chain in Irish telecommunications. Although there has been some alternative provision of value added services since 1992, it largely began in 1997 with a provision for alternative infrastructure providers to enter the market and compete with Telecom Eireann. Voice telephony was fully liberalised on 1 December 1998. Accompanying this has been a clarification of the legal and regulatory conditions for access to *eircom*'s network by competing downstream firms. A licensing regime acts as a screening device to ensure that entrants satisfy minimum efficiency and quality standards. There are now 76 licence holders, which indicates the potential for effective competition to develop in the market. The time periods for issuing basic and general licences stand at 4 and 6 weeks respectively.

Entry has necessarily been restricted (as in all countries) to the mobile communications market due to the scarcity of spectrum. The third mobile licence was issued in January 2001 after lengthy court proceedings. The ODTR will soon announce details of the competition for 3G licences.

The incumbents (*eircom* and Eircell) no longer have exclusive licences and have been authorised using a general license to ensure that all operators are on an equal footing. Both eircom and Eircell's licence, however, contain additional regulatory obligations (aimed at conduct) that are triggered by the possession of Significant Market Power in the fixed and interconnection markets, respectively. These conditions adhere to the principles of non-discrimination, transparency and cost-orientation of tariffs and are designed to ensure that abuses of the position of market power are prevented. At the downstream level, price controls are imposed on *eircom* in the form of a price cap on a basket of services that are not yet considered competitive. The cap requires *eircom* to reduce the overall price of this basket of goods by eight percent (CPI-eight percent) every year until 2002. While benefiting users, the three-year lag between

reviews allows *eircom* to sustain (at least in the short-term) the benefits from cost reductions, over the required eight percent, in which it has successfully invested, providing good incentives for productive efficiency. The extent to which effective competition in the market has developed is illustrated by three facts:

- *eircom* exceeded its requirements for price cap compliance (by four percent) in 1997/98;
- the incumbent, in response to new entrants, has recently introduced per second billing after the minimum fee has been incurred;
- international voice services were removed from the price cap in 1999.

2.5 Local Loop Unbundling

The Director has cleared the way for implementation of local loop unbundling by recently setting interim prices for access and has directed changes to *eircom*'s Reference Access Offer[1]. While there has been an LLU reference offer available from *Eircom* since the due date of 31 December 2000, this was incomplete and non-compliant in several respects. Local Loop unbundling has the potential to increase significantly the range of competitive services available to businesses and consumers.

2.6 Other Issues

The ODTR has commenced a number of processes that are concerned with regulating quality and is currently involved in collecting information as part of the Measuring Licensed Operators Performance Programme (MLOP).

In order to enhance competition, the ODTR has imposed measures such as non-geographic and geographic number portability, carrier pre-selection in the fixed network together with mandating number portability in the mobile sector.

Universal service obligations exist, whereby all customers pay the same price for connection (and other basic services) regardless of the cost of provision. *eircom* is currently designated as the USO provider. Where the ODTR determines that there is a net cost to eircom and that cost is an unfair burden for eircom, it may consult with the industry on the appropriate funding mechanism.

3. Regulation of Access and Interconnection

3.1 Access Rights

The Interconnection Directive (Directive 97/33/EC) established a regulatory framework concerning interconnection of telecommunications networks including harmonisation of conditions for interconnection of and access to public telecommunications networks and publicly available telecommunications services. The Irish transposition of the European Communities (Interconnection in Telecommunications) Regulations, 1998, is S.I. No. 15 of 1998.

Regulation 2(1) of the Interconnection Regulations defines interconnection as

…" the physical and logical linking of telecommunications networks used by the same or a different organisation in order to allow the users of one organisation to communicate with users of the same or another organisation, or to access services provided by another organisation"

Organisations entitled to interconnection are defined in Regulation 4(2) as

"organisations which are authorised pursuant to the Act of 1983, and which provide all or any of the following:

(i) a public telecommunications network,

(ii) voice telephony services,

(iii) a public mobile telephony network,

(iv) a public mobile telephony service, or

(v) leased lines to users' premises,

An organisation in any of these classes:

(a) shall have a right to negotiate an interconnection agreement with any other organisation in any of the classes specified in paragraph (2), and

(b) when requested by any other organisation in any of the classes specified in paragraph (2), shall have an obligation to negotiate an interconnection agreement with that organisation."

Regulation 8(7) of the Interconnection Regulations states:

"An organisation obliged to offer to provide interconnection shall publish a reference interconnection offer and shall re-publish the offer where there is any change made and shall notify the Director as to the manner in which such information is published, and it shall include the elements identified in Annex IV as appropriate."

The obligation to publish a reference offer pertains only to an operator with SMP in the fixed market. There is no corresponding obligation in the mobile market for the publication of a RIO. In relation to the fixed market, the published Reference Interconnect Offer (RIO)[2] details the regulated services under which access and interconnection is provided. New services are added to the RIO on an on going basis. The RIO is, therefore, frequently updated to reflect new services, price offerings and specific directions by the Director.

In the ODTR Document 00/31 – eircom's Reference Interconnect Offer Decision Notice D7/00,[3] the Director issued a decision that –

"eircom shall develop a standard process for the development and introduction of new interconnection services and elements, including standard documentation and time scales. A Service Level Agreement (SLA) should be drawn up to support the timeframe for the

introduction of new interconnection services. In making its proposal eircom shall seek the views of industry and shall take due regard of the comments received."

Interconnect and access services are negotiated on a case-by-case basis in line with European and national obligations with appropriate intervention from the Director. Disputes relating to mobile interconnect or requests for access can also be referred to the Director's Office for resolution.

3.2 Interconnection Charges

Access and interconnection in both the fixed and mobile market can be regulated by the Director both ex-ante and ex-post in line with the powers afforded to her under ONP Directive 98/10/EC and the Interconnection Directive 97/33/EC. The Irish transposition, The European Communities (Interconnection in Telecommunications) Regulations, 1998, S.I. No. 15 of 1998, provides for intervention whereby:

"The Director may in relation to interconnection agreements:

(a) set conditions which the Director may specify as a condition precedent to the conclusion of an interconnection agreement in the areas listed in Part 1 of Annex VII which said conditions shall be published by the Director in accordance with regulation 15"

and regulation 10(3) states:

"The Director may, from time to time, intervene on his or her initiative, and shall intervene if requested by any party concerned, in order to specify issues which shall be included in an interconnection agreement or to lay down specific conditions to be observed by one or more parties to such an agreement and the Director may direct that those issues or conditions be included in the interconnection agreement and it shall be an offence to fail to comply with a direction of the Director under this paragraph."

Operators with SMP are obliged to ensure that their interconnection rates are cost-orientated in line with the Interconnection Directive 97/33EC. The Director's role is to ensure that such operators fulfil these obligations and all appropriate steps are taken to ensure compliance. In relation to interconnection tariffs, the Regulations 8(3), 8(4) and 8(5) state that:

"An organisation imposing a charge for interconnection shall ensure that charges for interconnection shall follow the principles of transparency and cost orientation imposed by the Directive.

Where a dispute or a difference arises in relation to a charge for interconnection and the Director intervenes under regulation 10(8), the burden of proving to the Director that charges are derived from actual costs (including a reasonable rate of return on investment) shall lie with the organisation providing interconnection to its facilities.

The Director may direct an organisation to justify its charges for interconnection and, where appropriate, shall direct that charges be adjusted in cases where an interconnection charge does not comply with paragraph (3)."

Regulation 8(10) specifically deals with retrospection for tariff charging:

> "Where an organisation adjusts the reference interconnection offer and the Director subsequently directs the organisation concerned to implement changes to the adjusted offer in accordance with this regulation, the changes required by the Director may be retrospective in effect to the date of introduction of changes in the reference interconnection offer by the organisation concerned".

Regulation 8 (12)(a) of SI 15 of 1998 states:

> "an organisation providing interconnection shall ensure that charges for that interconnection shall be sufficiently unbundled so that an applicant is not required to pay for anything not strictly related to the service requested…"

In the ODTR Document 00/31 – eircom's Reference Interconnect Offer Decision Notice D7/00.[4] The Director stated:

> "In order that OLOs can compete on an equal footing with eircom retail, eircom should provide a full list of unbundled interconnection products (e.g. network products and interfaces that support retail products) within its RIO. The level of unbundling should be the same as that offered to its retail division or subsidiaries, i.e. any elements that are offered on a stand alone basis to an eircom subsidiary or retail division should be listed and priced based on cost of provision. The Director suggests that this full list of interconnect elements, along with charges, be included as an annex in the RIO. This list should be updated at least twice per year. She further suggests that each service schedule in the RIO should include a list of the interconnection elements used to provide the service.
>
> She believes that eircom should notify OLOs of the introduction of a new interconnection service (or interconnection element) giving OLOs the notice required for OLOs to order this new service and have it delivered by eircom at the same time as eircom's retail business first utilises the service. This will ensure a level playing field between eircom retail and OLOs."

Specific cases involving complaints from other operators where interconnection prices may have been used in an anti-competitive way are addressed in Section (5) below. These sections outline specific price-squeeze complaints and price monitoring processes used by the ODTR.

3.3 Dispute Resolution

The ODTR published its formal dispute resolution procedures in September 1999.[5] The Director operates in the context of the obligations imposed on her by the harmonising legislation of the European Union, in particular, the European Communities (Interconnection in Telecommunications) Regulations, 1998[6], the European Communities (Leased Lines) Regulations, 1998[7] and European Communities (Voice Telephony and Universal Service) Regulations, 1999[8]. In addition, disputes between undertakings concerning issues contained in Regulation (EC) No 2887/2000 of the European Parliament and of the Council of 18 December 2000 on unbundled access to the local loop shall be subject to the national dispute procedures established under the Interconnection Directive.

Since September 1999, 48 inter-operator disputes have been submitted, bringing a total of 59 disputes lodged with the ODTR to date. The majority of disputes concern interconnection-related issues. Such examples include Internet access, Number Translation Codes, interconnection rates, and delivery of circuits. The interconnection regulations provide that the Regulator take steps to resolve disputes within six months.

> "In the event of a dispute between organisations in relation to interconnection, the Director shall, at the request of either party, take steps to resolve the dispute within six months of that request being made and the resolution of the dispute (in these Regulations referred to as a "finding" of the Director) shall represent a fair balance between the legitimate interests of both parties".

The ODTR's dispute procedures aim to resolve disputes within a shorter timeframe (approximately 12 weeks). On average, the ODTR has taken 13 weeks to successfully conclude the disputes it has received, many being resolved much quicker than this timeframe. The ODTR acknowledges the role that less formal procedures may play in resolving disputes. In particular, the ODTR is prepared to help mediate between parties where it is felt that such a course of action would be more appropriate in reaching a more speedy resolution to a dispute.

The ODTR is empowered to impose sanctions where a licencee fails to comply with its licence obligations. In the disputes to date, however, the ODTR has not imposed sanctions as disputes have been satisfactorily and effectively resolved by alternative means, i.e. determinations, warning letters. All decisions of the Director under her dispute resolution procedures may be appealed, in the first instance to the Director who will assign a new Case Officer to review the case in its entirety. The rights of the parties under the internal appeals procedures of the ODTR are without prejudice to any right either party possesses to appeal this finding to the High Court pursuant to Regulation 20(4) of the Interconnection Regulations or any other ground of appeal provided for under domestic or European law.

Where a dispute is considered of a nature that may affect other parties or the market generally the Regulator may publish a summary of the dispute on the ODTR website and invite comments from interested parties. To date, the ODTR has conducted two public consultations on foot of a dispute.

3.4 Interconnection Charges and Retail Prices

The regulator reviews interconnection prices individually. Access/interconnection prices differentiate between peak and off-peak but do not differ according to the use to which the access service is put (i.e. whether access is the purpose of providing value added services, Internet services, call-termination for mobile services and so on). Interconnect charges must be cost based. The interconnect regulations explicitly limit the ability of the incumbent to discriminate in its access/interconnection prices.

Call conveyance charges currently have a one part linear form (per minute). A two part (per call & per minute) linear form is to be introduced from the beginning of October 2001. There are no discounts for quantity. Peak, off peak and weekend differentials are calculated based on the time of day differentials ("gradients") in eircom's retail prices.

A number of costing methodologies can be used to review costs underlying interconnection charges, including fully allocated cost (FAC), either current or historic and LRIC. The primary basis used for setting interconnection prices is long run incremental cost average including a regulated rate of return based on the operators weighted average cost of capital (WACC). Average cost or fully distributed cost is used as an interim measure for new services.

In order to ensure that the regulated firm charges itself the same access/interconnection prices as its rivals, costs are assessed at network component level. The incumbent's costs per call (e.g. local or national) are lower than its rivals' services over the incumbent's network because more network elements are utilised. The incumbent must offer wholesale service parallel to any retail service.

3.5 Incumbent Behaviour

The Director under her powers in the European Communities (Interconnection in Telecommunications) Regulations 1998 (SI No 15 of 1998) ("the Interconnection Regulations") regulates non-discriminatory behaviour by operators designated with significant market power in the relevant markets.

Specifically, Regulation 7(1) of the Interconnection Regulations states:

"The organisations specified in regulation 4(2)(a) which have been designated by the Director as having significant market power pursuant to regulation five shall:

(a) adhere to the principle of non-discrimination imposed by the Directive with regard to interconnection offered to others and:

(i) shall provide similar conditions in similar circumstances to interconnected organisations providing similar services, and

(ii) shall provide interconnection facilities and information to others under the same conditions and of the same quality as they provide for their own services or those of their subsidiaries or partners."

Any organisation that fails to comply with this obligation will be guilty of an offence. Company audits and separated accounts from SMP operators are used to ensure that all qualifying organisations do comply with the obligation.

Regulation 8 (12)(a) of SI 15 of 1998 states:

"an organisation providing interconnection shall ensure that charges for that interconnection shall be sufficiently unbundled so that an applicant is not required to pay for anything not strictly related to the service requested…"

In the ODTR Document 00/31 – eircom's Reference Interconnect Offer Decision Notice D7/00,[9] the Director stated:

"In order that OLOs can compete on an equal footing with eircom retail, eircom should provide a full list of unbundled interconnection products (e.g. network products and interfaces that support retail products) within its RIO. The level of unbundling should be the same as that offered to its retail division or subsidiaries, i.e. any elements that are offered on a stand-alone basis to an eircom subsidiary or retail division should be listed and priced based on cost of provision. The Director suggests that this full list of interconnect elements, along with charges, be included as an annex in the RIO. This list should be updated at least twice per year. She further suggests that each service schedule in the RIO should include a list of the interconnection elements used to provide the service."

She believes that eircom should notify OLOs of the introduction of a new interconnection service (or interconnection element) giving OLOs the notice required for OLOs to order this new service and have it delivered by eircom at the same time as eircom's retail business first utilises the service. This will ensure a level playing field between eircom retail and OLOs.

Specific cases involving complaints from other operators where interconnection prices may have been used in an anti-competitive way are addressed below in Sections 5 where specific price-squeeze complaints and price monitoring processes used by the ODTR are outlined.

4 SMP in the Telecommunications Sector

Concerning the Irish case, firms designated as having SMP in a relevant market are subject to additional regulatory obligations such as cost orientation but no distinction is made between dominant and non-dominant firms. However, under Section 7 of the Telecoms (Miscellaneous Provisions) Act, 1996, a price cap can be applied to a dominant firm. The Telecommunications Tariff Regulation (Modification) Order, 1999,[10] which amended the previous 1996 Order, applies to a basket of telecommunications services provided by *eircom*.[11] These services are as follows:

- the provision of telephone exchange lines and Integrated Services Digital Network lines (Rental);
- telephone exchange lines and Integrated Services Digital Network connection and take-over (Connection);
- local dialled calls;
- trunk dialled calls;
- operator calls;
- directory enquiry calls; and
- payphone calls.

The price cap is independent of the ONP framework. Unlike the ONP framework there are no legal market definitions incorporated in the price cap provisions. The price cap provisions apply only to markets where the firm is dominant as illustrated above. The ODTR when making a determination on the relevant market and dominance, has followed standard competition principles.

5 Competition Concerns

This section deals with competition concerns looking in turn at those initiatives taken by the ODTR, the Competition Authority and the section closed by looking at the important precedents that have arisen from private initiatives.

5.1 ODTR

Antitrust-style market definition has not tended to be a feature of investigations under telecoms law, since the markets referenced in telecoms law are defined on a legal and technical rather than economic basis.[12].

The ODTR has constant contact with market participants, and when a matter of potential concern arises it tries first to with the issues in an informal manner. In many cases, such informal intervention has proved sufficient. For example, in late 1999 eircom informed the ODTR of a planned discount scheme. Elements of this scheme appeared to be potentially damaging to competition, and eircom agreed to alter it substantially before it was introduced.

However, ODTR also has formal powers for investigation and dispute resolution. Some of the more important cases are listed below.

5.1.1 Possible Unfair Cross-Subsidisation and Discrimination by the Incumbent

The ODTR conducted two investigations of possible unfair cross-subsidisation by the incumbent during the past five years. One concerned eircom's frame relay business, which other market participants alleged was receiving discriminatory pricing and unfair cross-subsidisation. The ODTR directed that eircom charge its frame relay business the same charges for access to its network as it applied to external parties,[13] but did not find that the business was being unfairly cross-subsidised.

A second investigation was carried out into possible unfair cross-subsidisation of eircom's Internet affiliates: eircom Net and Indigo, which accounting information showed to be making substantial losses. After a detailed investigation, no evidence of a licence breach was found.

5.1.2 Possible Unfair Pricing by the Incumbent

Entrants have made repeated allegations that eircom sets certain of its retail prices and discounts at a level that places a price squeeze on service based competitors. The main services where these questions have been raised are 1891 dial-up Internet access and weekend national calls. In each case the ODTR has established that the price charged by eircom exceeded the fully allocated historic cost, as represented by the interconnection charge applied to OLOs. However, the ODTR has instituted an internal price monitoring process to ensure that any future changes to prices or discounts can be scrutinised promptly.

During the 1999 review of the price cap on eircom, a competing directory assistance provider argued that eircom's retail price for directory assistance was far below the cost of provision and likely to damage competition. The scope for eircom to increase this price was at that time constrained by the price cap. Evidence from eircom's separated accounts suggested that the service was heavily loss making, and in the new price cap from 1 January 2000, the Director removed the sub-cap on directory assistance charges. Early in 2000, after a legal challenge by the competing operator, eircom substantially increased the retail price of its directory assistance service.

5.1.3 Alleged Discrimination by Incumbent in Provision of Facilities to OLOs

ODTR found eircom in breach of the telecoms regulations and its licence in respect of delivery of interconnection circuits to an OLO, although no evidence was found to support the linked allegation that eircom had given preferential treatment to its own affiliates in delivery of such capacity.[14] eircom remedied the breach without further action being taken.

eircom's performance in delivering leased lines and interconnection capacity to OLOs has been a matter for continuing concern and intervention.

5.2 Competition Authority

5.2.1 Backround

The legal provision under which the Competition Authority of Ireland deals with such cases is Section 5 of the Competition Act, 1991, as amended.

The role of the Competition Authority in Ireland may differ from that of many other OECD countries, and since this affects the amount of information, a brief outline of this role may be appropriate.

While the competition authorities of many other OECD countries are enabled to impose administrative sanctions for breaches of the competition law, this is not the case in Ireland. The Competition (Amendment) Act, 1996, gave the Authority the power to enforce the prohibitions in the Competition Act, 1991. However, because of the separation of powers doctrine enshrined in the Irish Constitution, the Irish Competition Authority is not empowered to impose such sanctions directly. Rather, the Authority's function is to investigate and take cases in the courts against undertakings or individuals that it believes are in breach of the Act. These cases may be taken in the High Court for breaches of both Section 4 and Section 5, and in the Circuit Court for breaches of Section 5 only.

For example, following an investigation into an alleged breach of the prohibitions in Section 4 of the 1991 Act, the Authority may ultimately take civil proceedings in the Irish High Court; such proceedings may seek injunctive relief in respect of the practice/behaviour complained of, and/or a declaration by the Court of wrongdoing on the defendant's part. The burden of proof in such cases is the normal one of balance of probabilities. The Authority, for its part, may be satisfied to settle such a case prior to formal judgement on the basis of admissions of wrongdoing and undertakings to discontinue the practice complained of. Section 5 cases maybe brought in either the Circuit Court or the High Court.

The 1996 Act provided that breaches of the prohibitions in the 1991 Act were potentially criminal offences. The burden of proof in such criminal cases is the normal one of "beyond reasonable doubt". If the Authority wishes to pursue a criminal action against the perpetrators of an alleged breach of the Competition Acts, it essentially has two options.

It may refer the results of the investigation to the Director of Public Prosecutions, an independent state official who has the sole responsibility for enforcing the criminal law in the courts on behalf of the people of Ireland. The Director of Public Prosecutions may decide to press indictable charges against the defendant in the Circuit Criminal Court. Sanctions include fines and imprisonment.

Alternatively, it is open to the Authority itself to pursue a summary prosecution in a lower court (the District Court); the permissible sanctions are commensurably lower.

It follows from this that the Authority's role in competition law enforcement differs from that of authorities in other jurisdictions in that it does not itself make determinations and impose fines. When the Authority's investigation into a complaint or practice is completed, it may decide to take enforcement action. The matter is then *sub judice* and the Authority is largely precluded from public comment on the issue until the courts have heard the case, for fear of prejudging the outcome of the trial. If the Authority decides not to take enforcement action on foot of a complaint, the practice is simply to write to the complainant stating its decision, without giving reasons. This is because anyone aggrieved by an anti-competitive agreement, decision or concerted practice, or an abuse of dominance, has a right of private action in the courts under Section 6 of the Competition Act, 1996. Any stated reason by the Competition Authority for not taking action (for example, that it did not consider the behaviour to be abusive, or that insufficient evidence existed) might deter an individual from taking such action where it might otherwise

be warranted. The Authority does, in some cases, include a brief summary of the matter in its Annual Report, where the case is of sufficient interest.

The Authority must also take into account the confidentiality provisions of the Competition Acts. Paragraph 9 of the Schedule to the 1991 Competition Act provides that

> "No person shall disclose information available to him by virtue of the powers of obtaining information conferred by this Act or by any other enactment conferring functions on the Authority or through being present at a meeting of the Authority held in private."

Exceptions are made for a communication made by a member of the Authority in the execution of his functions under the Act, and for the disclosure of information in court proceedings. The Act lays down penalties, including imprisonment, for breach of the confidentiality provisions. In summary, therefore, the information that the Authority can provide is limited both by the requirement not to prejudice possible court actions (taken either by itself or by an aggrieved party) and by the confidentiality provisions of the Act. Within these constraints, however, we have tried to provide the fullest possible information.

5.2.2 Issues

The following section summarises the main issues that the Authority has had to deal with in relation to telecommunications since the last review.

5.2.2.1 Length of Mobile Contract[15]

In 1996 the Authority received a complaint concerning Eircell's inclusion in its standard rental terms of a provision that customers were obliged to pay a minimum of 12 months' rental. This, it was alleged, was designed to prevent customers switching to Esat Digifone, a new entrant, which had been granted a licence by the Government to provide a second mobile telephone service throughout the State.

On the basis of Esat's projections of the likely development of the market over the next five years, it appeared to the Authority that a large part of the potential market was still open to Esat. In addition, even customers who had a one-year tie to Eircell were not prevented from switching to Esat for a full year following its launch as the agreements had already started prior to the launch. The Authority took the view that while Eircell was certainly trying to retain customers in expectation of the entry of a new competitor, this was a rational business response, and it did not appear that the number or period of time for which customers were committed was such that it would prevent Esat from entering the market.

The Authority took the view that it would not take further action on foot of the complaint at the time and informed the complainant accordingly.

5.2.2.2 Retailers of Mobile Phones

The complainants alleged that a mobile phone company was abusing its dominant position in the mobile telephony market by subsidising its own sales arms to a greater extent than independent agents. Mobile operators distribute their products through their own direct sales arms and through agency agreements with independent retailers. It appears that subsidising the price of the handsets is a long-standing practice in mobile phone retailing. Various complaints alleged that the mobile phone company was "poaching" customers from agents by bypassing them and offering better deals through their own sales organisations.

In considering this matter, the Authority noted that the law as then interpreted by the courts did not require operators to provide wholesale airtime to anyone other than a licensed operator. This prevented independent service providers and retailers from becoming a source of competition in the mobile market. While cross-subsidising mobile phones might impact on the profitability of independent retailers, the customer would benefit in terms of lower mobile phone costs. The retailers, who were not prevented from becoming dealers of competing operators, nor from selling the products of competing operators simultaneously, freely entered into agency agreements. While the actions of the operators might be "squeezing" the margins of retailers, the indications were that this represented operators competing aggressively for network connections, albeit through the subsidisation of mobile phones rather than through usage rates. The net result was that consumers benefited.

5.2.2.3 Provision of Telecommunications Infrastructure

In 1999 the Authority received a complaint relating to an agreement between a telecoms operator and CIE, the national State owned monopoly railway company, whereby CIE would lay the operator's cables along its tracks in return for consideration (including access to capacity on the cables). The complainant argued that CIÉ controlled nation-wide wayleave rights and that consequently it was in a unique position from the point of view of a network operator which wished to achieve rollout of a national network in as short a time as possible. While, theoretically, other infrastructures were also available, these were not equivalent to CIÉ's since their owners could not grant wayleave rights and since the Esat/CIÉ telecommunications network, unlike others, was substantially in place. The complainant argued that CIE was in a dominant position in the provision of telecommunications infrastructure in Ireland.. The Complainant argued that CIÉ's effective refusal to negotiate for the use of its cable network was an abuse of its dominant position.

The arrangements between CIÉ, Esat and Iarnród Éireann, which were the subject of this complaint, were also notified both to the Commission and to the Authority. When an agreement is notified to the Authority, the Authority must decide whether to issue a certificate stating that, in its opinion, on the basis of the facts in its possession, the notified agreement does not contravene Section 4(1) of the Competition Act, 1991. If the agreement does contravene Section 4(1), the Authority may nevertheless grant a licence under Section 4(2) of the Competition Act to the agreement provided that certain conditions are met. These provisions are the equivalent in domestic law of Articles 81(1) and 81(3) of the EU Treaty.

In its Decision No. 577 of 28 January 2000 (see Appendix II), the Authority issued a certificate to the agreement (i.e. found that it was not restrictive of competition) after it had been modified to reduce the period of exclusivity during which other operators could not sign a deal with CIE. The reasoning followed that of the Commission in the Telecom Development case.

The Authority has no power to certify whether or not an agreement breaches Section 5, nor to licence any breach of Section 5. Nevertheless the Authority's decision on the notified agreement concluded that access to CIÉ/Iarnród Éireann's property in order to lay cable could not be regarded as an essential facility.

5.2.2.4 Local Loop

In the latter part of 1998 the Authority wrote informing Telecom Eireann (now eircom) that unless certain practices concerning access to the local loop were terminated, it would institute proceedings under Section 6 of the Competition Act. Following a refusal by Telecom to discontinue the behaviour involved, the Authority issued proceedings in April 1999 alleging that Telecom Eireann's refusal to grant

unbundled access to the local loop constituted an abuse of a dominant position contrary to Section 5 of the 1991 Act. Since the matter is *sub judice*, the Authority is precluded from further comment.

However, in subsequent developments Regulation 2887/2000 of the European Parliament and of the Council on unbundled access to the local loop ('the LLU Regulation') required *eircom* to publish from 31st December 2000, and keep updated, a reference offer for unbundled access to their local loops and related facilities. Charges are to be set on the basis of cost orientation. Additionally, Article 3(2) of the LLU Regulation required *eircom*, from 31st December 2000, to meet reasonable requests from beneficiaries for unbundled access to their local loops and related facilities under transparent, fair and non-discriminatory conditions. Requests may only be refused on the basis of objective criteria, relating to technical feasibility or the need to maintain network integrity.

5.3 Private Action

The following is an important recent decision that has been made in relation to issues of dominance in the mobile sector.

5.3.1 Meridian Communications Limited and Cellular Three Limited-v-Eircell Limited

In July 1999 Meridian Communications Limited and its subsidiary Cellular Three Limited applied for a number of orders against Eircell, including one restraining it from terminating a volume discount agreement with Meridian. Miss Justice Carroll refused the injunction on the grounds that Meridian was required to have a licence to offer mobile telephony services to the public. The decision was appealed to the Supreme Court but the Supreme Court declined to adjudicate and instead directed that the case should have an early trial. The case commenced on the 18th January 2000 and was heard by Mr. Justice Higgins. In his decision of the 4th April Mr. Justice Higgins decided that Meridian did not need a licence to engage in the business which they carry on and also that Eircell were not obliged to renew the a volume discount agreement with Meridian. However, at the close of the trial Mr. Justice Higgins was also asked to rule on two additional issues: (*i*) whether Eircell was jointly dominant with the other operator in the market (Digifone); and (*ii*) whether Eircell was dominant on its own.

5.3.1.1 Joint Dominance

On the 4th October 2000 Mr. Justice Higgins ruled that Eircell were not jointly dominant in the market:

> "In my view there is no prima facie evidence of a joint dominance as required in the legal sense. Even if one accepts that the structure of the market is sufficient to infer economic links, there has been no evidence that the parties in the present case adopt uniform conduct, or the same conduct on the market.
>
> The Plaintiffs submit that I can infer that the joint conduct consists in pricing above the competitive price. In my view that is not sufficient. Indeed the concept of 'conscious parallelism', seems to be fundamentally different to the concept of acting as a unit or as one in the market place, which is a requirement for joint dominance. The uncontradicted evidence is moreover that there is a level of competition between Eircell and Digifone." *[Judgment 4.10.00, p22*]

Just before stating this conclusion Mr. Justice O'Higgins had said that Meridian relied on the EU's *Access Notice* on Telecommunications (para 79). This said that the European Commission did not consider that either economic theory or European law implied that explicit agreements were:

> "legally necessary for a joint dominant position to exist. It is a sufficient economic link if there is the kind of interdependence which often comes about in oligopolistic situations."

Also, the Judge said, Meridian relied on the decision of the European Court of First Instance in *Gencor v Commission* [case T-102/96] in which the court had said [paras 273-6] that;

> …"there is no reason whatsoever in legal or economic terms to exclude from the notion of economic links the relationship of interdependence existing between the parties to a tight oligopoly..."

However, the judge went on, according to Mr. Paul Sreenan SC (for Eircell) the *Gencor* case was "a classic merger analysis" and

> "was therefore an *ex ante* analysis, in contrast with the decisions in courts in relation to breaches of Article 86 [now 82] of the Treaty. He submits that the case is not authority for the proposition that the possibility of tacit collusion is sufficient, to establish joint dominance, but merely states that from the merger point of view it is legitimate for the regulatory authority to use the mergers regulations to prevent it happening prospectively."

The judge said: "It is the plaintiffs' case that joint dominance is equated with tacit collusion." He then quoted, from the transcript, a passage in which Meridian's economist said that he could not accept that proposition. The judge then gave his decision on joint dominance.

5.3.1.2 Dominance

On the 5th of April 2001 Mr. Justice Higgins ruled that Eircell was not dominant on their own in the market:

> "Taking into account all the evidence in the case the Court is not convinced that Eircell can act to an appreciable extent independently of its competitors and ultimately of consumers. The plaintiffs have failed to prove on the balance of probabilities that Eircell are dominant. It follows that any claims based on the abuse of dominance and hence breach of Section 5 of the 1991 Competition Act must fail. *[Judgment 5.4.01, p66]*

On the issues of Eircell's high market share (60 percent), the small number of competitors, barriers to entry and barriers to expansion Mr. Justice Higgins said:

> " The high market share of Eircell, the low number of competitors, the high barriers to entry are all factors which would tend to indicate its dominance in the market place. However, when examined in the context of this particular case, the position appears to me to be different. The significance of the high market share is greatly diminished having regard to the rapid decline in the market share in a relatively short period. The importance to be attached to the small number of competitors is significantly reduced by (*a*) consideration of the regulatory regime, which is the background to the market (*b*) by the size and strength of the competitor and (*c*) in light of the knowledge that new licenses are to be awarded. The high barriers to entry as a factor pointing towards dominance must be looked at in the context of the low barriers to expansion, which are characteristic of the market with which we are concerned herein. In that context the weight to be

attached to high barriers to entry as an indicator of dominance is much reduced." *[Judgment 5.4.01, p24]*

On the evidence of Eircell's alleged high prices:

"The analysis of the various reports and data produced or referred to in the evidence is inclusive and unsatisfactory." *[Judgment 5.4.01, p44]* (p.44)

Moreover the Judge found that,

…"Even were it accepted that Irish mobile telephony charges are high, it is difficult to know what significance should be attached to that, because of the many different possible reasons for such price which Professor Cave at p.50 of his report called "*a host of factors that are unrelated to competition*"." *[Judgment 5.4.01, p45]*

NOTES

[1] ODTR Decision D8/01 available on the ODTR's website http://www.odtr.ie/

[2] Eircom published document available on the eircom.ie website

[3] Available on the www.ODTR.ie website

[4] Available on the www.ODTR.ie website

[5] Decision Notice D11/99 " Dispute Resolution Procedures", Document Number ODTR 99/53 available on the ODTR website www.odtr.ie.

[6] S.I. 15 of 1998

[7] S.I 109 of 1998

[8] S.I. 71 of 1999

[9] Available on the ODTR website www.odtr.ie.

[10] S.I. No. 438 of 1999.

[11] The order placed a price cap on *eircom*'s tariffs requiring an overall downward movement in tariffs which was required, as a minimum, to equal the annual percentage change in the Consumer Price Index for the year preceding the relevant year ("ΔCPI") minus 8%.

[12] For example, Annex 1 of Directive 97/33/EC.

[13] ODTR document 99/68

[14] ODTR document 00/75

[15] Source: Competition Authority Annual Report, 1996

ITALY

1. Regulatory Developments since 1995

Since the mid 1990s, the reform of the Italian regulatory framework in telecommunications has been driven by the implementation of the European Directives into national legislation[1]. By 1998, the reform was completed and the National Regulatory Authority (denominated Autorità per le Garanzie nelle Comunicazioni) started enforcing the new rules through successive resolutions and directives[2].

At that time the telecommunication sector was characterised by the presence of the incumbent operator, Telecom Italia ("TI"), in the markets of fixed services, and of the two mobile operators, Telecom Italia Mobile ("TIM"), a subsidiary of TI, and Omnitel Pronto Italia ("OPI"), which offered GSM services[3]. Licences to operators which wanted to develop fixed networks have been granted since the beginning of 1998 and by summer 1998 a third mobile licence was granted to Wind (a joint venture between Enel, France Télécom and Deutsche Telekom).

The general licensing regime established in Italy is inspired by the principles of European law. Therefore, no limitation has been introduced in the number of licences that can be granted, except in the case of scarce resources. The procedure for granting mobile licences, which require the allocation of frequencies to the licensee, is set in the Regulation and requires a public tender. In 1998 and 1999 the third and fourth licence have been assigned through a beauty contest procedure, while for the granting of the five UMTS licences, the Government preferred to adopt a two step procedure, combining a public tender and an auction, innovating the traditional selection procedure through a more competitive approach. The Competition Authority, which was consulted (and then followed) on the procedure to be adopted for the UMTS licensing process, stressed the need to introduce a market mechanism for the allocation of scarce resources in order to enhance the transparency and efficiency of the entire procedure.

The licensing regime introduced in 1997 was modified by the NRA after the remarks of the European Commission which criticised the requirement for a performance bond and the obligation to invest in research and development. The supply of fixed voice telephony services is still subject to an individual licensing system, whereas Internet services can be provided under an authorisation regime. In spite of the fact that a licensing regime has been introduced through the new regulation, special concessions are still attributed to TIM and OPI. According to Telecommunication Regulation, the existing concessions are being modified by the NRA and converted into licences.

After the privatisation of TI (1997), the Italian Government retained only a 3.5 percent stake of TI's capital and the *golden share* rights, according to which it can block an acquisition of TI in case of risk for the vital interests of the State and the public. The Government did not exercise its powers of *veto* when Olivetti acquired the majority stake of TI in 1999 and there is no general restriction on foreign ownership of TI's stake.

TI is not subject to any special regulation except that concerning operators with significant market power in the telecommunications markets. Law 249/97 introduced a special provision that prohibited TI from entering the terrestrial broadcasting market due to its concession in the telecommunications market[4]. TI controls also Stream, a cable TV service provider which does not own an independent network, but leases cable capacity from TI in order to distribute its services. A cable operator

can provide telecommunication services under the authorisation and licensing regime, provided that accounting or corporate separation is assured. Corporate separation must be assured also in the case of provision of telecommunication services by public utilities (in the sector of electricity, water and gas).

TI's retail prices have always been regulated: until 1999 there was a tariff approval regime under which TI was obliged to have its tariff changes approved by the regulator. In 1999 a price cap system was introduced, which considered a general basket of services including connection fees, monthly rental, local, long distance and international tariffs and a price cap formula as (RPI - 4.5 percent). In addition to the general basket, three specific sub-baskets were defined for residential voice telephony services (RPI - 2.5 percent), access charges (RPI + one percent) and local calls (RPI + zero percent). The introduction of sub-baskets and the specific formula for access charges (RPI + one percent) was intended to be a tool for tariff rebalancing and an incentive for the incumbent to increase its efficiency[5]. At the end of 1999, TI introduced per second billing with a call set-up charge.

Mobile operators are not subject to any specific regulation in fixing final prices, but they have to notify the introduction of each new tariff to the regulator. In order to avoid concerns for competition between TIM's analogue service (provided only by TIM) and the GSM service, analogue service prices cannot be lower than those for GSM services. Until the end of 1998, fixed to mobile prices could be set by mobile operators in order to provide them with sufficient funds for the developing of mobile networks. At that time, TIM and OPI were charging very high prices for fixed to mobile calls and when the regulation changed, splitting the price in a retention share for the fixed operator and a termination rate for the mobile operator, they both set identical termination rate (see following paragraph on the antitrust case I/372, *TIM/OPI fixed mobile tariffs*).

In the Italian regulatory framework universal service, defined as a minimum set of services of a specified quality, which is available to all users independent of their geographical location at an affordable price, is limited to PSTN related services. In this way the economic burden on new entrants that contribute to universal service funding is minimised. TI is currently the unique operator which has Universal Service Obligations (USOs), even if in theory each licensed operator could bear USOs as part of its licence conditions. The methodology adopted for the calculation of USOs net costs is based on long run forward looking incremental cost and it is up to the NRA to determine whether such cost represents an unfair burden for the supplier. In that case other mobile and fixed operators may be required to contribute to an *ad hoc* fund. In 1999, for the first time, TI's three major competitors, TIM, OPI and Infostrada, were required to contribute to the universal service fund on the basis of their turnover.

2. Access Regulation

Interconnection and access agreements between operators can be regulated on a commercial basis, while specific regulation based on European law principles is imposed on operators notified with significant market power (SMP). In case an agreement is not reached within a fixed time period, the parties may appeal to the regulator. Currently, TI, TIM and OPI are notified as operators with significant market power in the interconnection market and this situation is reviewed each year by the NRA.

In the case of SMP operators, ex-ante regulation implies that a Reference Interconnection Offer is published each year and approved by the regulator, charges must be transparent and cost oriented, interconnection conditions must be non-discriminatory and the operators must keep separate accounting between interconnection services and other network services.

On the basis of the regulation adopted in 1998, interconnection is allowed to facility based operators and to service resellers without any discrimination. In the short term, this service-based competition model allows new operators to get into the market without the significant investment in network facility, whereas in the longer term there could be no sufficient incentive for the building of alternative networks. Currently, TI is the only operator obliged to publish a Reference Interconnection Offer, whose charges are calculated using a fully distributed accounting model (FDC) based on current costs. Interconnection charges must in addition meet the EU "*best practice"* guideline and TI must justify any positive difference between its charges and the European best practice. In fact, TI's local charges are determined using the FDC model while long distance charges are in line with European best practice. The 1998 regulation introduces a Long Run Incremental Cost model (LRIC), but its use has been postponed to the validation of TI's accounting by the NRA. Interconnection charges are differentiated between peak and off-peak hours and into local, single transit and double transit. Fixed charges are based on the number of interconnection points activated. No discrimination is made according to final services provided through interconnection (voice, data, Internet access, etc.), nor to final clients served (residential or business).

Other structural measures that have been taken in order to improve competition include the introduction of carrier preselection (for local calls, long-distance calls and fixed to mobile calls), number portability for fixed numbers and the unbundling of the local loop[6]. Carrier preselection became operational on January 2000, while unbundling of the local loop and number portability have entered a trial phase in October 2000. At present 530 local switches of the incumbent (covering 35 percent of its customers) are open to these services and the launch of a full commercial service is due by October 2001.

3. Dominance

The concept of significant market power was initially introduced in the European legislative framework as a tool to determine whether an operator should be obliged to a specific *ex-ante* regulation. The application of the European Directive definition to different markets showed that the concept of significant market power is progressively getting closer to the concept of dominant position emerging from the Court of Justice case-law.

As already mentioned, in Italy the NRA notified TI as operator with SMP in the fixed telephony market and in the interconnection market and the two major mobile operators, TIM and OPI, in the mobile services and in the interconnection markets. Since the notification of an operator who has a market share lower than 25 percent, as in the case of OPI in the interconnection market, implies a deeper evaluation by the NRA in order to verify the effective market dominance, also the NCA was involved in the decision process and was asked for a specific advice by the regulator.

4. Competition Concerns and Competition Law Enforcement

During the first phase of liberalisation (1995-1997), when the process of implementation of European Directives was still in its first stage, the NRA had not yet been established. During those years, the main competition concerns in the field of telecommunications were those related to abusive behaviour by TI, such as the refusal to supply leased lines to the new entrants and the discrimination in the offer of liberalised services to competitors and final clients. The National Competition Authority addressed these issues through three investigations: A/71, *Telsystem/Telecom Italia* (10.1.1995) and A/178, *Albacom/Telecom Italia - Dedicated Circuits* (30.10.1997), in which the incumbent’s practices, consisting in the refusal to supply leased lines to new entrants, were considered as an abuse of a dominant position; A/156, *Albacom/Telecom Italia - Servizio Executive* (29.5.1997), in which Telecom’s discrimination between its final clients and competitors in offering a liberalised voice service at discounted rates was evaluated as an abuse designed to hamper market access.

In the meantime, the NCA played an active role in advocating the swift implementation of European directives into national legislation. In particular, the Authority expressed its opinion regarding the rules governing licences and permits, mobile telephony services, frequency allocation, network interconnection and telephone numbering.

Concerning the rules governing licensing, the Authority pointed out that, according to Community law, companies should not be required to fulfil any further obligations than those necessary to meet "fundamental requirements" (network security, data protection, etc.); in particular, the right to provide telecommunications services should only be subject to general authorisation requirement, and the obligation to obtain a specific individual licence should be limited only to undertakings subject to particular rights or duties, or to cases of scarcity of resources. In 1999, AGCOM amended the 1997 Regulation on licensing and cancelled the obligation to provide a performance bond in the case of licences granted for the installation of infrastructure.

With regard to mobile services, in 1997 the Authority expressed its hope that the draft Regulation provide for the prompt definition of a new national frequency allocation plan, in order to allocate adequate frequency bands for the introduction of new services based on digital technologies. Since that year and in the occasion of the following tender for the award of new mobile licences, the Authority pointed out that it would be desirable to introduce a pricing mechanism for the assignment of frequencies in order to optimise the allocation of scarce resources. In the case of UMTS licensing, Italian Government adopted a hybrid methodology, combining a first step based on competitive tender criteria and a second step based on auction rules.

With regard to interconnection between networks, the Authority observed that, in order to comply with Community guidelines, any company being interconnected should only be required to pay the charges for the services actually used, therefore guaranteeing equality of treatment for large customers and competitors. In relation to the level of connection charges contained in the reference interconnection offer presented by TI, the Authority expressed its view that it appeared to be unjustifiably high and that, pending a verification of the incumbent’s costs, the reference to the Community benchmarks should not be adopted in such a way to produce competitive distortions to the advantage of either the dominant operator or its competitors. Currently the incumbent’s interconnection charges are still verified using a “benchmark” criterium, but AGCOM has recently introduced a current costs methodology which should be applied to TI’s cost accounting.

Given the extreme importance of number portability between the networks of different operators, in order to guarantee the creation of suitable competitive conditions, the Authority urged the Government to introduce in the legal framework specific obligations on network carriers. July 2001 is the current deadline for the introduction of number portability for mobile operators.

Starting from 1999, the NRA started to operate on the basis of the new regulatory framework. Initially, the NRA main effort was to complete the regulatory framework. With regards to the implementation of measures aimed at ensuring a competitive environment, the NRA notified the two main mobile operators, TIM and OPI in so far as they were found to hold a significant power in the markets for mobile services and for interconnection. After the notification, the regulator started to control mobile termination rates: a maximum price is applied to mobile termination rates and the two notified operators (TIM and OPI) are allowed to differentiate their termination rates in peak and off-peak

Given the central role that competition principles play in the governing of the telecommunication sector, the NRA and the NCA are required by law to consult each other on decisions concerning telecommunication operators. Therefore, the NRA has to be consulted by the NCA on each decision concerning anticompetitive behaviour or concentration between telecommunication operators. On its part,

the NCA was called several times to express its opinion to the NRA on matters like competitive entry conditions in the mobile communications market, identification of the undertakings with significant market power, interconnection charges and structure.

As regards more specifically violations of competition law, in the last few years in a number of cases TI was found to have abused of its dominant position by impeding access to the nation wide TLC infrastructure to the detriment of competitors in the final markets. Furthermore the NCA evaluated two mergers, one between TI and SEAT, a firm operating in the editing of telephone directories, and the other one between TI and Cecchi Gori Communications, which controls two free to air TV channels TMC and TMC2. Concerning mobile services, in 1999 the Authority found that Tim and OPI, at the time the only two operators in the market, had violated the provision on restrictive agreements, having adopted a common and agreed pricing policy with respect to fixed to mobile charges.

The definition of relevant markets is one of the most important steps of the investigations conducted by the NCA: with respect to services provided via the fixed telecommunication network, the NCA defined as relevant (upstream) markets the supply of capacity transmission over fixed lines and of local telecommunication infrastructures as well as the downstream markets of Internet access services and telephone directories. On all these markets TI was found to hold a dominant position.

In the case conducted against TI for abusive behaviour in the Internet markets (Case A/255, AIIP/Telecom Italia, decision of 28 January 2000), the relevant markets considered were those of supply of network capacity to Internet Service Providers and supply of dial up connections to Internet. The investigation showed that the PSTN operator, in force of the availability of network connections, had acquired very rapidly a significant market share in all markets connected with the Internet network. In fact, TI was the unique provider at a national level of dial up and dedicated connections, used by Internet Service Providers to provide their clients with access to the Internet network, and was able to become rapidly the main operator in the market for final Internet services.

Concerning the violations of competition law, in the AIIP case the behaviour of TI, consisting in practising predatory pricing for the supply of Internet access services and discriminating between its commercial division and competitors in the supply of network capacity, was considered as an abuse of the dominant position in the upstream markets for network facility and public telephony service.

As in the case of most PSTN operators, the dominance of TI in the supply of capacity transmission and local connections creates major competition concerns. In the last case conducted by the Competition Authority against TI (A/285, *Infostrada/Telecom Italia - ADSL technology*, decision of 27 April 2001), it was found that the lack of substitutability of fixed local loop connections was at the basis of TI's persistent monopoly in the supply of broadband data transmission services. Moreover, given the delay in the approval of a regulation on unbundled access to local loop, the only way for new entrants to serve final customers was through a PSTN local connections. In Italy there are no fully developed cable networks and the application of wireless technology to local loop connections appears at the moment at a too early stage of development to be adopted in the commercial distribution of Internet services.

In the ADSL case, it was demonstrated that TI, abusing of its dominant position in the upstream market for local loop, adopted a commercial strategy in order to strengthen its dominance in such market, during a phase of liberalisation of the market for infrastructure, and to reinforce its position in the supply of data transmission services and Internet services. The enquiry showed that TI's strategy was planned through a series of commercial actions:

- supply of data transmission and Internet access services based on ADSL technology: TI launched a commercial offering of ADSL services by late 1998 and planned at the same time a wholesale offering that discriminated between its commercial division and competitors;

- supply of local connections: TI refused to provide competitors of analogue direct circuits on base-band without any technical justification, with the explicit aim to exclude them from the market of local connection and from those of data transmission services;

- TI launched its offering of data transmission services based on x-DSL and SDH technologies to retail customers without providing a wholesale offering to competitors, which could not access to the public switched telephone network because of the incomplete implementation of unbundling of local loop regulation.

The described behaviours of TI were considered by the Competition Authority as violation of competition law because they were adopted by an undertaking which has a dominant position in the market for local infrastructure and in that of data transmission services and which has therefore a special responsibility in maintaining a sufficient degree of competition in such markets. In its decision, the Competition Authority concluded that the violations put in place by TI involved serious obstacles to the development of competition on data transmission services and Internet access services markets, given also that such behaviours continued for at least 12 months, and sanctioned them by the imposition of a fine of three percent of specific turnover.

The bottleneck effect created by the concentrated availability of fixed local connections was also at the core of the analysis developed by the Competition Authority in the merger between TI and two TV channels, TMC and TMC2 (Case C/4158, *Telecom Italia/ Cecchi Gori Communications*, decision of 23 January 2001). The merger was evaluated paying specific attention to the possible overlap between the activities of the two groups. The markets specifically affected by the operation were the following: *i)* free to air TV broadcasting market*; iii)* Internet access services market; *iv)* advertising on telephone directories market*; vi)* on-line advertising market*; vii)* the to-be-developed markets originating from the convergence of telecommunication and broadcasting. The dominance of TI's in the access to the local telecommunication network gave rise to serious concerns for the development of a competitive environment in the newly developing markets. Therefore the Authority conditioned the clearance of the concentration to the fact that TI would allow competitors to have access to its network facilities at a local level (civil infrastructure) in order to install the local loop connections necessary for the provision of interactive services.

Indeed it was found that, given the dominance of TI in the upstream market for the *supply of local loop connectivity*, the effect of the acquisition of a TV operator such as TMC could limit the development of services based on the convergence between telecommunication and broadcasting, because of the practical impossibility for new entrants to duplicate a network infrastructure for the access to clients at a local level.

As already mentioned, in Italy, unlike in most of other OECD countries, where the regulatory framework allows fixed operators to determine the price of fixed-mobile calls, the fixed to mobile charges where fully under the control of the mobile operators. Therefore, until the Communications Authority's Ruling of December 22, 1998 came into force, TIM and OPI were allowed to set prices for fixed-mobile calls, subject only to the obligation to inform the regulator about their price schemes. Given this regulatory conditions, the Competition Authority defined the market for call termination to the mobile networks as part of the mobile service.

The investigation originated from the observation that the two operators, while competing strongly on the prices of mobile calls, maintained the fixed to mobile charges at an agreed common high level. Indeed in the course of 1998 TIM/OPI repeatedly met and exchanged information on the supply to the public of the fixed-mobile segment of the service. The two companies also pursued their objective of keeping the revenue from fixed-mobile communications at a high level by attempting jointly to eliminate arbitrage based on international triangulation in fixed-mobile traffic, given the high value of the peak-time fixed-mobile prices applied to the public. These conducts were considered by the Authority a restrictive concerted practice, but such a conclusion was repealed by the Consiglio di Stato, the Italian supreme administrative court.

On the other hand the Authority found, and the Consiglio di Stato confirmed, that in January 1999 TIM and OPI restricted competition, by agreeing to raise simultaneously the fixed to mobile charges, issuing to this respect a common communication. Finally the Authority considered a serious restriction of competition, and the Consiglio di Stato confirmed, the agreement by TIM and OPI to raise the cost of the interconnection between their respective networks to the highest of the costs that the two mobile operators had separately declared to the Ministry for Communications as applicable to the winner of the bid for the third DCS 1800 technology mobile license. The increase in this cost, during the start-up phase of the new competitor Wind, and before the negotiations for interconnection with the new fixed network operators took place, appeared designed to create barriers to access to the market by producing higher costs for new entrants.

NOTES

[1] Most of the European Directives were implemented into the Italian legal framework through the D.P.R: n. 318/97, so-called Telecommunication Regulation.

[2] Established by law n. 249/97 and operational since July 1998, when the regulation for organisation was adopted.

[3] TIM is still offering also TACS services and is allowed to operate an analogue network until 2005.

[4] Blocking a recent attempt by TI to acquire the control of a TV operator TMC, this provision was considered by the NRA as binding. The decision by the NRA has been challenged in Court by TI and the first level Court has ruled in favour of TI.

[5] For 2001 the sub cap formula for access charges has been set at RPI+six percent.

[6] The unbundling decision has also mandated the temporary provision of unbundling of fibre optic access (for 3 years).

JAPAN

1. Regulatory Reform in Japan's Telecommunications Sector

1.1 Entry controls

In accordance with the effectuation of the WTO Basic Telecommunications Agreement in February 1998, Japan abolished the foreign capital ownership restriction for Type I Telecommunications Carriers (except for NTT and KDD). In July 1998, the Kokusai Denshin Denwa (KDD) Law was abolished, and currently, NTT is the only carrier with a restriction on foreign capital ownership. (A bill on the amendment of the NTT Law has just been submitted to the current Diet in order to deregulate the foreign capital ownership restriction for NTT from under 1/5 to under 1/3.) Since then, 44 foreign Type I Telecommunications Carriers have set up business in the telecommunications market as of March 2001, and 342 Type I Telecommunications Carriers have joined the market as of April 1, 2001.

1.2 Structural policies

To promote fair and effective competition in Japan’s telecommunications market, Nippon Telegraph and Telephone was reorganised in July 1999 by the establishment of NTT East, NTT West Corp. and NTT Communications. Under a single holding company (Nippon Telegraph and Telephone). Under the reform, the goal of the holding company has been set to ensure the provision of telecommunications services by the regional companies and to promote fundamental research into telecommunications technologies. The new regime has set the goal of NTT East and West to provide local telecommunications services and has allowed NTT Communications to enter international telecommunications markets as a private company.

1.3 Access to scarce resources

Pursuant to the Reference Paper of the WTO Basic Telecommunications Agreement, Japan has implemented procedures for the allocation and use of scarce resources, including frequencies, numbers and rights of way, so that they are carried out in an objective, timely, transparent and non-discriminatory manner.

1.3.1 Frequencies

Japan abolished the foreign ownership regulation on radio stations for telecommunications services in 1998, based on the WTO Basic Telecommunications Agreement.

Furthermore, in order to ensure objectivity and transparency, the Government of Japan makes inquiries to the Telecommunications Council and the Radio Regulatory Council, and invites public comments when establishing criteria and plans for frequency allocation and assignment.

1.3.2 Numbers

In August 1999, Japan drew up rules to introduce Number Portability.

Accordingly, six carriers have started to provide service provider portability for free phone numbers one after another since March 31, 2001. In addition, carriers expect to launch services for service provider portability for geographic numbers in the near future.

1.3.3 Rights of Way

When a Type I Telecommunications Carrier plans to set up utility poles and conduits and the likes by using others' land etc., or when it plans to use utility poles and conduits etc. set up by public utilities, it may request negotiations with relevant parties on the creation of the right to use the land, etc., subject to the authorisation of the Minister of Public Management, Home Affairs, Posts and Telecommunications. Where negotiations fail to be conducted or to come to an agreement, the Type I Telecommunications Carrier may apply to the Minister of Public Management, Home Affairs, Posts and Telecommunications for its arbitration on the use of the land, etc.

In order to facilitate the procedure for Type I Telecommunications Carriers to use the utility poles and conduits set up by public utilities, such as NTT East and West and electricity utilities, a guideline has been established which stipulates the procedure for using utility poles, conduits, etc. owned by public utilities. This guideline has been in force since April 1, 2001. This guideline would work as the criteria for the Minister of Public Management, Home Affairs, Posts and Telecommunications whether to grant authorisation for negotiation and arbitration.

1.4 Universal service or non-commercial service policies

Universal service is currently ensured by the NTT Law, which stipulates that the provision of telephone service throughout the country is an obligation for the three NTT companies (NTT holding company, NTT East and West).

The scope of universal service covers telephone services, which include subscriber telephone services, public telephone booth services and emergency call services.

Universal service is ensured by cross subsidisation from profitable to non-profitable areas within NTT East and West. However, if competition within profitable areas in the local telecommunications market, increases, then the finance for cross-subsidisation will become difficult. Therefore, a revision of this system, where the three NTT companies are the only ones having the obligation of providing universal service, has become very necessary.

The government has just submitted a bill on the amendment of the Telecommunications Business Law to the Diet, which stipulates the shift from a system where NTT East and West bear the entire cost burden for providing universal service to a system (or Universal Service Fund) where other Telecommunications Carriers also bear appropriate costs.

1.5 Expansion of measures promoting fair competition by sector specific laws on telecommunications

Based on the significance of the telecommunications sector, such as its essential facilities and technological innovations, and that the market is changing rapidly, and also bearing in mind the present situation, where the telecommunications sector is in a transitional period of transforming from a monopolistic market to a competitive one, it is necessary, for promoting fair competition in the telecommunications sector, not only to enforce general competition law, but also to impose necessary regulations from the viewpoint of ensuring public and user benefits and take measures in a full, expeditious and flexible manner by sector-specific law on telecommunications.

In other words, in addition to removing the problem ex post, it is necessary to make explicitly clear rules, such as interconnection rules, and actively establish a competitive environment, so that telecommunications carriers are able to predict the outcome ex ante.

In line with this, a bill on the amendment of the Telecommunications Business Law and others, which includes rules to prevent and eliminate any anti-competitive behaviours by specific major telecommunications carriers which are assumed to have market power and reviews on the relevant rules on interconnection, has just been submitted to the Diet.

In Japan, Type I Telecommunications Carriers installing bottleneck facilities have the obligation to establish, announce and authorise articles of interconnection, to unbundle local loop, to collocate, to disclose accounts, and so on.

2. Rules on Interconnection and Access

2.1 Obligation for interconnection

A Type I Telecommunications Carrier shall agree to requests for the interconnection of telecommunications facilities from other telecommunications carriers with the telecommunications facilities owned by the latter.

A Type I Telecommunications Carrier: a carrier which provides telecommunications services by establishing telecommunications circuit facilities.

In addition, the Minister of Public Management, Home Affairs, Posts and Telecommunications may order the Type I Telecommunications Carrier to start or reopen negotiation with other telecommunications carriers on the matter of interconnection. Where, in spite of one's proposal to enter into an agreement to interconnect telecommunications facilities between telecommunications carriers, the other party does not accept entering into negotiation or where such negotiation fails to come to an agreement, one may apply for arbitration to the Minister of Public Management, Home Affairs, Posts and Telecommunications.

2.2 Obligation for access

Unless a Type I Telecommunications Carrier has a relevant reason, it may not refuse to provide telecommunications services within its service area.

The Minister of Public Management, Home Affairs, Posts and Telecommunications may order a change in the tariff if the telecommunications services stipulated under the tariff are deemed inappropriate and, as a result, user benefits are harmed.

2.3 Articles of interconnection

A Type I Telecommunications Carrier installing bottleneck facilities shall establish articles of interconnection agreement which set forth interconnection charges and conditions of interconnections in terms of the interconnection of such bottleneck facilities with telecommunications facilities of other telecommunications carriers, and shall obtain authorisation from the Minister of Public Management, Home Affairs, Posts and Telecommunications. The same shall also apply where such articles of interconnection agreement are to be amended.

The Minister of Public Management, Home Affairs, Posts and Telecommunications may order to apply for notification to change the articles of agreement, if the interconnection charges and conditions of interconnection are inappropriate, and as a result, public benefit is impeded.

2.4 User Charges

Due to the promotion of competition, user charges in Japan have been deregulated gradually, and as of today, all fees for services no longer have to be approved and are simply reported to the Ministry of Public Management, Home Affairs, Posts and Telecommunications. The "price-cap system" is applied to fees for major services provided by NTT East and West [voice transmission service (telephone service and ISDN), leased circuit service.]

Under the price-cap system, the Minister of Public Management, Home Affairs, Posts and Telecommunications sets a basic fee index. As long as a carrier sets its basic fee for a given service at or below this basic fee index, the notification requirement holds and there is no need for the fee to be authorised by the Ministry of Public Management, Home Affairs, Posts and Telecommunications.

Basic Fee Index

	NTT East	NTT West
Voice transmission service (telephone and ISDN services) (Telecommunications Fee)	97.8	97.8
Subscriber line sub-basket within the voice transaction service (Basic Fee, etc.)	100	100
Leased line circuit service (Leased Line Fee, etc.)	97.6	97.6

Under specific circumstances, the Minister of Public Management, Home Affairs, Posts and Telecommunications may order a change in user charges.

2.5 Cost of interconnection charges

The Long-Run Incremental Cost (LRIC) methodology is used to calculate the interconnection charges for terminals and repeater switching system and local and repeater transmitting system, etc. Historical Cost methodology is used to calculate the interconnection charges for terminal circuit transmitting system, etc. (The cost of interconnection charges calculated using the Historical Cost methodology equals the sum of the following: cost for controlling and operating designated facilities, equity cost, and tax on profits.)

3. Ensuring non-discrimination

Based on the tariff stipulated in the Telecommunications Business Law, Type I Telecommunications Carrier access and access charges are non-discriminatory.

According to the Telecommunications Business Law, non-discrimination is one of the criteria for the Minister of Public Management, Home Affairs, Posts and Telecommunications to grant authorisation to Type I Telecommunications Carriers installing bottleneck facilities. In addition, according to specific interconnection agreements, non-discrimination is one of the criteria to grant authorisation to carriers other than Type I Telecommunications Carriers installing bottleneck facilities. Therefore, non-discrimination of Type I Telecommunications Carriers' articles of interconnection is ensured.

4. The Roles of Competition Law and Competition Authorities in the Telecommunications Industry

Japan has the Anti-Monopoly Act (AMA) that provides for general rules on competition that apply to all the business sectors including the telecommunications sector. And in accordance with the AMA, the Japan Fair Trade Commission (JFTC) has been established as an independent administrative commission. It is ensured that at its own discretion, the JFTC can take measures to enforce the AMA, implement competition policy and express its views on competition policy issues in any business fields, including activities of promoting competition. Japan has no competition authority that specialises in a certain business field.

The AMA is aimed at promoting fair and free competition, thereby assuring the interests of consumers and democratic and wholesome development of the national economy. Specifically, it prohibits private monopolisation that substantially restrains competition by controlling and excluding other businesses, unreasonable restraints of trade such as cartels and use of unfair trade practices that obstruct fair competition such as refusing to have business transactions with certain businesses, and regulates mergers that substantially restrain competition.

In the telecommunications sector, major service providers that have been present in the market for many years and were previously allowed to monopolise the market still exist as dominant forces. If these companies refuse or restrain new service providers' connections with their networks -- which is a prerequisite for market entry -- without proper reasons, it constitutes a violation of the AMA. And we believe that there is a high possibility that the dominant providers will engage in such practices. Therefore, it is important to take action in accordance with the AMA to prevent such practices in order to promote free and fair competition in the telecommunications sector.

Based on this recognition, the JFTC is in the process of drafting out and publicising guidelines for application of the AMA to the telecommunications sector that will provide specific examples, such as

blocking new market entry by refusing transactions on equipment indispensable for providing telecommunications services without proper reasons.

The government puts a high priority on further promoting the information technology (IT) revolution and regulatory reform. The JFTC is also required to take prompt and appropriate actions against AMA violations in the IT field. In response to requests from Japan and abroad, the JFTC established the "Task Force of IT Business and Public Utility Business" within its Investigation Bureau on April 11, 2001, in order to ensure fair and free competition in the IT-related sectors and public utility sectors.

5. Competition Concerns

Although markets in long-distance, international and mobile communications are competitive, when we focus on the revenues and the traffic, we find that NTT's regional companies continue to enjoy a de facto monopolistic situation in the local telecommunications market. Therefore, the most important competition concern is the full promotion of competition in the local telecommunications market. In order to establish new competition policies that could accurately respond to the needs for low-cost, high-speed and safe use of Internet and other telecommunications services, and to conform to the changes in the market environment driven by technological innovations, the Ministry of Posts and Telecommunications (the present Ministry of Public Management, Home Affairs, Posts and Telecommunications) inquired the Telecommunications Council of the "Desirable Pro-Competitive Policy in the Telecommunications Field for Promoting the IT Revolution" in July 2000, and as a result, the First Report was submitted in December 2000. Based on this Report, a bill on the amendment of the Telecommunications Business Law and other related laws has just been submitted to the current Diet. The following are some of the main points:

Promote competition between telecommunications carriers, by establishing rules for fair competition (including the establishment of asymmetrical regulations, introduction of a new system for ensuring the provision of universal service, and the establishment of Telecommunications Business Dispute-settlement Commission which would improve the procedure for dispute settlements among telecommunications carriers).

Allow telecommunications carriers to display imaginative and original ideas, by conducting deregulation, and enhance international competitiveness (by conducting deregulation for carriers that do not have market power, enlarging the scope of services provided by NTT East and West, and deregulating the foreign capital ownership regulations).

Promote the establishment of high-speed and broadband network infrastructure such as optical fibber networks (facilitation of the laying of cables).

REFERENCES
AMA violations in the telecommunications sector over the past five years

1. Legal measures

	Cases	Details	Category of the Act	Date
1	Tohoku Cellular Telephone Co.	Through its agents, the company regulated the prices of portable phones with the brand name of "Cellular," which its agents should indicate in advertising leaflets inserted in newspapers, and regulated the prices of its phones that retailers should indicate in such leaflets.	Dealing on restriction	1997/10/8
2	NTT DoCoMo	The company forced its agents to sell portable phones with the brand name of "NTT DoCoMo" to consumers at the same prices as those at which its own shops sold them.	Resale price maintenance	1997/11/18
3	Tokyo Digital Phone Co.	The company forced its agents and other retailers to sell portable phones with the brand names of "Digital Phone" and "J-Phone" to consumers at the prices it designated, and to indicate the designated prices at their outlets or in their advertising leaflets inserted in newspapers.	Resale price maintenance	1997/11/18
4	Tu-Ka Cellular Tokyo Co.	The company forced its agents and other retailers to sell portable phones with the brand name of "Tu-Ka" to consumers at the prices it designated, and to indicate the designated prices at their outlets or in their advertising leaflets inserted in newspapers.	Resale price maintenance	1997/11/18
5	Nippon Idou Tsushin Corp.	The company forced its agents as well as retailers that directly or indirectly bought portable phones with the brand name of "cdmaOne" from the agents to sell them to consumers in Ibaraki, Tochigi, Gumma, Saitama, Chiba, Tokyo, Kanagawa and Yamanashi prefectures at the retail prices that the company designated.	Resale price maintenance	1999/12/9

2. Warnings

	Cases	Details	Category of the Act	Date
1	Microsoft Corp. (Japan)	The company was suspected of lowering or offering to lower the basic software licensing fees to some personal computer manufacturing and sales companies on condition that they remove browser software developed by its competitors from their computers. Furthermore, it was involved in the conclusion of an agreement under which its parent company in the United States, Microsoft Corp., supplied its basic software to 11 major Japanese Internet service providers to help them solicit new subscribers in exchange for restraining their sale of browser software produced by its competitors.	Dealing on exclusion	1998/11/20
2	Microsoft Corp.	The company was involved in the conclusion of an agreement under which it supplied its basic software to 11 major Japanese Internet service providers to help them solicit new subscribers in exchange for restraining their sale of browser software produced by its competitors.	Dealing on exclusion	1998/11/20
3	Nippon Telegraph and Telephone East Corp.	The company was suspected of obstructing market entry by new DSL companies that wished to conclude an interconnection agreement with it to gain access to its telephone circuits, making it difficult for these companies to conduct smooth business activities, and placing them in an disadvantageous position in terms of competition.	Private monopolisation	2000/12/20

KOREA

1. Introduction

Korea's information and telecommunications industry has been advancing at a dazzling speed, thanks to the rapid spread of high-tech services following the development of information and telecommunications and the government's policy of introducing competition in the sector.

As a result, the information and telecommunication industry accounted for 22.2 percent of the nation's GDP in 1999, up from 7.2 percent in 1991.

Meanwhile, the competition authority is paying a growing attention to anti-competitive conduct emerging in the telecom market, as the past monopolistic structure is being transformed into a competitive structure after deregulation and the introduction of competition.

In addition, it is deemed that indirect regulation through the introduction of competition to promote the market functions is more desirable than direct regulation, since technology advances at a breath-taking speed.

In this light, the roles of competition and regulation authorities are pivotal to facilitate competition in the telecom industry, thereby increasing consumer welfare.

This paper looks at the market structure and regulatory regime of Korea's telecommunications industry, the division of roles between competition and regulation authorities, major regulatory issues, and recent competition issues. It concludes with a desirable policy direction to facilitate competition in the telecom sector from the competition policy perspective.

2. Market Structures in the Telecommunications sector

2.1 Classification of telecommunication services and markets

The Telecommunication Business Act (TBA), classifies telecommunication services into three categories:

- facility-based services: telecommunications services provided by installing and using telecommunications line facilities and notified by the Minister of Information and Communication in consideration of impacts on public interest and domestic industries and the necessity for stable delivery of services; examples include fixed line services such as local service, domestic and international long distance and leased line service, and wireless services such as cellular and PCS;

- special services: facility-based services delivered by making use of telecommunications line facilities of facility-based service providers; examples include web-phone, international call-back phone and voice resale;

- value-added services: telecommunications services other than facility-based services provided by leasing telecommunications line facilities from facility-based operators; examples include data communications and internet service.

These services can be broken down into meaningful relevant markets of local telephone service, long distance service, international telephone service, and mobile telephone service markets. This paper is structured into the analysis of these relevant markets.

2.2 Liberalisation of the telecommunications sector in Korea

Until 1980s, Korea's fixed line telephony market including the local service and domestic and international long distance service was monopolised by the government-owned Korea Telecom (KT), while the mobile market was dominated by the Korea Mobile Telecom. However, in 1990s, new players entered the markets following the government's active policy of introducing competition in the sector.

In 1997, Hanaro Telecom, Inc. was selected as another local phone service provider. From April 1999, competition was introduced in the market, though in the form of duopoly. In the domestic long distance market, Dacom Corp. and Onse Telecom Co. Ltd. were awarded licenses in 1995 and 1997, respectively, introducing competition in the market as well. Turning to the international long distance market, Dacom has been in operation since 1990 and Onse Telecom since 1996, bringing up the number of current market players into three.

The mobile telephony sector is the facility-based service market where competition is the most active. The Korea Mobile Telecom, a subsidiary set up by the Korea Telecom in 1988, enjoyed monopolistic status until 1994, when it was acquired by the SK Telecom. In the same year, Shinsegi Telecom, a cellular phone operator, entered the market, followed by three PCS providers in 1996.

As can be seen from above, competition is currently up an running in all telecom markets.

<Introduction of Competition in Korea's Major Telecom Service Markets>

1982:	Korea Telecom created (monopoly for local, domestic and international long distance services)
1990:	Beginning of duopoly for international long distance services (DACOM).
1994:	Beginning of duopoly for mobile services (SK Telecom, Shinsegi Telecom)
1995:	Decision to invite competition in the national long distance market (DACOM)
1996:	Award of new licences in the following areas: PCS (3), CT-2 (11), international telephony (1; Onse Telecom), radio paging (1)
1997:	New service providers licensed in following areas: local telephone services (1; Hanaro Telecom) and long distance (1;Onse Telecom)

3. Market Structure

Competition has been introduced in all major telecom sectors including fixed and mobile telephony sectors. Any firm meeting legal requirements can freely enter the market.

While competition in the local and domestic long distance service markets remains relatively weak, competition has been active in the international long distance and mobile service markets, resulting in substantial increase in consumer welfare such as reduced prices and improved services.

3.1 Local Telephone Market

Korea's local telephony market is currently duopolistic, with the state-controlled KT and Hanaro Telecom competing with each other. However, market competition is almost absent, as the KT dominates most segments.

As of July 2000, KT accounted for 99, 12 percent of the market share, based on the number of subscribers, with Hanaro Telecom a meager 0.9 percent. One year after the Hanaro's arrival into the market, the KT still enjoys monopoly in the local telephony market. This is because Hanaro Telecom's business strategies and goals focus on the delivery of internet services such as the Asymmetric Digital Subscriber Line (ADSL) and cable modem services rather than on local telephone service in competition with the KT. Even though Hanaro acquired the license in the local service market, local telephony is only a component of ADSL bundling service.

The ultimate reason behind Hanaro Telecom's negligent market share is that securing a subscriber base takes much time and requires high investment costs. In this respect, the Ministry of Information and Communication (MIC) introduced a new provision in the TBA in Jan. 2001 setting forth the mandatory access to subscription line of facility-based service providers to promote competition in the market. In addition, the MIC laid a foundation under the TBA for providing number portability under the TBA, which will phase in from 2003.

3.2 Domestic Long Distance Market

Korea's domestic long distance service sector was transformed from KT's monopolistic structure to a competitive structure when Dacom and Onse Telecom launched their operations in 1996 and Dec. 1999, respectively. This produced positive results on the part of users, bringing down prices and improving call quality.

However, the demand for domestic local distance service has been steadily shrinking, as users are increasingly shifting toward mobile phone services. This is because the price competitiveness of domestic long distance services is not so great as to outweigh the convenience offered by mobile telephony service (3A: Anywhere, Anytime, Any kind of).

As of June 2000, the KT held the largest market share of 88.2 percent, followed by Dacom with 9.6 percent and Onse Telecom with 2.2 percent. Since 1999, however, the KT's share has been declining, in favour of Dacom.

This changing market share seems be the result of carrier pre-selection system introduced in Nov. 1997 and differentiation strategies which prompted the shift in consumer demand.

However, marketing strategy grounded on price differentiation is bound to face limits, since excessive competition in the rapidly shrinking long distance market will produce no winner but only losers.

In addition, the interconnection fee is set too high compared to the level of call tariffs, which is restricting competition. Dacom and Onse Telecom are now demanding the reduction in interconnection fee, a guarantee of appropriate market share, etc.

3.3 International Telephone Market

This is the marketplace where competition is most intense among fixed telecommunications service markets. In addition to the KT, Dacom and Onse Telecom, more than 50 special service providers such as voice resale and web-phone entered the market after 1998, further accelerating price and other forms of market competition.

Thanks to the growth of Dacom and Onse Telecom, KT's market share is on the constant decline. As of June 2000, KT's market share reached 50.5 percent, followed by Dacom with 23.6 percent and Onse Telecom with 10.8 percent, based on sales revenue. The combined market share of 46 special service providers stood at 14.9 percent.

Price competition has been an important factor in the sharp increase in market share of special service carriers, since users in this market are particularly sensitive to call rates. Tariffs offered by special service providers are only half of those of facility-based carriers.

3.4 Mobile Telecommunication Services: Cellular and PCS

The mobile telecommunication service market has been growing explosively; subscribers in 1999 grew 66 percent compared to that of the previous year, while service revenues increased 71 percent.

In particular, after September 1999, subscribers of mobile service began to outnumber subscribers of local telephony service. As of February 2001, the number of mobile service subscribers stood at 27 million (in the case of local telephony service, approximately 22 million).

The sharp increase in the penetration of mobile telephony results from the reduced call rates and improved quality of service following the introduction of competition in the mobile phone market.

Stimulated by increased competition, mobile carriers have made constant efforts to accommodate the needs of consumers in a timely fashion, employing various means to attract subscribers such as dramatic rate cuts, huge advertising expenditure and developing a variety of additional services and tariff systems.

<Trend of SK Telecom's Service Charge (in Korean Won) >

	June `90	Feb. `96	Dec. `96	Sep. `97	June `98	July `99	April 2000
basic charge	27,000 ($20.8)	22,000	21,000	18,000	18,000	18,000	16,000 ($12.3)
(standard) per 10 sec (regular)	25	32	28	26	26	26	22
per 10 sec (discount)	18	23	20	18	18	18	16
per 10 sec (night)	18	23	20	18	18	13	11

There are currently five players in the market, including 3 cellular operators such as SK Telecom and 3 PCS providers, which all engage in cut-throat competition. As of Feb. 2001, SK Telecom was the No. 1 carrier with 40.9 percent market share, followed by KT Freetel with 20.3 percent, LG Telecom with 14.4 percent, Shinsegi Telecom with 12.6 percent and KT M.com with 11.5 percent.

In the May 2000 business combination case between SK Telecom and Shinsegi Telecom, the No. 3 player in the market, the KFTC granted a conditional approval after consultation with the telecommunications regulator, the MIC. This business combination will be explained in detail later.

Number of carriers in each market

	Local	Long-distance	Int'l	Cellular	PCS
1991	1	1	2	1	-
1991-95	1	2	2	2	-
1995-	2	3	3	2	3

4. Regulatory/Competition Institutions

The MIC, the Korea Communication Commission (KCC) under the MIC and the Korea Fair Trade Commission(KFTC), the competition authority, regulate the telecommunications sector. The MIC carries out the dual function of promoting and regulating the telecom industry, while the KCC has the authority to review the cases of offence of the TBA.

Meanwhile, the KFTC enforces its competition law against the telecommunications industry without exception. In some areas including the merger, business transfer, and access to essential facility, the MIC and the KFTC are required to undergo mutual consultation.

4.1 Ministry of Information and Communication and Korea Communication Commission

The MIC is responsible for telecommunication policy and regulation. Along with its regulatory functions in the telecommunication sector, the MIC has broad powers over the promotion of information and telecommunication industry, unlike many other regulatory bodies in the OECD that have a single task of enhancing consumer benefits. In that fair and transparent regulatory supervision requires that the

regulator distances itself from interested parties, there may be some concern that MIC's industry promotion role, while important, may have negative consequences on its regulatory functions.

The KCC is a body established under the Ministry with responsibility to consult on matters concerning fair competition among the telecommunication service providers, to protect the interests of users and to arbitrate in the disputes among service providers and between service providers and consumers. However, the KCC is not equivalent to other telecommunication regulators in Europe, the FCC in the US, or the CRTC in Canada. It is an integral part of the MIC and has no authority to take independent corrective actions. The ultimate authority lies with the Minister of Information and Communication, who renders final judgment on corrective measure to be taken, considering the review results of the KCC. The KCC's powers are indirect, based on its ability to undertake reviews and sanction individual abuses. As a result, it tends to be reactive rather than proactive, responding to complaints since it does not have the power to ensure that appropriate conditions and safeguards are in place for competition to develop.

4.2 Competition Authority: Korea Fair Trade Commission

The KFTC is the administrative body responsible for competition policy in Korea. The MIC has responsibility for anti-competitive behaviour in the telecommunication sector, but this authority is not exclusive since the sector is subject to Korea's basic competition law, the Monopoly Regulation and Fair Trade Act (MRFTA).

In light of its public nature, the telecom sector has been subject to various government regulations and has remained as legal monopoly for a substantial period of time. As such, it has not drawn much competition policy attention.

Since deregulation and the introduction of competition in the mid-1990s, however, the KFTC has maintained particular attention to this sector. Efforts have been underway to facilitate competition in the telecommunications sector.

In particular, the telecommunications industry was included in the Clean Market Project initiated this year, with a view to eradicating anti-competitive behaviour and prevent its recurrence in this sector.

* Clean Market Project (CMP): Aiming to transform the market structure into a pro-competitive one, the CMP represents a fundamental shift in KFTC's work from the case-oriented approach to the industry-wide approach. The CMP is designed to prevent the recurrence of offences by identifying all the anti-competitive institutions and practices that distort the market and devising comprehensive measures such as corrective measures against law breaches, institutional improvements, and the introduction and revision of related laws.

4.3 Consultation system between the KFTC and MIC (KCC)

Consultation system is in operation in the telecom sector, in order to fend off the conflicts between the MRFTA and individual statutes governing the industry. This is aimed at ensuring effective law enforcement and preventing overlapping regulations on businesses.

- Firstly, the TBA explicitly requires that in situations of unfair competition, when the type of standards of unfair practices have been defined, the MIC should consult with the KFTC.

- Secondly, there is an article under the TBA that prevents double penalties for the same

offence. Under Article 37 of the TBA, the MIC can impose penalties on telecommunication service provider for prohibited acts that include hampering fair competition, unfair discrimination concerning the supply of facilities, interconnection, provision of information and non-performance of existing agreements. Article 37-2 ensures that a company fined by the MIC will not be subject to a fine for the same offence by the KFTC.

- Thirdly, concerning the business transfer and merger in the telecom industry, the TBA requires the approval of the Information and Communication Minister in the case of business transfer from facility-based operator and the merger of an entity of facility-based carrier. In granting an approval, the MIC should first undergo consultation with the KFTC.

- Lastly, with regard to the access to essential facility, the KFTC regulates the refusal or restriction of use or access to elements essential to the production, supply, and sale of goods and services of new competitor without justifiable reasons, categorising such acts as abuse of market dominance. In this regard, the KFTC recently entered into an arrangement with the MIC, setting forth the prior application of the TBA to matters related with access to essential facility, procedures for communication of views and notification of the results of actions undertaken between the KFTC and the MIC.

5. Regulatory issues affecting competition

5.1 Regulation of entry and licensing

The licensing classification system, introduced in 1991 and maintained until 1995, required the registration of value-added service providers, while the fixed facility-based operators were required to obtain designation and the mobile facilities-based operators to gain authorisation. A new service classification system adopted in April 1995 maintained the two categories of services: value-added services that required notification and facility-based services that required authorisation.

Further streamlining and improvement in the licensing classification and licensing system was introduced in late 1997. Current license classification system required authorisation for facility-based providers, registration for special service providers and notification for VAN providers. Licences for fixed facility-based services are differentiated by the type of service offered (local, long distance, international). In other words, a prospective licensee needs to apply for multiple licenses if it wishes to offer local, long distance and international services.

5.2 Access and interconnection

After competition provision was introduced under the TBA in December 1996, regulations related to interconnection and access were gradually provided as well. Currently, when a carrier possesses facilities essential for other carriers in delivering services and the market share, size of operation, etc. of its facility-based services fall under the criteria set by the Decree of the MIC, it is required to accept the request from another carrier for the provision of telecommunications facility, sharing of subscriber lines, sharing of wireless facility, interconnection, etc., if any.

Korea Telecom and SK Telecom are at present subject to the mandatory provision of access and interconnection. They are required to have the access/interconnection agreement between them and other

operators and follow the criteria set by the MIC. If no agreement is reached within the specified period (90 days), either of the parties may request KCC's arbitration.

Regarding interconnection charges, the fully distributed cost method is used in Korea to determine interconnection prices. With present interconnection pricing, a domestic long distance service provider pays approximately 28-37 percent of revenues in interconnection fees.

5.3 Regulation of prices

At the end of 1995, the prior approval system for telecommunication tariffs was abolished. Under this system, the MIC had to approve all telecommunication tariffs from all operators. Now, operators are free to determine their own tariffs, and any changes in tariffs have to be notified to the MIC. The only tariffs that now require formal approval are those of KT's local service and those of SK Telecom and Shinsegi Telecom, the market leaders in the cellular service. The reason for maintaining the approval system is that they are dominant in the markets and therefore, there are concerns of unfair pricing practices.

Services whose tariffs are subject to the approval include those delivered by facility-based operator with the largest market share in the market concerned, based on sales revenue of the previous year.

5.4 Access to spectrum

The MIC is responsible for spectrum planning and allocation. The legal basis for MIC's authority is the Radio Wave Act. A number of important changes have taken place over the last decade in the policies used to allocate spectrum. The policy in 1991 was for the MIC to provide information on the detailed allocation of spectrum bandwidths, select the operators and allocate the spectrum within given bandwidths. Recent changes in spectrum allocation policy have improved on past practice. At present, the MIC decides on the number of operators for available bandwidths and publicises the number of licences to be issued and the application procedures. Licences are allocated through a competitive tender procedure.

5.5 Numbering issues

The Korean government took over the management of numbering resources in 1991 when the telecommunication market first opened to competition. For long distance, the MIC adopted a carrier pre-selection system which began in November 1997. At that time, user needed to register with KT if they wished to change their pre-selected carriers. To increase transparency and ensure fairness, the MIC established in July 1999 the "Long Distance Carrier Pre-selection Registration Center" which will be responsible for changing and maintaining records on pre-selection. User can now register with the Center if they wish to change their pre-selected carrier. This is important in view of complaints that KT has used discriminatory verification to review customer request forms to change carriers.

With regard to number portability, the MIC laid a legal groundwork therefor in the Jan. 2001 amendment of the TBA. The number portability service will be phased in from 2003.

Numbering policy is important in the context of enhancing local competition. Not only do new entrants require adequate access to number resources to expand their services, but also they need to be assured that number portability will be implemented. Therefore, the delay in implementation of number portability helps to support the incumbent.

6. Competition Issues: Regulation of anti-competitive practices

Deregulation gained speed in 1990s, which ended monopoly and introduced competition in the telecom sector. This gave rise to various instances of anti-competitive practices related to the access to telecommunications facilities and networks. In addition, the market opening led to merger involving domestic carriers.

6.1 Possible anti-competitive practices

Act of blocking effective competition in downstream markets by a company possessing facilities essential for new entrant to produce goods or services in the forward or backward industries by unduly refusing or delaying the provision of facilities.

6.1.1 Actual case

(i) Upon Dacom's request to enter into a co-use agreement of its public phone network, KT either failed to reply or responded that it would not be possible to provide public phone connection service on credit, twice since Aug. 1997.

The KCC determined that KT's act constituted an undue discrimination concerning interconnection, arbitrarily refusing to enter into an agreement with the reporting party without justifiable reasons, pointing to the fact that KC allowed three mobile phone operators and PCS carriers to connect to its public phone network. Consequently, it ordered KT to enter into a co-use agreement of public telephone network to provide connection service to the reporting party within three months after the date of issuance of corrective order.

(ii) In April 1999, Hanaro Telecom requested KT to enter into an interconnection agreement between its telephone network and KT's data networks in order to enable its subscribers of local telephony service to use KT's data network through its telephone network. KT, however, unduly delayed the execution of the agreement to Nov. 1999, after more than 90 days of legally specified deadline, in the absence of technical or physical glitches in interconnection or other understandable reasons.

The KCC decided that by hampering the smooth delivery of service of Hanaro Telecom, a new entrant in the local telephony market, KT's delay in the conclusion of the agreement constituted unfair trade practice aimed to maintain monopolistic status in the market. It also determined that the act caused inconvenience in the free use of data communications. As a result, 299.72 million Won (roughly 230 thousand dollars) in surcharge was assessed (Dec. 1999).

Act by carrier possessing facility of unduly terminating the permission to use facility by another enterprise.

Act of offering the price and terms and conditions of access to facility that makes access virtually impossible or that are excessive in light of ordinary practice or method of setting access price

Act by facility-based carrier of offering the price and terms and conditions of access different from those imposed to subsidiary; that is, the case where carrier A offers fees and conditions to data

communication provider, which has leased its telephone network, different from those offered to another data communication provider using the network.

Act of coercing user of its facility to purchase goods or services from itself or its subsidiaries that are unrelated to the use of facility; for example, the case where facility-based carrier in allowing the use of its telecommunications facility to special (value-added) service provider requires the use of its local, long distance, or international phone service, or attaches conditions that restrain the operation of another carrier using this facility (such as retraining the territory or customers of trade, price of goods or services, etc.)

6.2 SK Telecom's Acquisition of Shinsegi Telecom's Stock (May 2000)

6.2.1 Overview

SK Telecom, the No.1 company in the mobile telephony market, acquired 51.19 percent stakes of Shinsegi Telecom, the No.3 firm, from Pohang Iron and Steel Co. (POSCO) and on Dec. 31, 1999 filed a notification with the KFTC on the proposed business combination.

6.3 Result of the Review

The combination will bring up the market share of SK Telecom from 42.7 percent to 56.9 percent, increasing market dominance of the merged firm. On the flip side, however, the merger can enhance efficiency by integrating the management of telecommunications networks, reducing overlapping new investments, and boosting international competitiveness.

It is true that a lessened competition in the domestic wireless market may inflict harms on consumers, delaying the reduction of calling charge and dampening the incentive on the part of the combined firm to develop additional services.

Meanwhile, the merger has an effect of boosting efficiency by consolidating the two firms' existing telecommunications networks including cell stations and switches, removing the possibility of overlapping investments, lowering the costs of rendering services by attaining the economy of scale through the expansion of subscribers, and combining the distribution channels and R&D capacities.

At the same time, the business combination concerned may expand the size of SK Telecom and sharpen its competitive edge, which will enable the new telecom giant to gain an upper hand in international negotiations on technical standards and in formation of alliances with foreign firms. As such, it will bring about strengthened international competitiveness.

Services in the telecommunications industry, including the mobile telephone, have short life cycles because of rapid technological advances, thus requiring new investments on a constant basis. This characteristic is facilitating M&As in the global telecommunications markets. Furthermore, IMT 2000 services, which are currently being pursued around the globe, is planned to go into commercial operation in 2002. This will significantly shrink the portion of mobile telephony market.

After comprehensively taking into account the anti-competitive and efficiency-enhancing effects of the business combination, the characteristics of and prospects for the mobile telephone market, and the necessity for market restructuring, the KFTC issued the following corrective order, aimed at preventing the possibility of reduced competition in the wireless phone market.

7. Corrective Action

SK Telecom and Shinsegi Telecom should gradually reduce the market share based on the number of subscribers, to below 50 percent by June 2001. Even though the merged company achieve this target before June 2001, it should maintain the said market share until June 2001.

This is designed to facilitate competition in the market by lowering the combined firm's market share to 50 percent from 57 percent right after the merger, thereby boosting the relativeness competitiveness of three PCS providers.

This corrective action of the KFTC sparked heated controversies in Korea. In particular, consumers that could not subscribe to the service because of this requirement raised complaints. However, the KFTC believes that its action will improve consumer welfare in the long run through competition promotion, even though it may cause short-term inconveniences on the part of consumers in the process of setting up a pro-competitive market structure.

8. Policy Challenges

The KFTC is entitled with the authority to hold consultation with other government agencies when they plan to enact or amend laws that may raise competition concerns. In addition, its Chairman sits on the Cabinet meeting and can present opinions to improve various anti-competitive regulations. As a commissioner of the Regulatory Reform Committee, he is also able to review numerous regulation issues. Korea's competition authority is also steadily moving ahead with regulatory reforms, with the Task Force on Reform of Anti-competitive Regulations, set up under the Commission in early October 1999 at the center. Based on these authorities, the KFTC will continue its efforts to introduce competition in the telecommunication sector.

8.1 Price regulations

Currently, the only tariffs that now require the formal approval are those of KT's local service and those of SK Telecom and Shinsegi Telecom in the cellular service.

Because the present approval system on local service tariffs has not been sufficient to provide KT with an incentive to reduce costs and improve its efficiency, the MIC is now exploring the introduction of a price cap and expansion of the price cap system to the long distance and leased lines markets, where the KT is a dominant player.

By contrast, in the long term, the requirement for any type of price control in the mobile sector should be re-considered, given that the market is competitive and prices are declining. Further, complex pricing in the mobile market makes it technically difficult to impose caps. In this respect, the MIC is reviewing the introduction of notification system with grace period one or two years later. Under this system, tariffs filed by a carrier take effect after a specified grace period, when they do not pose competition concerns.

8.2 Access and interconnection

Many point out that revenues and expenses related to interconnection fees take up too high a portion of revenues of telecommunication carriers, resulting in the continuation of monopolistic structure and delaying the fostering of competition in the fixed line market.

Furthermore, most countries have realized the inadequacy of the fully distributed cost (FDC) methodology which is not sufficiently rigorous in distributing common costs across different services and does not discount inefficiencies of the former monopoly carrier. Therefore, the fully distributed cost (FDC) methodology need to be changed to long run average incremental cost (LRAIC) methodology.

8.3 Build-up of the role of competition authority

The KCC's approach is focused on the resolution of conflicts between businesses rather than on consumer welfare. The KCC also lacks analytical expertise in competition issues and competition-oriented mind-set. Furthermore, its superior, the MIC, carries out both regulatory function and industry promotion function, which are sometimes in conflict.

Under the circumstances, the KCC and MIC have included various competition issues under the TBA, giving rise to concerns of jurisdiction with the KFTC.

Therefore, the KFTC believes that it would be desirable for the KCC to gain an independent status as a specialized regulatory agency. The KCC's attention should be focused on pure regulatory issues such as pricing regulation, entry regulation, and allocation of spectrum rather than on competition concerns. However, competition policy should be the underlying basis of KCC's approach in dealing with such regulatory issues.

In this respect, competition issues in deregulated sectors such as telecommunications, electricity and gas should be delegated to the competition authority, except those that are technical in nature. This is necessary to attain consistency in competition policy enforcement in each sector.

Since the KCC is a relatively new agency, the KFTC will actively lead the formulation of KCC's perspectives. It will continue to provide assistance and co-operation to the KCC so that the KCC can have a balanced view of competition policy. In addition, the KFTC will keep its works on fostering competition in the telecommunication industry, separate from the KCC.

9. Conclusion: General assessment of current strength and weakness

The regulatory regime in Korea displays some distinct strengths such as universal availability of infrastructure with high penetration rates, liberalised market entry, no line of business restrictions, competitive mobile sector and carrier pre-selection implemented. These strengths relate to the series of pro-competition reforms and structural reforms undertaken over the past decade. In particular, competition in mobile has led to high rates of mobile penetration surpassing now the level of penetration in the fixed telephony market and the mobile sector has provided an example of how competition can grow a market and provide significant benefits. These strengths in the essential regulatory framework position Korea well for effective competition and will provide substantial benefits to consumers and users if further reforms are taken to complete the implementation of a transparent and neutral regulatory framework based on sound economic principles.

Significant regulatory and institutional weaknesses are also evident such as lack of independent regulatory authority with adequate powers to regulate the sector, conflict between regulatory functions and industry promotion functions and lack of essential regulatory safeguards and lack of local competition. These weaknesses can be corrected in the short to medium term to provide a basis for a stronger and more efficient competitive market. The KFTC believes that the driving objective of regulatory oversight should be to enhance efficiency in the telecommunication service sector, increase competition and ensure that all user benefit.

MEXICO

1. Background

The liberalization process of the Mexican telecommunications sector began in 1990 with the privatization of Teléfonos de México (Telmex). This firm was sold under a scheme which preserved vertical integration of long distance and local telephony services and implied the modification of Telmex's concession title in order to guide the development of telecommunications towards a more competitive model. Telmex's Modified Concession Title (MTC) was issued in August 1990 and will be in force until 2026. Its validity and may be extended for an additional 15 year period. The main obligations it introduced are:

- the application of price cap regulation to a "basic service basket"[1] which would allow recovery of average incremental costs;
- the provision of access to other networks;
- accounting separation and the gradual elimination of subsidies between local and long distance services;
- prohibition on Telmex to carry out monopolistic practices[2] or any practice leading to monopolization of complementary services;
- specific obligations on social coverage and service quality.

Local telephony service was, in principle[3], opened to competition, while exclusivity in long distance telephony was limited to a six years period.

The Secretary of Communications and Transportation (SCT) was responsible for the design and implementation of sector liberalization and regulation, as established in the General Law of Communication Media (LGVC).

Concessions for the commercial use of the radio spectrum were granted on a discretionary basis. These concessions had a nation-wide coverage and were conferred for an indefinite period for the provision of specific services. The first concessions to render cellular telephony services were awarded on this basis in 1990. To this end, the country was divided into nine regions, in each of which two carriers would participate. Following technological requirements, two bands were given in concession: band A was allocated to a different carrier in each region; band B was granted in all regions to a single carrier, namely Telcel, a subsidiary of Telmex.

The prevailing conditions in Mexican telecommunications in 1995 showed a clear lag as to coverage, penetration and competition. Mexico's integration into international markets required the

enactment of a pro-competitive legal framework which would foster private investment. Among the regulatory reforms that took place during 1995 are the modification of article 28 of the Mexican Constitution (March) and the enactment of the Federal Telecommunications Law (LFT), which partially derogated the LGVC. The reforms to article 28 of the constitution permitted the initiation of the satellite service privatization process. In turn, the LFT redefined structural policies and set out new control mechanisms regarding entry and access to scarce resources. Likewise, the LFT enhanced regulatory transparency by creating a specific regulatory agency, the Federal Telecommunications Commission (Cofetel).

2. Regulatory developments since 1995

The modifications introduced since 1995 into the telecommunications regulatory structure and policy were aimed at the promotion of competition in four main areas: local and long distance telephony services, the operation of the radio electric spectrum and satellite communication services. These changes comprised both dimensions of the regulatory scope, structure and behavior, in order to promote fair competition conditions for new entrants.

In addition to the LFT, several regulations have been issued during the last five years, with the purpose of providing the necessary regulatory conditions to introduce competition in the related services:

- long Distance Service Rules (June 1996);
- technical Signaling Plan (1997);
- technical Numbering Plan (June 1996);
- international Long Distance Rules (December 1996);
- public Telephony Regulations (December 1996);
- satellite Communication Regulations (August 1997);
- local Service Rules (October 1997);
- restricted television and audio Regulations (February 2000);
- the Agreement establishing the proceedings to obtain concessions for inter-state telecommunication public networks, in accordance with the LFT. This agreement defines information requirements interested parties must provide in order to comply with the LFT. (September 1995);
- the agreement that sets out the proceedings to obtain concessions for local telecommunication public networks. This agreement permits the granting of local wire network concessions to render cable TV and local telephone services. (January 1996).

From the competition point of view, the introduction of regulatory tools aforementioned is important since they provided the opportunity to open *de facto* markets to competition. For instance:

- Local services rulings established the *bill and keep agreements*; without them introduction of competition in such services would not be possible[4].

- Long distance rulings establish the possibility to select by pre-subscription an operator on the schedule for opening to competition in several cities.

- International long distance rulings introduce the use of an uniform settlement rate and a mechanism of proportional return for the entering traffic, These schemes might not be the optimum for competition, but they provide a mechanism of traffic allocation and payment system that allowed the opening up of the market.

- Public telephony rulings establish freedom to pre-subscribe public telephone lines with the preferred long distance operator.

Based on last year's experience, some rulings could be reviewed adjusting them to make them more adequate to competition. From the competition view, one of the most relevant regulatory issues is the publication of the Resolution through which specific obligations on prices, quality and information for Telmex are established. This Resolution includes provisions which delimit substantial power in relevant markets where the CFC declared Telmex as dominant agent: local telephony, access, long distance, resale and international long distance. The Resolution favors healthy competition and includes the following:

Rates

- Prices based on costs and mechanism oriented to prevent price squeezing;
- For essential services such as interconnection ports; co-location; local transit; invoicing and charging; emergency services; circuits and digital links; rates must only recover the costs of providing such services.

Quality

- Quality index estimate of services provided to consumers and to other carriers;
- Establishment of services for attention of requests based on the principle "first come, first served";
- Equal quality of services to competitors as to itself.

Information

- Establishment of a technical database that allows better network inter-operation;
- Publication of separate accounting and quality index aforementioned.

The Resolution does not incorporate specific obligations regarding interconnection rates nor resale[5]. Cofetel considered that these topics are related to interconnection, and thus should be resolved through an agreement among competitors as it is established in the LFT[6]. At this time Telmex is protected by a legal appeal, which prevents Cofetel from applying such regulations. Although, on January 1, 2001 the principal long distance carriers (Alestra and Avantel) subscribed respective Agreements, which were ratified by the Communications and Transport Secretary (SCT).

The Agreement has the objective to define reciprocal concessions among parties to determine the disputes that have been originated until today and avoid future problems. The Agreement includes arrangements regarding interconnection, resale, reciprocal debts and international long distance. Additionally, it establishes that the Parties desist from the administrative and judicial actions, through which claimed diverse acts and commit to not initiate new proceedings against the other party. Many of the provisions included in the contract are similar to the Resolution, however, it is still early to determine its effect on competition in the markets.

Main provisions

- Mutual debts compensation.
- Interconnection rates (from 1.25 cents, including the charge of the interconnection port), rate of resale, local transit and co-location.
- Interconnection and the provision of digital links and trunks are subject to transparent proceedings, non discriminatory bases, and must be delivered in maximum periods of 35 working days.
- Infrastructure sharing, of infrastructure such as the long distance links.
- Possibility to share co-location and other necessary equipment for interconnection.
- The gradual liberalization of international settlement rates and traffic subject to proportional return.
- Bill and Keep agreements are established in local telephony.

2.1 Entry controls

The LFT distinguishes between public network and private network telecommunication services. The former refers to those networks rendering commercial services. The LFT provides legal certainty and clarifies matters regarding the granting of concessions by setting out the terms and expiry dates of awarded titles. It also establishes the need to obtain a concession title from the SCT by means of a public auction in order to: *i*) use or exploit a frequency band within the country, except for the radio spectrum frequencies reserved for free or official use; *ii*) exploit emission and reception signals of frequency bands related to foreign satellite systems authorized by international treaties to render services within the country; and *iii*) occupy geo-stationary orbital positions and satellite orbits allocated to the country, and to exploit its corresponding frequency bands.

Likewise, the LFT requires a permit must be obtained in order to: establish and operate or exploit a telecommunication service business which does not comprise a public network; and to install or exploit ground transmission stations. Value added services, need to be registered before the SCT.

In accordance with the LFT, any firm requesting a concession must previously submit its business plan to economic, technical and legal evaluations undertaken by Cofetel. These proceedings are subject to deadlines and requirements which seek to eliminate the authority's discretion and to enhance transparency in its acts, while providing legal certainty to private parties. The regulation does not impose limits on the number of concessions or permits granted for different services. So far, 19 carriers have a

long distance telephony concession, 17 have fixed local concessions, 15 have been granted mobile (cellular and PCS) concessions and 136 count with paging services concessions.

Concession and permit titles specify their terms and duration as well as the concessionaire's investment commitments. However, this last requirement may incorporate artificial rigidities to investment and could be substituted for an agreement to carry out investments based on their profitability, so as to encourage new entrants.

The adoption of open architecture network designs which favor interconnection and interoperability is also established in the LFT. In addition, technical plans eliminate technical entry barriers and thus foster the interest of new concessionaires.

Although the LFT foresees the entry of new commercializing firms[7], no such permits have been granted so far. Apparently in order to encourage infrastructure investment. However, resale is one of the fastest means for new entry and is likely to result in infrastructure investment once a level of profitability is attained.

Other telecommunications markets as satellites and access infrastructure have been benefited with the modification of the new providers entrance regulations. On 1996, Mexico subscribed an agreement with the USA to permit both countries to use the other satellite capacity. At present time, 3 concessions have been granted to Mexican companies to give services with US satellite capacity. The afore opens *de facto* the satellite capacity market to international competition.

On the other hand, in accordance with the LFT, the COFETEL published an agreement establishing the proceeding to obtain concessions for the instalment, operation or exploitation of public networks for local telecommunications, by which companies with cable television concessions are allowed to change them to concessions for public telecommunications networks, und thus be able to give additional telecommunications services, such as data transmission (internet). This eliminates the previous access restriction and favours the new services with additional value. 14 concessionaires have benefited from the application of this agreement.

2.2 Structural policies

The LFT establishes the accounting separation of services for operators of public telecommunications networks and its subsidiaries. In December 1998, the Cofetel established a methodology through which operators should present separate annual accounting information for the following services: fixed local, mobile local, long distance, public telephony, rural telephony, provision of dedicated circuits, trunk, paging, cable and maintenance and trading of technical equipment, restricted television and other services. Notwithstanding, several carriers including Telmex, Telnor, Avantel and Alestra, appealed for the application of this methodology. Due to such appeal, the methodology has not yet been applied.

From a structural point of view, a general restriction affecting vertical or horizontal integration of entrepreneurial activities in the sector does not apply. Only the MTC of Telmex forbids the enterprise to provide television services, but this restriction limits exclusively the company's activities.

The only legal reform affecting service integration is referred to pay TV providers, for whom a mechanism has been created to expand the scope of their concession tittles, in order to allow them to give local telephony and data transmission services.

Even when there is no general prohibition to vertical or structural integration, the CFC may impose conditions or block integration in order to avoid substantial power or situations which damage competition and free concurrence. The CFC is empowered to review and block or condition mergers among enterprises regardless the sector. According to the LFT, the CFC is also empowered to issue opinions about transmission of concession titles among enterprises and economic agents participating in public auctions of spectrum available for private sector. This allows the CFC to impose restrictions to a particular case (under a case by case basis).

Lately, some changes have taken place in the industry structure:

- Long distance carriers have entered into the local telephony market in order to provide integrated services to users, besides of having an own local network which will allow the development of other services such as Internet access.

- Regarding cellular telephony, Motorola and Iusacell have accumulated concessions in several regions in order to improve its position to compete with Telcel, the incumbent enterprise with national coverage in this market.

- Within the pay-TV market, several mergers took place. This service is provided through cable system, microwave and direct-to-home services (DTH).

- Mergers involving enterprises providing digital trunking have affected several markets such as cellular telephony, mobile radio paging (RMP) and PCS, since digital trunking delivery services is an efficient substitute of cellular telephony, PCS and RMP services.

- The FCC analysed in 1996 a concentration involving Telmex (dominant company in the local telephony market) and cable television companies. The FCC considered that the relevant markets affected were: pay TV services; and local basic telephony (wire, due the possibility to use networks of cable television companies in local telephony and data transmission services). Because of the risk implicated in the operation, the FCC explored diverse conditions which would modify the original transaction notified. This situation determined the applicants to desist from the merger.

- On December 2000, Telmex received favorable opinion from the FCC to the proposed splitting up of the company, in order to create America Movil, which would focus on wireless business in Mexico (wireless telephony with cellular technology, under the trademark Telcel) and internationally (USA, Europe and Latin America). Telmex would focus on fixed telephony, including internet access, data transmission and related international opportunities. The FCC resolved to authorise this operation because the objective is to separate the traditional telephony activities, data and internet, from wireless and international development of telecommunications which present a major dynamism, and thus require other commercial strategy. Besides, the companies involved belonged to the same economic group.

2.3 Price control policy

In September 2000, Cofetel issued a Resolution establishing specific obligations for Telmex regarding price, quality service and information, as concessionaire of public telecommunications network with substantial power in local basic telephony market, interconnection, national long distance, resale and international long distance (the Resolution).

The price regulation applicable to Telmex as a dominant carrier seeks to limit its capacity to carry out price squeezing practices. Being a vertically integrated carrier, Telmex can unduly displace its competitors from markets with strong competition (long distance services, for example). Prices offered by Telmex are based on costs as established in its concession title but the Resolution provides additional transparency and establishes the floor for services with more competition. Additionally, it obliges Telmex to sell some services at the same price offered to its large users, preventing discrimination.

The Resolution establishes cost based prices and restricts the average price of long distance service and other services opened up to competition, to recover the total average costs (including capital cost). Those provisions are aimed to prevent Telmex from carrying out price squeezing practices.

From 2002, the price cap system will be modified, based on an study regarding the incremental average costs[8] of controlled services, that will be put forward by Telmex for the approval of regulatory authorities. Telmex will also provide the regulators with a specific price proposal for controlled services[9].

The Resolution includes other obligations to prevent Telmex from reducing prices of the services opened up to competition and from diminishing profit margins of other carriers. For example, Telmex may respond to reductions initiated by other carriers but may not start the reduction of consumer prices. Additionally, unlike other carriers, Telmex must put forward its prices for an authorization process before applying prices.

Telmex cannot sell packages of services which bundle local and long distance services and is required to provide complete and service specific price information whenever it offers bundled services.

Increases in private links and circuit prices cannot surpass variations of the consumer price index.

The Resolution also prohibits Telmex from providing packages or services by contracts covering periods longer than three months or to apply sanctions to users choosing another carrier. This provision aims to maintain a flexible structure of the different markets by reducing entry barriers.

For “essential services” such as ports; co-location; local transit; invoicing and charging; emergency services; operator services; installment; hiring of long distance linkages, the Resolution establishes that fares charged by Telmex shall only recover costs.

On the other hand, the Resolution establishes that prices charged by Telmex for local service shall be uniform nationwide until the 1st of January of 2003 and that prices of other services included in the basic services basket only can differ due to volume, distance and schedule. From 2003 Telmex may apply different local service charges based on geographic differences. The regulator’s purpose in this case is to prevent Telmex from reducing prices in locations where competition in local services is only starting, recovering profits through its sales in locations were there is no competition. In the main cities of the country local competition is being introduced through fixed wireless technologies. Monterrey and Mexico City offer two clear examples: Axtel has 81,898 subscribers in the former; while Unefon reaches 162,024 lines in the latter. The imposition of a time limit to the application of a uniform price system provides flexibility in order to enhance price competition from 2003, in those cities where competition in local services has already developed.

2.4 Access to scarce resources

Elimination of legal and administrative barriers and a pro-competitive regulation of essential resources are necessary for the entry and development of competitors and to enhance sector contestability through the introduction of new technologies.

The regulatory framework includes the following provisions which rule access to scarce resources:

- Regarding the assignment of the radio-electric spectrum, the LFT establishes: *i*) the publication of an program to specify frequency bands to be auctioned [10[1]]; *ii*) the requirement to obtain favourable opinion from the FCC to participate in such auctions.

- The Fundamental Technical Plan of Numeration (June 1996) establishes a new dialing system which homologates all the locations to a seven digits code (eight digits in the case of Mexico City, Guadalajara and Monterrey), as part of a migration process to a national dialing system based on ten digits. Furthermore, the Plan gave the administration of the system to Cofetel, in substitution of Telmex (historical administrator of the system), promoting the efficient, equitable and non-discriminatory assignment of the numbers among carriers. Keys 91, 95 and 98 to access national, North America and rest of the world long distance services, were eliminated, as they were applicable in order to enhance competition in this service. The Plan establishes also the portability of the non geographic numbers (800 numbers) and the consolidation of the local service areas.

The introduction of a new numbering and access codes to long distance services, facilitated the entry of new carriers. The additional digits in the main cities increased the supply of local numbers, while the new long distance access codes eliminated dialing inertia.

In accordance with the Regulations of Local Service, the number portability should have been initiated in 1997. However, following a requirement by the new carriers, the Cofetel issued an agreement postponing the process indefinably, due the investments required to permit such portability.

On the other hand, as part of the Resolution which imposes obligations to the dominant carrier, Telmex is obligated to permit carriers to share interconnection resources, such as circuit links and co-location, as well as long distance capacity acquired through resale. Although the Resolution cannot yet be enforced, due a legal appeal initiated by Telmex, the main carriers have maintained this benefit through a private contract subscribed with Telmex, which provides them with a cost reduction.

Since 1995, the LFT establishes that the clients of any carrier should have the same access to yellow pages, information and emergency services, 800-numbers and operator services. Only in 2000, with the enactment of the Resolution the needed price obligations applicable to Telmex were established, so as to allow new carriers to offer their clients such services in reasonable economic terms. As it was mentioned before, the Resolution sets up a procedure that simplifies the request of such services based on the principle of “first to come, first served”; it also establishes a procedure to attend the repairs that may be necessary and that carriers may share scarce resources. The introduction of specific procedures makes it also easier for the authority to verify the observance of these provisions.

Even though the Resolution is still not applicable, it reflects pro-competitive principles. On the other hand, the Agreement between the main long distance service providers regains in a good measure the procedures mentioned.

2.5 Universal Service

In 1990, cross subsidisation and fiscal incentives were used to accomplish the universal service obligations, which consisted mainly in increasing service penetration so that in the minimum possible time

more persons could have access to the basic telephone services. Commercial users and the long distance service were subsidising residential users and rural clients.

From 1st January 1990 to the 1st January 1996, Telmex' investment was enhanced through tax refunds. The MTC established precise coverage goals for the first four years of the private management (1990 to 1994), which included the following:

- Expansion of the telephone lines, excluding public cabins, to a minimum annual average rate of 12 percent.
- Locations having more than 5 000 inhabitants should be provided with telephone services.
- Locations having more than 500 inhabitants should be granted access to telephone services, at least trough public cabins;
- Increase of the public cabins density from 0.5 to two cabins per each thousand inhabitants.

Since 1995 this mechanism was replaced by a direct investment program carried out by the SCT, and financed with federal resources.

In 1999 several meetings were held between the Cofetel and the carriers in order to define the concept of universal service, as well as a new financing mechanism that involves all carriers. These meetings made advances, which were:

- The parameters used to measure the access of the telecommunications services in a specific region were defined.
- Several options were proposed about the mechanism of contribution, allocation and management of the resources of the universal service fund.
- The definition of a cost estimation model that will be used to calculate the potential feasible coverage based on the available finance resources.

The CFC has pronounced in favor of a neutral funding mechanism in which all the carriers who benefit from the expansion of the networks will contribute proportionally. Financing mechanism must be set independently from the interconnection rates.

2.6 Institutional arrangements governing the industry: the regulatory agency

The LFT ordered the creation of an independent regulatory authority to be in charge of telecommunications policy and regulation. In August 1996, the Cofetel was created as a de-concentrated governmental organ of the SCT, with technical and operative autonomy. The grade of its independence, structure and specific responsibilities were determined by its Internal Regulations, which were approved internally by the commissioners of the Cofetel.

The Cofetel is composed by four commissioners, one of them is the president. They are all appointed by de Secretary of the SCT. Their resolutions are taken by majority and the president has quality vote. The commissioners are not appointed by a specific term, they can be removed anytime.

The Cofetel is the responsible authority for the technical regulation as well as the economic and social regulation of telecommunications. The CFC is responsible for the control of monopolistic practices and anticompetitive mergers, and is also the agency in charge of determining the existence of agents with substantial power, in order for Cofetel to impose additional regulation. The CFC can also pronounce itself in transactions involving the cession or transmission of concessions and permits. Although the CFC is empowered to issue opinion on regulatory projects, its opinions are not binding.

In the drafting or regulatory provisions, Cofetel has consulted the national industry so as to enhance transparency of its procedures. Other authorities, such as the CFC, have also been consulted. The creation of the Telecommunications Advisory Council, has helped to improve the efficiency and transparency of regulatory activities, due to the participation of academic institutions, chambers and associations of the national industry. The Advisory Council publishes an annual report on its main actions.

Between 1997 and 1998, the relative participation of Cofetel in the federal public expenses increased slightly and remained relatively constant from 1998 to 2000.

2.7 Institutional arrangements governing the industry: the competition agency

The LFCE applies to all the economic agents and is the legal provision which sanctions and prevents anticompetitive behaviors in all economic activities. The transition from a monopolistic structure to a competitive marketplace has required an active participation of the CFC in this sector. The LFCE and the LFT establish the powers of the CFC in telecommunication, including the following:

Set in the LFT:

- Determine which economic agents are capable of participating in the bids for concessions to exploit the radio-electric spectrum.
- Determine the existence of dominant agents in order to apply specific regulations on rates, quality and information.
- Analyze the transmission of concessions and permits among companies. The CFC is empowered to apply restrictions or object to such operations .

Set in the LFCE:

- Investigate and impose the corresponding sanctions to anticompetitive practices.
- Investigate and analyze, condition or object, as necessary, mergers in the telecommunications sector.
- Issue opinions on the regulatory framework.

The CFC powers have not been modified since the publication of the LFCE and the LFT. In 1998 the Interior Regulations of the CFC were modified, creating among others, the General Direction for Privatization and Auction Processes. The objective is to have a specialized area in charge of applying competition principles in regulated sectors such as telecommunications. However, mergers and

anticompetitive practices are addressed by the General Directorates of Mergers and Investigations, which carry out its tasks in all sectors.

Although no institutional arrangements have modified the CFC powers in the telecommunications sector, the quick development of the market has forced the CFC to participate actively. Access to the networks, and practices such as discrimination, undue-bundling and price squeezing have been the main concerns during the first years of competition. The CFC has sought to solve timely such problems by reviewing efficiently complaints and other investigations.

In 2000, 14 percent of the cases related to concessions and permits corresponded to telecommunications and so do six percent of all mergers reviewed.

Co-operation treaties between Cofetel and the CFC may provide co-ordination mechanisms in order to make the information exchange easier and develop a more efficient work and relationship between both authorities.

2.8 Access Regulation and Dominance

The LFT establishes that carriers must adopt open architecture designs in order to allow network interconnection and interoperability. The law also empowers authorities to intervene as referees, at the request of the parties involved, in the determination of interconnection rates and terms. The authority may therefore order any carrier to provide interconnection to other concessionaires.

Interconnection of public telecommunication networks with foreign networks must be carried out by means of agreements between the interested parties. Concessionaires must present before the SCT any such agreements before they come into effect.

Interconnection is compulsory at the request of a carrier. For this purpose, carriers are free to begin direct negotiations on the terms and conditions of interconnection. The parties have a 60 day deadline to reach an agreement, but if they fail to do so, or if they request so, Cofetel is empowered to settle the conditions.

In most of the cases, the determination of interconnection rates has actually required some level of mediation by the authority. For example, in April 1996, the SCT settled interconnection rates for 1997 and 1998, this intervention permitted opening up of the long distance market in January 1997.

Again, on November 1998, Cofetel announced the rates for the period January 1999 through December 2000, and in October 2000 the rates for the year 2001. The interconnection rates for 2001 were settled at 1.25 cents (US currency) per minute, which implied a reduction of over 60 percent with respect to the rate applied on October 2000.

Cofetel also established that starting July 2001 Telmex would be allowed to apply different interconnection rates on a geographical basis, for which it would require Cofetel’s authorization confirmation. This measure seeks to identify costs differences in interconnection services among localities.

The interconnection rate must be cost based and must not discriminate among carriers. Rates determined by Cofetel are in force for limited time periods, following which the rate is subject to review. The review parameters used in 1996 included:

7. Costs. In order to determine interconnection rates a cost model was developed. This model is based on costs related to the efficient expansion of a public telecommunications network (forward looking), considering the existing network's structure.

8. International reference rates.

9. The growth and development of domestic telecommunication markets.

10. Contribution to foster increased telephone penetration.

Since 1998 the last two parameters were not longer considered.

Interconnection rate regulation is not related to final rates and each of them is independently established[11]. However, in the case of the incumbent company, Telmex, some relationship exists since the applicable price cap regulation requires the determination of the local carrier's income, which includes interconnection rates.

Interconnection rates are meant to allow the carrier offering this service to recover long term total incremental costs as well as the imputable common costs. However, in 1996 other parameters described previously were considered. Specifically, when long distance telephony was opened up to competition an interconnection rate comprising two elements was established: a basic rate accounting for delivery and termination of public switched long distance traffic in Telmex's local network, and an additional charge equivalent to 58 percent of the settlement rate. The latter was intended to support the development of the local network and the local-long distance rate rebalancing.[12] Both elements added up to 5.3 cents (US dollars).

In November 1998, given the advances achieved in price rebalancing, interconnection rates applied by the local carrier were reduced, by eliminating the charge based on international settlement rates. The other element of the interconnection rate remained but was updated considering the Consumer Price Index. Thus interconnection rates were set at 2.6 cents (US dollar).

The interconnection rates do not vary according to the hour or the day of the week in which they are provided, neither do they change based on the type of final user being interconnected (i.e, residential or commercial subscribers). Different rates were applied between 1997 and 1998 depending on the switching infrastructure used to connect a given location. This was in order to distinguish costs accounting to different technologies.

Different rates do apply to mobile services (cellular and PCS). Interconnection rates for fixed to mobile services are different to those from mobile to fixed services and from mobile to mobile services.

With regard to interconnection of the networks, the LFT establishes that parties to the interconnection agreement must refrain from granting volume discounts for interconnection.

On the other hand, the LFT specifies that as a part of the referred agreements, carriers must permit unbundled access to services, capacity and network functions on the basis of non-discriminatory rates. So far, local loop unbundling has not occurred given the lack of a methodology to evaluate the cost of elements integrating interconnection. The Resolution that imposes special obligations on Telmex as a dominant carrier, states that Telmex will charge a rate that allows recovery of incremental costs incurred and that it may not charge different rates to those authorised. Recently, discussion among carriers has started in order to evaluate new methodologies (BIT and EEL) to unbundle the loop.

The LFT and other regulations oblige Telmex to keep accounting separation. This enterprise must impute expenses attributable to interconnection to the local network to all the services requiring it (for example, cellular and long distances services). This mechanism was designed to prevent cross-subsidisation among Telmex subsidiaries and services.

The applicable Resolution to Telmex incorporates additional elements that benefit interconnection:

- Telmex will offer the rates associated to diverse elements necessary for interconnection at cost terms.
- The rates offered to other carriers will be applied to Telmex and its subsidiaries.
- Telmex will provide an automatic redundant alternative in case of failure in interconnection or in the links provided to other carriers.
- Telmex will attend the requests of its competitors in the same way it attends its own needs and the requests of its subsidiaries.
- Telmex must permit unbundled access to its network services, capacities and functions and under non-discriminatory terms and conditions.
- Telmex will allow the resale of exceeding capacity of links that are provided to other concessionaires , including the ones used for interconnection.
- Telmex must keep a data base that includes updated information of the status of other concessionaires' service requests.

3. The Concept of Dominance

The regulatory authority is empowered by the LFT to impose additional regulation on the dominant carrier. In accordance with this faculty, in September 2000, Cofetel imposed specific obligations on Telmex, which had been previously declared by the CFC as carrier with substantial power in five relevant markets. The obligations regard rates, information and service quality and can only be applied to services and functions related to those five relevant markets.

According to the LFCE and the LFT, the CFC is responsible for determining the existence of substantial market power. The LFCE specifies which elements must be considered to establish whether an economic agent has substantial power in the relevant market. These elements are uniformly applied to all economic sectors and include:

- market shares and the agent's ability to unilaterally fix prices or to restrict supply in the relevant market, without being potentially or actually offset by competitors;
- the existence of entry barriers and any elements that may be foreseen to alter those barriers or competitors' supply;
- the existence and power of its competitors;
- availability of inputs for both the agent and its competitors;

- the agent's recent conduct.

The Regulations to the LFCE additionally specify that market shares must be determined taking into account sales indicators, number of clients and productive capacity. Entry barriers include limited access to financing, technology or to efficient distribution channels; government authorizations as well as use or exploitation rights protected under intellectual or industrial property legislation; restrictions to competition present in international markets and any limits imposed by common practices of incumbent agents.

In 1997, the CFC determined Telmex has substantial power in the following services: local basic telephony, access (interconnection), domestic long distance, resale and international long distance. The proceeding to determine Telmex's dominance implied a balanced analysis of all elements foreseen in the LFCE and its regulations. Barriers to entry and access to inputs were most important given the vertically integrated structure of the incumbent firm.

4. Competition concerns and competition law enforcement

Introducing competition in a market that has traditionally operated as monopoly presents several difficulties. Some structural measures may be favourable to the transition to competition. As it was mentioned, Telmex privatisation in 1990 was given under a vertical integration scheme which opens the possibility to conduct anticompetitive practices. Therefore, FCC's concern has focused mainly in three areas: *a*) necessity to introduce a convenient regulatory framework to promote competition in services open up to competition and other related services and to limit substantial market power of the incumbent company; *b*) promote a market structure adequate to competition, and *c*) release promptly complaints and investigations related to the telecommunications sector, in order to prevent undue displacements or irreversible damage to the competitive process.

Market Structure. In reference to an adequate market structure, it has been stated that the CFC has done a hard labour in mergers, cession of permits and concessions, as well as restraining the participation of economic agents in the bidding process of radio electric spectrum when the acquisition of the bid frequencies can generate some kind of market power.

Competition friendly regulation. Between 1996 and 1998 there has been an intense regulatory activity regarding telecommunications. The CFC has participated in order to introduce pro-competitive principles in the different rulings seeking to:

- prevent entry barriers;
- prevent anticompetitive practices;
- specify regulatory aspects that the LFT has included but were not very precise.

Restriction of the market power of the incumbent company has been a priority since the opening up of the long distance service. The CFC has proceeded to analyze the power that the enterprise has in different markets. Final resolution regarding Telmex' dominance was issued by the CFC in July of 1998. Currently a legal appeal before the courts is in process. However, the federal court determined that because this issue is of public interest the additional regulation provided by the LFT could be applied even though the appeal is still in process. Based on the court's decision, the CFC has made its best efforts in order to apply as soon as possible the dominant carrier regulation it also worked in preparing the most adequate and competition friendly legal framework.

In September 2000, Cofetel notified Telmex its Resolution establishing specific obligations related to prices, service quality and information. Telmex appealed also this Resolution which *de facto* has not been implemented yet. Thus, main carriers have negotiated a private contract with Telmex seeking to obtain interconnection and service terms that will enable them to compete while the Resolution is enforced. The agreement establishes reciprocal concessions between the parties to end disputes and prevent problems in the future. It also includes arrangements regarding interconnection, resale, reciprocal debts and international long distance.

The agreement constitutes the legal mechanism through which particulars search solutions on telephony issues, considering the Resolutions ineffectiveness. Thus, the agreement duplicates many provisions of the Resolution applicable to Telmex as dominant operator.

Addressing anticompetitive conducts. Investigations carried out by the FCC in the telecommunications sector cover several practices related to the abuse of market power. Most of them derive from Telmex' control over the local loop.

Example 1. Undue charges. Between 1996 and 1998, interconnection rate was relatively high (5.6 cents per minute). Notwithstanding, Telmex applied additional charges for "complementary interconnection services". In this regard, Avantel questioned legality of such charges, and therefore, Cofetel expanded the regulation in order to include all charges associated to the use of the network. However, Avantel appealed the decision before the court and gained an order to suspend the payment of the new rates.

Example 2. Discriminatory services. Telmex restricted competition by delaying the provision of links and circuits, which are necessary for interconnection. Such practices were carried out even after Telmex had subscribed with Avantel an agreement to set delivery terms.

Example 3. Price squeezing. Long distance prices were severely reduced by Telmex. Although this could be the outcome of strong competition, the combination of low prices offered to consumer services and high interconnection rates imposed a risk to competition process. Price squeezing was possible because the provisions regarding competition specified in Telmex' concession title, proved to be insufficient. Particularly, price regulation established in the concession title referred to a price cap, thus, a reduction in long distance prices can be offset with an increase in local revenues. Other provisions foreseen in the LFT and other regulations were ineffective.

Today there is a different perspective for competition as the Resolution introduces restrictions to price reductions and lower interconnection rate and costs have been set.

5. LFCE enforcement

The CFC has investigated and resolved complaints against the aforementioned practices as well as against other anti-competitive behavior. The following two cases illustrate competition enforcement:

Avantel and Alestra vs Telmex (long distance 800 numbers)

Long distance operators, Avantel, S.A. and Alestra S. de R.L., filed complaints against Telmex with alleged practices in breach of the FLEC. As a result of the investigation the FCC found Telmex responsible for anticompetitive practices derived from charging public telephone users $0.50 per minute for long distance calls when using non geographic 800 numbers and for requiring the use of

Telmex's pre-paid cards (Ladatel) in order to access those numbers.

800 paid numbers are used to render paid telephone services, whereby the receptor agent absorbs the cost of the call. Traditionally, commercial firms or social service institutions offer 800 paid numbers to provide their customers with a free communication in order to encourage them to use their information services. These numbers may be accessed from private or public telephones. In the latter case, Telmex applied its competitors' clients a $0.50 per minute access fee, although users calling to 800 numbers offered by Telmex were not subject to such charge.

The investigation covered the following lines:

Tied sales. The FCC found that the charge imposed by Telmex represented an entry barrier since access to 800 national service through public telephones was only available by using Telmex's prepaid Ladatel card.

Refusal to deal. In 1997 Avantel requested Telmex to enter into a contract which would enable it to absorb the $0.50 charge for 800 number calls originated from public telephones, in order to free its users from this payment. Telmex refused the contract without justification, although it had already subscribed such agreements with foreign providers of 800 numbers.

In 1999, following a decision issued by the Federal Telecommunications Commission (Cofetel), Telmex signed contracts with six firms setting technical and operation conditions regarding access to calls originating from public telephones by means of 800 numbers.

Discrimination. By denying direct charge to the plaintiffs in the access to its public network, Telmex created exclusive advantages in its own favour since it did offer itself this service to operate its own 800 numbers. Foreign firms offering 800 numbers also operated under a scheme where the final user is not charged for the use of Telmex's public telephone network.

Thus, uneven sales conditions were established for agents providing equal services from public telephones.

Demand decrease. The object and effect of the behaviour challenged was to offset competition faced by Telmex through its main competitors, Alestra and Avantel. These practices resulted in losses derived from useless advertising and because the plaintiffs were forced to withdraw their prepaid cards from the market, since they would not meet demand given that their acquisition required unavoidably the purchase of Telmex Ladatel card too.

The FCC's decision included a sanction amounting to the highest applicable fine for each of the practices incurred in. On deciding this amount, consideration was taken of the harm posed on competition the international effect on firms and consumers and of Telmex's market share.

Undue charges and discrimination practice in the resale market

Case. The complaint filed by Avantel, Alestra and Marca Tel against Telmex referred to: *i*) the double charge imposed by Telmex for rendering resale services. This charges were implemented through the Lada Operator Plan (PLO)[13] offered by Telmex, *ii*) price discrimination as compared to other commercial clients; *ii*) restrictions in the provision of resale ports; *iii*) restrictions in leased links; *iv*) unjustified failure in such services; and *v*) the imposition to use 2 Mbps links (which constitutes a tied sale).

The CFC determined the affected relevant markets were: *i*) resale of long distance transmission capacity and *ii*) access or interconnection services, both with a national dimension.

As a result of the enquiry the CFC found that:

- Telmex charged twice for the interconnection at the originating location, because resale rate included both interconnection at the originating and destination cities. Notwithstanding, Telmex was applying an additional interconnection charge.
- Long distance operators paid a higher price for long distance services (acquired in the resale market) than retail rates paid by Telmex' customers.
- Telmex provided delayed resale infrastructure even though it had the capacity to provide them on time.
- Telmex unduly delayed the provision of links and interconnection circuits.
- Telmex suspended the provision of links without offering technologically competitive options. The majority of these interruptions occurred in cities recently opened up to competition.
- Some cities' transmission requirements are below 2 Kbps , thus carriers had to acquire spare capacity. However, Telmex did not allow long distance operators to share 2 Kbps links.
- Microwave and satellite links are not substitutes for the interconnection service provided by Telmex through its wire network, for resale and interconnection services.
- Telmex has substantial power in the relevant markets.

The CFC defined the resale[14] market as one of the relevant markets, because the practice was carried out as regards an input used by long distance carriers to render final long distance services to their customers.

Based on these grounds, the CFC determined the existence of anti-competitive practices aimed at impeding the competitive provision of interconnection and resale services, thereby reducing its competitors demand. The CFC therefore ordered:

- To unbundle the interconnection rate charged at the originating city from the resale rate and to suspend price discrimination regarding resale services. It did allow Telmex to apply uniform discounts on the basis of volume to all customers, and ordered the application of cost based rates.
- To provide resale ports on time.
- Not to delay or deny the provision of leased links and interconnection circuits, unless technical restrictions are verified.
- To eliminate undue service interruptions and if these ever occur it must be proved they respond to technical conditions. If these interruptions are a consequence of maintenance labor this situation shall be anticipated to long distance operators.
- To allow long distance operators to share 2Mbps links and to remove the obligation to purchase these links if the amount of traffic does not justify its purchase.

In addition, the CFC imposed sanctions accordingly to the LFCE.

The FCC's resolutions in the aforementioned cases foster efficiency in the telephony market and diminish Telmex capacity to conduct anticompetitive practices adverse to the market functioning.

Efficiency and opportunity in the FLEC application is limited by legal protective procedures (amparos) presented by the enterprises.

6. Conclusion

The most important regulatory changes in the last five years have been reviewed in this draft paper. Significant developments have been achieved: a regulatory framework for several services already exist and a Resolution with specific obligations applicable to the dominant carrier may be enforced; competition begins to consolidate and even in local telephony service some outcomes are arising; interconnection rates are equivalent to 25 percent of the rates charged four years ago. Still it is necessary to resolve some important problems in the sector.

NOTES

[1] This basket includes installation and connection, basic month rate covering an upper call limit; local calls in excess of such limit and long distance calls, in commercial an residential service.

[2] The concept of monopolistic practices included in MTC is not identical to that established in the FLEC, in force since 1993.

[3] Although local service was legally opened to competition, the lack of a specific legal framework impeded practical results.

[4] New wireless local networks have to pay interconnection on a minute of use basis. Traditional local telephony applies a charge for each event (call); and thus, in the absence of bill and keep agreements the introduction of new local service would be if interconnection charges need to be covered, new local companies would not be able to compete.

[5] Resale refers to the use of long distance transmission capacity. New carriers do not connect all cities with their networks and need to have access to Telmex' infrastructure in order to end transmissions in all the country.

[6] The LFT foresees that carriers should sign contracts in order to interconnect their nets. Whenever they do not reach an agreement, Cofetel may determine the terms and conditions of interconnection.

[7] A commercialising firm is defined in the LFT as a firm that renders telecommunication services but does not own transmission means.

[8] The increasing costs study shall identify adjusted average capital cost (CCPP) which is the financial cost of an enterprise's assets adjusted by the cost and relative importance of each component of such financing. To calculate the CCPP it must be considered the appropriate leverage structure for a telecommunications enterprise.

[9] Controlled services are: installment and connection, basic rent, measured service and long distance calls, residential and commercial.

[10] The LFT permits any interested agent to require the SCT to open auction processes in order to make available additional spectrum frequencies. The SCT has 60 natural days to give a resolution to such requests.

[11] Mexico's contribution to the May 2001 roundtable on Price Transparency includes the analysis performed by the CFC of a proposal presented by the long distance carriers regarding final price determination on the basis of the interconnection rate. The proposal was rejected by CFC in view of its anticompetitive effects.

[12] As indicated above, before privatisation took place and during the fist years of the private administration long distance services subsidised cheap local service. (This occurred particularly with respect to residential users.) Rebalancing of these prices, i.e. their gradual approach to cost levels was promoted in 1997 and 1998 by means of the interconnection rate.

[13] Under the PLO terms, long distance carriers have access to resale services they require in turn to provide their services, and Telmex commits itself to charge as the resale rate the lowest long distance rate it charges its own clients (most favoured client policy).

[14] This refers to resale of transmission capacity between cities, i.e. long distance.

THE NETHERLANDS

1. Introduction

The telecommunications sector is a very fast-moving sector. As new products, techniques and markets develop rapidly, the regulatory environment needs to follow these changes closely. Especially because current regulation is linked to the use of certain networks, which can change easily. The convergence of infrastructures can influence the relevant markets and hence the (dominant) position of companies involved.

In this paper we will focus on the regulatory developments in the Dutch telecommunications sector. As 6 years is a long period of time as explained above, we will start by giving a quick overview of the developments between 1995-1999. Recent developments are discussed in chapter 2.

2. Regulatory developments 1995-1999

2.1 Regulation and supervision of the Telecommunications Sector[1]

For the telecommunications sector, the legislator opted for a sector-specific regulator, the Independent Post and Telecommunications Authority ("OPTA").[2] The OPTA supervises the compliance of undertakings with the Telecommunications Act 1998 (hereafter "TA"). OPTA's regulatory powers are more self-contained in the sense that the Commission of OPTA is not subject to specific ministerial directions (from the Minister of Transport, public Works and Water Management) nor must he report to the director-general of the national competition authority (NMa). As the largest player on the Dutch telecommunications market – KPN – is not yet fully privatised, it was considered necessary to confer independent legal status on the OPTA.

In the beginning OPTA (then called TND) formed part of the Ministry of Transport Public Works and Water management. The Minister does not have powers to interfere with individual decisions taken by OPTA. In addition to the Minister's legislative powers, the Minister has the power to issue general instructions to OPTA. The OPTA is called an independent governmental agency.

Furthermore the Dutch Government decided to establish a National Competition Authority (NMa- Nederlandse Mededingingsautoriteit) following the introduction of the new Competition Act 1998. This act is based on the European Treaty and jurisprudence on the articles 81 and 82 of the Treaty. Articles 6 and 24 of the Dutch Competition Act are in line with the aforementioned articles in the Treaty. As the Dutch Competition Act comprises situations of abuses of competition by dominant market players and the prohibition of cartels in every possible market, the NMa supervises all markets in the Netherlands, including the market for telecommunications. Furthermore the NMa supervises mergers and acquisitions.

Of course the NMa and OPTA have to work closely on a daily basis. When OPTA interprets terms used by the NMa when assessing abuse of a dominant position, OPTA must use its powers in

agreement with the views of director-general NMa. In some areas concerning the supervision of competition issues the NMa has exclusive authority such as -the aforementioned competition restricting agreements between companies and the merger control supervision.

The director-general NMa and OPTA have concluded a Protocol governing the interpretation and implementation of those powers which they have in common ("Samenwerkingprotocol OPTA-NMa").[3] (see chapter 3)

Currently the ministry of economic affairs is preparing the NMa to become an independent governmental agency. A draft Act amending the Competition Act has been sent to Parliament.

2.2 Some specific developments

2.2.1 Local loops

Despite the lack of regulatory barriers to access to the local loop, the high technological and investment costs mean that as yet there is still little or no competition in the residential local loop throughout the Netherlands. If the full benefits of liberalisation are to be felt in reality then it is essential that effective competition in the local loop is established as rapidly as possible. The Member States of the EU realised this and introduced in very speedily manner a Regulation obliging those companies that have a significant market power on the market of the local loop to provide for access to that local loop.

In The Netherlands, specific obligations have been developed to ensure that there would be no influence by the incumbent telecom operator on the commercial activity of the cable operators and to limit cross-ownership by the incumbent telecom operator over both telecom and cable- TV infrastructure. KPN was thus under an obligation to divest its cable-TV business in The Netherlands and has done so. Currently, two cable companies provide voice telephony services over their cable networks.

2.2.2 Rebalancing in the fixed telephony market

The Netherlands is one of the few countries of the European Union in which the tariffs for calls have been rebalanced with the tariffs for subscriptions. Therefore competitors of the incumbent in the field of carrier (pre)select. End-users can choose to dial-up via a competitor of the incumbent whilst having a subscription with the incumbent.

2.2.3 Mobile market

In the Netherlands there are currently five mobile operators and seven service providers. Two of these service providers are independent of the mobile operator. Until 1999 there were only two operators (KPN and Libertel – Vodafone) active in the Netherlands. In that year Ben, Telfort and Dutchtone acquired a licence and a frequency. The number of mobile subscriptions rose exponentially. Tariffs fell accordingly. The tariffs for fixed to mobile calls however remained high.

KPN and Libertel have been designated as having SMP on the mobile market (see hereafter).

2.2.4 Leased lines

Competition in the leased lines market has grown and tariffs have dropped accordingly. However the delivery periods still form a problem for especially those leased lines that KPN is obliged to offer. In particular in the west of the Netherlands competitors were able to obtain substantive market shares.

2.2.5 Price squeeze

In 1999 OPTA received complaints from competitors of the incumbent of being squeezed off the market. The margins that the competitors could establish on the fixed market decreased rapidly due to the fact that the incumbent lowered its interconnection tariffs whilst retaining the end-user tariffs at the same level. Therefore the competitors and their investors saw their income decrease accordingly. The OPTA presented in close co-operation with the NMa (national competition authority) a consultation document on this issue in 2000. This document will form the basis for regulating the interconnection tariffs in future.

2.3 Regulatory developments 2000-2001

In this chapter we will focus on the developments which occurred in 2000. We will concentrate on the access regulation and dominance issues (paragraph 3.1) and the competition concerns and competition law enforcement (paragraph 3.2).

Interesting topics last year in the field of regulation concerned internet access issues. Also the enhanced collaboration between the OPTA and the NMa deserves attention.

3. Access regulation and dominance

The supervision of access by various market parties, especially to the KPN network, is one of the duties of the Dutch Telecommunication Authority, OPTA. One of the main topics during 2000 was the telecommunication services between providers. The rates to be paid by the parties to one another and the conditions governing access in particular. Unambiguous procedures and guidelines are being developed, *inter alia,* in order to enhance market transparency. Some of the developments and new techniques are outlined below.

4. New System for Interconnection Tariff Assessment

In order to asses the level of interconnection tariffs, a new cost allocation model was developed for calculating terminating interconnection rates. In the future cost allocation will be calculated using the Long Run Incremental Cost (LRIC) model. This makes more allowances for technological progress than the model currently in use. The LRIC model bases itself on such costs as are incurred by an efficiently operating provider applying new technology. It will replace the Embedded Direct Cost model (EDC) which is based on past costs incurred by KPN and which has the drawback that tariffs are set retroactively. The decision to apply a different cost allocation model for originating access tariffs than for terminating access[4] tariffs is a result of the fundamental difference between the two types of service in terms of competition. Transactions of the originating kind offer greater alternative scope than transactions of the terminating kind as market parties may always decide (partly) to deal with originating transactions using their own infrastructure. Moreover, other than for the reason of promoting infrastructural competition, OPTA considers a distinction in the regulation of the two types of service to be justified from the

perspective of providing market parties with the right incentives when making their make-or-buy decisions.

4.1 Enhanced KPN Reference Interconnection Offer

Interconnection links and leased lines continue to be scarce. The under-capacity causes congestion on KPN's telephone network. Although no under capacity disputes were instituted during the review year, plenty of signs were picked up from market parties confirming the serious shortage. There were complaints about the supply and reliability of leased lines in particular continuing to be filed in numbers.

As a provider with a very dominant market share in the market for fixed telephone services, KPN has a statutory duty to publish a Reference Interconnection Offer (RIO). This is an overview of the various interconnection services offered by KPN along with corresponding tariffs, conditions, projection, order and delivery procedures. It is OPTA's duty to ascertain that nothing in the RIO contravenes the law. Periodic penalty payments can be imposed if the RIO does not comply with the law. The publication of the RIO contributes to market transparency, giving the various providers better information when negotiating the realisation of the interconnection links.

4.2 Policy regulations regarding filing and publication of interconnection agreements and special agreements…

In order to stimulate market transparency further, the 'Policy regulations regarding filing and publication of interconnection agreements and special agreements' were published in June 2000. These guidelines elaborate upon the parties' filing obligation. It also stipulates that all interested parties have the right to inspect all OPTA-filed agreements between other parties and obtain copies thereof for consideration. This will enhance the negotiating strength of individual parties as well as lowering market access thresholds.

4.3 Special Access to Dominant Providers' Networks

Access to the networks of dominant providers is an important step in the development of competition in the telecommunication market. Subject to specific conditions, market parties with significant market power are under the obligation to comply with (reasonable) requests from others to be granted special access. This enables competitors which do not operate a network of their own or which only have a partial (backbone) network to market telecommunication services to end users.

4.4 Unbundled Access

'Unbundled access' means that KPN is required to grant its competitors access to its local loop, which runs from the district exchange to the telephone outlet in the subscriber's home. Main Distribution Frame (MDF) access is an example of unbundled access, and enables telecommunication companies to gain immediate access to the consumer via the local loop or individual subscriber line. MDF access mainly revolves around broadband services such as ADSL and HDSL.

A development path has been charted for the MDF access tariff, which is set to gradually develop over a five year period from a historical cost based to an actual cost based rate.

4.5 Regulation Regarding Unbundled Access for the Whole of Europe

The European regulation governing unbundled access to the local loop came into operation in early 2001. This directly applicable European legislation provides an obligation on the part of former monopolist providers to grant unbundled access to the local loop. The European regulation was designed with the purpose of promoting competition on the local loop as well as giving consumers a greater choice. It is of further crucial importance in terms of the introduction of broadband internet access. As an obligation to grant unbundled access is already in operation in the Netherlands, the introduction of the European regulation will not lead to a fundamental change here.

4.6 Publication of Collocation Policy Guidelines

KPN's competitors seeking access to the local loop must be given the opportunity to install their own equipment in KPN's telephone exchanges. This is referred to as 'collocation'. Policy guidelines on the subject were published in late December 2000.

Examples of prominent aspects in the assessment of KPN's Reference Offer are that:

- collocation requests should always be taken up;
- collocating providers should also be able to provide for mutual connections;
- the facilities enabling physical collocation to be achieved should be made available within three months of the order date and, for adjacent collocation, within one month of the application date.

Moreover, the policy guidelines offer scope for collective phased rollout by KPN, albeit in a transparent, fair and non-discriminatory manner.

4.7 Special Access to Mobile Networks

Special access has predominantly been applied to the fixed telephone communication market. The designation in 2000 of KPN Mobile and Libertel as providers with significant market power in the mobile telephone market has made special access to mobile networks an issue of current interest. OPTA is receiving an increasing number of queries from parties about possibilities for offering services using the mobile networks of other parties, as the shortage of frequencies is curbing access options using their own network. In 2001, a market consultation will take place and, if appropriate, new policy guidelines will be published.

Box 1: Unbundled access -- A selection of relevant disputes of 2000.

- *Unbundled Access Disputes between Cistron and Eager versus KPN*

In November 2000, OPTA issued its ruling in a dispute between Cistron and KPN and in another between Eager Telecom and KPN, both plaintiffs having requested the prompt presentation of a reasonable offer for unbundled access to the local loop and collocation. KPN had declared itself unwilling to supply the requested services until 2002. Under OPTA's ruling KPN was given two weeks to develop a revised offer to present to the two companies. Previously, in February 2000, a provisional decision by OPTA had

forced KPN to make an offer to Cistron for interconnection, unbundled access and collocation in the municipality of Alphen aan den Rijn; no definitive ruling having been issued in this earlier dispute as the parties belatedly managed to settle the matter between them.

- *Telfort Drops Dispute Proceedings*

A protracted dispute between Telfort and KPN concerning the latter's making interconnection capacity available to the former was dropped by Telfort, which had inter alia sought to have an obligation imposed on KPN for setting aside the interconnection capacity ordered. Having continued negotiations as proceedings progressed agreement was eventually reached between the parties in February 2000.

- *KPN Drops Objections Against EDC*

KPN, and Worldcom in its wake, dropped a number of objections against the EDC model, partly in response to the OPTA-prepared regulation draft setting out tariff regulation intentions for the future. The OPTA Commission published the regulation draft in the autumn of 2000, subsequently elaborating on it in its consultation document dated 21 December 2000.

- *WorldCom versus KPN*

In proceedings which WorldCom had initiated against KPN OPTA ruled that the latter should make two special access services available to the former. WorldCom applies a different (wholesale) tariff structure for access to the KPN network and is thus able to launch new price structures for end user tariffs charged to internet users (the 'MIACO' (Metered Internet Access Call Origination) versus 'FRIACO' (Flat Rate Internet Access Call Origination) discussion). Further reference is made to the section on internet.

5. Significant Market Power

With the aim of ensuring a level playing field, the Netherlands Telecommunications Act, in line with the European Legislation, stipulates that all market parties having a market share in excess of 25 percent should be designated as 'parties with significant market power'. The Act imposes additional obligations on parties with significant market power compared to the obligations for new providers. This should enable (new) providers to develop a market share of their own, thus intensifying competition and giving greater end user choice.

5.1 Publication of Policy Guidelines Regarding Significant Market Power

The 'Significant Market Power Designation Guidelines' were published by OPTA in the edition of March 8th, 2000 of the Netherlands Government Gazette. These policy guidelines have clarified the use of the concept of significant market power and its future application. The policy guidelines identify the differences between the Netherlands Telecommunications Act and the Netherlands Competition Act. For example, under the former act the market has been pre-classified into four relevant (sub) markets: Fixed public telephone communication, mobile public telephone communication, leased lines, and fixed-to-mobile telephone communication. The basic principle of this part of the Telecommunication Act is that a provider is deemed to have significant market power in so far as its market share in any of these four (sub) markets exceeds 25 percent (see above). Based on statutorily prescribed criteria OPTA may exempt parties from holding this status, with the policy guidelines outlining how the criteria should be applied. Finally, OPTA will, where possible, operate in line with general competition law when interpreting the criteria.

Box 2: Significant Market Power -- A selection of relevant disputes in 2000

- *KPN and Libertel Disagree with Significant Market Power Designation in Mobile Telephone Communication Market*

In October 1999, based on their market shares (the 25 percent rule as per Section 6(4) of the Netherlands Telecommunications Act), OPTA designated both KPN Mobile and Libertel as parties with significant market power in the mobile telephone communication market. Libertel lodged an objection against this designation, for which the court subsequently requested a suspension arguing that OPTA had wrongly omitted to verify whether there was any reason for departing from the 25 percent rule on the basis of such criteria as outlined in the Telecommunications Act. In 2000, OPTA had an elaborate survey conducted into the mobile public telephone communication market and the market positions of the relevant parties, the outcome of which prompted it to conclude that none of the exemption criteria stipulated in the law warranted departure from the 25 percent rule. For this reason it indicated in its ruling over the objection, on 9 November 2000, that Libertel's designation would be upheld, as well as stipulating that there were no reasons for withdrawing KPN Mobile's designation as a party with significant market power. KPN has filed an objection against this designation, while Libertel has lodged an appeal.

- *Significant Market Power Designation for Fixed Telephone Communication Market and for Leased Lines*

Section 6(4) of the Netherlands Telecommunications Act designates KPN and its subsidiaries as parties with significant market power in the fixed public telephone communication and leased line market until 15 December 2000. OPTA commissioned an analysis of these markets and of the positions of each of the parties, with the aim of deciding whether one or more parties should be re-designated as parties with significant market power with effect from 15 December 2000. The analysis having shown that KPN's share of the fixed public telephone communication market currently lies in the 85-to-95 percent range, OPTA has duly re-designated KPN as a party with significant market power. OPTA will annually assess whether KPN's designation should be extended. KPN lodged an objection against being designated as a party with significant power in the leased line market ('Section 7(2) designation') and requested the Rotterdam Court to provide for provisional relief. The Rotterdam Court upheld this request in January 2001, thereby partly suspending the decision

5.2 Collaboration between the National Regulatory Authority (OPTA) and the National Competition Authority (NMa)

As explained in the first chapter, there are two authorities within the telecommunications sector that are concerned with competition issues in the sector, each having their own powers. As both authorities have competencies in specific cases, incompatibility between the rulings and actions of both regulators must be avoided. Close collaboration is thus necessary between the two regulators. For example in the context of an investigation into or complaints about abuse of economic power by a postal or telecommunication company.

Agreements concerning collaboration and consultation between OPTA and the NMa have been laid down in the 1999 Co-operation Protocol. In 2000 this protocol was evaluated and subsequently optimised.

The substance of the protocol remained intact. The amendments are some adjustments for the benefit of an even better insight and some revisions in response to the coming into operation of the Amsterdam Treaty and that of the Netherlands Postal Act (the latter having taken effect during 2000). In addition, pursuant to Article 18.3 of the Telecommunications Act, the Minister of Transport, Public Works and Water Management has to request the advice of the director-general NMa before deciding on the refusal or withdrawal of a licence for the use of frequencies, when the withdrawal is based on an significant restriction of competition on the relevant market. The new Protocol was effected in December 2000.

Examples of topics on which OPTA and the NMa conferred in 2000 are the 'Cable and Consumer' memorandum on market forces and digitalisation, and the uncoupling of Internet communication. Consultation between the two regulators also took place in several individual decisions which have been taken (by OPTA) and also decisions designating KPN, KPN Mobile and Libertel as providers with significant market power.

5.2.1 Cable and Consumer memorandum

As mentioned above the OPTA and NMa presented their joint view on cable access issues in their 'Cable and Consumer' Memorandum. As for programme transmission, an access obligation for the distribution of radio and TV programmes to be included in the Netherlands Telecommunications Act was recommended. Cable companies then will have to comply with reasonable requests by programme providers to be granted access to their network, subject to reasonable conditions and at reasonable rates. In this respect, OPTA and the NMa have assumed that - given the dominant position which the cable companies will continue to enjoy for the time being in respect of programme transmission - 'reasonable rates' will be interpreted in accordance with cable access policy guidelines as are currently applied.

5.2.2 Internet access

Also, the NMA and OPTA have announced their intensified collaboration in the area of markets for Internet Access. These markets are characterised by considerable dynamism and issues may arise which fall within the areas of responsibility of both NMa and OPTA. Therefore active monitoring of the markets for Internet Access is important for law enforcement/settlement of disputes in relation to both the Competition Act and the Telecommunications Act. A joint Internet team was set up, which is to scrutinise internet access markets at regular intervals. The closest attention will be paid to competition in all Internet access markets in anticipation of the completion of the ONP Review. This regularly recurring study will speed up the rate at which it can be determined whether competition-promoting intervention is required. The NMa-OPTA internet team studies the relevant internet access markets and the market positions of network and service providers as well as the degree of vertical integration between them, analysing the development of competition and the consequences at end user level (consumers and business users). The team's first product is the consultation document on Internet access published during the first quarter of 2001. One of the conclusions drawn in the document is that separate markets can be distinguished for narrowband Internet access and broadband Internet Access. No final conclusions have been drawn as to whether and, if so, to what extent the cable networks and ADSL are or will actually become competing networks. Based on the conclusions of the consultation document and the response from market parties, the authorities will draw up an amended report before the summer and (in so far as this is deemed useful and necessary) they will publish the guidelines.

5.2.3 Internet communication uncoupling

Another issue that was discussed is the powers by which the two organisations are qualified to take action against market disruption in the context of Internet communication uncoupling. The conclusion was that although these powers cater for the majority of market disruption scenarios, there remain limits to their supervision. For example, the fact that KPN is the only party which has a finely meshed network of local interconnections at its disposal could enable it to gain control of the internet access market, as it remains the only provider capable of uncoupling internet communication at local level within the network. This could provide KPN with a significant initial advantage over its competitors (including a host of new market entrants).

5.2.4 Price squeezing

As mentioned in chapter 1, OPTA received complaints from competitors of the incumbent of being squeezed out-off the market. When looking into the issue of price squeezing, it was determined by the two authorities that the difference between KPN's retail prices for calls within the same region (local calls) and the prices KPN charges competitors for using its network (interconnection rates) is too small. KPN was asked to propose a solution to this price squeeze.

Due to the price squeeze, it is almost impossible for providers other than KPN to compete. In time this will result in less competition, which, in turn, may bring about an increase in retail prices. At present national calls, calls from the fixed network to mobile phones and Internet calls to a 06760 number do meet the price squeeze norm. The criteria may possibly be extended at a later stage to include other services with the aim of bringing about fair and lasting competition. Due to an overlap in the authority of OPTA and NMa, it was decided to publish joint 'Price Squeeze Guidelines' (March 2001).

Box 3: Internet rulings -- A selection of relevant disputes in 2000

- *WorldCom versus KPN*

In proceedings launched against KPN by WorldCom OPTA ruled that the former should provide the latter with two special access services. Owing to the fact that it applies an alternative (wholesale) rate structure for access to the KPN network, WorldCom is in a position to launch new tariff structures for end user rates charged to internet users. The first new format is that MCI WorldCom can itself provide for settlement of internet calls with the end user coming in via the KPN network, thus enabling it to charge the end user a different rate per unit than KPN (Metered Internet Access Call Origination, MIACO). The second format enables a flat-rate internet subscription to be offered, i.e. using the internet at a fixed price without having to pay extra for units used (Flat Rate Internet Access Call Origination, FRIACO). In view of the scarcity affecting the fixed network, KPN will only have to supply FRIACO to such subscribers as have ISDN connections for the time being. The Rotterdam Court turned down KPN’s request for provisional relief against the FRIACO ruling.

5.3 The NMa and the Telecommunications sector

The NMa has also looked into some closely telecom related issues last year, concerning *inter alia* the auction of UMTS frequencies. Also the NMa provided the Ministry of Transport, Public Works and Water Management with advice on TErrestrial Trunked Radio (TETRA).

5.3.1 Auction of UMTS-frequencies

In July 2000 the Dutch UMTS-frequencies were auctioned. In November of the same year the suspicion was aroused that two parties, Versatel and Telfort, might have been involved in some competition restricting agreements. If this would have been the case, the two parties could have influenced the auction. Therefore the NMa was asked to review the auction, thereby especially looking into possible competition restricting agreements amongst auction parties. However, from all the material gathered (documents, interviews) and analysing the auction process and auction behaviour of the parties involved, no evidence was found of existence of competition restricting agreements between Versatel or Telfort, thereby violating art. 6 of the Dutch Competition Act.

5.3.2 Advice of the NMa on concessions for TErrestrial Trunked Radio (TETRA)

The Ministry of Transport, Public Works and Water Management sought an advice on competition issues with respect to the distribution of frequencies for TETRA. TETRA being a new standardised digital system for mobile radio communication. TETRA is also suitable for voice and data communication. It is expected that within years to come TETRA will be applied in a large part of Europe.

The advice focused inter alia on the relevant market for TETRA. Regarding the relevant product market it was concluded that TETRA and GSM Pro[5] share the same product market. Whether Traxys (Traxys is a national public analogue mobile telecommunication network), is also part of the same market is not yet plausible. Furthermore, it was considered not very likely that if one of the market parties would obtain a concession for TETRA that this market party would have the powers to hinder competition in the relevant market for TETRA. Therefore there are no reasons why parties should be expelled from the rights to obtain a concession.

6. Literature

- Annual Report OPTA 2000 (published May 10th, 2000);
- *Regulatory Reform in the Netherlands*, OECD, 1999, pages 69-77;
- *Community Law (including competition rules) AFFECTING "Networks"(telecom, energy and information technology) and its Consequences for the Member States; XIX F.I.D.E. Congress, Helsinki 1-3 June 2000;*
- Annual report NMa 2000.

7. Information

www.opta.nl
www.nma-org.nl

NOTES

[1] The Services Directive (90/388/EEC) and the Framework Directive (90/387/EEC) lay down obligations on Member States to establish national regulatory authorities with legal and functional independence from the network operators and service/equipment providers.

[2] See www.opta.nl.

[3] Samenwerkingprotocol OPTA-NMa, see www.nma-org.nl and www.opta.nl

[4] Terminating access is the handing over of a telephone call by KPN to the subscriber of another network provider.

[5] TETRA is primarily used for communication between the mobile users of a company or an institution. It uses radiotelephones and/or walkie-talkie. GSM Pro is a group communication service using the GSM network. Traxys is a national public analogue mobile telecommunication network.

NEW ZEALAND

Following an extensive review the New Zealand Government is in the process of introducing the following telecommunications industry reforms to assist in achieving its economic and social objectives in the telecommunications services sector. A Telecommunications Bill was recently introduced to Parliament and is expected to be passed by 30 September 2001. Key features of the Bill are described.

1. Economic Objectives

1.1 Industry Specific Telecommunications Commissioner

A Telecommunications Commissioner will be appointed as a specialist Commissioner within the Commerce Commission. The Commissioner will carry out the following key functions:

- dispute resolution (includes an initial and a final determination) concerning compliance with access regime obligations for designated or specified telecommunications services;
- making recommendations to the Minister of Communications on further designations or specifications; and
- monitoring and enforcement of the Kiwi Share obligations or any new universal service type obligations.

2. Categories of Regulation

There will be three categories of regulated telecommunications service:

- designated service: a provider of a designated service must provide that service on request from an access seeker in accordance with prescribed access obligations, including pricing principles (which will enable the new Telecommunications Commissioner to set a regulated price in the event one party brings a dispute over the price);
- deferred designated service: an alternative to immediate designation; that is, the service will be designated if the industry fails to agree access terms and conditions by a set date; and
- specified service: an obligation to make the service available, but which does not include the pricing principles to be used in providing access;

– all designations and any specifications will expire automatically after five years, unless revoked earlier, but can be renewed for further periods of two years by the Minister.

3. Determination of Disputes

- parties will be encouraged to reach commercially negotiated agreements where possible;
- the Commissioner will invite submissions from parties and exercise powers to obtain further information as required;
- where the price is in dispute, the Commissioner will apply an initial pricing principle to quickly make an enforceable determination on price. The initial price determination will be binding and not subject to appeal;
- a party can seek a "pricing review determination", at which point the Commissioner will be required to apply the pricing principles specified in the determination;
- a determination (including a pricing review determination) will be binding and enforceable, but appeal will be allowed in the circumstances described below. It will continue to be binding while the appeal is being heard, meaning the parties could not use the appeal process to delay a determination. Parties could also request the Commissioner to reconsider a determination later if circumstances changed.
- the parties are responsible for enforcing a determination through the courts.
- determinations of the Telecommunications Commissioner will be made publicly available.

4. Rights of Appeal

- Rights of appeal against determinations of the Telecommunications Commissioner will be limited to points of law, to co-exist with a right to judicial review.

5. Involvement of other Commissioners in Decision Making

- full determination pricing reviews will be made jointly by three Commissioners, including the Telecommunications Commissioner;
- the Telecommunications Commissioner will make recommendations for new designated or specified services, but will be required to consult with two other Commissioners;
- other duties will be carried out by the Commissioner, or with two other Commissioners at the discretion of the Telecommunications Commissioner.

6. Industry Forum

- Industry participants have been invited to set up an industry Forum.
- Reference will be made in legislation to a voluntary industry forum but establishment and membership of the forum will not be made mandatory.

- The Telecommunications Commissioner will have powers to approve codes prepared by the Industry Forum. Such codes will be binding on the industry.

7. Funding the Costs of the Commissioner

- the general costs of the Commerce Commission (including the Telecommunications Commissioner) incurred in carrying out its telecommunications-specific regulatory functions will be met through a levy imposed on the telecommunications industry;

- the costs of any determination proceedings will be met by the parties to those proceedings in proportions decided by the Commission.

8. Process for Regulating Additional Telecommunications Services

- the process may be initiated by either the Minister of Communications or the Telecommunications Commissioner;

- the designation/specification test will be applied by the Commissioner and a recommendation will be made to the Minister on whether the service should be regulated and if so the form of regulation;

- the Minister will make the final decision on whether to regulate the service.

9. Designation/Specification Test

The following test will be applied to determine whether a service should be designated.

- the objective is to promote efficient telecommunications markets for the long-term benefit of end-users of telecommunications services within New Zealand by regulating the supply of certain telecommunications services to service providers;

- in determining whether anything done is consistent with the objective, the following matters must be considered;

  - whether or not the act facilitates efficient competition in markets for telecommunications services; and

  - whether or not the act promotes any-to-any connectivity to the extent that it is efficient; and

  - whether or not the act encourages the efficient use of, and efficient investment in, the infrastructure by which telecommunications services are provided.

10. Initial Designated Services

- voice and data interconnection (call origination and termination) with Telecom's fixed telephone access network;

- commissioner will also be able to set the price of interconnection on the other network (excluding cellular networks) in the event of a dispute.

- The pricing principles to apply are:

  - the cost-based pricing principle for interconnection with Telecom's network will be total service long run incremental cost (TSLRIC);

  - the price for interconnection with the other network will be the price of interconnection with Telecom's network corresponding most closely to the nature of the other network (e.g. urban, rural); or a TSLRIC model; or bill and keep (where no payments are exchanged), if appropriate.

  - Where TSLRIC interconnection prices are required, each network will undertake its own modelling to estimate the price for interconnection with its network, with the Telecommunications Commissioner having the power to set the price.

  - Legislation/regulations will specify that a key purpose of allowing the Telecommunications Commissioner to set the price of interconnection for data traffic to the non-Telecom network is to eliminate perverse incentives to stimulate artificially Internet traffic.

- Wholesale access to Telecom's fixed network at 'retail minus' prices

  - the designation will apply only to non-price capped services, and will not require Telecom to unbundle a service offering where the unbundled elements are not offered as a retail product;

  - pricing for these services will be on a 'retail minus wholesale discount' basis (reflecting net costs saved), and the Commissioner will use economic efficiency criteria to determine:

    - the most appropriate retail price on which to base the discount (average price or best price for the service); and

    - the areas to which the designation should apply (areas of market power only or all areas).

11. Number Portability

- local, freephone and cellular number portability will be designated;

- if the Telecommunications Commissioner is required to resolve a number portability dispute, economic efficiency criterion will be used to make a determination on:

  - the most appropriate number portability system; and

  - how the implementation and use of this system will be funded.

12. Deferred Designation: Fixed-to-Mobile Carrier Pre-Selection on Telecom's Fixed Network

- the industry will be given until 31 December 2001 to agree on appropriate terms and conditions for fixed-to-mobile carrier pre-selection;

- if agreement has not been reached by this time, the Minister of Communications will have the power to designate fixed-to-mobile carrier pre-selection on Telecom's fixed network immediately.

13. Social Objectives

The following enhancements to Telecom New Zealand's Kiwi Share obligations (New Zealand's equivalent to a universal service type of obligation) will be introduced to meet the Government's social objectives:

- extend geographical coverage of the Kiwi Share to September 2000 levels;

- clarify that the Kiwi Share obligations provide for (so-called) free local calls for dial up data (e.g. Internet) as well as voice;

- achieve an improvement in Telecom's network capability for dial up data to at least 9.6kbps within two years of the passage of legislation for 99 percent of all existing residential lines, and to 14.4kbps over a period of two years for 95 percent of all existing residential lines. Capital costs are to be met by Telecom;

- implement a strengthened monitoring and enforcement regime including the following measures for assessing Telecom's performance in fulfilling its Kiwi Share obligations:

  - Internet access availability (99 percent at 9.6kbps; 95 percent at 14.4kbps);

  - Emergency services performance; and

  - dial tone availability - a measure of voice service quality.

  - A penalties regime will apply if Telecom fails to fulfil its Kiwi Share obligations. The Commissioner will be able to withhold approval for Telecom to oncharge industry participants their share of the costs of the Kiwi Share obligations if Telecom has not achieved satisfactory performance.

  - The current CPI price cap on residential telephone service will be retained.

  – Telecom will continue to be able to reduce its prices in the face of competition (subject to the Commerce Act);

14. Industry Contribution to Kiwi Share Obligations

- Telecom will carry out an initial costing of the Kiwi Share obligations in accordance with a robust and transparent costing methodology (including auditing and consultation with

interested parties). The Telecommunications Commissioner will make a final determination on the level of any net operating costs.

- Telecom and other firms connected to Telecom's fixed network will contribute to any net operating costs of the Kiwi Share obligations.

- The level of each industry member's contribution will be determined by the Telecommunications Commissioner in accordance with an appropriate methodology, based on a share of relevant telecommunications revenue streams including mobile, long distance, data and local access. Approved shares will be recoverable by Telecom as a debt from other companies.

Snapshot of Telecommunications Competition in New Zealand

1. Local Telephone Services Competition

Telstra Saturn has invested ~NZ $230 million in its Wellington-Kapiti area telecommunications and pay TV network rollout which was completed in late 2000. In the Wellington-Kapiti area Telstra Saturn passes ~ 120 000 homes, has ~30 percent share of the telephone market, and has a 20 percent penetration pay TV of houses passed.

Telstra Saturn are now one year into a five year network rollout plan to invest some $1.1 billion to create a voice and data network that will pass 65 percent of homes and 80 percent of businesses in New Zealand.

Currently, Telstra Saturn has about 32 000 telephone service customers, mainly in the Wellington area.

Clear Communications provides a full range of business telephone and data services in larger centres throughout New Zealand. Clear has not released any data on the number of telephone access line customers. Clear also provides a range of long distance call services to residential telephone service users.

The following companies provide long distance call services:

- Telecom New Zealand;
- Clear Communications;
- Telstra Saturn;
- Global One Communications;
- Worldxchange;
- Call Plus;
- Compass Communications;
- Ihug;
- DigiPlus.

2. Cellular Services

There are two providers of cellular network services in New Zealand.

(Cellular customer in 000s)	**Dec 2000**	**March 2001**
Telecom New Zealand	1,151	1,269
Vodafone	753	889
Penetration Rate (%)	46	53

Both Telecom and Vodafone have rebranded-resale arrangements.

3. Data Services

The following companies provide an extensive range of data services

- Telecom New Zealand;
- Clear Communications;
- Telstra Saturn;
- Walker Wireless.

Telecom New Zealand offers xDSL based broadband services (~12,000 users). Some 43 percent of Telecom's telephone service users will now be able to get DSL if they choose to.

Telstra Saturn offers cable modem based broadband services in Wellington and parts of Christchurch where it has installed an access network.

NORWAY

1. Introduction

The liberalisation of the Norwegian telecommunication sector has largely been completed in accordance with the time schedule set by the European Union. The EU directives regarding Telecommunications have been implemented mainly through regulations and/or secondary law.

The present Norwegian Telecommunications Act entered into force on 1 January 1996. The Act was revised prior to the full liberalisation of the sector on 1 January 1998.

Since 1992 the principle of technology neutral regulation has been advocated. Fixed and mobile telecommunications are, as far as possible, regulated independent of the underlying technology. Furthermore, the ONP principles concerning the offering of access to public telecommunications networks, public telephony services and transmission capacity at open and non-discriminatory conditions, and at cost oriented prices, has been equally applied to fixed and mobile related services since 1993.

As of 1 January 1998 the remaining exclusive rights in the telecommunication sector were relaxed. They prevailed mainly within public switched voice telephony and general telecommunications infrastructure, and constituted one third of the telecommunication market. Previously the following segments had been liberalised: Cable TV (1987); terminal equipment (1988); value-added services (1989); data transmission services (1993) and satellite networks and satellite communications (1994). As of 1 November 1996 existent alternative infrastructure could be used to transmit services already opened to competition.

Two operators were granted licenses for mobile communications in 1992. In 1998 three licenses (DCS-1800) were given. Two of the networks have so far been constructed. In 2000, four UMTS licenses were given.

In 1998 the possibility to build private networks for mobile communications was given. Direct interconnection between mobile and fixed networks and between several mobile networks was made possible from 1996.

2. The Sector Regulator and the Competition Authority

The Norwegian Post and Telecommunications Authority (NRA) is an autonomous administrative agency under the Norwegian Ministry of Transport and Communications. The authority has monitoring and regulatory responsibilities for the postal and telecommunications markets in Norway. It was established in 1987.

Until 1997 the Norwegian Telecommunications Authority Complaints and Advisory Board and the Ministry of Transport and Communication handled the complaints regarding decisions of the NRA[1]. The Board should refer cases concerning matters of principle or sector policy to the Ministry of Transport and Communications. However, being the owner of the incumbent, the Ministry of Transport and

Communications could be perceived as having a conflict of interest in cases concerning competition issues. It was therefore decided that the Ministry of Transport and Communications should handle complaints concerning political issues, while cases concerning competition issues should be handled by the Ministry of Labour and Government Administration. Due to the transfer of the administrative responsibility concerning the Government's ownership in Telenor to the Ministry of Industry and Trade, complaints concerning competition issues were to be handled by the Ministry of Transport and Communications.

The telecommunications sector is subject to the Norwegian competition legislation. Hence, competition issues related to telecommunications are regulated through both the telecommunication and the competition legislation. The sector regulator has handled most cases concerning competition issues in the Norwegian telecommunications markets. The co-ordination between the authorities is handled on the basis of an agreement closed in 1998. The agreement includes guidelines concerning the exchange of information and co-ordination in actual cases.

2.1 Access and Interconnection Regulations

Undertakings having *significant market power* are subject to certain obligations. Primarily, access to public telecommunication networks, delivery of public telephony services and transmission capacity shall be offered at objective, transparent and non-discriminatory conditions[2]. Furthermore, access shall be offered at cost oriented prices and at a quality at least equal to that offered to the provider's own business units.

Prices shall be set independently of the purpose for which the customer wishes to use a public telecommunication network, public telephony services or transmission capacity. Offers must reflect market demand. Offers must also be published. The Norwegian Post and Telecommunications Authority may require changes to be made in an offer.

Providers of access to public telecommunication networks, public telephony services and transmission services with significant market power are required to comply with any reasonable request from providers of access to public telecommunication networks and of public telecommunication services for special network access.

Special network access refers to access to other network termination points on other terms than those used in the standardised offers. An agreement on special network access is based on negotiations between the parties.

Providers of access to public telecommunications networks and public telecommunications services are entitled and obliged to comply with any reasonable request to enter into or amend an agreement on interconnection. Providers with significant market power must offer interconnection at cost-oriented prices. Such providers must also prepare and publish reference offers on interconnection. These must contain offered standardised interconnection services, prices, points, interfaces and terms. Offers must relate to the demand conditions and be updated on a regular basis. The Norwegian Post and Telecommunications Authority may impose changes in such offers.

Both interconnection and access, including special network access, must be offered at cost-oriented prices as long as the provider has significant market power. In general, the operators set their prices and determine the price structure based on fully allocated historical cost calculations. Both access and interconnection prices must cover their share of the common costs and a reasonable rate of return. Access to the local loop is based on current cost accounting. Service providers' access to mobile networks is based on retail minus model.

The sector regulator may determine the *ex post* access or interconnection terms, on its own initiative, as a result of complaints or through mediation between two parties. Until February 2001 the NRA could only impose an agreement after the parties have been through a negotiation period of three months. This time limit is now suspended.

The same principle of ex post regulation applies to retail prices. The principle of cost-orientation is generally applied more rigorously to access and interconnection prices than to retail prices.

The general principle concerning access to mobile networks is that mobile operators with significant market power must comply with any reasonable request of access to the telecommunication networks. Early in 1998 the incumbent's mobile telephony unit (Telenor Mobil) requested the sector regulators permission to deny a mobile virtual network operator (MVNO) access to its network[3]. In Report to the Parliament nr. 24 (1999-2000) the government recommended that mobile operators with significant market power should not be obliged to give access to mobile virtual network operators. The Parliament supported this conclusion.

2.2 Carrier selection

Call-by-call carrier selection was introduced with respect to both mobile and fixed telephony on 1 January 1998. Carrier pre-selection within fixed voice telephony was introduced on 1 June 1999 – six months before the deadline set by the European Commission. Carrier pre-selection quickly proved to be crucial to the development of competition. Initially, carrier pre-selection was planned to encompass both fixed and mobile. Because of a lack of need for such regulatory measures in the market, carrier pre-selection in the mobile network has not been adopted.

2.3 Resale/wholesale

At the beginning of 2000 the two existing mobile networks were opened to independent service providers for the first time. Through resale, these agreements enable the service provider to offer subscription to end-users. In 2001 resale of fixed network subscription has also been made available. In principle, the providers of services based on fixed networks are able to offer a complete service to the end users, consisting of both subscription and traffic.

2.4 Leased Lines and LLUB

In 1998 the Ministry of Transport and Communication proposed that "leased lines" should be further developed to include full LLUB. Due to several factors, including the attempt to merge the Norwegian and the Swedish incumbents (Telenor and Telia), this did not materialise until 2000.

Local Loop Unbundling (LLUB) was introduced in Norway earlier this year, in accordance with the EU regulation. By also implementing bit stream access, Norway has chosen to go beyond the EU regulation.

2.5 Number Portability

Number portability in the fixed network was introduced in Norway on 1 June 1999. The European Commission had set the final implementation date to 1 January 2000. Based on the principle of

technology neutral regulation, the NRA finds it equally important to impose number portability in mobile networks. Number portability in mobile network is to be implemented as of 1 November 2001.

2.6 Frequencies – Spectrum management

Free frequencies designated to mobile telecommunication has been awarded through so-called "beauty contests". In 2001 frequencies within two mobile systems (GSM 900 and 1800) will be auctioned. Historically the need to secure national coverage has dominated the choice of awarding mechanism. With two operators already offering "second generation" services to more then 95 percent of the population, the need is no longer existent.

The national policy on spectrum management aims at an adequate and efficient use of the frequency spectrum. The radio frequencies available to the provision of a certain type of services, limits the amount of service providers. The basic principle of the policy is not to limit the number of actors beyond this level. The sector regulator is presently exploring the opportunities inherent in the current regulation.

2.7 Price Regulations

Prices on the Norwegian telecommunication market are regulated *ex post*. Both retail, interconnection and access prices are regulated. In line with future EU-regulations – and the developments in the market – the focus has to some extent been shifted away from regulating retail prices.

Generally, prices are to be based on fully allocated historical cost calculations. For local loop unbundling (LLUB) the principle of current cost accounting is applied.

In 1996 price cap regulations were introduced on all service delivery obligations (USO and SSO). Only retail prices are covered. Price caps are set on three specific service baskets being leased lines, residential voice telephony and business voice telephony. The Ministry of Transport and Communications administers the regulation.

2.8 Accounting Separation

As of 1 January 2002 accounting separation will be introduced for fixed and mobile operators with significant market power. The decision to implement accounting separation is in accordance with an EC recommendation[4] issued in 1998. Norway goes beyond the recommendation by also applying accounting separation to mobile networks. The main objective of this regulatory initiative is to strengthen the NRAs enforcement of the non-discrimination obligations.

Accounting separation has been imposed on the incumbent since 1 January 1998, between mobile and fixed operations; interconnection and other telecommunication services; regulated and non-regulated services.

2.9 Service Obligations

The provision of Universal Service Obligations (USO) and the Social Service Obligations (SSO) are secured and enforced through the incumbent's license. Universal services include public voice telephony, leased lines (> 2 Mbit/s), operator assistance, emergency and directory inquiry services,

services to disabled and widely available payphones. The obligation to offer connection to digital networks was included in the USOs as of 1 January 1998.

The USO is at present imposed on Telenor by virtue of the company's leading position in the Norwegian telecommunications market In principle, other companies could compete to provide USO services. This could be more efficient especially in a well functioning market. It would, among other things, make it easier for the regulator to assess the relevant costs.

3. Competition Issues – market conditions and actual cases

3.1 Selected markets

3.1.1 Fixed network voice telephony market

To a large extent, Telenor controls the fixed telecommunications network in Norway. Telenor's share of the fixed network voice telephony market is about 90 percent. There is more competition in the market for services to the business segment then in the household market.

3.1.2 The Mobile telephony market

Two companies - Telenor and NetCom - dominate the mobile telephony market. Telenor has a market share of 70 percent, and NetCom a market share of 30 percent. There are about 15 service providers (resellers) which do not own a network in the market.

The Norwegian authorities have recently allocated four licenses for the development and operation of a third generation mobile telecommunications system. The recipients were Telenor, NetCom, Tele2 and Broadband Mobile (Enitel/Sonera). Accordingly, the number of mobile operators in Norway may soon increase to four. It is however expected to take some time before all the networks will be fully developed.

3.2 Selected Competition Issues

3.2.1 Interconnection

Interconnection is a decisive factor for new telecommunications operators. Generally, the incumbent's interconnection prices have dropped significantly since the liberalisation of the market. In a European context they are in the lower half and partially under the EU's current best practice.

Most customers are still connected to the incumbent's network through their fixed access line. Competitors, hence, are dependent on interconnection to its network. The regulators face the difficult task of monitoring interconnection agreements under the condition of asymmetric information about network costs. The incumbent, naturally, has near complete information about cost conditions, while the regulator mainly relies upon the incumbent to give him this information.

The sector regulator has spent a lot of time looking into complaints concerning alleged use of dominant position, as owner of the fixed network, to overcharge their competitors in the market for fixed

network traffic. Because of the lack of information on the part of the regulator, it has been difficult to prove whether Telenor actually does so. Currently, the sector regulator has three draft decisions concerning three different time periods pending. All three state that Telenor should decrease their interconnection charges.

3.2.2 Access - LLUB

Until the LLUB-regulation was implemented in the Norwegian regulation in February 2001, Telenor maintained full control of the access network. Carrier selection implies that all end-users pay a subscription fee to the incumbent. This can be regarded as a disadvantage to incumbent's competitors, since the competitors' customers must relate to more then one telecommunications company (the incumbent for subscription and at least one more for traffic).

LLUB makes it possible for Telenor's competitors to present their customers with a more complete offer – including access subscription. It also, to some extent, makes it possible for competing companies to upgrade the existing access network. It is too early to say to what extent LLUB will foster competition in the local access markets. One issue that has been raised is related to the fact that the LLUB regulations do not cover access to fibre lines. Since the competitors must undertake substantial investments in order to take advantage of LLUB with regards to the copper lines, it is relevant to know whether these lines will be maintained or whether the incumbent plan to use fibre lines in the access network. Another issue is the importance of the competitors being able to obtain detailed plans over the incumbent's networks and connection points, in order to proceed with the construction of the network facilities necessary to take full advantage of LLUB.

One of the main competitors in the local access network is the Cable TV Company UPC, which is presently upgrading its cable network to a digital two-way broadband network. This network can handle both telecommunications traffic and Internet/data traffic. UPC now has the infrastructure to reach about 100 000 customers. The number of households served by UPC does not exceed 10 000. The competition on infrastructure is more intense in the business access market, where several competing telecom companies are established. This market segment seems to be more attractive for new market entrants, mainly because of the larger demand for transport capacity per customer unit.

3.2.3 Resale of fixed telephony – relevant case

The sector regulator has recently stated that it is planning to oblige the incumbent to offer fixed voice telephony subscriptions to service providers – unconditional on traffic. Until recently, the incumbent has denied any request from its competitors to offer the right to sell fixed voice telephony subscriptions. The possibility to charge both the subscription fee and the traffic on one bill is regarded as an important advantage.

3.2.4 Case: The Win Back Campaign

The above-mentioned advantage is even more efficient for Telenor, taking in to account their so-called "win back" campaign. This is a campaign aiming at winning back customers that have changed operator. As a result of the carrier pre-selections agreements, Telenor has information on its contractual partner's customers. To a certain extent, Telenor has used this information to win back customers.

The sector regulator has recently stated in a letter to Telenor that such use of information is not in accordance with the assumptions of carrier pre-selection. The sector regulator, thus, is considering

imposing on the incumbent certain measures to prevent such information from being used beyond its purpose.

3.2.5 Transport in the backbone net

The last two years, several companies have begun to offer transport capacity in the backbone net. The new suppliers of backbone transport capacity are mainly companies that already have an established infrastructure. Among these are some of the Norwegian power companies and the Norwegian National Rail Administration.

3.2.6 Tying – relevant cases

Some markets are characterised by a high degree of market power, while others are more competitive. Ties between activities, products or services can represent a problem if used to transfer market power from one market to another.

The Competition Authority has received a number of complaints concerning the incumbent's alleged abuse of its dominant position within the fixed network, to enhance its market power in other parts of the telecommunications sector.

The sector regulator has dealt with several cases involving tying. These cases have been initiated on the basis of customer requests as well as requests from actors on the supply side. The sector regulator is of the opinion that the bundling activities found in several of these cases may be harmful to competition, and is currently considering which options it has to intervene.

Relevant cases:

- The Norwegian Post and Telecommunications Authority is currently assessing an agreement concerning the tying of a customer to a particular supplier. By means of agreements with the building associations NBBL and OBOS/USBL, on telecommunications equipment and services, Telenor offers a certain discount scheme to the end users.

- In 1997 the NCA handled a case concerning Telenor's alleged abuse of a dominant position in the fixed network to enhance its market power in the mobile market. Telenor was giving discounts on calls from its fixed network to the mobile subscribers of Telenor Mobil Ltd. The NCA intervened, and required Telenor to offer Netcom the possibility to participate in the arrangement on equal conditions. The Competition Authority also required that Telenor's discounts on calls terminating in the mobile network had to correspond to the price reduction of the interconnection termination fee in different mobile networks.

- In 1996 the Competition Authority handled a case in which Telenor allegedly abused a dominant position in the NMT market to enhance the market power in the GSM market. *Telenor's* termination of the agreement with the dealer *Klart Svar Telekjøp Norge Ltd,* and use of the database with information about NMT customers for the purpose of promoting sale of the Nordic mobile system Telenor GSM. The NCA did not intervene after Telenor Mobile Ltd had committed itself to take steps to secure that the NMT database would not be used for the purpose of marketing and selling Telenor Mobil GSM.

3.2.8 The price structure within the mobile sector

For several years the price of making a mobile call within the network one belongs to has been considerably lower than making a call to another network. This may have adverse effects in a market where the incumbent mobile operator has a market share close to 70 percent, and the second mobile operator holds nearly 30 percent of the market. It might result in a situation where more and more customers choose the incumbent because of there being able a larger amount of its phone calls at the lower inter-network price. Furthermore, in a situation with approximately 15 service providers, in addition to the two network operators, it becomes almost impossible keep track of which network you are calling, and hence, which price you will be charged. With the introduction of mobile number portability this situation will be further enhanced.

The sector regulator is fully aware of these issues and that it may have a detrimental effect on the competition in the mobile market. Earlier in April NetCom, the second mobile operator, announced that it was introducing a one-price system implying that the price of a call is independent of the network you are calling and the time of the day. This may prove to enhance competition in the mobile telephony market. However, as long as the incumbent maintains its current pricing policy, the detrimental effect on competition may prevail.

3.2.9 Inquiry services

The sector regulator is preparing the liberalisation of the market for inquiry services. Four-digit numbers will be introduced for the purpose. The incumbents widely known inquiry service number will be withdrawn.

The Norwegian Post and Telecommunications Authority is currently working on a proposal for a new regulation regarding access to the information necessary for the provision of inquiry services. The regulation will cover access to relevant directory inquiry information as well as the pricing of data traded between telecommunication service providers and directory service providers. Privacy protection is also an important issue within the new regulation. The goal is to bring the new regulation into force by the end of this year.

3.3 Merger cases

The Competition Authority has handled only a small number of merger cases related to the telecommunications sector. The Authority has not intervened in any of them.

As a part of the EU-Commission's handling of the merger between the Norwegian and the Swedish incumbents, Telenor and Telia, the Norwegian Competition Authority assessed the effect of the planned merger on the Norwegian market.

4. Other issues

4.1 Advocacy

Beyond cases directly related to the competition law, the Competition Authority has been exercising its advocacy powers and participated in relevant forums:

- The Competition Authority has been particularly involved in issues related to access to existing networks; i.e. call-by-call carrier selection, carrier pre-selection and access to the fixed access network.

- The Competition Authority and the sector regulator participated in a working group who prepared a Report to the Parliament on access to mobile networks and third generation mobile communication systems. Related to the former, mobile virtual network operators was an important issue[5].

- The Competition Authority, and the sector regulator, has participated in EU hearings and in the EU Advisory Committee, concerning cases of importance.

- The Competition Authority, and the sector regulator, participates in a working group assessing the spectrum management primarily within mobile communications.

4.2 The notions of significant market power and dominant position

4.2.1 Telecommunications regulation

Significant market power is an ONP concept, used to decide when an undertaking should be subject to specific regulations. An undertaking is assumed to have significant market power if it has a share of 25 percent or more of the market concerned. An undertaking may be notified as an operator having significant market power under the ONP legislation, but not be considered as having dominant position in the sense of the competition act – and vice versa.

Significant market power is determined for four distinct product markets:

- fixed public networks/services,

- leased lines services,

- public mobile networks and/or

- services and national interconnection markets.

An operator designated as having significant market power in a relevant market is subject to specific regulations entailing the ONP principles. Access and interconnection shall be offered at objective, open and non-discriminatory terms and to cost-oriented tariffs.

4.2.2 Competition legislation

According to Section 3-10 of the Norwegian Competition Act, the Competition Authority may intervene against terms of business, agreements and actions where the Authority finds that these have the purpose or effect of restricting, or are liable to restrict, competition contrary to the purpose of the Act, which is economic efficiency.

One normally assumes that an undertaking must have market power in order to restrict competition. The analysis of market power goes beyond the mere assessment of market shares. It also

includes the assessment of restrictions of the choices/alternatives of the consumers and undertakings. On the demand side factors influencing substitution possibilities are of particular importance; for example, brand loyalty, asymmetric information and buyer power. On the supply side one looks at a variety of market features, e.g. market transparency, competitors' (actual and potential) ability and incentives to compete and barriers to entry.

NOTES

[1] Royal Decree 21 December 1987.

[2] Data traffic is not covered by this obligation.

[3] A MVNO is an undertaking that provides mobile telephony services to its customers without having spectrum resources at its disposal.

[4] Commission Recommendation of 8 April 1998 on interconnection in a liberalised telecommunications market

[5] White Paper nr. 24 (1999-2000) [St.meld. nr. 24 (1999-2000) om tilgang til mobilnett og innføring av tredje generasjons system for mobilkommunikasjon.]

RUSSIAN FEDERATION

1. Terms and Definitions

The present Concept employs the following terms and definitions, that are not specified by current legislative and administrative documents:

Traditional telecommunication operator - a telecommunication operator created as a result of privatization and reorganization of the telecommunication industry on the basis of the state telecommunication enterprises that have been previously engaged in rendering telecommunication services.

New telecommunication operator - an individual entrepreneur or a legal entity that obtained a license for rendering telecommunication services after 1990 and has never before rendered telecommunication services using the public telecommunication network.

Cross subsidizing - reimbursement of costs as a result of provision of telecommunication services tariffs for which are set by the state lower than the actual cost of these services and compensated from revenues as resulting from other profit-generated services.

Universal service - a minimum list of telecommunication services rendered to any user on the territory of the Russian Federation by tariffs that are not in excess of the tariffs established by the state and thus considered to be affordable.

2. Introduction

This Concept serves as a basis for creating conditions, forming mechanisms and developing measures to supply modern telecommunication services to the population, governmental institutions and to the growing economy as a whole.

The Concept defines the prospects for further development of the Russian market of telecommunication services and the role of state regulation in the process of this development. Within the framework of this Concept consideration is given to the problems of telecommunication services development; the problems of post, radio and television services should be defined by separate documents. The Concept is prepared as specified in the Russian Federation Government's Plan of activities in the field of social policy and economy modernization for 2000-2001 approved by the Russian Federation Government's Decree 1072-p dated 26.07.2000; the above Decree established the creation and development of the national telecommunication infrastructure as one of the major priorities.

The Concept tasks consist in perfecting the state regulation mechanism intended for telecommunication services market development, creating conditions for efficient work of telecommunication operators, developing a competitive environment on the telecommunication services market, ensuring equal rights for all telecommunication operators, increasing interest in further

investments to the telecommunication industry, effecting the right of the Russian Federation citizens to the information and telecommunication infrastructure access, developing new technologies, integrating Russia's telecommunication complex into European and world telecommunication complexes with due regard to national interests and improving the legal standard regulation system of the telecommunication industry.

Within the framework of the Concept the main telecommunication market segments are dealt with, namely: telephone communications, mobile communications, Internet services and data transmission services.

The efficient development of modern telecommunication markets in all countries depends on the proper balancing of privatization processes, on the liberalization and state regulation measures employed. The wrong balance will lead to the structural disproportions, to the slowing down of the infrastructure development and to limitations in the services' markets development.

At the moment the telecommunication market of Russia faces serious disproportions: 87 percent of the traditional infrastructure produces only 49 percent of profit, while 13 percent of the new infrastructure produce 51 percent of profit; the capitalization of the system-forming companies of the industry (two billion US dollars) is lower, than the capitalization of the three major new operators – MTS, Vympelcom and Golden Telecom (2.9 billion US dollars); 54 thousand settlements in Russia do not have telephone networks, while the telecommunication services on the whole territory of Russia are being developed by the traditional operators only; the local telephone rates cover about 77 percent of actual industry's expenses.

The top priorities in the telecommunication services' markets development are the following: the availability of the high quality telecommunication services in all settlements of Russia; the surpassing development of the telecommunication infrastructure in order to provide for the economic development; protection of the state strategic interests; promotion of the development of the national equipment and software; promotion of investments in the telecommunication infrastructure, especially in the local telecommunication infrastructure; improving the business efficiency of the traditional operators; creation of the necessary conditions of promoting the bona fide competition; promoting the faster development of new technologies.

The Concept contains eleven sections which define initial provisions used to characterize the Russian Federation telecommunication services market development, the main indices of the telecommunication complex development for a period of up to 2010, the status of the acting legal standard basis in the telecommunication regulation area, the main tasks and methods of the telecommunication market state regulation aimed at further development of the telecommunication market and efficient functioning of the industry as a whole by: perfecting the principles of connection services provision – mandatory connection of networks, lack of discrimination, transparency and prime cost orientation, standard level of profitability; choosing the principles of tariff regulation so that these principles meet to the most extent the current status of the telecommunication services market – cross subsidizing minimization, tariffs structure optimization as for consumer and regional markets, transition to tariff regulation by ultimate price formation method starting from 2002; substantiating the principles and mechanism of the universal telecommunication services provision; accounting the national interests in the telecommunication market development process.

3. Telecommunication Industry Importance and Main Indices of its Development

The telecommunication industry plays a very special role in the economics infrastructure of the country. The most important function consists in meeting society's demands for information transmission.

The volume of information transmitted through telecommunication infrastructure is doubled every three years. The appearance and successful development of new branches of the information industry lead to a higher importance of the information as a constituent part of the economics growth and to a much higher influence of the information technologies on the scientific and technical and intellectual potential and health of the people. The beginning of XXI-st century is considered to be the era of the global information society which for the purpose of its own efficient development needs creation of the global information and telecommunications infrastructure and this infrastructure in compliance with laws of information increase in economics turnover and other spheres of life activity should develop at a more rapid pace as to the rates of economy development as a whole.

Creation of the Russian information and telecommunication infrastructure should be regarded as a dominant factor of the national economy growth, intensification of business and intellectual activities of society and its individuals and strengthening of country's authority and standing in the international community.

The priority development of telecommunications is an indispensable condition for creation of business infrastructure, formation of favorable conditions for attracting investments to country's regions, solution of population employment problems, development of modern information technologies. The telecommunication industry importance is reflected in the constant growth of its share in the gross domestic product (GDP) of the country. The GDP telecommunication share of developed countries of the world amounts to five percent whilst for Russia this index amounts only to two percent.

Table 1 - Russia's GDP Telecommunication Share

Indices	1995	1996	1997	1998	1999
GDP telecommunication share, %	1,4	1,9	2,0	2,0	2,0
Changed as compared to the previous year, point	+0,23	+0,5	0	0	0
GDP telecommunication share, %	1,0	1,4	1,6	1,7	1,78
Changed as compared to the previous year, point	+0,15	+0,4	+0,2	+0,1	+0,08

Proceeding from macroeconomic indices of the Russian Federation development as defined in the Major Trends of Long-Term Social and Economic Policy of Russian Federation Government the telecommunication services market by 2010 will be characterized as shown in Table 2.

Table 2 - Russia's Telecommunications Development Indices up to 2010

Indices	Years		
	2000	2005	2010
Number of telephones, mln.	31,2	36,9	47,7
Telephone density per 100 residents, %	21,3	25,3	32,7
Number of cellular telephones, mln.	2,9	9,24	22,2
Density of cellular telephones per 100 residents, %	2,0	6,3	15,2
Number of Internet users, mln.	2,5	6,0	26,1
Density of Internet users per 100 residents, %	1,7	4,1	17,9

The total volume of investments during the ten year period will amount to about USD 33 billion.

For the countries with developed economy the telecommunication development indices already by the present moment are characterized as follows: telephone density – 40-60 percent; cellular communication density – 25-40 percent; Internet users density – 20-30 percent.

4. Characteristics of Current System of Legal Standard Regulations of Telecommunication Services Market

According to the Constitution of the Russian Federation (Article 71) the federal telecommunications fall under control of the Russian Federation Administration. The sphere of telecommunications as a constituent part of the whole telecommunication industry also falls solely under control of the Russian Federation Administration. Thus, all problems of telecommunication services market regulation on the Russian Federation territory constitute the competence of federal administrative bodies.

The telecommunication services market legal regulation system now in force incorporates acts of general and special character adopted on the Russian Federation level. These standard legislative and administrative documents altogether regulate telecommunication services market formation and development processes and market participants' activities and establish the state powers as for telecom services market regulation.

The acts of general character (i.e. the acts that are common for all industries and used to regulate problems relating to a wide range of subjects) include: the Constitution of the Russian Federation, the Civil Code of the Russian Federation, The Code of the Russian Federation on administration breach of law, the Laws "On Natural Monopolies (1995)", "On Joint-Stock Companies (1995)", "On Foreign Investments in Russian Federation (1999)", "On Investment Activity in Russian Federation Effected in Form of Capital Investments (1999)", "On Consumers' Rights Protection (1992)" and other laws, decrees of the Russian Federation President, resolutions of the Russian Federation Government and acts issued by ministries and administrations.

The acts of social character pertaining to the telecommunication services market include the standard acts that cover the following problems: ownership of networks and telecommunication facilities, antimonopoly regulation, licensing, certification,, networks connection, tariff regulation, telecommunication industry regulation bodies, limited resources distribution, national security in the telecommunications field.

The legal standard regulation system that has been formed in the Russian Federation by the present time provides for development and proper functioning of telecommunication services and adequate balance of interests of service users and telecommunication operators.

Yet, the existing legal standard system of telecommunication services market regulation has certain serious drawbacks which are as follows:

- limitation of the market potential of traditional operators and creation of unequal market conditions for traditional and new operators;
- lack of efficient regulation mechanisms for connection services provision procedure;
- inconsistent implementation of tariff regulation principles established by the state;
- absence of guarantees and mechanism by which the Russian Federation citizens can exercise their right to the public switched network access regardless of their location and income level;
- insufficient provision for the national security interests of the country as for foreign investors' participation in the national telecommunication infrastructure development.

5. Russian Federation Telecommunication Services Market and Its Participants

Starting from 1992 the telecommunications industry has witnessed the reform based on privatization of state-owned telecommunication enterprises by way of turning them into joint-stock companies. The reform principles have been envisaged by the Program of Privatization and Joint-Stock Company Creation in "Telecommunication" Industry for 1992 (1992) and by the Russian Federation Telecommunication Industry Program Concept (1993).

As a result of this reform implementation the Ministry of the Russian Federation for Communication and Informatisation has ceased to be the owner of telecommunication enterprises and networks and has accomplished to effect economic functions in the telecommunication field. At present the Ministry of the Russian Federation for Communication and Informatisation performs state regulation functions in the telecommunication industry. These functions include: implementation of state policy in the "Telecommunication" field, performance of scientific and technical policy, licensing of physical and legal persons in the telecommunication services sphere, certification of telecommunication facilities jointly with concerned bodies of power, use of the Russian Federation frequency resource, control of markets of telecommunication services and equipment, telecommunication networks management in extreme cases, coordination of telecommunication operators' activities, telecommunication networks development forecasting, formation and protection of country's information resources.

As a result of privatization 127 telecommunication joint-stock companies have been set up. "Rostelecom" joint-stock company has become toll and international telecommunication services operator.

The Ministry of the Russian Federation for Communication and Informatisation issues telecommunication services provision licenses to legal entities and to physical persons registered as individual enterprises. Over 7 400 licenses for telecommunication services provision have been issued starting from 1992. Alongside the traditional operators of public switched networks there are about 4 500 new operators on the telecommunication market and their share in terms of value amounts to 50.8 percent of the market total

volume. Thus, at present there is an open market of telecommunication services in the telecommunication industry.

The main segments of the telecommunication marked formed in the course of the market development are as follows:

- Mobile communication. It is characterized by a period of dynamic growth and considered to be one of the most competitive telecommunication services in Russia. At present, there are more than 2,9 mln subscribers in Russia which corresponds to two percent of the coverage level. The number of mobile communication subscribers increases by 40 percent minimum every year. Mobile communication tariffs are gradually decreased. The investment and marketing strategy of mobile communication operators is not controlled by the state. The mobile communication market growth potential is considered to be high.

- Local telephone communication. It is provided by 92 traditional operators and about 2 700 new operators.

New operators' share on the market of telecommunication services provided by fixed telephone communication operators on the whole territory of Russia is about 15 percent. Yet, this index is much higher in most economically developed regions of Russia (for example, in Moscow and St. Petersburg it amounts to 50 percent of the total market share).

New operators concentrate their efforts on most solvent clients by offering them the whole spectrum of most up-to-date and high-quality telecommunication services. The investment and marketing strategy of new telecommunication operators is not controlled by the state.

The traditional operators' on the fixed telephone communication services' market amounts to 85 percent. For the most part, the traditional operators are included into the register of natural monopoly subjects and they are relatively small companies (100-300 thousand numbers). Only three regional companies have more than 1 million main telephone apparatus each. These companies include Moscow city telephone network (3,8 mln subscribers), St. Petersburg city telephone network (1,6 mln subscribers) and "Electrosviaz" of Moscow region (1,12 mln subscribers). These three regional telecommunication enterprises altogether provide services for about 22 percent subscribers of Russia.

Tariffs and investments of traditional operators are regulated by the Ministry of the Russian Federation for Antimonopoly Policy – the body that controls natural monopolies in the telecommunication field. The local telephone communication tariffs for the most part of subscribers are established lower than the prime cost, the cross subsidizing system is employed. The activity on developing local telephone networks is economically ineffective. Periods of capital investments return exceed 25 years. In order the conditions for traditional operators be equal to those of new operators in the course of high-quality and up-to-date services provision the traditional operators allocate this segment to most solvent clients as a 100 percent subsidiary company or a 100 percent joint venture company. In the course of last three years the results as regarding the new numbering capacity introduced are steadily deteriorating.

- Toll and international communication. "Rostelecom" joint-stock company plays a dominant role in this segment and it provides for 70 percent of the whole toll and international traffic of the Russian Federation. To some extent, operators of other networks also employ the "Rostelecom" infrastructure when they render telecommunication services. Under conditions of competition the "Rostelecom" share on this segment is gradually decreased. Availability of cross subsidizing leads to establishment of high retail tariffs for toll and international communication services. New operators working on the same segment and

having no load on subsidizing the local telephone communication services are in a position to perform efficient price competition with "Rostelecom" while retaining super profits from toll and international communication.

- Transmission of data, telematic services including Internet, is one of most quickly developing segments of the telecommunication market as regarding subscribers' base growth and infrastructure development. Number of active users of Internet in Russia amounts to about 2,5 mln. persons. The number of subscribers increases by 50 percent every year and such intensive growth is expected in the future. In 1999 the profits from Internet access provision in Russia came to USD 190 million. The tariff and investment policy of data transmission and Internet operators is not controlled by the state.

Table 3 specifies the characteristics of the current state of competition and telecommunication services market in Russia.

Table 3 - Characteristics of Current State of Competition and Telecommunication Services Market in Russia

Services markets	Operator's type	Market geography	Competition level
Local communication	Traditional operator	Certain region	Services for population – LTM Services for organizations – CMD
	New operators	Licensed Region	
Toll and international communication	"Rostelecom"	Russian Federation	Services for population – CMD Services for organizations – CMD
	New operators	Licensed Region	
Mobile communication	New operators and traditional operators	Licensed Region	CM
Data Transmission, telematic services including Internet	New operators, "Rostelecom" and traditional operators	Licensed Region	CM

LTM – long-term monopoly
CMD – competitive markets with domination of one or several subjects
CM – competitive markets without domination of any subjects

The reform of 1992-1998 has been of great positive importance and it has enabled the "Telecommunication and Informatisation" industry to be converted into efficiently functioning and profit-making branch which will play the role of a system-forming branch of economy in the future.

Yet, the analysis of work of telecommunication joint-stock companies (traditional operators) – leading telecommunication operators for the last one or two years has revealed increasing negative tendencies in these companies' operation which consist in lower investments attraction and loss of competitive power on the market. These factors provide a basis for taking new decisions on changing the telecommunication market regulation rules for further expansion and development of the market.

6. Competition on Telecommunication Services Market and Natural Monopolies' Subjects

Article 8 of the Constitution of the Russian Federation guarantees support of competition. In compliance with the Article 20 of the Federal Law "On Communication" the federal bodies of executive power responsible for telecommunication field in conjunction with the federal bodies of executive power responsible for antimonopoly policy and new economic structures support field should encourage and support fair competition.

Competition on all markets including the telecommunication market is supported by monopoly activities limitation and unfair competition prohibition as well as by preventing and curbing such kind of activities.

The Law on competition and monopoly activities limitation introduces market regulation mechanisms. Besides, the Russian Law applied for "Communication" field still contains such a notion as "natural monopolies". Article 3 of the Federal Law of the Russian Federation NO 147-ФЗ of August 17, 1995 specifies a natural monopoly as such a state of merchandise market when satisfaction of demand is more effective on the market in case there is no competition due to certain technological features of manufacture (as a result of considerable decrease of production costs per item unit in the course of the manufacture volume increase) and the items manufactured by natural monopolies' subjects cannot be replaced by other sort of items during their usage and, hence, the demand on the given merchandise market for the items manufactured by natural monopolies' subjects depends to a lesser degree upon a price change of these items as compared with the demand for other items. The subject of the natural monopoly is the manufacturing subject (legal entity), engaged in the manufacturing process (sales and distribution process) in the conditions of a natural monopoly.

- Activities of natural monopolies' subjects are controlled in three main fields:

- price regulation as for items (services) of natural monopolies' subjects (Article 6 of the Law);

- control of a considerable number of deals of a natural monopoly subject (Article 7 of the Law) (in order to make a deal the natural monopoly subject should lodge a petition to the respective regulation body of this natural monopoly subject on giving consent to such a deal and provide this body with all needed information for taking a relevant decision);

- control of current activities and capital investments plans (Article 8 of the Law).

In compliance with Article 4 of the Law, this Law is valid for all organizations rendering generally available telecommunication services. Due to the above, the lawmaker unequivocally regards operators rendering public switched network services as natural monopolies' subjects.

The Law distinguishes two main characteristic features of a natural monopoly:

- a monopoly evidently exists in case the demand satisfaction is more effective in the absence of competition due to certain technological features of manufacture;

- items manufactured by natural monopolies' subjects cannot be replaced by other sort of items in the process of their consumption.

Based on these characteristic features the economic theory derives firm economic characteristics of natural monopolies. The characteristics relationship of modern telecommunication markets and natural monopolies is shown in the Table below.

Table 4 - Natural Monopolies' Characteristic Features Versus Current State of Telecommunication Markets

No	Natural monopoly typical features	Current state of telecommunication markets
1	Supply on the market is formed only by one manufacturer while demand is required by a number of consumers	Supply for the most part on telecommunication markets is formed by several operators
2	A supplied item (service) has no substitute	New modern telecommunication services come as traditional services substitutes. Commercial competition plays an important role under modern conditions.
3	Market barriers are so essential that market entry becomes difficult for new manufacturers	No barriers for new operators
4	Considerable decrease of production costs per item unit as production volume increases	Constant updating of technologies, used by new market participants leads to constant decrease of costs for service rendering

This comparative analysis shows that on the main economic indices the telecommunication markets state has lost the characteristic features of a natural monopoly.

The telecommunication markets development process in many foreign countries shows that as a result of technical progress and considerable increase of demand for telecommunication services this industry has ceased to be a natural monopoly. A similar situation is typical for modern telecommunication markets of Russia.

The traditional operators included into the register of natural monopolies' subjects and functioning on the Russian telecommunication markets turn to be in a complicated economic situation. Practically all of them have a worn technical base and they are bound by obligations as for rendering services for federal needs and granting social privileges. For the most part, they have low profitability per line which makes it impossible to guarantee even a simple reproduction. In formulating their strategic aims the traditional operators orient more to stable development than to solution of survival problem. At present, measures of regulation are applied directly to economic subjects of natural monopolies and these measures cover all kinds of these subjects' activities including the activities that have no relation to the monopoly market. Thus, these operators are put under unequal conditions with their competitors. Due to the fact that their activities are regulated within the framework of the Federal Law "On Natural Monopolies" they cannot perform adequate market policy and attract investments and material and human resources on the same terms and conditions as new operators.

Activities of economic subjects under competitive conditions require new principles of state regulation which consist in changing over from regulation of economic activities of telecommunication operators to regulation of telecommunication operators' behaviour on the market where the latter occupy a monopoly position.

The new regulation principles should be based on the problems of provision and support of fair competition on telecommunication services markets as well as prevention, restriction and curbing the activities aimed at making monopoly profit and various kinds of unfair competition.

Based on the accomplished analysis the subsequent sections of this Concept cover certain concrete mechanisms that provide a means for efficient development of the Russian Federation telecommunication services market.

7. Updating Principles of Connection Services Provision

Transition to market economy and liberalization of the "Communication" industry has brought about new operators on the market of telecommunications. New operators now face a problem of necessary connection to the existing networks of other operators.

Technological characteristic features of telecommunication services provision necessitate interconnection of operators' networks to ensure the network interconnection traffic (connection service). So far the Russian telecommunication system integrity has been provided by administrative measures as the telecommunication industry being a completely state industry was a single telecommunication network covering the whole territory of the country. At present, under strengthening competition between telecommunication operators the connection service becomes a leading factor for preserving the integrity of Russia's telecommunication network.

To ensure the principles of fair competition and regulation of procedure of connection of telecommunication operators' networks to the public switched network, some new standard documents have been elaborated in order to regulate the rules and methods of connection of incumbent and assigned telecommunication networks to the public switched network, allowance of telephone traffic through public switched telecommunication networks, organization and technical interaction of public switched telephone networks' operators, performance of mutual settlements between telecommunication networks' operators, establishment of settlement prices (tariffs) for technical facilities and network services which are provided by telecommunication networks' operators and which constitute the public switched telecommunication network.

Yet, the analysis of the way of using these standard documents by telecommunication organizations has revealed that the connection procedure is accompanied by a great number of conflicts and debates, infringement of the law and discrimination of some telecommunication operators as compared to the other ones.

Failure to regulate arising conflicts results to a certain extent from imperfection of the acting legal standard regulation system due to the lack of:

- mechanisms of implementation of operators' non-discrimination principles and substantiation of tariffs for connection services and traffic allowance;

- state bodies' rights for forced provision of connection services by telecommunication operators and for conclusion of connection and internetwork interaction.

To achieve dynamic and efficient development of the telecommunication services market it is necessary to improve the state mechanisms used to regulate the connection services provision procedure. A rationally organized procedure for connection services provision will provide for mutual interest of telecommunication operators in rendering network services. Efficient development of the telecommunication industry will depend upon a state-established provision allowing telecommunication operators to exercise free competition on a fair basis. Competition on the telecommunication market will lead to a higher economic efficiency of the telecommunication industry, maximum satisfaction of users of

telecommunication services, perfection of quality of services provision due to introduction of up-to-date telecommunication means and new technologies.

The state regulation mechanism used for provision of telecommunication services by various organizations should be based on the following fundamental principles:

- compulsory connection of networks. A connecting network operator occupying the dominant position on the market is not entitled to refuse connection to a connected operator and he should offer fair and reasonable terms of connection;

- lack of discrimination. A connecting operator in the course of connection of a connected operator should apply equal tariffs in similar situations and present information and network resources on the same conditions and of the same quality as they are presented to his own internal departments or to his subsidiary organizations and partners;

- transparency and orientation to the prime cost and standard level of profitability. In the course of establishment of tariffs for connection services a connected operator should orient to the prime cost of service provision and the standard level of profitability of used capital. A connecting operator should allocate expenses that relate directly to connection services provision.

Under market liberalization conditions telecommunication operators rendering telecommunication services are authorized themselves to enter into interconnection services agreements. Yet, this process should occur in strict compliance with the law under supervision and with participation of the state. On the market there should be such categories of operators that possess not only the connection services provision rights but also similar liabilities. By such category in this document are meant operators which occupy the dominant position on the market. “Operators occupying the dominant position on the market” imply telecommunication operators that occupy such a position on the telecommunication services market when with regard to his financial possibilities, market share on a certain geographic territory, possibility to control users’ access to public switched network and experience in similar services provision this operator can exercise a great influence on telecommunication services market functioning conditions and hinder access to market for other operators. Term “operator occupying the dominant position on the market” is applied exclusively to the telecommunication industry and only to operators engaged in the connection services provision.

In compliance with Article 1 of the Civil Code of the Russian Federation (hereinafter referred to as RFCC) adopted on the basis of Article 55 of the Russian Federation Constitution citizens’ rights and freedoms can be limited (respective liabilities for citizens’ rights and freedoms limitation can be introduced) only on the basis of the federal law. Hence, introduction of the general principle and definition of the category of the telecommunication operators which should be obliged to provide connection services and to conclude respective agreements should be fixed on the federal level. The connection services provision agreement concluded with the operators which occupy the dominant position on the market should fall into the category of public agreements envisaged by Article 426 of RFCC because the telecommunication operators which occupy the dominant position on the market should effect connection services by their nature to anyone who applies to them. The operators which occupy the dominant position on the market are obliged to publish a connection model agreement.

Operator’s model agreement should contain the following terms and conditions: connection agreement validity period, forecast of traffic and traffic control procedure, location of connection points, technical requirements and standards of networks’ connection, connection performance procedure, consequences of changed network configuration of one of the parties, networks’ repair works and

maintenance performance procedure, connection agreement terms alteration and cancellation procedure, liability of parties.

The main tasks of the connection services provision procedure regulation should include:

- ensuring law implementation in the field of connection services provision and internetwork interaction;
- elaborating rules as for connection services provision terms and procedure;
- coordinating connection services provision by telecommunication operators;
- organizing and assuring state control and supervision in the field of connection services provision to prevent telecommunication operators from abuse of their position on the market;
- implementing the principle of transparency and orientation to the prime cost and standard level of profitability by way of state regulation of prices for connection services rendered by the operators which occupy the dominant position on the market;
- perfecting the mechanism of operators' activity regulation in the course of connection services provision.

To make allocations for connection services provision costs it is necessary to utilize the system of separate accounting depending on the category of activities.

Control and regulation of connection services provision procedure should be specified by the Russian Federation Government.

8. Tariffs Policy and Telecommunication Services Market Development

Perfection of the tariff policy and selection of optimal price formation strategy are decisive factors of telecommunication market development which influence greatly the supply-demand balance, satisfaction of increasing demands for telecommunication services on the part of state bodies, legal entities and population and achievement of state tasks as for national telecommunication infrastructure development.

The telecommunication services tarification system that is in force in the telecommunication industry is based on combination of principles of free market price formation and state regulation of tariffs in compliance with the telecommunication services list approved by the Russian Federation Government. The state bodies are entitled to regulate tariffs for telecommunication services included into the register of natural monopolies' subjects.

The current mechanism of state regulation of tariffs for telecommunication services in Russia was formed in 1995-1998 and this mechanism is stipulated by a number of legislative and standard acts: Federal Law "On Natural Monopolies" of August 17, 1995, Russian Federation Government Resolution No 265 "On Regulation of Tariffs for Telecommunication Services and on Approval of Main Provisions of State Regulation of Tariffs for Public Switched Telecommunication Network Services on Federal and Regional Levels" of March 7, 1997, Russian Federation Government Resolution No 1559 "On Perfection of State Regulation of Prices (tariffs) for Telecommunication Services" of December 28, 1998. Up to the end of 1998 regulation of tariffs was effected by two-stage scheme: the toll service tariffs were regulated

on the federal level and the local communication service tariffs were regulated on the level of Federation subjects. Starting from 1999 regulation of tariffs for telecommunication services is effected by the federal body of executive power - the Ministry of the Russian Federation for Antimonopoly Policy and Business Support (MAP of Russia).

The most significant tasks of state regulation of tariffs for public switched telecommunication network services are as follows: maximum satisfaction of consumers' demand for telecommunication services; higher efficiency of telecommunication organizations' activities; provision of further growth and updating of telecommunication facilities and networks; broader market of telecommunication services and better quality of their provision.

At present, the tariff regulation in the field of telecommunications in the Russian Federation is based on the cross subsidizing principle. The telecommunication operators included into the register of natural monopolies' subjects reimburse their costs on local telephone communication services provision at the expense of revenues from the toll and international communication.

For instance, the subscriber's payment tariff for using a telephone of the city telephone exchange for population averages only 77 percent of one number service costs. Account must be taken also of the presence of a large group of privileged payment categories of local telephone communication subscribers for whom acting tariff discounts are set in compliance with the existing law (about 40 administrative regulations). Compensation received by telecommunication operators from respective bodies of executive power at the present time covers less than 20 percent of costs on privileges provision for relevant categories of subscribers. The rest of costs is compensated at the expense of their own profit.

On the one hand, the cross subsidizing principle leads to super competition on the toll and international communication market, to continuous reduction of toll and international communication traffic allowed through natural monopolies' network, to the policy of superseding and discrimination of new operators on the side of natural monopolies, while, on the other hand, this principle results in artificial restriction of competition by the state on the local telephone communication market and in the absence of incentives for local communication networks expansion.

For the recent two tears it has not been possible to successfully diminish the regional differentiation of tariffs for like services that has stemmed from the two-stage system of state regulation applied up to the end of 1998.

The principle of change-over to tarification of services by two groups of users has not been implemented to the full extent. At present, only 40 percent of traditional operators on regional markets apply common tariffs for payment of local telephone communication services for organizations which are financed or not financed from respective budgets.

The drawbacks of the system of price formation and the mechanism of state regulation of tariffs for telecommunication services adversely affect the state of the material and technical base of the whole industry, satisfaction of service demands and telecommunication services market development level.

All over the world telecommunications are one of most investment-profitable sectors of economy in which the investments recovery period is four to eight years. In Russia, however, with the existing level of tariffs and the acting system of cross subsidizing the investment projects investments return periods are 20 to 30 years (Table 5).

Table 5 - Investment Projects Investment Return Periods

Investment project	Return period before 1998, years	Return period after 1998, years
Toll automatic telephone exchange	2 to 3 years	4 to 6 years
Local (urban) automatic telephone exchange	10 to 15 years	25 to 45 years
Local (rural) automatic telephone exchange	more than 20 years	more than 60 years

As a result of the current situation investments to telecommunications development have considerably decreased. For the last three years automatic telephone exchanges are less and less introduced: in 1997 - 1,825 mln. numbers, in 1998 - 1,681 mln. numbers, in 1999 - 1,160 mln. telephone numbers.

Perfection of the mechanism of state regulation of tariffs for telecommunication services consists in creating such a system of price formation that would ensure most satisfaction of social and personal demands for telecommunication services on the basis of coordination of economic interests of consumers, telecommunication organizations and the society as a whole.

The mechanism of state regulation of tariffs should be based on the objective principles of price formation and it should take account of the current state of the telecommunication services market and perspectives of its development, the potential demand and real supply, the telecommunication role in all spheres of life activity and liabilities of telecommunication organizations as for the state, personnel and stock-holders.

The price formation mechanism perfection effected in the telecommunication sector should be based on the following principles:

- all subscribers regardless of their solvency should possess accessibility of universal services which ensure normal conditions of life activity (access to law protection bodies, emergency medical aid, rescue service, information services etc.);

- efficiency of telecommunication organizations activity in the course of services provision, i.e. establishment of tariffs that would compensate operation costs and ensure an adequate profit;

- impartiality of costs reflection in the process of tariffs establishment by introducing a method of separate accounting as per activity kinds and accounting of inflation processes in economy;

- transparency and systematization of price formation methods used by the state bodies.

With further development of competition the list of regulated services should be revised and the methods of regulation depending on market domination intensity may vary from tariffs establishment by elaborating common principles of recommending character (for merchandize markets with relatively high competition, for example, toll telephone communication services market) to establishment of fixed tariffs by a regulating body for services of the telecommunication operators which occupy the monopoly position on the market.

Within the 2001 period the state regulation of tariffs should be aimed at solving the following tasks:

- completion of work on tariffs structure improvement as per consumer and regional segments (within federal districts);
- adjustment of tariffs for unprofitable services for population to the production prime cost level (with due regard to inflation) in all regions of the country by minimizing the cross subsidizing limits;
- change-over to tarification of same type services by two categories of users: population and organizations;
- establishment of common limiting tariffs for provision of access to local telephone communication network for the same categories of users within the federal districts which allow for local telephone communication services investment return within eight to ten years.

Together with these measures it is necessary to consider a possibility of complementing the local telephone communication services tariffs by a minimum required profit in order to gain means for networks development and updating, as well as for service quality improvement.

Change-over to the method of limiting price formation in the course of tariffs regulation should start from 2002 when the demand-supply balance is achieved on the telecommunication market and tariffs levels are adjusted to the real prime cost of services provision. The limiting price formation method is used for establishment of tariffs for telecommunication services by respective bodies in the majority of developed countries and countries with transient economy.

The limiting price formation method consists in determining by a regulating body a limiting growth index for tariffs from the “basket” of telecommunication services regulated by the state. The tariffs limiting growth index is equal to the actual inflation level corrected by value ”X” which takes account of expected changes of prices as for production factors in the telecommunication sector, predicted changes of labor productivity, national currency devaluation effects and requirements of the state to the telecommunication services development as envisaged by federal and regional programs. Value “X” is established as a fixed value for three to five years.

Implementation of suggested principles of tariffs regulation will facilitate advanced development of the telecommunication market, most complete satisfaction of demands for services, increase of services range and improvement of services quality and it will result in higher financial stability of telecommunication organizations, bigger allocations to the budgets of all levels and enhanced investment interest in the industry.

9. Universal Service and Universal Service Implementation Mechanism

For further development of the interconnected network of Russia and for rendering telecommunication services to the people living in sparsely populated and almost inaccessible places as well as for rendering telecommunication services to socially unprotected and needy layers of population the specific category of telecommunication services should be complemented by such a notion as “universal service”.

In the standard documents of the European Union the universal service (servicing) is defined as "A minimum complex of standard quality services which are accessible and rendered to all users regardless of their geographic location at an acceptable price established depending on certain national conditions".

Introduction of the universal service in the Russian Federation is of paramount importance for the following reasons:

- more than 40 thousand populated settlements in Russia are not yet covered by telephone communication at the present time;
- for the recent years the problem of telephone coverage of rural and almost inaccessible areas has in fact failed to be solved due to insufficient centralized and local financing;
- there is a great number of persons whose incomes are below the living wage level.

The universal services are supposed to effect using a universal servicing mechanism. The main problems of universal servicing organization consist in defining: the contents of the universal services minimum list; the procedure and criteria for universal service operator appointment; the mechanism and sources for compensation of universal services provision costs; the universal servicing quality norms.

The universal servicing system in Russia should be created by stages based on the industry development features, available financial resources and population purchasing capacity.

Table 6 specifies the indices of the Russian universal servicing system creation and development stages.

Table 6 - Russian Universal System Creation and Development Stages

Stage	Stage characteristics	Stage implementation period
Stage 1	1. Employment of public call offices, collective use stations and universal coin-box telephones	2 years
	2. Organization of public call offices and collective use stations and installation of coin-box telephones proceeding from the following: the period of user's access to the service (excluding transport use) should not exceed 1 hour in sparsely populated and almost inaccessible area and 10-15 minutes in towns	
	3. Provision of toll, international and local telephone services (including free-of-charge emergency calls and general-purpose information services)	
Stage 2	Increase of the number of universal coin-box telephones, public call offices and collective use stations proceeding from availability of one coin-box telephone per one populated area with population of at least 50 people; one public call office and one collective use station per one populated area with population of at least 1000 people.	3 years
Stage 3	1. Realization of applications for access to and provision of telephone communication as for separate groups of population (for example, disabled people) and socially important objects (medical stations,	3 years

	schools, shops etc.)	
	2. Extension of the list of services rendered at public call offices and collective use stations: • possibility of transmitting facsimile messages	
Stage 4	1. Broader coverage of population and life provision objects by individual subscriber's equipment for solvency demand satisfaction	3 years
	2. Extension of the list of services rendered at public call offices and collective use stations: • data transmission and Internet access.	

Note: The periods of stages 2-4 are specified in accordance with achieved previous stage results.

The plan for universal servicing implementation in the Russian Federation should be worked out in the future.

For universal servicing organization use will be made of new mechanisms of costs compensation exclusive budget financing. The sources of universal service costs compensation will be mandatory contributions of all telecommunication operators engaged on the Russian telecommunication services market into a special-purpose fund.

Collection of contributions and financing of telecommunication operators costs as a result of universal services provision should be effected by the "Universal service fund" (hereinafter referred to as "Fund") specially created for this purpose. The Fund may be set up as a purpose budget fund. The Fund control and organization procedure is determined by the Russian Federation Government.

The main criteria for definition of a universal service operator include: scale of activities; ability to provide universal services with required characteristics (volumes, kinds, quality, area coverage) including emergency call services; ability to ensure fulfillment of programs of support of socially unprotected subscribers (for example, disabled persons, persons with low income) and programs of support of health and education departments located on the serviced territory.

To enable functioning of the universal servicing system a special Resolution "On Universal Services Provision" should be prepared and put into force by the Russian Federation Government and relative changes and amendments should be introduced into the federal law on telecommunication and some other telecommunication legislative documents.

10. Frequencies Planning and Licensing

State policy of the Russian Federation in the sphere of frequencies regulation includes frequency bands distribution for different purpose radio transmission technologies and frequency ranges allocation for different categories of users.

The scope of frequency distribution activities is illustrated by the following figures. As of today there are more than 102 thousand radio networks operating, including 211 thousand radio stations with more than 457 thousand frequency allocations. Apart from that about 6 000-7 000 applications for frequencies allocation are received on the annual basis. It's worth mentioning that only four percent of frequency ranges are intended for use by civil radio equipment only; the remaining 96 percent of frequencies are used either jointly, or mostly for the needs of national defense and state security.

The frequencies utilization state regulation activities include the measures undertaken to harmonize the frequency bands usage in accordance with the international agreements, accepted by the

Russian Federation as well as the continued work in the field of radio spectrum conversion. Apart from that it is necessary to perform the frequencies bands allocation optimization as well as to supervise the frequencies utilization, which can be achieved by creation of the state radio frequencies control body. During the frequencies allocation it is necessary to introduce such market means, as tenders and competitions.

As a result of the above measures introduced it is intended to achieve the new qualitative level in the field of radio frequencies allocation and utilization by introducing the clear and transparent rules of radio frequencies resource distribution. The above mentioned steps being part of the state policy will help to create more favorable conditions for new radio technologies development as well as to increase the potential volume of the radio services market within the framework of the competitive environment.

During the licensing policy liberalization period the number of valid licenses for telecommunication services has increased up to more than 7 400 as of 1 December 2000. At the same time no more than 20 operators seriously take part in the construction and development of the telecommunication infrastructure.

The main principle of licensing, which is supposed to provide for the stable functioning and development of telecommunication networks, has to be the principle of telecommunication operators equality. The above principle will provide for the competitive environment on the telecommunication services market and, finally, will provide for the efficient development of the telecommunication industry as a whole.

The established Russian Federation state regulated telecommunication services licensing procedures in the field of telecommunication services acts as a means to control and monitor the compliance with technical requirements worked out for operators, including the new operators on the market.

The current licensing procedures do not provide for the development of efficient structure of regional markets and often leads to investments scattering and reduces the companies' efficiency. The acute competition in the fields of long distance, international and corporate telecommunication goes together with the low competition in the field of local telecommunication services for the population.

The main approach of the licensing mechanisms development should include the creation of the state regulation means, aimed at optimization of the number of licenses issued within the same territorial borders as well as the introduction of licensing on the competitive basis. The licensing mechanisms development should be performed within the framework of the telecommunication regulations reform as a whole and should provide for the harmonization with the European legislation in this field.

The transparency and openness of issuing and revoking licenses, as well as forming the objective licensing requirements and criteria, aimed at the further development of the telecommunication infrastructure, is the necessary prerequisite for the true competition development on the telecommunication market.

11. Technological Policy and National Interests Issues in the Sphere of Russia's Telecommunication Market Development

Technological policy includes the development of norms and regulations, providing for the harmonized functioning and development of the interconnected telecommunication network of the Russian Federation as well as ensuring the proper quality of services provided and those services availability to all consumers regardless of their location and income level.

The main task of the technological policy development at present is the issue of modernization of existing public telecommunication systems and networks. As of today only about 26 percent of Russian Federation telecommunication equipment can be considered corresponding to the international level. In order to ensure the efficient functioning of the telecommunication market it will be necessary to modernize about three quarters of the existing public telecommunication networks in the nearest future.

Together with the modernization of existing networks it is necessary to perform a set of operations, aimed at the development of the modern telecommunication infrastructure (which first and foremost means introduction of new services). The technological developments in the telecommunication field in the developed countries has led to creation of more than 100 new services, which will become an integral part of future telecommunications. Every year more than 100 new types of telecommunication equipment appear, and it is necessary to preview and estimate the role and usage of this equipment in the interconnected telecommunication network of the Russian Federation.

The technological policy should also include the development and realization of the separate Concept of the public telecommunication networks development of the Russian Federation, the above network being the part of the interconnected telecommunication network; the development of the general models of telecommunication networks' development; development of the rules of telecommunication services provision as well as the applicability of different types of equipment in the interconnected telecommunication network. The technological policy should also include such important issues, as conducting the industrial standardization and voluntary services certification introduction.

The realization of the above described measures will allow to achieve within the five-year period the integrity and improved reliability of the interconnected network of the Russian Federation as well as to create a necessary conditions to introduce new technologies. As a result new services will appear, the quality of existing services will improve, the consumer rights and interests will be protected – but only if the state interests are protected and all telecommunication market participants enjoy same rights.

Preserving national interests in the process of telecommunication structure development comprises a complex and multilevel problem, which must be maintained by the appropriate legal and administrative efforts.

Taking into consideration the geopolitical situation being created and Russia's interests regarding the informational sphere the President of the Russian Federation has approved on 9 September 2000 the "Doctrine of the informational Security of the Russian Federation". The above Doctrine, among other issues, defines the national interests of the country, the threat to the informational security of the Russian Federation and the sources of such threats. In accordance with the above document one of the threats to the informational security is the willingness of some countries to infringe upon Russia's interests in the international information space, to push it out from external and internal informational markets as well as to step up the international competition in the field of informational technologies and resources and, finally, markets themselves.

The activities of the Government of the Russian Federation in the sphere of the further liberalization of the telecommunication services market require the settlement of the legal regulation system, which will ensure the stability and security of the public access telecommunication network. The main elements of such system are as follows: centralized administration and control, planning and development of the public access telecommunication network in order to ensure the stability and security of the public access telecommunication network operation; utilization of instruments and equipment, which fully comply with the governmental standards and administrative normative documents regarding the reliability, electromagnetic compatibility, ability to survive the external destabilizing factors, noise immunity; design and construction of the public telecommunication network elements (objects,

telecommunication lines and networks as a whole in compliance with the stability requirements; provision of the general automated centralized administration and control for telecommunication networks and systems in order to secure the necessary operative switching over of telecommunication lines; development of the backup system , which allows for by-passes and quick restoration of network elements; security system and protection of public telecommunication network objects; utilization of national software products, which are developed in compliance with the specific requirements of the governmental structures; utilization of the certified telecommunication equipment and security means on the public telecommunication networks.

The goals and interests of the national telecommunication market development require the discussion of the issue both of limiting direct access for the foreign individuals to the telecommunication services market and of limiting their direct and indirect overwhelming participation in charter capitals of the telecommunication organizations of the Russian Federation.

12. National Manufacturer Support

The state policy of the Russian Federation in the sphere of national manufacturers support should include the development and adoption of the number of measures, aimed at creating conditions for efficient development of national manufacturing of the competitive telecommunication equipment and software.

In 1990-s the telecommunication operators, working on the telecommunication market of the Russian Federation, were purchasing abroad the telecommunication equipment for the total amount 500-520 million US Dollars annually. All long-distance, international and 80 percent of local telephone stations were manufactured abroad because the Russian manufacturing plans could not offer any competitive telecommunication equipment.

Today the situation on the telecommunication equipment market has changed. Starting from the middle of 1990-s the high-quality telecommunication equipment is produced in Russia – "Kvant", "Elcom", "Beta". The high-quality switching equipment is produced jointly with such companies, as Alcatel, NEC, Siemens and IskraTel; such an equipment has acquired the status of the national product.

The existing capacities of local Russian manufacturers are quite capable to satisfy the requirements of the telecommunication market in switching equipment. The quality of equipment produced is not inferior to the best international samples. Nevertheless today the national manufacturers' share of the Russian market does not exceed 20 percent.

In a situation like this the state's main objective should be viewed as working out and conducting the policy, aimed at supporting and promoting the national equipment manufacturers. The main approaches to the state policy should be as follows:

- introduction of the requirements of mandatory availability of the infrastructure, which is necessary to provide service and operational support to be conducted by the Russian manufacturers of the telecommunication equipment;

- conducting of customs policy, aimed at non-discriminating attitude towards the national manufacturers as compared to foreign companies; the above policy to be conducted via introducing the customs duties for the imported equipment provided the similar equipment is produced by Russian manufacturers;

- working out and development of financial mechanisms, which will provide the equal opportunities for promoting the switching equipment for Russian and foreign manufacturing companies, namely, regarding the conditions of delayed payment for equipment purchased and provision of long-term material credits.

The consistent following of the above mentioned measures will allow to create and develop the competitive national equipment production within the three years' period. The final goal of the state policy in the sphere of national manufacturers' support should be the creation of such economic conditions, which will provide for manufacturing of competitive telecommunication equipment and software mainly on the territory of the Russian Federation.

13. JSC "Sviazinvest Restructuring Program

Dynamic development of the telecommunication industry will be impossible without the efficient functioning and modernization of the JSC "Sviazinvest" Holding, which constitutes the basis of the national telecommunication infrastructure of Russia. Today the JSC "Sviazinvest" Holding includes 78 independent regional companies. Such a fragmentation within the framework of the Holding leads to lowering of competitive potential on the telecommunication market of the Russian Federation, both of the individual companies and of the Holding as a whole, renders inefficient the Holding administration, brings financial instability and low capitalization of the JSC "Sviazinvest" (today the holding capitalization is 2.0 billion US Dollars).

In order to improve the efficiency of the JSC "Sviazinvest" and telecommunication industry of Russia as a whole it is necessary to conduct within next two-three years a certain number of steps, aimed at company's restructuring. The positive experience of JSC "Sviazinvest" local companies' mergers on the regional level testifies to the assumption that the company's restructuring, which had been started following the Board of Directors decision of 1 September 2000, well could be successfully completed provided the process receives an appropriate state support.

The above measures should include the development of legislative and administrative base and the deep internal restructuring of the Holding (including the regional merged companies). Upon completion of restructuring the 78 existing separate companies should be transformed into seven major inter-regional operators. The process of separate companies' integration within the framework of the Holding is an already established international tendency. Nowadays all over the world the efficient operators account for millions of telephone lines and the smaller telecommunication companies are absorbed by the bigger ones.

Apart from companies' consolidation it is necessary to conduct an administration and management system reform, both regarding separate structural units and Holding as a whole. The reform should achieve the significant amelioration of the JSC "Sviazinvest" management quality. One more important issue in the JSC "Sviazinvest" restructuring should be the reform of the technical policy and development of an efficient marketing strategy.

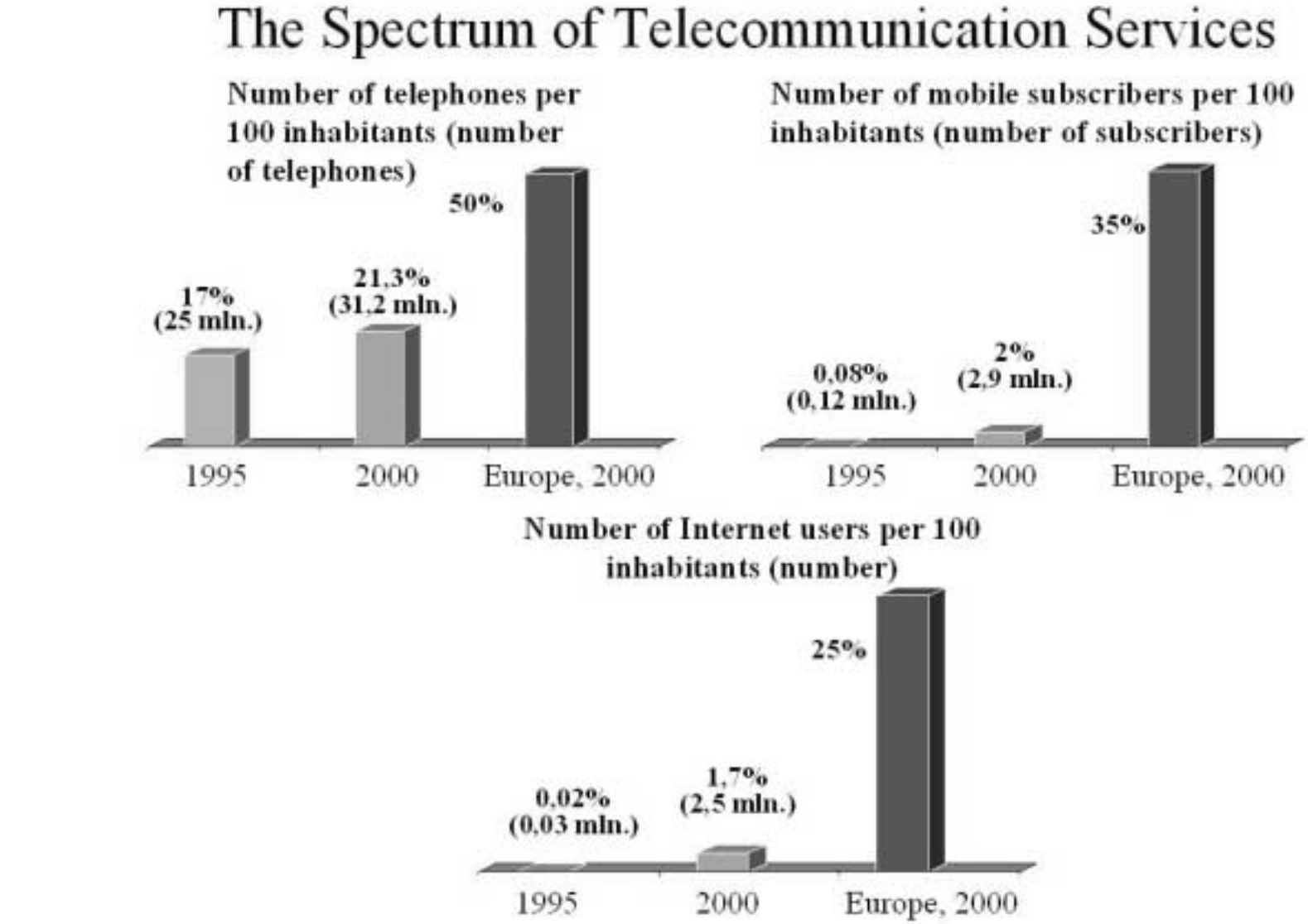
The reforming process and inter-regional merges of separate companies will lead to substantial reduction of JSC "Sviazinvest" operational expenses and will improve the control over the floating assets. Inter-regional companies will be able to offer their customers full range of telecommunication services on the large territory as well as complete service packages for corporate client; those companies will acquire the potential, which is needed to conduct investment projects, not affordable for smaller companies. The potential for market surveys and strategic planning of Holding activities will improve as well.

Strengthening of the Holding's position as combined with its improved liquidity will provide for a quick and substantial growth of Holding's shares prices. Taking into consideration the proposed restructuring measures the JSC "Sviazinvest" capitalization may well increase four-six times, which, in turn, will allow for improved potential in the field of attracting outside investors, which is vital for Holding's successful development.

14. Conclusion

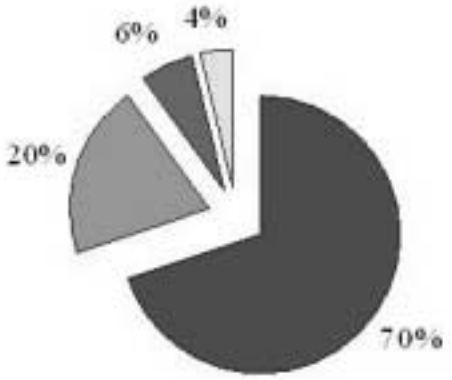
On the basis of this Concept provisions, the priority tasks of state regulation of the telecommunication services market development include: working out and developing of the technical policy, aimed at the modernization of existing public telecommunication services and networks; harmonization of the radio frequencies utilization in accordance with the international agreements, continued efforts in the sphere of frequencies conversion, introduction of market principles in frequencies allocation through tenders and competitions; creation of the efficient system for regulation and coordination of interconnection services provision; elaboration of the procedure and conditions for interconnection services provision; organization and provision of state control and supervision in the connection services provision sphere in order to prevent some telecommunication operators from abuses of their positions; implementation of the principle of transparency and orientation to prime cost and standard level of profitability on the basis of state regulation of prices for connection services rendered by the operators occupying the dominant position on the market; introduction of the system of separate accounting according to a kind of activity; completion of work on perfection of tariffs structure as for consumers' and regional segments (within federal districts); adjustment of tariffs for unprofitable services for population to the production prime cost level (with due regard to inflation) in all regions of the country; minimization of the cross subsidizing limits; change-over to tarification of same telecommunication services by two categories of users: population and organizations; establishment of common limiting tariffs for local telephone communication access provision for the same categories of users within federal districts so as to attain the local telephone communication services investment return period of 8 to 10 years; transition starting from 2002 to regulation of tariffs for telecommunication services by limiting price formation method; introduction of the universal servicing system in the Russian Federation; definition of the contents of the minimum list of telecommunication universal services, procedure and criteria of universal service operator's appointment, mechanism and sources for compensation of operators' costs due to universal services provision and universal servicing quality norms on the basis of the Russian Federation standard documents; organization of the purpose budget fund - Universal Service Fund replenished at the expense of mandatory allocations of telecommunication operators; introduction of transparent and public procedures of licenses' allocation and revocation as well as forming the objective licensing conditions and requirements, aimed at the development of the telecommunication infrastructure; support of the national telecommunication equipment manufacturers, provision of centralized control and planning of public switched telecommunication network development so as to achieve network stable and secure functioning.

Telecommunications – a Key Factor in the Russia's Development in the XXI-st Century

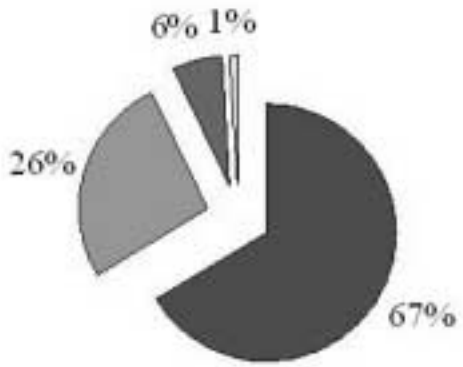

The Spectrum of Telecommunication Services
Number of telephones per 100 inhabitants (number of telephones)
17% (25 mln.)
21,3% (31,2 mln.)
50%
1995
2000
Europe, 2000
Number of mobile subscribers per 100 inhabitants (number of subscribers)
0,08% (0,12 mln.)
2% (2,9 mln.)
35%
1995
2000
Europe, 2000
Number of Internet users per 100 inhabitants (number)
0,02% (0,03 mln.)
1,7% (2,5 mln.)
25%
1995
2000
Europe, 2000

Changes in Market Structure

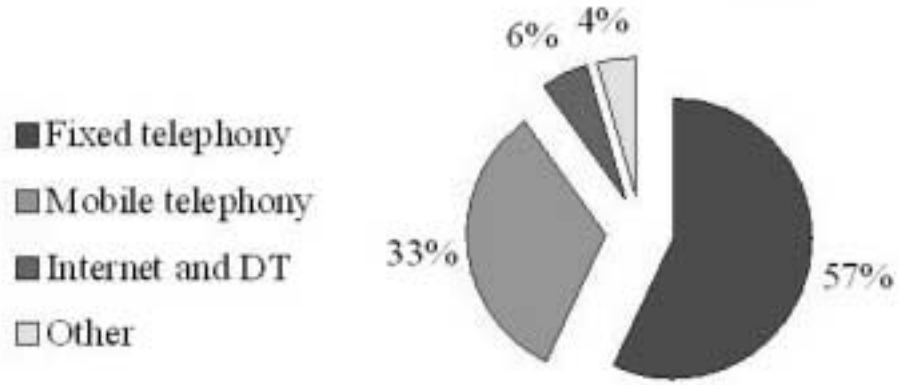
1998. Market volume - $4,9 bln.



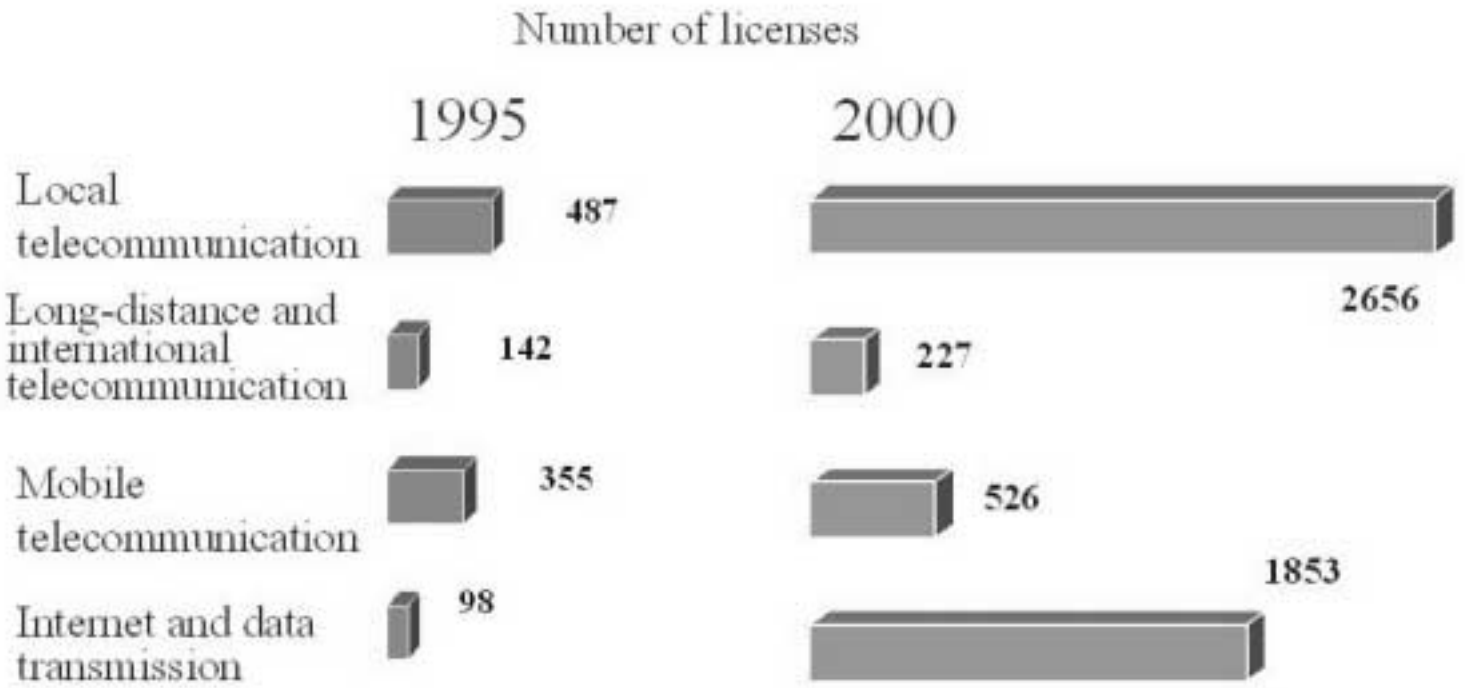
1999. Market volume - $4,0 bln.



2000. Market volume - $4,5 bln.



Telecommunication Market Liberalization

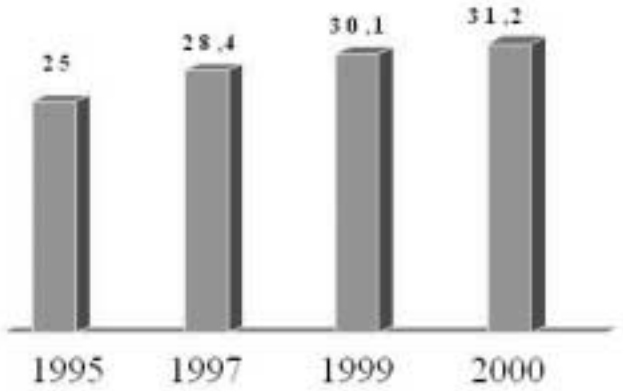


Conclusions:

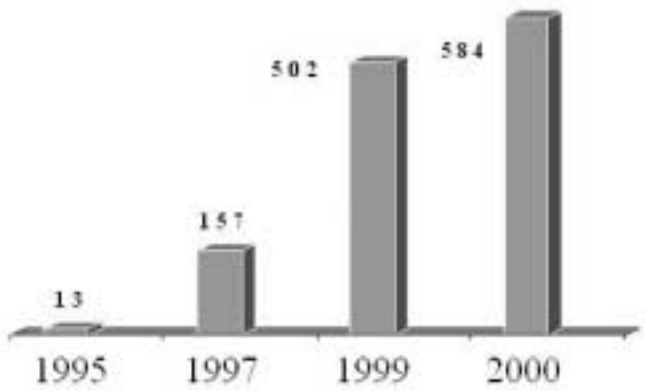
- Industry's privatization completed
- Telecommunication markets formed

Telecommunication Infrastructure Development

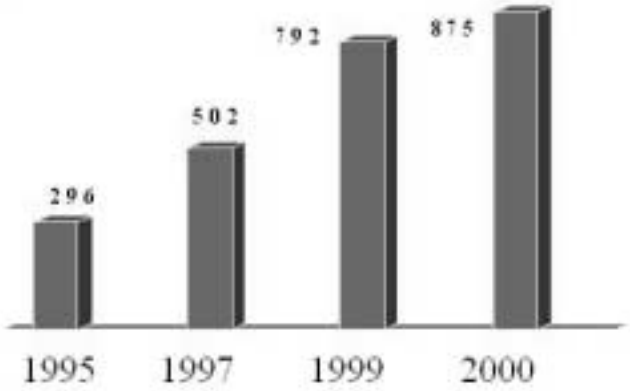
Number of telephone lines, mln.



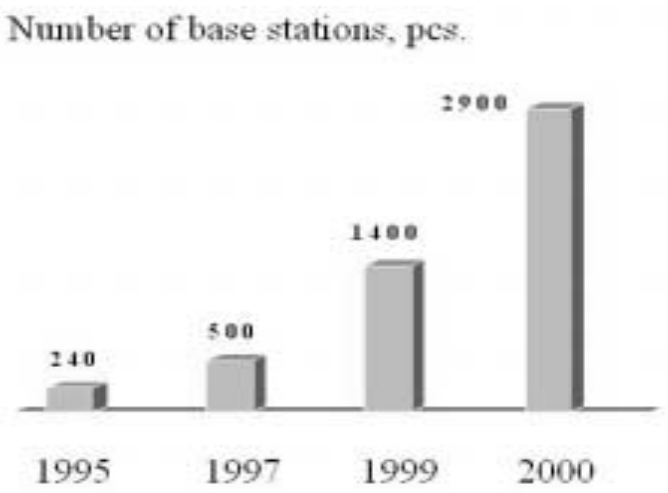
Fiber-optical lines, mln. Km.

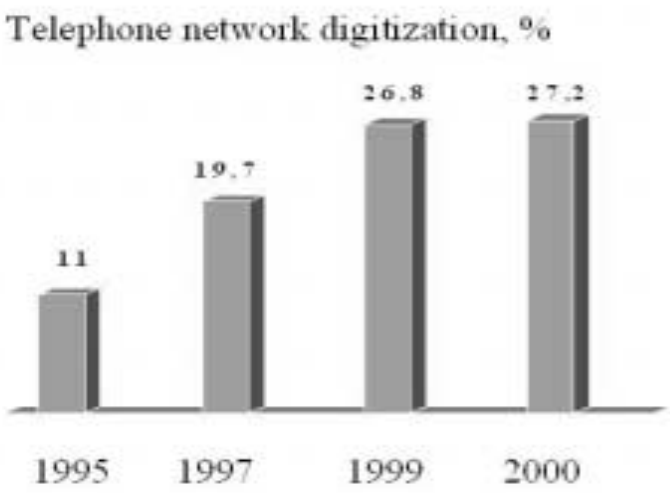


Long-distance and International lines, mln. Km.

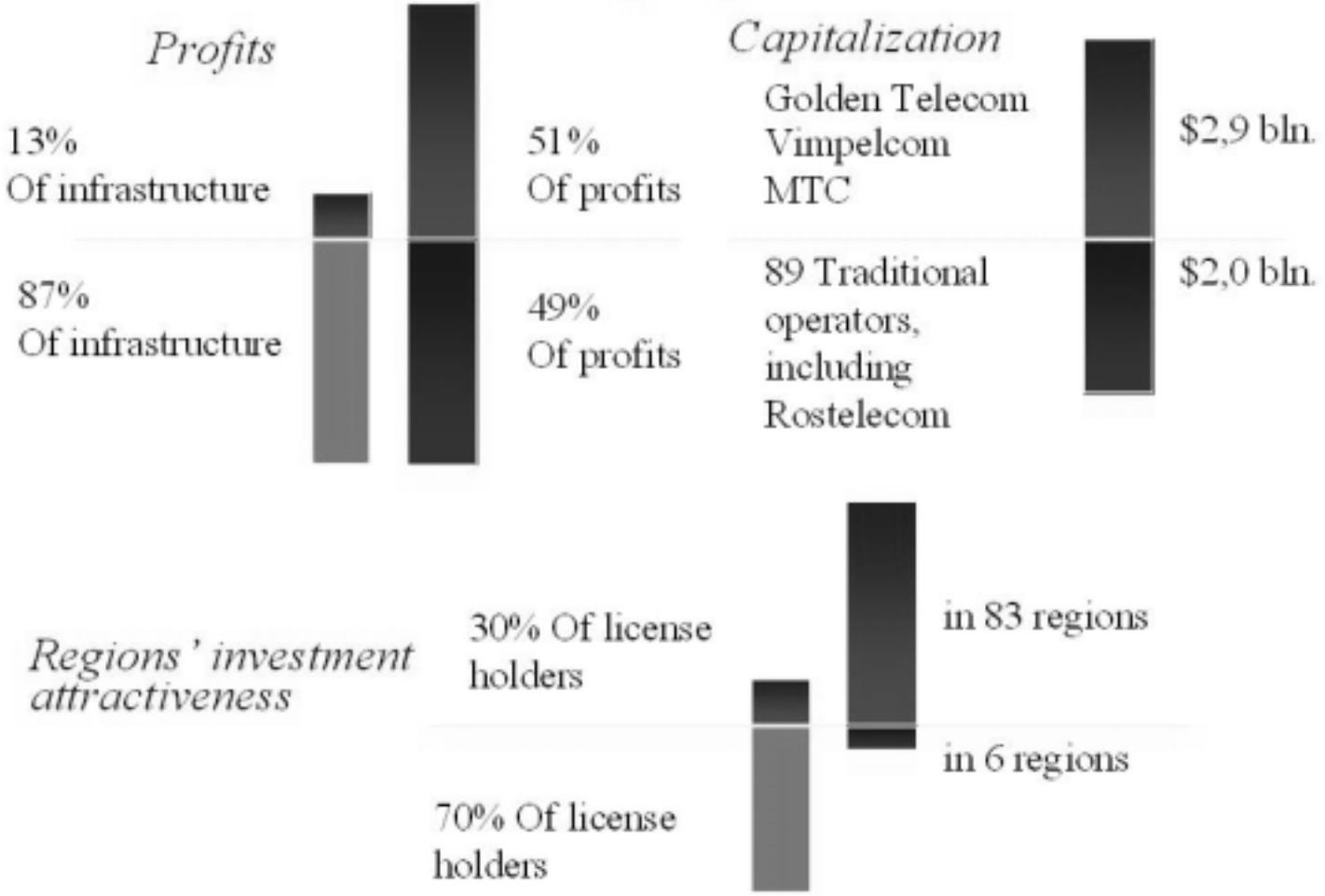


Telecommunication Infrastructure Development

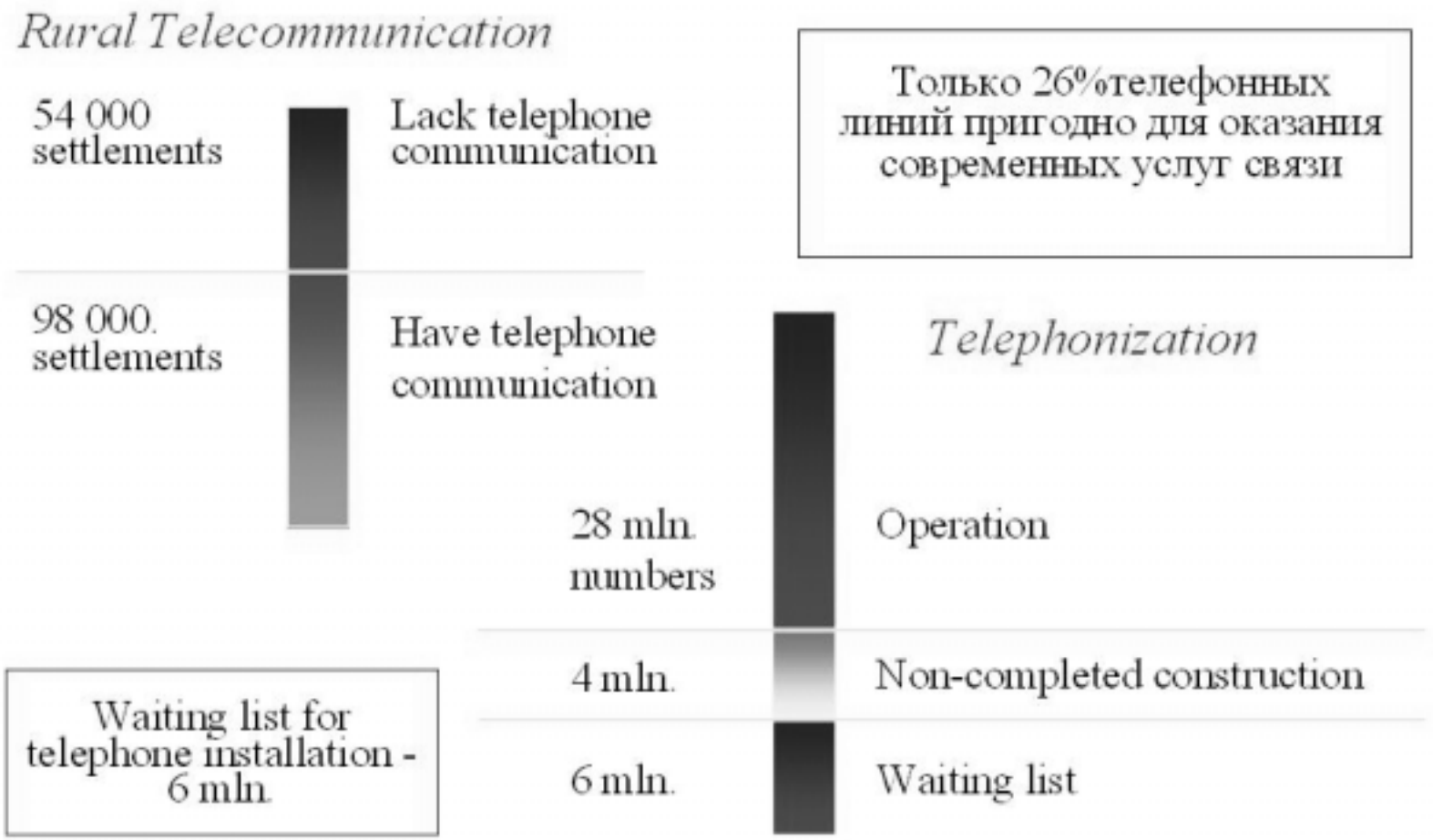




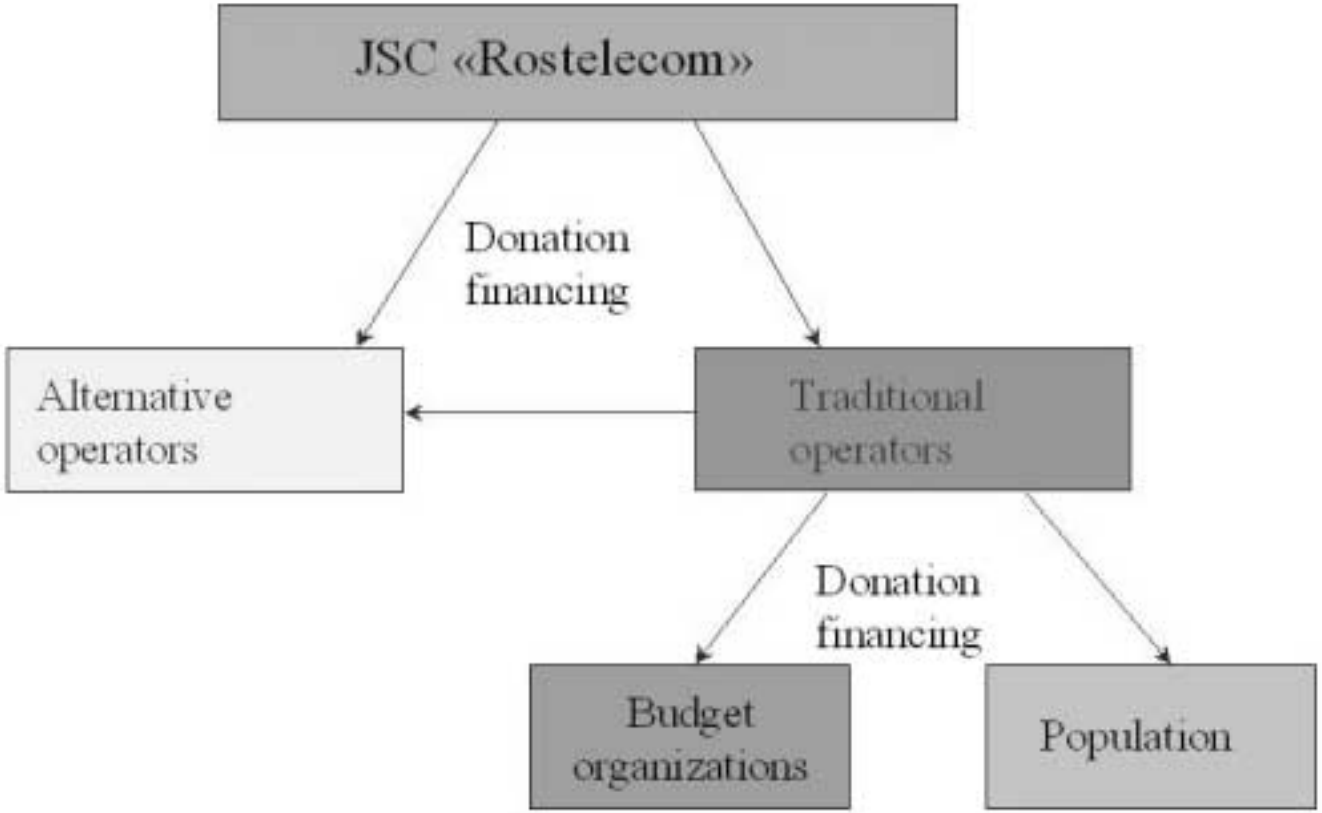
Telecommunication Markets Development: Main Disproportions



Telecommunication Markets Development: Main Disproportions



Cross Subsidizing Issues



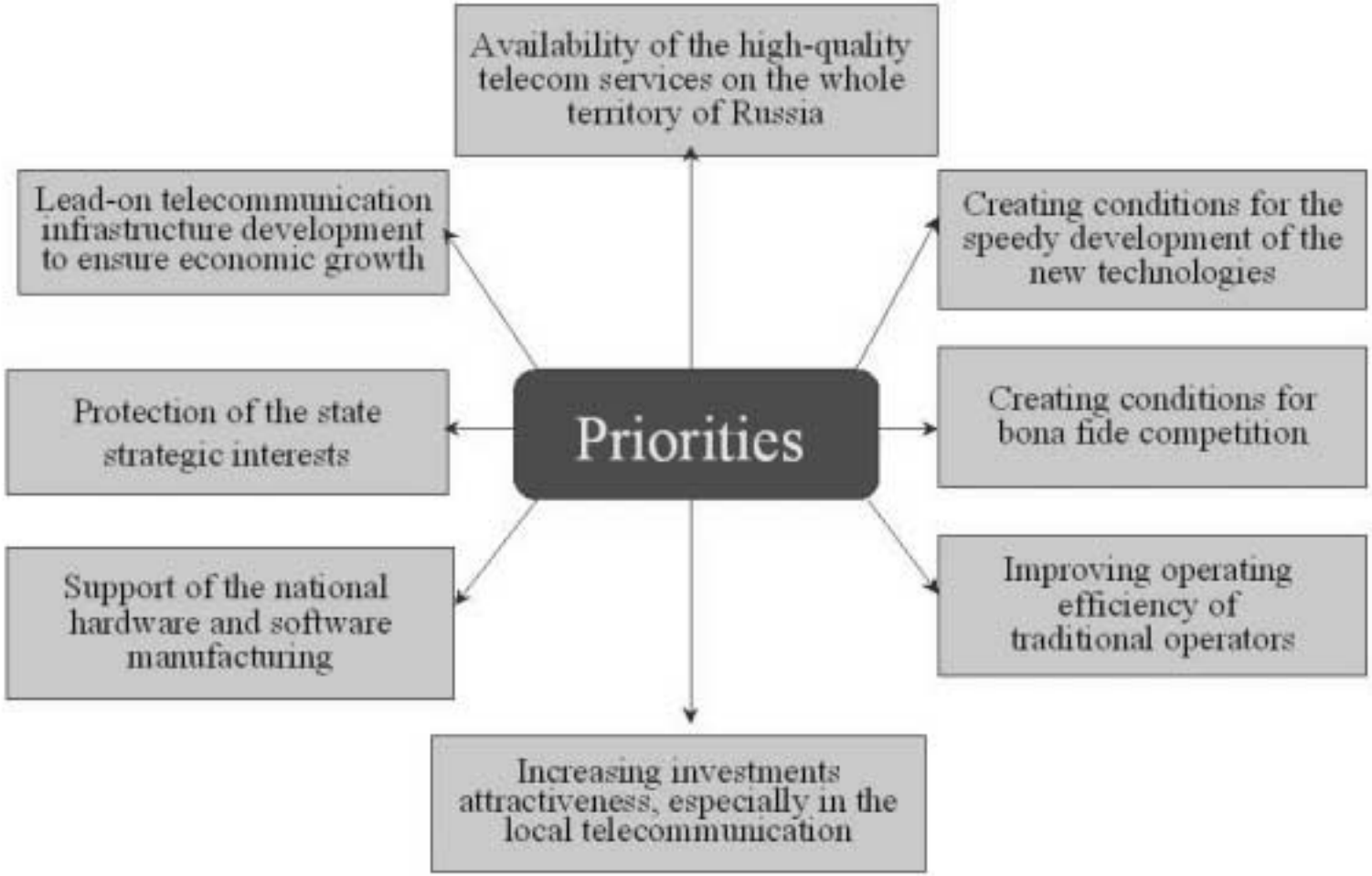
Concept Goals

- To provide for increasing demands for telecommunication services and to ensure the high-speed development of the national telecommunication infrastructure by way of creating conditions for *the balances and dynamic telecommunication market development*
- To ensure provision of universally affordable telecommunication services in each Russia's settlement by way of *involving all market players in the task of solving state social issues*
- To improve the telecommunication infrastructure utilization efficiency, to increase the investments attractiveness of the industry, to create the proper competitive environment by way of *improving the state regulation.*

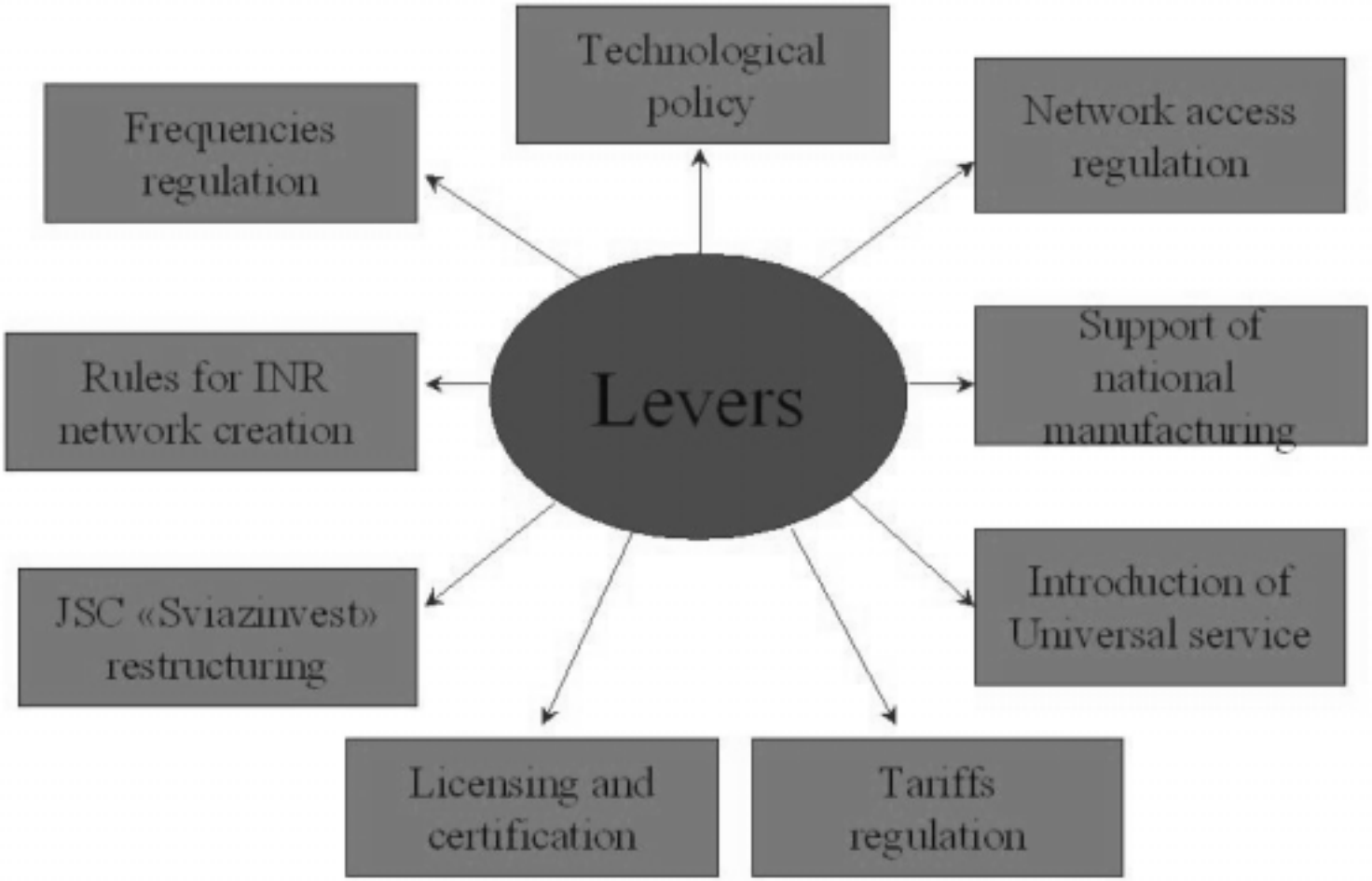
Target goals for 2010:

Telephone density increase from	31,2% to 47,7%
Number of mobile subscribers increase from	2,9 mln. to 22,2 mln.
Numkber of internet users increase from	2,5 mln. to 26,1 mln.
Russia's telecom networks digitization increase from	26% to 94%
State investments volume -	$33 bln.

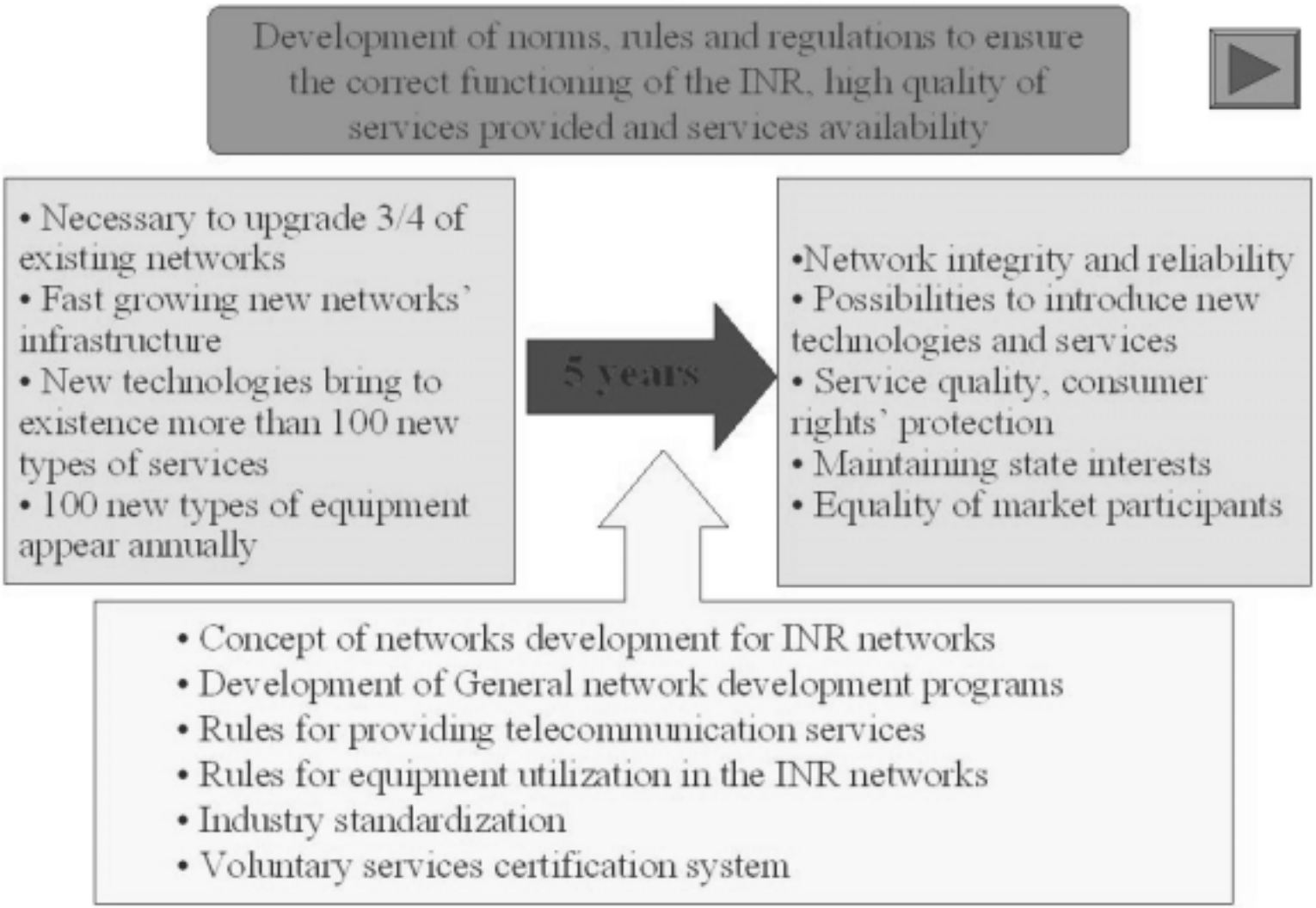
Top Priorities of the Telecom Market Development



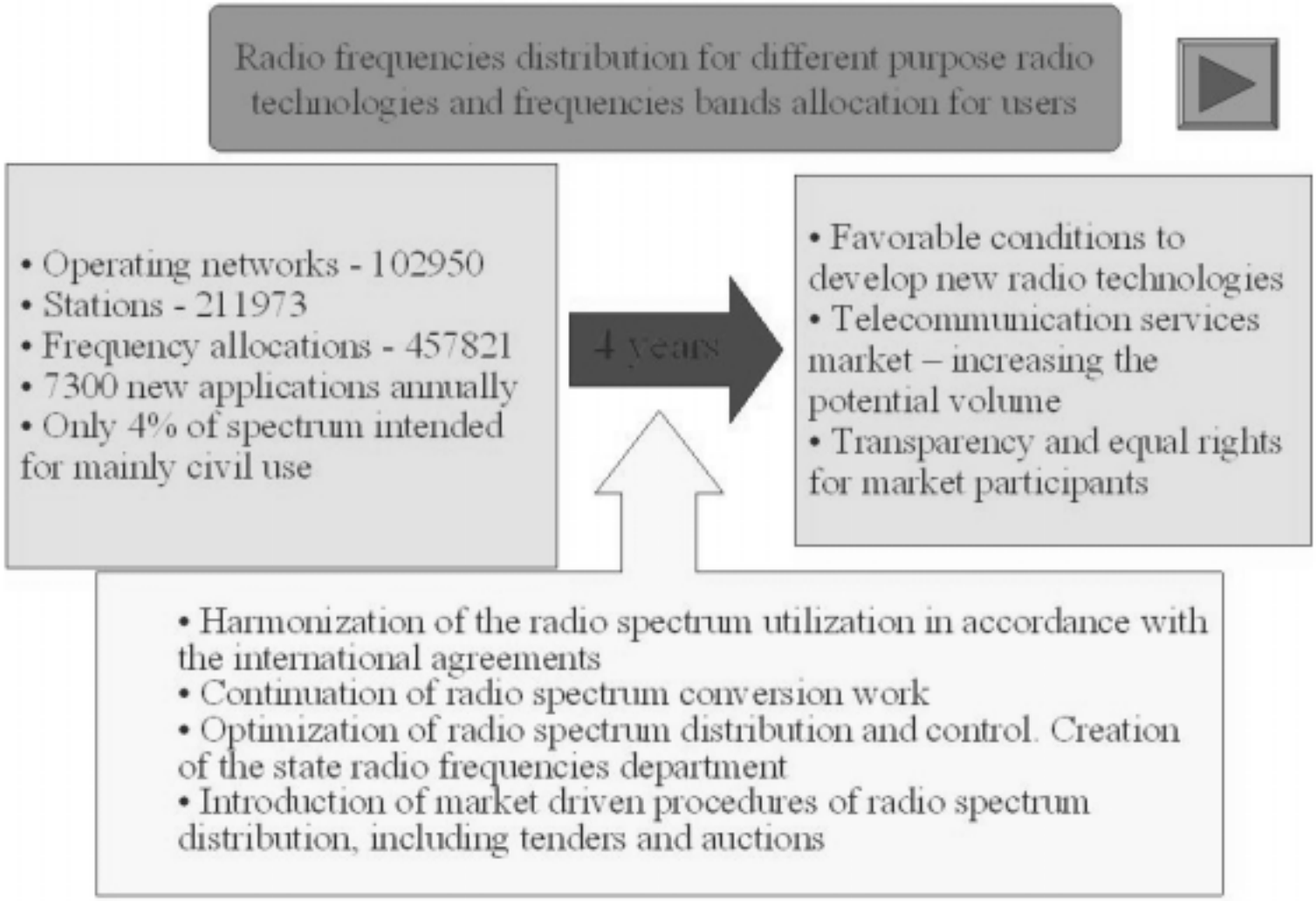
Telecommunication Markets: Mechanisms of Influencing



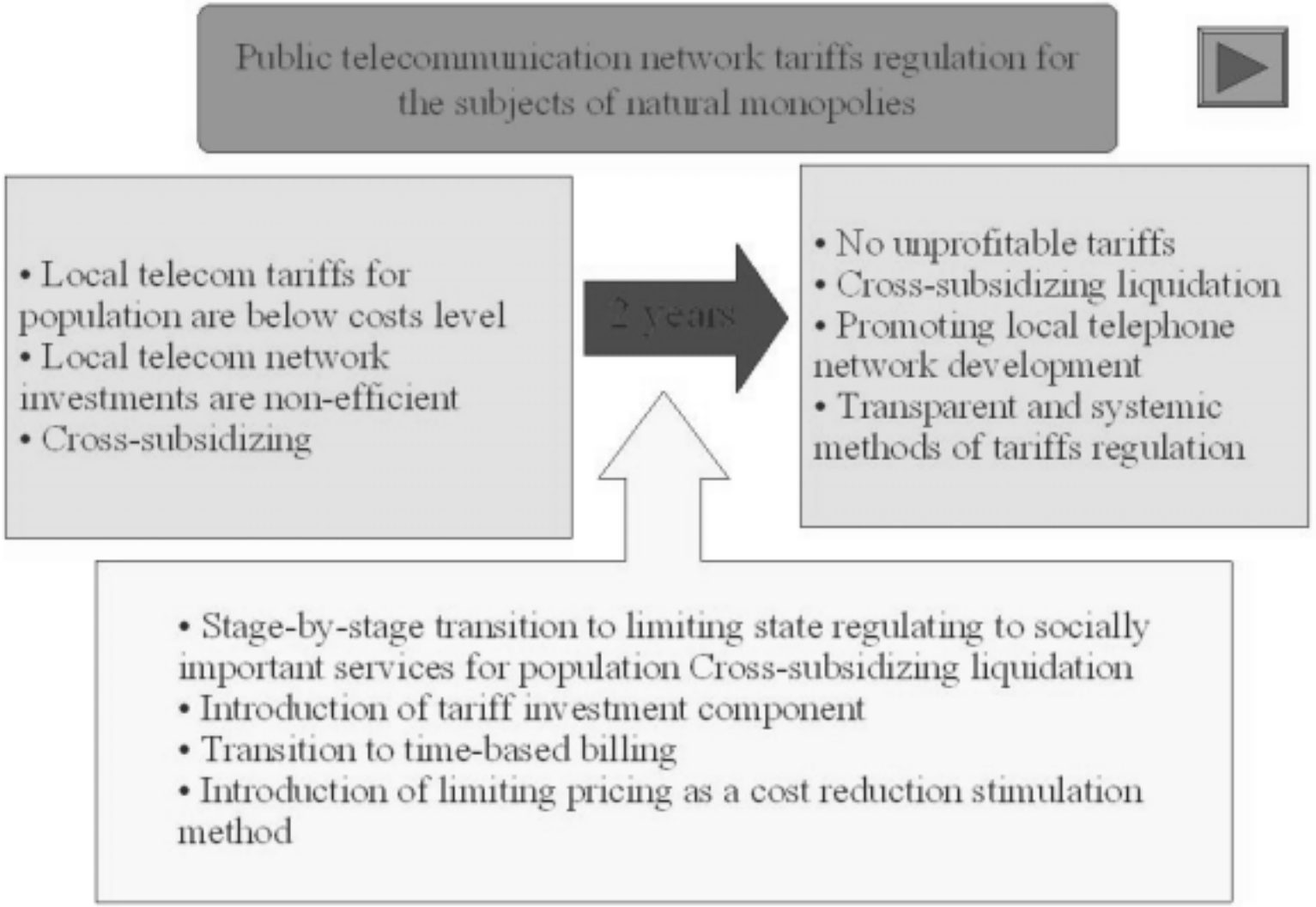
Technological policy



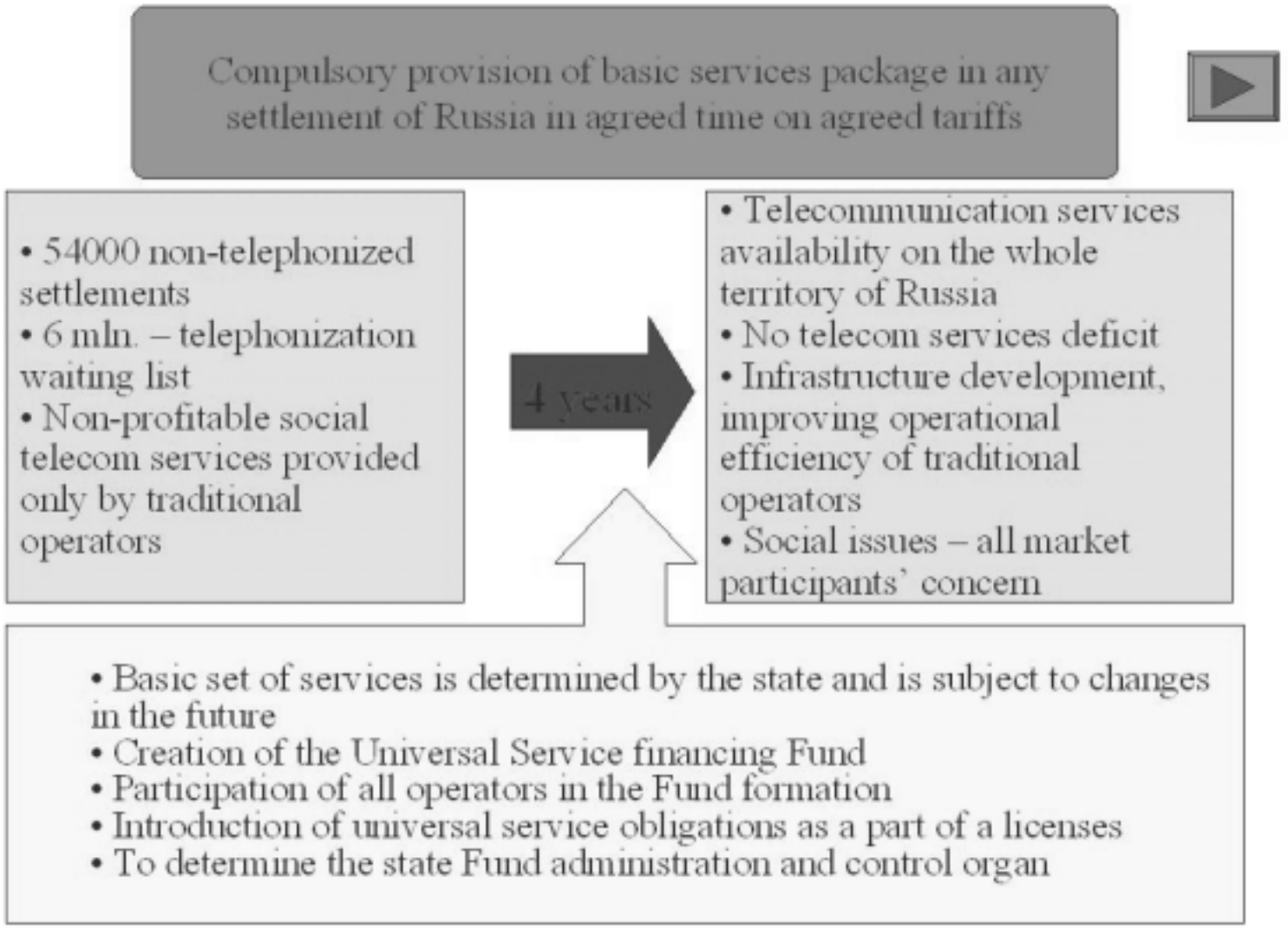
Frequencies Regulation



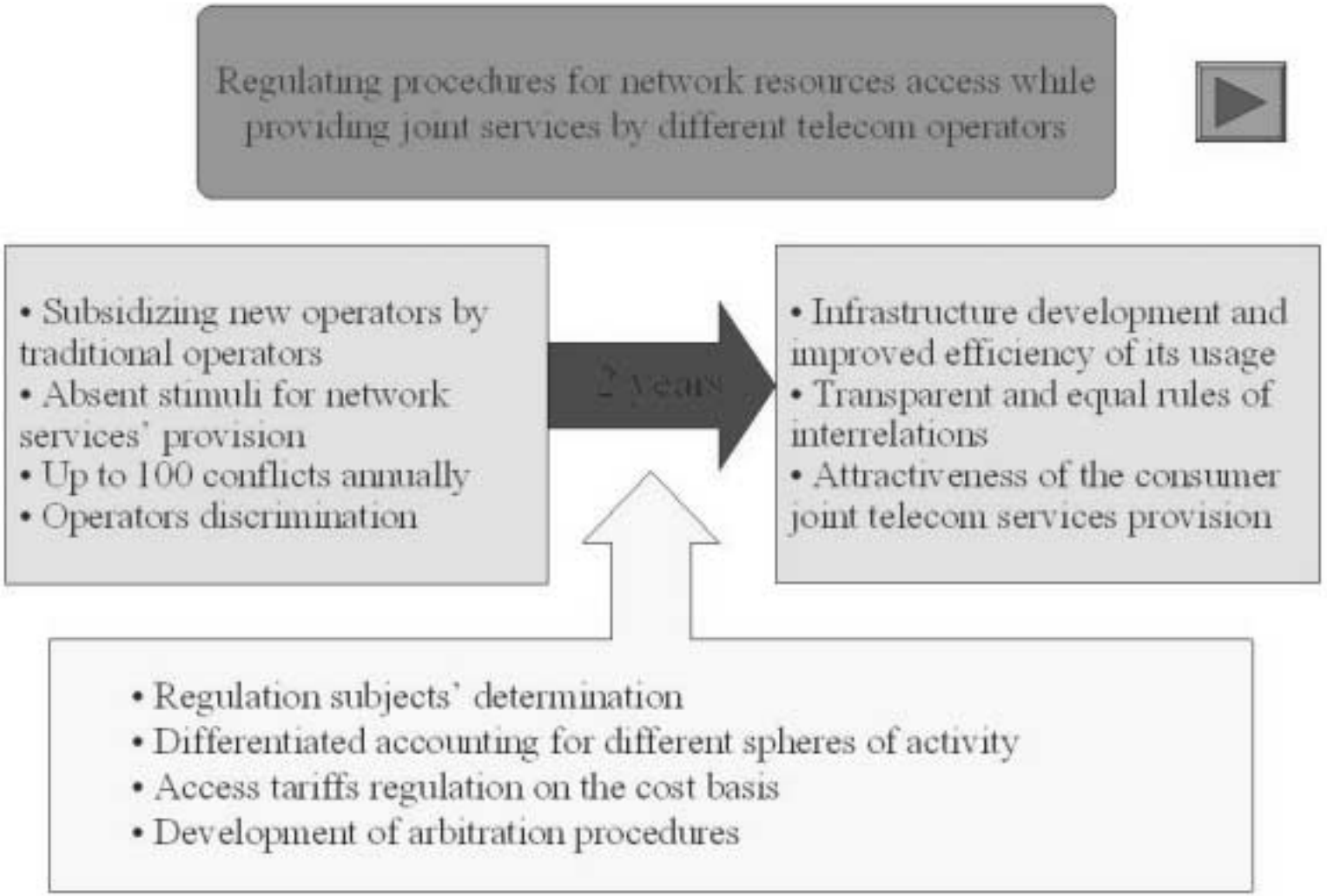
Tariffs Regulation

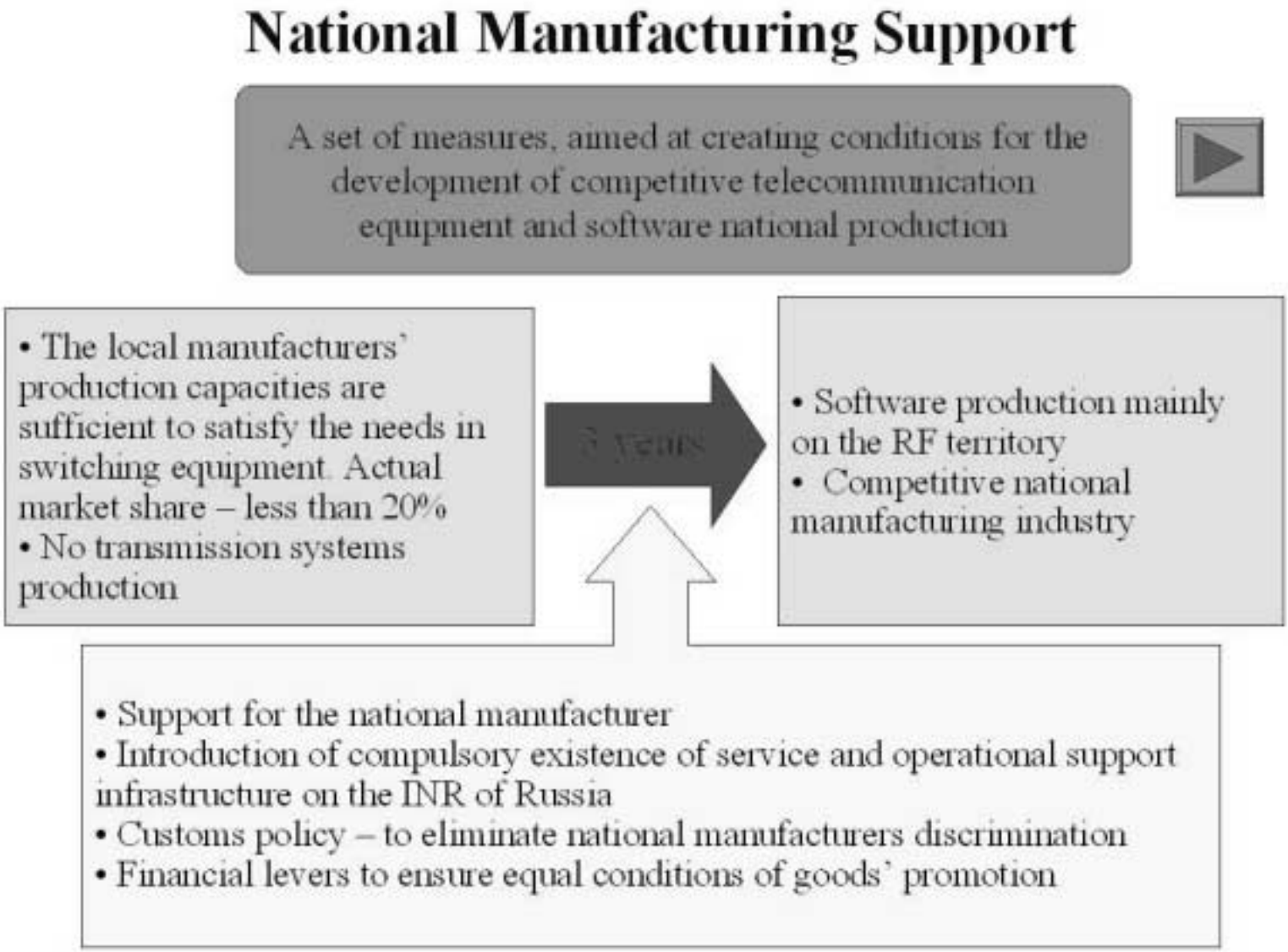


Universal Service

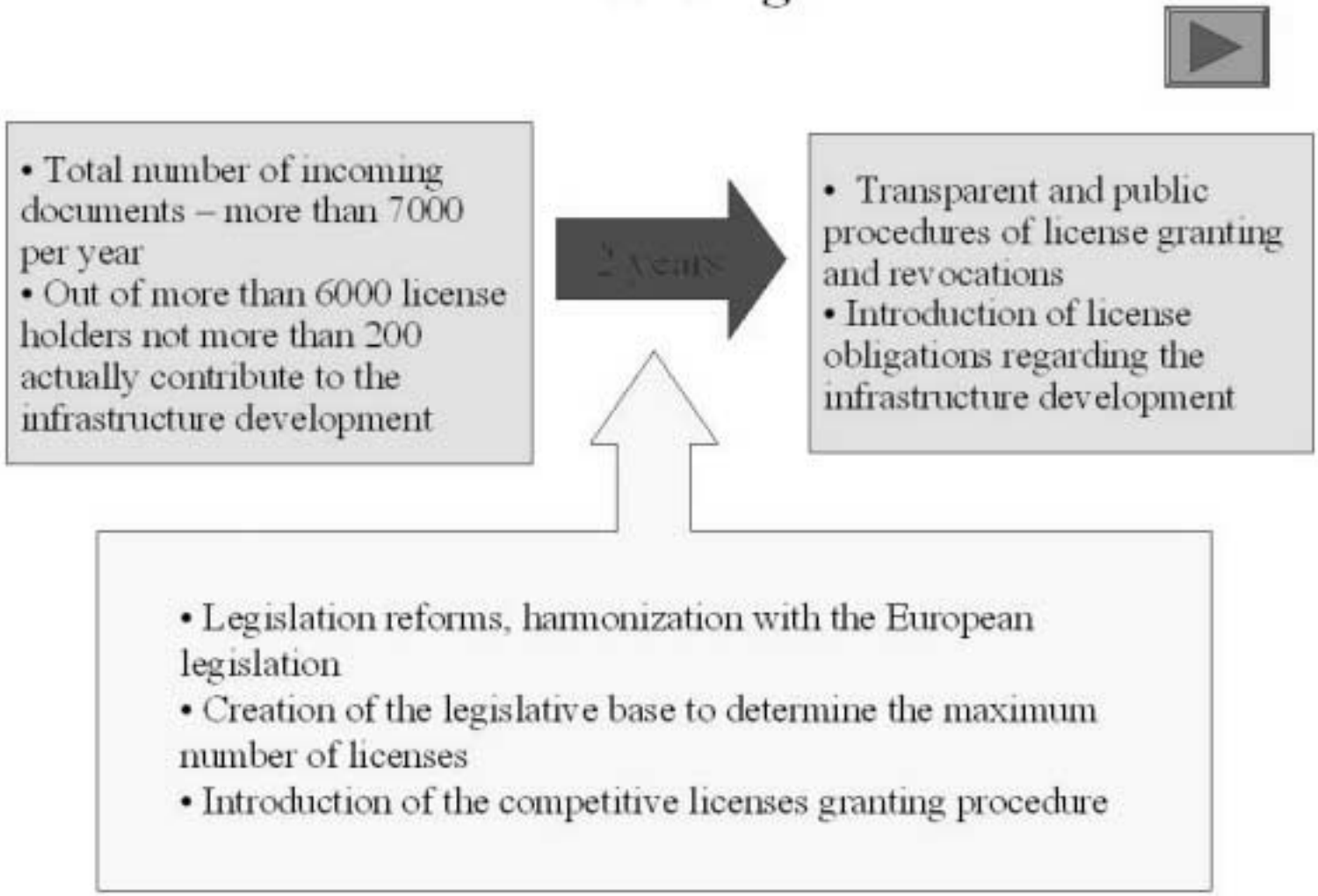


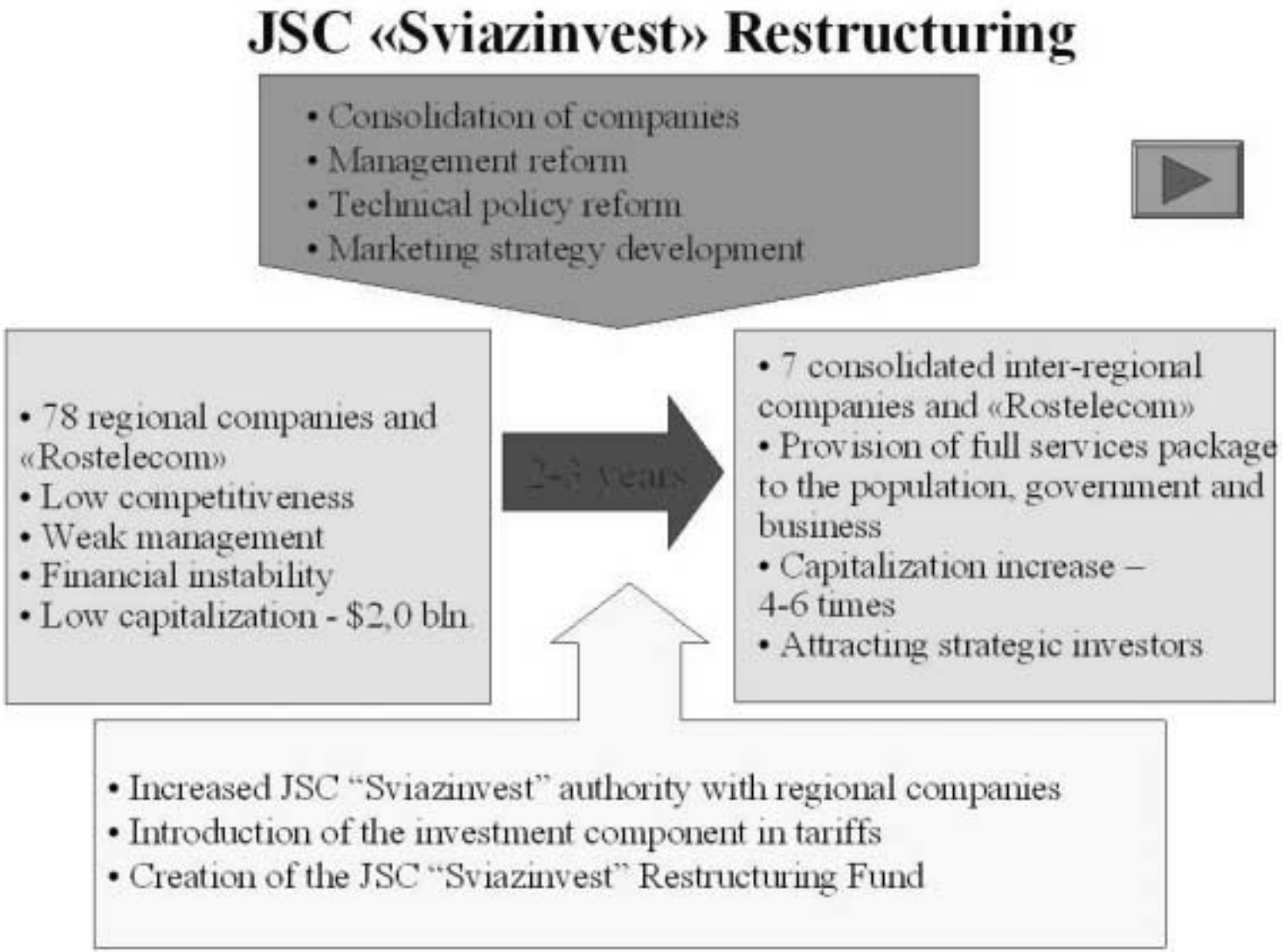
Networks Access Provision



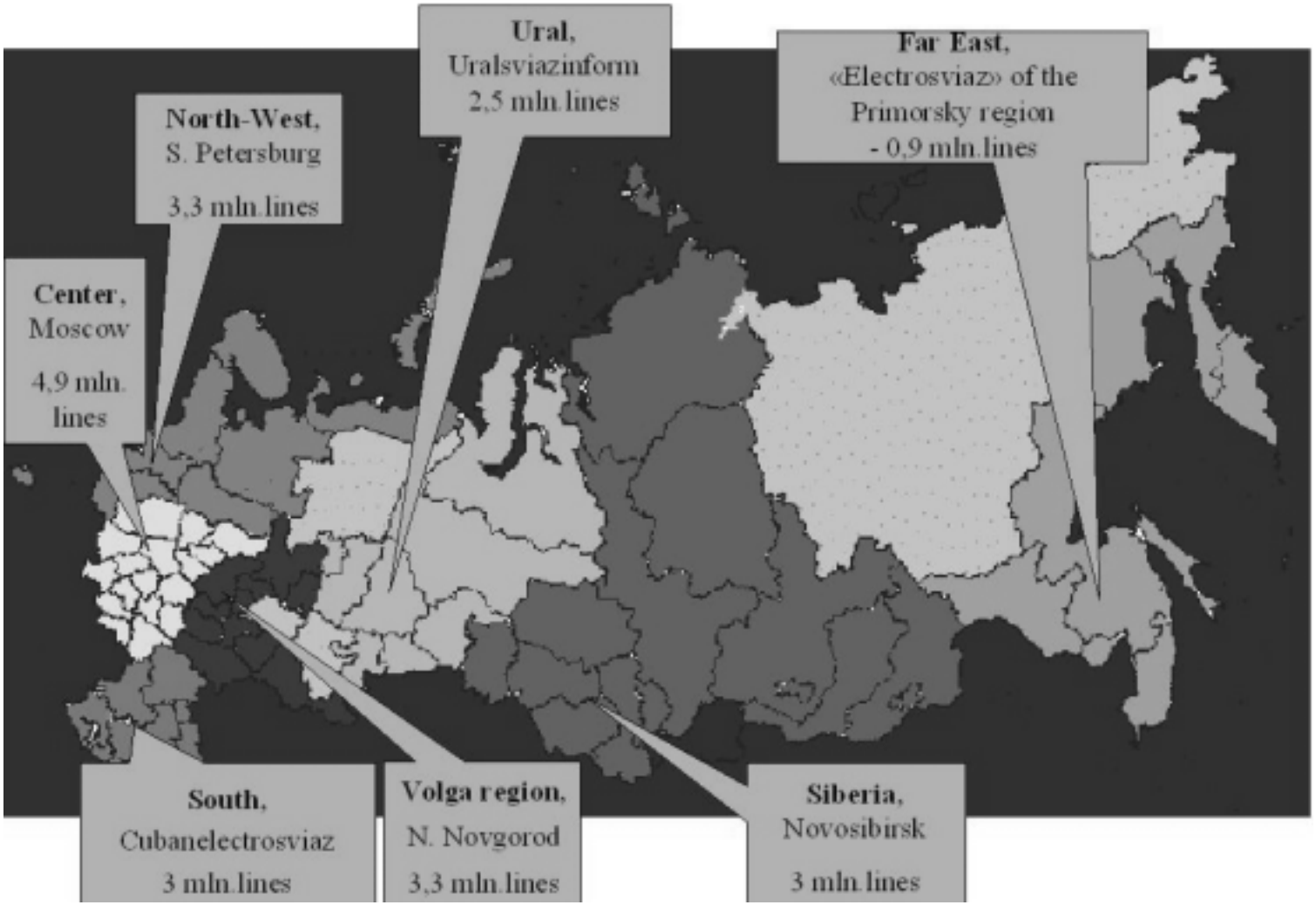

National Manufacturing Support
A set of measures, aimed at creating conditions for the development of competitive telecommunication equipment and software national production
• The local manufacturers' production capacities are sufficient to satisfy the needs in switching equipment. Actual market share – less than 20%
• No transmission systems production
• Software production mainly on the RF territory
• Competitive national manufacturing industry
• Support for the national manufacturer
• Introduction of compulsory existence of service and operational support infrastructure on the INR of Russia
• Customs policy – to eliminate national manufacturers discrimination
• Financial levers to ensure equal conditions of goods' promotion

Licensing

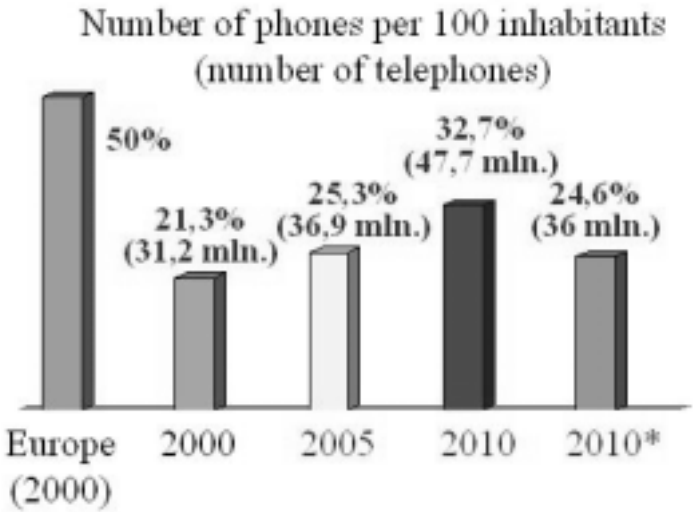

• Total number of incoming documents – more than 7000 per year
• Out of more than 6000 license holders not more than 200 actually contribute to the infrastructure development
2 years
• Transparent and public procedures of license granting and revocations
• Introduction of license obligations regarding the infrastructure development
• Legislation reforms, harmonization with the European legislation
• Creation of the legislative base to determine the maximum number of licenses
• Introduction of the competitive licenses granting procedure


JSC «Sviazinvest» Restructuring
• Consolidation of companies
• Management reform
• Technical policy reform
• Marketing strategy development
• 78 regional companies and «Rostelecom»
• Low competitiveness
• Weak management
• Financial instability
• Low capitalization - $2,0 bln
2-3 years
• 7 consolidated inter-regional companies and «Rostelecom»
• Provision of full services package to the population, government and business
• Capitalization increase – 4-6 times
• Attracting strategic investors
• Increased JSC "Sviazinvest" authority with regional companies
• Introduction of the investment component in tariffs
• Creation of the JSC "Sviazinvest" Restructuring Fund

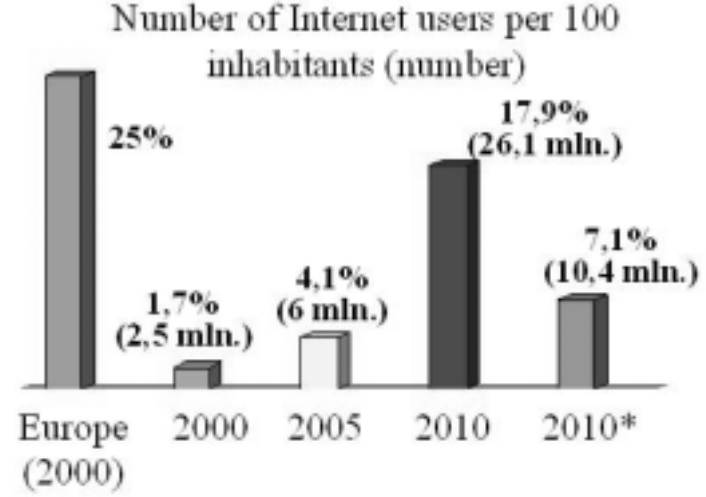
Inter-regional Companies

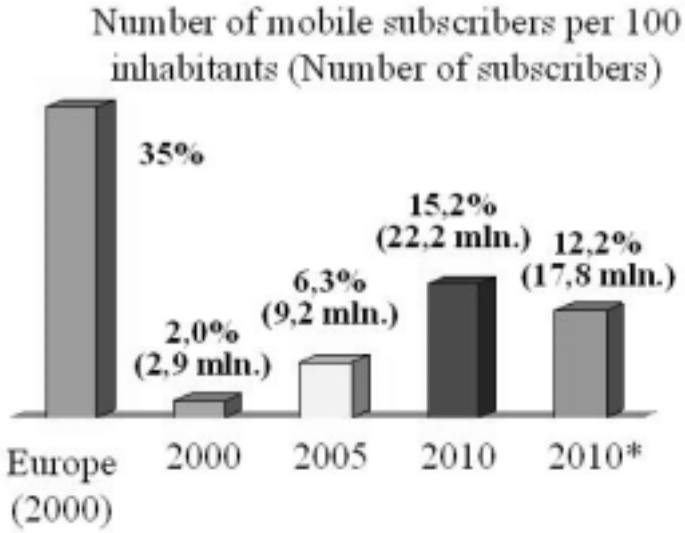


Concept Realization Results



2010* - results are given for the case when proposed measures are not realized

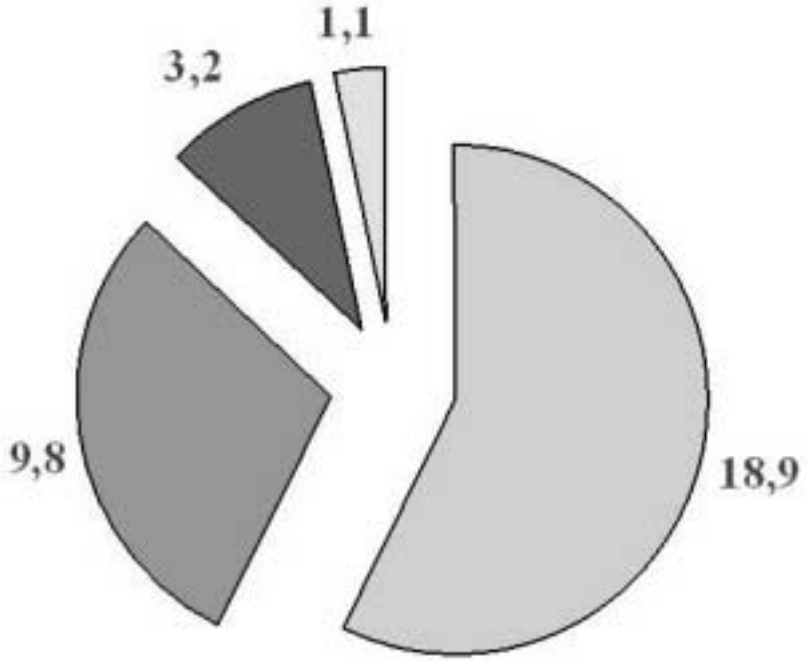




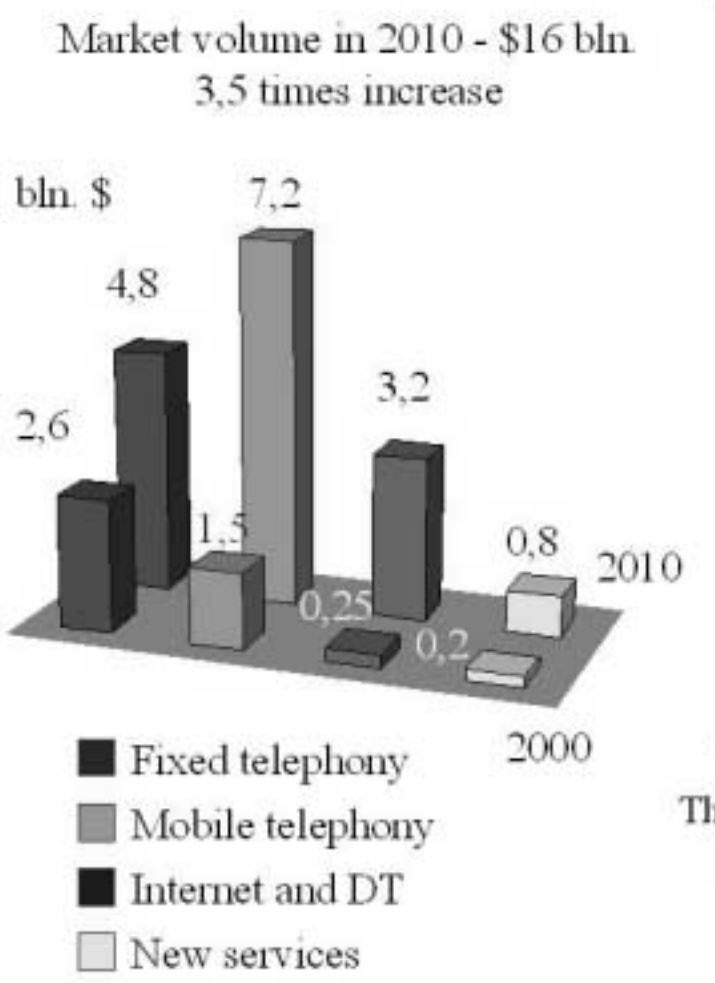
Capital Investments Volume

by 2005 - $12,4 bln.

by 2010r. - $33 bln.



Concept Realization Results



Comm. type	Market type	
	2000	2010
Fixed Commu-nication	Traditional operators' dominant position	Free competition with dominant operator
Mobile Communic.	Oligopoly	Oligopoly
LD and I Comm.	Monopoly and narrow segment competition	Oligopoly
Data Trans.	Free competition	Free competition

The market structure will undergo serious changes and will approach the market structure in the developed countries as previewed for 2010

SLOVAK REPUBLIC

On February 22, 2001 the chairman of the Antimonopoly Office of the Slovak Republic (hereinafter referred to as "Office") issued the decision No. 2001/DZ/P/2/52 by which he confirmed the first-instance decision regarding the activities of entrepreneur Slovenske telekomunikacie (hereinafter referred to as "Slovak Telecom").

According to decision:

Action of the Slovak Telecom as a lessor of digital circuits, consisting in the application of different conditions in providing INTERCONNECT and ACCESS services toward end users using Internet services has the nature of an abuse of a dominant position on the relevant market in terms of the Act on Protection of the Economic Competition.

Action of the Slovak Telecom as a lessor of digital circuits, which consisted in invoicing different prices in months May and June 2000 for a standard digital circuit to the individual end users of the Internet service has the nature of an abuse of a dominant position on the relevant market in terms of the Act on Protection of the Economic Competition

The action of the Slovak Telecom as a lessor of local lines, consisting in prevention of access to a *local telephone-type two-wire line* for new end users of the Internet service as from 1 May 2000 and a restriction of the range of provided services for the existing end users of the Internet service by deterioration in the quality of a *local telephone-type two-wire line* by introduction of frequency filters by which frequency spectrum was reduced to the detriment of the existing end users of the Internet service, has the nature of an abuse of a dominant position on the relevant market in terms of the Act on Protection of the Economic Competition.

Action of the Slovak Telecom as a lessor of local lines, consisting in prevention of access to a local telephone-type two-wire line for new end users of the Internet service as from 1 May 2000 the result of which is discrimination of new end users has the nature of an abuse of a dominant position on the relevant market in terms of Act on Protection of the Economic Competition.

The administrative proceedings was initiated upon the incentive of the Association of Internet Service Providers who stated in their submission that (Slovak Telecom):

- abused its dominant position on the market of installation and lease of local lines by limiting production or sales of services to the detriment of consumers and enforcing inappropriate contractual conditions.

- by introducing services called INTERCONNECT and ACCESS Slovak Telecom places a considerable disadvantage to customers of other Internet service providers to whom it mostly charges a price exceeding the regular price for lease of a standard circuit. By this action Slovak Telecom applies different conditions to identical or comparable performance (discrimination), as well as enforcement of inappropriate contractual conditions.

The joint-stock company Slovak Telecom was established by transformation from a state enterprise. Through a fixed public telecommunication network it provides voice service, data transmission services, services of lease of circuits, services of access to Internet, radio-communication services and other services related to construction, installation, operation and maintenance of telecommunication equipment, networks and information technologies constituting the public telecommunication network in the Slovak Republic.

The service of lease of telecommunications circuits means a category of provided services divided by territorial range, applied technology and way of utilisation. Leased telecommunications circuit is a group of technical means that provide permanent transmission of signals between two terminal points of a telecommunication network. Depending on the way of signal transmission and used interface analog and digital circuits are distinguished. Local circuit is a circuit that has both terminal points situated inside the same local telephone circuit. For lease of a local telephone-type two-wire circuit a monthly fee of 2 000, Slovak crowns (SKK) is charged. A qualitative parameter for this type of service is transmission band up to 3400 Hz.

The determination of commodity relevant market is based on the determination which goods, in this case services, are for the consumer identical or interchangeable, this means which services can equally compete with each other for his interest

To be able to provide services to end users the provider of telecommunication services requires and has the right of access to infrastructure and equipment that could be defined as essential facilities from the aspect of competition issue. Building up and coverage of a territory by cable telecommunication networks is very demanding from investment, economic, technical, town-planning and strategic points of view and its duplication is impossible. The access to local telecommunication lines is a necessity for entrepreneurs in providing telecommunication services (Internet).

The Office defined four mutually related and directly connected but non- interchangeable services constituting separate commodity markets: *1*. relevant market of lease of local lines, *2*. relevant market of providing services of installation and lease of digital circuits (“lease of digital circuits”), *3*. relevant market of providing services of installation and lease of analog circuits (“lease of analog circuits”) and *4*. relevant market of Internet services (Internet).

The first defined relevant market is the market of lease of local lines. Local lines as telecommunication cable distribution frames ending at a potential or existing user can be used depending on applied terminal equipment (terminals) and other technical means for voice service (call), installation of analog circuits and digital circuits through which other telecommunication services are provided.

In terms of legislation in force, Slovak Telecom is an operator of a public telecommunication network and considering historical development in the past it was responsible, as the only operator, for building and operation of the network as well as provision of services. The telecommunication network built at local level consists of local lines, i. e. direct metallic links to terminal points in the framework of the same local telephone area and from terminal equipment (terminals). Terminal equipment applied to a built metallic line at local level allows using infrastructure for the provision of services: voice transmission, data transmission, transmission of information in digital form etc. With the development of information technologies requirements on transmission rate, quality and capacity of transmission telecommunication networks increase.

The second defined commodity relevant market is a lease of digital circuits that enable to provide services of data (information) transmission between two points - subscribers and users of a telecommunication network. A digital circuit is a transmission medium allowing continuous transmission

of information in digital form between two terminal points. Terminal point of a circuit is physical interface characterised by properties allowing a connection of terminal equipment.

From a comparison of these characteristics it results that for a user of a data transmission circuit the lease of a digital circuit using a fixed infrastructure is not interchangeable with a digital circuit executed by a radio-communication link or public cellular mobile network.

The third defined relevant market is market of lease of analog circuits that allow transmission of signals in analog form between two terminal points – subscribers and users of a telecommunication network.

Characteristic properties of an analog circuit are as follows:

- existence of permanent connection of terminal points;
- transmission of information between two terminal points in analog form;
- transmitted frequency band (e. g. 300 to 3400 Hz).

An analog circuit ensuring transmission of frequency band 300 to 3400 Hz with its parameters is neither identical nor interchangeable with a digital circuit or a local line because within frequency band 300 to 3400 Hz data transmission cannot be executed with such rate and in such quality as by transmission through digital circuit or through local line.

The fourth defined relevant market is Internet.

In determining the geographical relevant market of lease of local lines, digital circuits, analog circuits and provision of Internet the Office assumed that the respective services can be used in the whole Slovak territory where the Slovak Telecom has built infrastructure. Ministry of Transport, Post and Telecommunication (MTPT) issued licences for applicants providing public telecommunication services (such as Internet) with validity for the whole territory of the Slovak Republic. From the aforesaid it results that the relevant geographical market of affected services is the territory of Slovakia.

During the administrative proceedings the Office examined the position of Slovak Telecom and rights and obligations arising under regulations and relevant legislation in force at the time of filing a motion for the commencement of the administrative proceedings. Having regard of this fact Slovak Telecom in terms of the Act No. 150/1992 Coll., is a provider of services and operator of a fixed telecommunication infrastructure. Slovak Telecom disposes of exclusive right to provide a voice service through the fixed infrastructure until the end of year 2002.

As said above the service of data transmission (e. g. through the Internet network) can be provided to end users through a network of local lines that are installed and leased as digital and analog circuits for data transmission. The lease of circuits is provided by Slovak Telecom. The Office examined the position of Slovak Telecom on the relevant market of lease of digital and analog circuits and ascertained the following facts:

The position of Slovak Telecom on the relevant market of lease of local lines and lease of digital and analog circuits is determined by rights arising under granted exclusivity for the provision of a voice service that is executed through a fixed infrastructure like digital and analog circuits. Since 1998 the MTPT was liberalising telecommunication services, other than public telecommunication infrastructure and public voice service, in compliance with the Resolution of Government. Actually local

telecommunication distribution network, save some exceptions, are in exclusive property and administration of Slovak Telecom. As unconditional and integral part of each digital circuit (whether local, long-distance or international) is local extension, i. e. a telecommunication line between the residence of the customer and the closest node of the digital circuit provider, in practice it is impossible to built any leased circuit via ground route without involvement of Slovak Telecom, with some exception.

In addition to Slovak Telecom, electric power companies and the Slovak Gas Industry dispose of a transmission telecommunication network through which they provide the service of lease of digital circuits. From a comparison of maximum capacity of the transmission network of Slovak Telecom with a capacity of power companies network, it results that Slovak Telecom avails of a quadruple of the said capacity. Moreover, the transmission network of Slovak Telecom covers the whole Slovak territory while the network of the other telecommunication network operators covers chosen areas where the entrepreneur has his establishments, eventually imitates other, not telecommunication network. After a previous examination, the Office quantifies the share of entrepreneurs operating telecommunication networks parallel with power networks on the relevant market of providing digital circuits to approximately ten to 20 percent. As the said networks lack terminations routed to end users (customers) their operators and users are limited by connection to the telecommunication network of Slovak Telecom at a local level.

The Slovak Telecom is the largest provider of telecommunication services in Slovakia. It owns and operates a telecommunication network covering the whole territory of the Slovak Republic. It provides local, long-distance and international telecommunication services, services of lease of circuits, data networks, telex and telegraph services, distribution and propagation of a radio and television signal and other telecommunication services. A prevailing source of income for the enterprise is the telephone service, which is basic and the most spread service. In 1999 the number of main telephone stations reached the amount of 1 655 380 which represents an increase of 7.6 percent against the year 1998. In 1999, 67 percent of total number of stations was connected to digital exchanges and the density of stations per 100 inhabitants was 30.6 percent.

The lease of analog and digital circuits is one of the most profitable services of Slovak Telecom. The service is provided particularly for purposes of data transmission, voice or image signal at a local, long-distance and international level of the public telecommunication network. The service of lease of digital circuits is used especially by enterprising entities, of which mainly large companies, important organisations and institutions belonging to the category of large customers and special users. The offer was extended by low-rate digital circuits which gradually replace analog circuits. Total volume of revenues from the lease of circuits reached 1.277 billion SKK in 1999, of which 636.6 mil. SKK from digital circuits, 607.5 mil. SKK from analog circuits and 33 mil. SKK from installation fees. Since 1995 the number of leased digital circuits of Slovak Telecom showed the following year-on-year growth: 96/95 4.84 points, 97/96 1,70, 98/97 1,31 and 99/98 1,39. The year-on-year increments prove high dynamism of the provided services.

Economic strength of the entrepreneur is characterised particularly by the size of turnover, investments and produced economic result (net income). From this aspect Slovak Telecom is enterprising subject on the market of telecommunication services with a long-year tradition. In the past, in absence of competitive environment, it operated as exclusive provider of telecommunication services and its tasks was to build, operate and administer the infrastructure on the Slovak telecommunications market. In 1999 Slovak Telecom reached a turnover exceeding 20 billion SKK. The produced net income in the decisive accounting period was exceeded two billion SKK.

Based on findings of the Office, in 1999 total share of Slovak Telecom on the relevant markets highly exceed 40 percent.

Considering the high entry barriers into these markets that are high particularly because of authorisation of Slovak Telecom by administration and operation of the telecommunication infrastructure built in the past and because Slovak Telecom is not subjected to a substantial competition on the defined relevant markets, as well as with regard of economic strength, it can behave independently in relation to other entrepreneurs (data and Internet service providers) and consumers (end users of data and Internet services) and can restrict competition. In addition Slovak Telecom proved to have more than a 40 percent share in the relevant market of lease of local lines, in the relevant market of lease of digital circuits and in the relevant market of lease of analog circuits.

On the basis of the above facts the Office arrived at the conclusion that pursuant to § 7, paragraphs 1 and 2 of the Act, Slovak Telecom has a dominant position in the three defined relevant markets (lease of local lines, lease of digital and analog circuits). Considering the reached turnover, net income, realised investments and some exclusive rights it disposes of a significant economic potential.

Slovak Telecom also operates on the fourth defined relevant market of Internet service provision; it belongs to important providers operating on the relevant market of the Slovak Republic but has no dominant position on this market. It ranks among the four largest Internet providers whereby on the respective relevant market almost 50 entities operate that were granted a licence for the provision of services from MTPT.

In further step the Office examined whether a dominant position on the defined relevant markets: lease of local lines, lease of digital circuits and lease of analog circuits was not abused by action of the company Slovak Telecom, in terms of § 7, paragraph 5, letter a) of the Act, by direct or indirect enforcement of inappropriate contractual conditions, in terms of § 7, paragraph 5, letter b) of the Act by limitation of production, sales or technical development of goods to the detriment of consumers and in terms of § 7, paragraph 5, letter c) of the Act by application of different conditions for identical or comparable performance toward individual entrepreneurs by which these entrepreneurs are discriminated in competition.

Due to a very huge extent of the case particularly from the number of assessed practices point of view, we focus the attention primarily on the abuse of dominant position on the relevant market of lease of local lines.

Slovak Telecom issued the *Price List* with effect from 1 May 2000, where the Analog Plus service, for the lease of local two-wire circuit allowing transmission of frequency band higher than 3 400 Hz, is indicated. Plaintiffs and providers of public telecommunication services of data transmission disagree with this change and they expressed a suspicion of a violation of the Act. According to the description of services the Analog Plus service provides the user with local metallic interconnection to an analog interface for data transmission using a width of frequency band above 3400 Hz. To an analog interface the user connects his own modems. Monthly fee for lease of such circuit is 6 000 SKK.

From the above it results that Slovak Telecom charges to the users for local metallic interconnection using a frequency band above 3 400 Hz (Analog Plus) a triple of price of lease of local metallic line, valid until 30 April 2000 according to the Price List, making reference to higher costs of service operation.

Slovak Telecom as provider of access to fixed network at a local level and almost exclusive lessor of local lines, after consultations with the regulator of telecommunications market MTPT and the Office, cancelled the provision of the “lease of local lines” service in original quality for the price of 2 000 SKK without a valid decision of the state administration authority and in terms of the said Price List it started to only provide the lease of local analog circuits with very limited transmission parameters as “the

lease of a local telephone-type two-wire circuit" for 2 000 SKK per month. By limiting qualitative parameters of the service (at a preservation of initial price) this service has become inapplicable to data transmission with transmission rates exceeding 33.6 kbit/s and it can only serve to low-rate data connections and voice transmission. If consumers using own terminals for data transmission with higher rates using local lines want to further use this equipment without change, according to the Price List they are obliged to pay monthly a triple of initial price with effect from 1 May 2000. Local lines with initially provided parameters are indicated in the Price List under the Analog Plus service and for the lease of a local metallic interconnection (line) enabling transmission of a frequency band higher than 3 400 Hz ST charges 6 000 SKK per month.

Providers claims that the provision of the service of lease of local lines should be considered as a basic and un-interchangeable need for the provision of final products (services) to consumers. Based on own findings, the Office has the same opinion of the definition of lease of a line and circuit, observing that Slovak Telecom provides and charges for the Analog Plus service in contradiction with actual performance provided to consumers. On one hand it charges in compliance with the Price List "for the lease of a local two-wire circuit allowing transmission of a frequency band higher than 3 400 Hz" and on the other hand it only provides a local line, instead of a circuit. In case of providing the Analog Plus service Slovak Telecom incurred no additional costs of building a circuit because, as it results from the aforesaid, there is no circuit, and it only leases the existing local lines established before 1 April 2000.

As said above, local lines are essential facility. To be able to provide services the providers need to have access to terminal points of telecommunication network to which end users are connected. Such access can be achieved through an operator of built local infrastructure who is authorised, usually by a regulatory office, in terms of issued permit or licence, to lease a network.

Pursuant to § 7, paragraph 5, letter b) of the Act, an abuse of a dominant position on the relevant market means limitation of production, sales or technical development of goods to the detriment of consumers. Slovak Telecom as an entrepreneur in a dominant position on the relevant market of local lines, by application of technical equipment (frequency filters) preventing transmission of frequencies higher than 3 400 Hz, degrades qualitative parameters of the existing local lines. Without affected technical interventions – application of filters to local lines – it is possible to use local lines, with a progressive technical equipment of the latest generation as circuits for data transmission. This technology allows to realise a circuit with capacity of 2 Mbit/s, i. e. with transmission rate of a digital circuit within cost (price) relations of about 5 000 SKK per month while Slovak Telecom charges for the lease of a circuit with the same capacity the amount of 37 500 SKK per month.

Slovak Telecom proceeded with the said changes of qualitative parameters of provided local lines without a valid decision of the regulatory office of state administration. In its decision the Office evaluated and took into account the development of price of the service concerning the lease of local lines since December 1998: By the end of 1998, the consumer paid for the lease of a local line 820 SKK per month; since 1 January 1999 the price increased to 2 000 SKK and since 1 may 2000 the price is no more fixed for a local line but as the Analog Plus service, at a conservation of original qualitative transmission parameters and the consumer pays 6 000 SKK per month provided that he already used the service before 30 April 2000, whereby he can use it only until the end of the year 2001. New applicants have only the possibility to install and lease a digital circuit with a monthly payment for a digital circuit, e.g. 8 500 SKK. For the Analog Plus service Slovak Telecom only provides to the consumer a local line without equipment enabling data transmission (modems etc.).

Slovak Telecom as administrator of essential facility, by not providing the lease of local lines for new applicants as from 1 May 2000 and by intending to end the affected service in terms of the Price List in the end of the year 2001, as well as by degrading qualitative parameters of the existing local lines

through additional technical interventions (installation of frequency filters), limits production to the detriment of consumers in terms of § 7, paragraph 5, letter b) of the Act. Users of Internet and other telecommunication services are forced due to the limitation of production by Slovak Telecom to pay for original quality of the service a triple of initial price and new applicants have not this possibility any more.

Local lines administered by Slovak Telecom are necessary condition of the execution of so-called last mile of each circuit mediating data transmission. As the relevant market does not provide any qualitatively interchangeable alternative Slovak Telecom forces users of services to use circuits built on the existing lines using technical equipment applied by Slovak Telecom that it leases for a higher price. Actually there is no interchangeable service to the built local lines which could be provided by alternative competitors of Slovak Telecom, and users of telecommunication services as well as entrepreneurs providing telecommunication services have no other possibility than to accept conditions laid down by Slovak Telecom.

For a breach of obligations arising under the Act the Office in terms of § 14, paragraph 1 of the Act is authorised, depending on importance of breach, to impose to an entrepreneur a fine up to the amount of ten percent of turnover for the previous accounting period, and if turnover cannot be quantified, up to the amount of ten million SKK. If material profit of the entrepreneur due to a breach of the duty arising under the Act is proven he shall be imposed a fine at least at the amount of such profit.

The Office considered the possibility of imposition of a fine and decided to impose a fine because of importance of violation of the Act. When determining the amount of fine the Office took into account the vindicatory nature of the fine for a serious restriction of competition by the entrepreneur which has negative effects in relation to the other competitors, as well as preventive nature of the fine and the fact that the Office should efficiently prevent a potential restriction of competition in the future. The Office considers the said action of the entrepreneur as a serious violation of the Act because the deed is qualified as an abuse of a dominant position by the entrepreneur having a dominant position, with a reference made to his large share in the relevant market. In addition, during one year the entrepreneur repeatedly violated the Act on identical relevant market, i. e. on the market of lease of digital circuits.

SPAIN

This brief analysis focus on the Spanish telecommunication market with a competition and regulatory approach. Recent regulatory developments in the telecommunications industry, new market participants, transmission and distribution networks, regulatory institutions, and recent competition issues will be reviewed.

1. Regulatory developments since 1995.

1987 Telecommunications Act was the starting point of market liberalisation in Spain. The liberalisation process was further reinforced by means of a new Telecommunication law, enacted in April 1997. This Act enhanced the liberalisation of fixed and mobile services, made possible for international operators with advanced technology to enter the Spanish market, and opened the possibility of alternative cable networks. The General Telecommunications Law enacted in April 1998 unified the legal framework in accord with EC Directives.

In the last two years major regulatory changes affecting telecommunications have been approved by the Government by Royal-Decree Laws.

In June 1999, Royal Decree 6/1999 was approved to enhance competition and liberalisation, including measures to reduce tariffs applied by Telefonica.

Royal Decree 6/2000, on urgent measures to enhance competition in several sectors ruled that undertakings having more than three percent of the equity in more than one major operator in fix or mobile telephony cannot exercise their voting rights in the governing bodies of these enterprises, without the previous authorisation of the Government. This measure was adopted to closely monitor the effect of cross-ownership of different competing telecommunications operators on competition.

Royal Decree 7/2000 on urgent measures to be applied in the Telecommunications sector, focused on improving costs information; opening the local loop to competition and enhancing the use of Internet and adjusting tariffs to costs. This decree ruled as follows:

- The dominant operator in fixed and mobile telephony should present cost accounting information to the regulator prior the end of July of every year.

- The local loop would be open to competition (unbundled access) by January 2001.

- Prior to November 15, 2000, the dominant operator would facilitate carrier pre-selection for local calls.

- A lump-sum price for Internet access in non-peak hours (2 750 ptas/month) would be established.

- There would be a lump-sum rate in non-peak hours for local calls (700 ptas/month for 600 minutes), and a lump-sum rate of 1 400 ptas/month for the whole day. Thus, a bonus system was added to the price-cap system to fix prices.

- Prior to September 15, 2000, the network access prices (*oferta de interconexión de referencia de Telefónica*) would be revised.

- By the end of October 2000, a study on ways to promote further competition in mobile telephony would be published.

Royal Decree 3456/2000 governs the conditions for the unbundling of the local loop by the dominant operators.

Finally a Resolution of December 28, 2000 published by the Telecommunications Secretary of State modified the first offer made by Telefónica to unbundle the local loop.

2. Market Participants

2.1 Major fixed line operators

Telefónica was the only supplier of telecommunications services in Spain for 74 years, till 1998. The incumbent was totally privatised by the end of 1998, nevertheless the government keeps a *golden share*. It is the major fixed line operator. The Government will keep a *golden share* for ten years (1997-2007). *Golden shares* in strategic undertakings, undergoing privatisation, were established in 1995, by Royal Decree-Law 5/1995. Royal Decree 8/1997 applies Law 5/1995 to Telefonica and Telefonica Moviles. The restrictions imposed on the boards concern only decisions related to the dissolution of the company, the modification of its corporate purpose, divestiture of networks assets and the acquisition of at least ten percent of the equity, in those cases the Government could impose a previous authorisation.

The second major operator is Retevisión, a former state owned TV and radio transmission company that was totally privatised during 1998.

Uni2 entered the market by the end of 1998, with France Télécom and ONO/Cableuropa as its main shareholders.

Euskatel is Spain's first regional phone company with Telecom Italia as its technological partner.

In 1999, Telefonica had 81 percent of the clients in fixed telephony and Retevision ten percent, the market share in traffic (minutes) was 96 percent for Telefonica and 1.85 percent for Retevision.

2.2 Major operators in the mobile telecommunication market

During 1998, there were two operators in the GSM 900 services market: Telefonica and Airtel. Telefonica also operates an analogue TACS licence. Airtel is the second mobile carrier. At present, 91,6 percent of Airtel belongs to Vodafone. A new operator came into the market in 1999, Amena, operating DCS 1800. Telefonica and Airtel were also given authorisations to operate new services in DCS 1800.

Amena's (Retevision Moviles) licence is operated by Auna, a joint venture between Spain's fixed line operator, Retevisión, Italy's Telecom Italia, the electricity utilities Endesa and Union Fenosa, the bank BSCH, and other saving banks.

The Government announced that two new DCS 1800 licences would be allocated in the first quarter of 2001.

On November 1999, the terms of reference for the UMTS licences were published and in March 2000, the Government gave entry to four operators, Telefonica, Airtel, Amena and Xfera, by means of a public tender. These licences were thus awarded before the auctions of licences took place in Germany and United Kingdom.

The major shareholders of Xfera are Vivendi-FCC, ACS and Mannesman (France Telecom)

The new UMTS operators must start operations in August 2001, otherwise the Ministry of Science and Technology will seize their tender guarantees.

Studies are being carried out about increasing competition in the mobile market by introducing virtual operators, thus offsetting the restrictions of availability in the radio spectrum.

In 1999, Telefonica Moviles had about 63 percent market share of the mobile phone business in Spain and Airtel around 34 percent.

2.3 Cable operators

The liberalisation process started in 1995. The process of licence allocation has been finalised leading to a duopoly situation on a local basis, whereby in each geographic area one licence belongs to Telefonica and the other to a cable operator. These cable operators that compete with Telefonica belong to two large undertakings, one group is formed by Retevision and Stet, and the other is Cableuropa.

Telefonica has a two years moratorium to start offering services.

3. Transmission and distribution networks

The CMT informed that the transmission network in 1999 was of 174 905 kms., of which 85 918 were wired fibre-optic cables (black fibre network not included) and 88 918 were wireless communications links. In relation to 1998, the number of fibre-optic kms has increased in 14.38 percent, while wireless links didn't increase in a significant figure (0.5 percent). It seems that new operators are quite active in investing in networks.

In 1999, 99.3 percent of the transmission network was digitilized, 65.09 percent of the transmission network has low digital capacity (speed of up to 140 Mbits/s) and only the 7.72 percent of the network has high digital capacity (over 622 Mbits/s)

Major owners of the network: 72.12 percent of the network belongs to Telefonica (measured in 2 Mbps kilometres); 11.98 percent belongs to Retevisión; 7.15 percent to Jazztel, operator in fixed telephony and 4.78 to Lince Telecom..

The satellites used by the telecommunications operators in the Spanish market are, Hispasat (53 percent of the total capacity), Eutelsat (19 percent), Intelsat (15 percent) and Astra (13 percent)

Black fibre is fibre-optic without active transmission elements that is rented to telecommunication operators. In 1999 there were 14 791 kms of black fibre in Spain due to the investments carried out by the Spanish Railways (RENFE) and Gas Natural.

At the end of 1999 the distribution network was not yet independent from the kind of services provided through it. There were 18 949 336 accesses installed, 93,16 percent of the accesses were copper wire, and belong to Telefonica. One year after liberalization, new operators are investing in a combination of fibre-coaxial accesses.

4. Regulatory Institutions

The *Secretaria de Estado de Telecomunicaciones y para la Sociedad de la Información* located within the Ministry of Science and Technology has retained some regulatory responsibilities in the sector (settle disputes between operators and users, radio spectrum management and monitoring, frequency assignment and spectrum pricing, control of universal services obligations among others).

The *Comision Nacional del Mercado de las Telecomunicaciones (CMT)* created in June 1996 is the independent national regulatory authority. From an administrative point of view is located within the area of the Ministry of Economy. Its mission is to *safeguard the existence of effective competition in the telecommunications, audio-visual, telematic and interactive services markets.* The instructions, resolutions and requests for information issued by the CMT are binding.

The Ministry of Economy sets prices of fixed telephony for the incumbent operator (Telefonica).

5. Recent Developments

Telefonica, the former telecommunication monopolist, has been declared by the regulator, *Comision del Mercado de las Telecomunicaciones* (CMT), to be an operator with a dominant position in fixed and mobile telephony. Telefonica must allow access to its network to third parties and the conditions and prices of this access are fixed by the regulator following the principles of transparency, non-discrimination and cost-related prices. Telefonica must submit information about its network costs to the regulator. Airtel has also been declared an operator with a dominant position in the mobile interconnection market, therefore with obligations to submit costs information.

1998 was the last year for the Government to fix the interconnection prices, from then on the regulator, CMT, carries out this task. The *Commission for Economic Affairs* (comprising ministers of economic-affairs portfolios, chaired by the Minister of Economy) approves the tariffs of the dominant operator, Telefonica. The Government brought the prices of Telefonica into balance, by scrapping the cross subsidies between long distance calls and local ones. The Government intended that the prices of the dominant operator kept pace with its costs. Recent regulation has introduced a new system of price cap coupled with a bonus system for metropolitan calls, and major political interest is placed in reducing fixed to mobile calls rates.

In October 1999, six WLL (wireless local loop) concessions, access through radio, were given. The operators of these licences could offer local calls, competing with Telefonica, which kept the local loop monopoly. These new licences enabled the development of alternative networks, whose advantages will be seen by the future.

In April 1999, the Government approved the conditions to make Telefonica widen its network with ADSL technology (Asymmetric Digital System Line), in order to offer, at the end of year 2000, flat tariffs for Internet, of which 11.5 million people could benefit.

Recently the Ministry of Science and Technology has announced that UMTS operators could postpone the opening of operations to June 2002, ten months later than established. Xfera, the only mobile operator having only one UMTS licence could operate GPRS services using the networks of the other mobile operators.

The Ministry of Science and Technology imposed a tax on the use of the radio-electric spectrum that will raise ESP 160 billion pesetas. This resolution was adopted once the UMTS tender was over. The mobile operators have appealed against this Resolution to the courts. The Ministry of Science and Technology has reduced the tax to 140 billion pesetas, but the operators have not withdrawn the appeal for the time being.

The Ministry of Science and Technology has increased the spectrum capacity available to the mobile telephony operators, as promised when their licences were allocated, moreover it has announced that no new GSM or DSC would be awarded. The Government has introduced number portability for mobile telephones.

6. Competition Issues

6.1 AIRTEL/TELEFÓNICA

In January 1996 AIRTEL submitted a complaint to the Servicio de Defensa de la Competencia against TELEFONICA, TSM and TELYCO (TELEFONICA's subsidiaries) for abuse of dominant position.

TELEFONICA was a monopolist in fixed and mobile telephone services and AIRTEL had entered as second operator in GSM 900 mobile telephony, being TELEFONICA the other operator in GSM 900 telephony. TELEFONICA had entered the GSM market three months in advance compared to AIRTEL and had not paid for the licence, AIRTEL had paid 50 billion pesetas.

AIRTEL accused TELEFONICA of subscribing exclusive distribution agreements, advertising analogue TACS and GSM telephony services together and cross-subsidising monopolised activities and GSM services, not having separated GSM assets from the rest of the firm assets. AIRTEL asked for interim measures to be adopted.

The Servicio opened a file against TELEFONICA and its subsidiaries, TSM and TELYCO, and in June 1996 proposed to the Tribunal interim measures.

The Tribunal adopted some of these interim measures in July 1996. In February 1999, the Tribunal adopted its Resolution imposing a fine of 610 million pesetas to TSM and a fine of 150 million pesetas to TELEFONICA for abuse of dominant position and ordered them to cease these prohibited practices.

6.2 BT/TELEFONICA

In March 1996, BT submitted a complaint to the Servicio against TELEFONICA, for restrictive practices (articles, 6 and 7, Competition Act and article 86 EC Treaty).

Until November 1995 TELEFONICA was a monopolist in basic telephony and as carrier in the Spanish market, being RETEVISION entitled to provide those services from then on.

Firms demanding international voice communication could obtain it through the basic telephone system then monopolised by TELEFONICA, leasing circuits to TELEFONICA or adding some elements to the leased circuits, as BT Primex service.

TELEFONICA provided those services to the International Monetary Market Brokers Association (AMMI). In 1993, BT made a proposal to the Association to provide its members the added value service Primex, the Association accepted TELEFONICA's proposal, and rejected BT proposal. BT accused TELEFONICA to apply discriminatory tariffs in leasing circuits, fixing predatory prices, establishing exclusivity clauses and binding the provision of services open to competition to the provision of monopolised services.

The Servicio sent its report to the Tribunal in August 1997.

In January 1999 the Tribunal decided that TELEFONICA had abused its dominant position, and imposed TELEFONICA a fine of 580 million pesetas, ordering it to cease this violation.

6.3 RETEVISION/TELEFONICA

On April 2, 1998, Retevision submitted a complain to the *Servicio* against Telefonica, for restrictive practices (articles 6 and 7 of the Competition Act) Telefonica was accused by Retevision to launch an advertising campaign in order to block the services of the new operator (Retevisión), advertising discounts they were not allowed to make. The cost of this campaign was 1.494 million pesetas.

The Servicio found evidence and sent a report to the Tribunal on April 8, 1999.

The Tribunal decided on March 8, 2000 that Telefonica had abused its dominant position, imposed a fine of 1.400 million pesetas and ordered Telefonica to publish this resolution at Telefonica expenses in the two major national newspapers.

SWEDEN

1. Introduction

With the entry into force of the Telecommunications Act in 1993, the telecommunications market in Sweden can be said to have been transformed from a market characterised by an unregulated monopoly to a market that can be described as regulated competition. The Telecommunications Act and the Competition Act comprise the main regulatory framework determining how the players may act on the telecommunications market.

The Telecommunications Act has undergone several revisions since 1993. In 1997 the Act was amended in order to harmonise it with the growing volume of regulation within the EU, especially the directive on interconnection. The basic obligation to provide interconnection was expanded. In addition, special regulations were introduced for undertakings that could be considered as exercising a significant market power on the Swedish telecommunications market. At the same time, the regulator in Sweden, the National Post and Telecom Agency (PTS) was given increased powers to intervene in disputes between operators concerning conditions for interconnection. The Competition Act is based mainly on the same principles as those applied in the EC. EC case law shall be taken into account when applying the Act.

Bringing about functioning competition within different parts of the Swedish telecommunications market has not been entirely free of problems. In this paper an overview is given of how the most important competition concerns within the fixed telecommunications market have been addressed. Action has been taken both by the Swedish Competition Authority and PTS. Two important decisions taken by the Competition Authority and their effects on the market are mentioned.

2. The Swedish telecom market

The fixed telecommunications market has changed substantially since deregulation took place in 1993. At present, there is a considerable number of companies competing with the dominant incumbent operator and network owner, Telia[1]. Even if the the market for fixed telecommunications services has not grown at the same rate as the mobile market, the fixed market still constitutes the major part of the telecom market in Sweden. The market for telecommunications services from fixed termination points amounted in the year 2000 to approximately SEK 26 billion which constitutes approximately 65 percent of the market value of the total telecommunications market[2].

Even though competition has increased it should be emphasized that a major part of the customers are still directly connected to Telia's fixed network. At the end of the year 2000 the number of directly connected PSTN-subscribers was approximately 5.8 million[3]. Less than one per thousand of the PSTN-subscriptions were provided by operators other than Telia. Characteristic for end-customer pricing within Telia has been that charges consist of a connection charge, a monthly rental charge, a variable call charge per minute and an opening charge per call. Since all customers directly connected to Telia's fixed

network already pay rental charges to Telia, competitors of Telia have in practice considered it impossible to invoice these customers monthly rental charges. Instead, competitors must rely on revenues from the calls. This means that the relationship between Telia's interconnection charges and Telia's variable call charges has been decisive in determining the conditions for competing via indirect access of customers with Telia in different parts of the market for national telephony services.

According to the Telecommunications Act, the compensation for the provision of interconnection of telephony services delivered to fixed termination points shall be fair and reasonable in relation to the performance costs which, amongst other things, cover running costs, depreciation and return on capital. This is supervised by PTS. The method used by PTS has so far been a modified version of the FDC (Fully Distributed Cost) method. Costs are taken from the statutory accounts but only those costs that have cost causation with interconnection are allocated. However, there is an ongoing work that aims at evaluating different pricing rules for interconnection in order to determine which model should be used in the future. In particular, the recommended model from the European Commission, LRIC (Long Run Incremental Cost), will be evaluated.

Supervisory activities extend to all licence holders and notified operators, but the extent of such supervision varies depending on their market position. This is why supervision has tended to focus largely on Telia. PTS has conducted reviews of the prime costs calculated by Telia for all the different telecom operations for which a licence is required and for which pricing must be cost based.

Since 1993 Telia's interconnection charges have certainly been substantially reduced. However, not until 1998 were Telia's competitors able to offer competitive call charges in comparison to Telia by way of indirect access even for such national calls which Telia regarded as local. Telia's interconnection charges and time-based charges for different types of calls between 1995 and 2000 are presented below.

Telia's charges for calls and interconnection in öre[4] exc. VAT during traffic peaks[5] between 1995-2000, charges per minute plus opening charges.

	1995	**1996**	**1997**	1998	**1998**	1999	**2000**
Call charges							
Local[6] calls	12 + 24	16 + 24	16 + 28	18.4 + 32	18.4 + 32	18.4 + 32	18.4 + 36
Regional-calls	48 + 24	48 + 24	48 + 28				
Long distance (Sweden) calls[7]	80 + 24	64 + 24	52 + 28	40 + 32	40 + 32	40 + 32	18.4 + 36
Interconnection charges				**Jan-Oct**	**November-**		**July-**
Local-segment		16	12 + 7	7,3 + 7	6.4 + 4.2	6.4 + 4.2	5,0 + 3,5
Single-segment	35	23	16 + 7	12,6 + 7	8.9 + 4.9	8.9 + 4.9	6.8 + 4.4
Double-segment		30	23 + 7	18 + 7	12.6 + 5.6	12.6 + 5.6	8.2 + 5.0

Since the deregulation, national long-distance calls have fallen in price considerably. For instance, a long-distance call through Telia cost 106 öre per minute exclusive VAT in 1994 and the opening charge per call amounted to 12 öre exclusive VAT. As shown above, during 1998 and 1999 the price for a long-distance call through Telia was 40 öre per minute exclusive VAT. The opening charge had,

however, been raised to 32 öre exclusive VAT. Since then, end-customer prices have been reduced even further (see footnote 7).

In contrast to long-distance calls, local calls have become more expensive. Since 1993/94 the price of a local call through Telia has more than doubled. However, this has occurred from a relatively low level. The increase in the price of a local call since the deregulation could be regarded as one step in the re-organisation of Telia's price structure which Telia has implemented in different stages. At the same time, it can be stated that Telia has been able to raise its prices for final customers on the market for local calls without any risk that competitors would enter the market as long as interconnection charges have been higher than call charges.

3. Discrimination by a vertically integrated monopolist

It can be shown that a vertically integrated monopolist has incentives to use its position with the interconnection charge as a vehicle independently of the market structure[8]. However, the dominant player's decision on the level of interconnection charges depends on the strategy that generates the largest combined profit. The degree of substitutability between the services is of utmost importance for the outcome. When telecommunications services are close substitutes the dominant operator will have little incentives to offer interconnection. Instead, it will be preferable to charge prices that restrict others from being active on the market. If, on the other hand the telecom services can be considered as not being of a similar kind, offering interconnection would bring revenues from "new services" and thereby higher profits. In such a situation, there is no need for the monopolist to apply a strategy that aims at excluding challengers from the market.

There is much in favour of the view that fixed telecommunications services, particularly telephony services, can be regarded as being close substitutes. The vertical structure in which all services are using the same access network implies that there is little room for product differentiation. Dominant telecommunications operators also have a tendency to enter market segments where new operators have set up their business. If production is characterised by economies of scale due to high fixed costs and low marginal costs, it is questionable whether a challenger has any cost advantages. One can then expect that the interconnection charge will be used in order to exclude competitors.

According to Economides[9] we can e.g. expect that the dominant operator will try to create a so-called squeeze effect by charging high interconnection charges, charges that are higher than the real cost for access. On an unregulated market it is easier for a dominant operator to carry out such a strategy. As Economides puts it:

> "It is well established by economic theory, as well as by empirical observation, that a monopolist which is not restrained by regulation or competition law will use its ability to price above cost. The monopolist holder of a bottleneck facility is no exception. It will price its output above cost and so reap supernormal (monopoly) profits. While the use of monopoly power and pricing above marginal cost are each a natural and expected behaviour by a monopolist, neither can be easily ascertained by observation of its accounts. It is well understood that items which appear as profits to competitive firms often instead appear as costs in the accounts of a monopolist."

On a regulated market it could be more difficult to charge interconnection charges that exceed the cost for the essential service. This is due to the fact that a dominant operator and network owner normally has to motivate the level of the charge. However, the dominant player still has possibilities to charge interconnection charges that exceed the real cost for access, by offering a bundle of services only. In such a

situation, challengers have to buy more services than the essential one needed in order to be active on the market.

In Sweden, the dominant incumbent operator and also network owner Telia has tried in different ways to take advantage of its position on the fixed telecommunications market. Telia's conditions for interconnection with Telia's fixed network have been examined under the Competition Act at the same time as PTS has acted as a mediator between different players. Telia's pricing policy towards its customers has led to interventions from both the Competition Authority and PTS. The violations of the Competition Act and the decisions taken by the Competition Authority are described in more detail below.

3.1 Telia's pricing of interconnection

As mentioned above, the majority of all companies and households are directly connected to Telia's fixed network. By signing different subscriptions with other fixed network operators, these customers have been able to have their call processed by an operator other than Telia by dialling a prefix before a country, area and subscriber number[10]. Telia's competitors have invoiced their customers, and have then paid an interconnection charge to Telia for the use of its network.

Each year Telia has worked out standard price lists which provide the basis for its interconnect agreements with other operators. Telia's basic interconnection services are access, termination and transit services. Access refers to Telia's responsibility for connecting and forwarding calls from another operator's customer within the Telia network to that operator's network via Telia's network. Termination refers to Telia's conveyance of a call from a point of interconnect in Telia's network to a customer in Telia's network. Transit services refer to Telia, on behalf of another operator, conveying traffic from a point of interconnect in Telia's network to another operator's network. Regarding access and termination services, Telia bases its charge on i.a. a local, single or double segment. Local segments are defined according to Telia as connections between local points of interconnect and subscribers within a national directory code area. There are local points of interconnect in a number of national directory code areas. Points of interconnect are those points where Telia's network is connected with another operator's network.

Telia has divided its network into 13 regional interconnect areas. An operator can choose to have points of interconnect in one or more of these areas. A single segment is defined by Telia as the resources used when the operator's regional point of interconnect and the customer in Telia's network are in the same regional interconnect area. When the Telia customer is in an area where the operator does not have a physical point of interconnect, a double segment is used.

In 1995 and 1996, The Competition Authority made two interim decisions concerning the financial conditions for interconnection over Telia's fixed network. Both decisions meant that Telia was not able to charge such high prices as it wished for interconnection to its competitor Tele2. According to the Authority, the high level of Telia's interconnection charges in relation to Telia's call charges had the effect of excluding competing telecommunications operators, both actual and potential from the market.

In January 1995, Telia asked Tele2 to pay an interconnection charge of 35 öre per minute for a single segment and 42 öre per minute for a double segment. With an interconnection charge of 35 öre per minute, it was impossible for Tele2 to compete over different types of national calls.

The competitor Tele2 had to pay Telia 70 öre per minute in order to convey e.g. a regional call between two so-called indirectly connected customers in case a single segment should have been used (35 öre per minute from calling customer to a point of interconnect plus 35 öre per minute from a point of interconnect to the customer who was being called). The price difference for a regional call, exclusive of

Telia's opening charge per call, was consequently 22 öre per minute to the competitor Tele2's disadvantage.

Nor could Tele2 compete over such national calls which Telia regarded as long-distance. In 1995 the charge per minute for a long-distance call through Telia was 80 öre. The price difference for a long-distance call, exclusive of Telia's opening charge per call, would then have been only 3 öre per minute in case one single segment and one double segment should have been used. By then a considerable part of the long-distance calls conveyed by Tele2 could be expected to use a double segment since Tele2 only had physical points of interconnect in the three biggest cities in Sweden. Besides, Tele2 incurred itself traffic costs between the points of interconnect.

In May 1995 Telia – in connection with the obligation issued by the Competition Authority that Telia could not make Tele2 pay an interconnection charge exceeding 20 öre per minute for a single segment – made an agreement with Tele2 which meant amongst other things that Tele2 would pay an interconnection charge of 23.5 öre per minute to Telia for a single segment.

At the end of 1995 and the beginning of 1996, Telia then changed its prices for end-customers for national telephony so that charges for long-distance calls were reduced by 20 percent, whilst the charge for a local call was raised by around 33 percent.

Existing interconnection charges meant that the margins for competitors for long-distance calls were substantially reduced. Telia did not run any risk – despite raising the charge for local calls – that competitors would enter the market for local calls as long as the interconnection charge was at such a high level i.e. 23 öre per minute. The high level of interconnection charges in relation to Telia's charges for calls had in other words the effect of excluding competing telecommunications operators, both actual and potential, from entering the market.

The Swedish Competition Authority issued once again an interim obligation to the effect that Telia was not permitted to charge Tele2 an interconnection charge exceeding 20 öre per minute for a single segment. The decision was revoked by the Stockholm City Court which considered that there were no particular grounds for issuing an interim obligation before the Competition Authority had made a final decision in the case.

Pricing of interconnection has since then been dealt with in a number of different investigations. It has been stated that a fundamental problem from the competition viewpoint has been that interconnection charges have only been variable, whilst Telia's tariff structure vis-à-vis its final customers was made up of both a fixed rental charge and a variable call charge. In a report it was proposed that a separate organisation for specified network operations (access network) should be created and that the company's conditions should be reasonable and non-discriminatory[11]. By such a solution, Telia's market power would be reduced and it would have been possible to offer all network operators different combinations of fixed and variable interconnection charges, i.e. different price menus.

3.2 Telia's pricing for end-customers

Apart from being able to influence conditions for competition through its pricing of interconnection, Telia can also influence the opportunities for others to compete through its pricing of services for end-customers. An effective instrument could well be to introduce pricing such that it is more expensive for Telia's own customers to call customers or dial-up numbers in the networks of other operators. In the middle of 1996, Telia planned to introduce such a pricing model, which was however impeded by the Competition Authority.

Telia had planned to gradually introduce a new service called "transferred call". This would make it more troublesome and up to 50 öre more expensive per minute for Telia's customers to call customers connected to the fixed networks of other operators than to other Telia customers. A contributory factor in Telia's plans was that Telia had started to experience a net outflow of calls to other operators' fixed networks. Amongst other things, this could be related to the fact that a number of Telia's subscribers were calling subscriber numbers in other operators' networks based on Telia's tariff for local calls, which at this time was 16 öre per minute at the same time as interconnection charges which Telia had to pay amounted to around 23 öre per minute. The vast majority of these calls went to modem pools for connecting to the Internet.

The Competition Authority stated that the pricing which Telia wanted to introduce would have highly negative effects on competition on the telecommunications market. If it were more expensive for a subscriber connected to Telia's fixed network to make a call to a subscriber connected to the fixed network of another operator than to a subscriber in Telia's own network, customers would have very limited incentives to subscribe to fixed networks other than Telia's. This applied particularly to companies that were strongly dependent on incoming calls for their business activities.

Telia appealed the Authority's decision to the first instance, the Stockholm City Court. On 28 March 2000 the Stockholm City Court upheld the Authority's decision. Telia has appealed the decision to the final instance, the Market Court.

PTS also regarded Telia's actions as serious and ordered Telia not to introduce the new pricing model. The decision was appealed by Telia to the court of first instance, which dismissed its claim. Telia then appealed PTS's injunction to the final instance which, however, revoked the PTS decision.

Since Telia was prohibited under the Competition Act from introducing "transferred calls", there was a greater incentive for Telia to reduce its interconnection charges. Telia also began at this time to offer competitors a connection to Telia's fixed network lower down in Telia's network hierarchy, at local points of interconnect within a national directory code area. Earlier Telia had only offered connection via regional points of interconnect within a regional interconnect area. The result was that competitors of Telia had to pay lower interconnection charges than would otherwise have been the case which, in turn, increased the prerequisities for new challengers to enter the market. Since then, as mentioned above, there have been substantial reductions in Telia's interconnection charges almost every year.

3. Concluding remarks

Fixed telecommunications services, particularly telephony services, can be regarded as being close substitutes. Under such circumstances, the vertically integrated monopolist has an incentive to take advantage of its position by trying to make it difficult for competitors to be active in the services market in competition with the dominant operator. Either the monopolist's interconnection charges exceed the actual cost of interconnection or the monopolist offers competitors points of interconnect at a higher level in the network hierarchy than would be necessary in order to be active on the market, i.e. offers only a bundle of network services, which in turn makes it possible for the dominant operator to motivate higher interconnection charges due to more resources used.

In the market for fixed telecommunications services in Sweden, the dominant incumbent operator and also network owner Telia has, in a number of ways, tried to foreclose competition. By charging high interconnection charges Telia has tried to prevent competitors from being active on the market. It can be said that Telia has acted in accordance with what could be expected.

With increased uncertainty regarding the flow of interconnected traffic, i.e. if there is an increasing risk that the dominant operator itself will have to terminate lots of calls into competitors' networks *ex post*, the dominant operator should – in accordance with theory – offer interconnection charges *ex ante* that are close to the cost which the dominant operator avoids by not having to terminate the calls within its own network. However, this requires reciprocal interconnection charges, i.e. the two network operators pay exactly the same interconnection charge for termination of calls into each other's networks. If the interconnection charge exceeds the dominant operator's actual cost for termination the dominant operator will earn less from calls that are terminated into competitors' networks than from calls that are conveyed completely within the dominant operator's own network.

In Sweden competitors of Telia managed to receive quite large inflows of calls from the Telia network during 1996. Hence Telia had to pay competitors for termination to quite a great extent. Telia planned to solve this "problem" by making it more expensive for Telia's customers to make "off-net calls" than "on-net calls". This was, however, impeded by the Competition Authority. Since Telia was prohibited under the Competition Act from introducing asymmetric end-customer pricing, there was a greater incentive for Telia to reduce its interconnection charges. Telia also began at that time to offer competitors a connection to Telia's fixed network at a lower level in Telia's network hierarchy. Since then, there have also been substantial reductions in Telia's interconnection charges almost every year.

This, in turn, has increased considerably the prerequisities for competiton within different segments of the market for telecommunications services from fixed termination points. At present, there is as a consequence a considerable number of companies competing with the dominant operator, Telia.

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NOTES

[1] PTS has determined that Telia has a significant market power on the Swedish telecom market in the sense laid down in the Telecommunications Act. This means that Telia is obliged, among other things, to publish its tariffs for interconnection and to offer equivalent conditions to all parties requesting interconnection.

[2] Source: The Swedish Telecommunications market 2000, Report from PTS. Revenues for calls from fixed to mobile networks amounted to approximately SEK 4.5 billion. This market segment is not described in this paper.

[3] Source: The Swedish Telecommunications market 2000, Report from PTS.

[4] 100 öre = SEK 1.

[5] Traffic peak refers to traffic during normal working days, Monday-Friday 8-18.

[6] On November 7th 1997 Telia changed types of calls so that national calls were either local or Sweden calls. Regional and long-distance calls ceased to exist. Telia implemented at the same time a change in its pricing system which meant i.a. that charges for calls to specific code areas became higher. On 21st April 1998 Telia returned to its earlier pricing system in terms of adjacent code areas. At the same time Telia raised its time charges for local calls from 16 to 18.4 öre excl. VAT.

[7] On February 15th 2000 Telia reduced the call charge for a long-distance call from 40 to 18.4 öre excl. VAT, i.e. a uniform charge for national calls was introduced.

[8] See e.g. Lundgren (1993) and Economides (1997).

[9] Economides (1995).

[10] On September 11th 1999 pre-selection was introduced in Sweden. According to PTS, the number of fixed telephony customers that had chosen another operator than Telia as pre-selection operator amounted to approximately 1.1 million at the turn of the year 2000.

[11] Bergendahl-Gerholm and Hultkrantz (1999).

SUISSE

1. Evolution dans le domaine de la réglementation au cours des cinq dernières années

Le cap le plus important franchi dans le domaine des télécommunications en Suisse au cours des cinq dernières années fut la libéralisation du marché, entreprise le 1er janvier 1998, et qui découlait d'une nouvelle loi sur les télécommunications. Ainsi, le monopole des réseaux et de la téléphonie, qui ne prévoyait quelques exceptions que pour la fourniture de services de transmission de données, fut aboli au profit d'un marché libre des télécommunications. Ce marché libéralisé doit permettre à une concurrence efficace de voir le jour car il met fin au monopole sur les réseaux et les services tout en garantissant l'existence d'un service universel sûr et avantageux. Les lignes qui suivent récapitulent l'évolution en matière de réglementation depuis le début de la libéralisation, autrement dit sur les trois dernières années et demies.

1.1 Diminution des prix

Si l'on considère le prix des prestations de télécommunication, la libéralisation a rencontré un succès relativement rapide. En 1998, le fléchissement des prix était encore passablement faible puisqu'il atteignait 2,6 pour cent, mais en 1999, la baisse fut considérable si l'on songe qu'elle a atteint 14,7 pour cent. Au cours des dix premiers mois de l'an 2000, les prix ont même chuté de 16,8 pour cent. Pour les services de télécommunication, les prix en Suisse ont baissé tant dans le secteur privé que dans le secteur commercial (privé: -8,6 pour cent; commercial: -24,6 pour cent) dans une proportion nettement plus important qu'en moyenne dans les pays de l'OCDE (privé: -1,8 pour cent; commercial: -2,9 pour cent).

1.2 Autorisations/concessions

En entreprenant la libéralisation en 1998, il fallait tout d'abord s'assurer en particulier que les nouveaux fournisseurs parviendraient à s'installer sans délai dans un contexte d'ouverture du marché. Afin que les fournisseurs puissent rapidement s'installer sur le marché, une solution transitoire a été trouvée, qui consistait à délivrer des autorisations provisoires, ces dernières ayant quasiment toutes été remplacées dès le milieu de l'année par des concessions. En 1999, 43 nouvelles concessions ont été attribuées concernant des réseaux mobiles et fixes. De ce nombre, il faut compter celles octroyées à Swisscom SA, en particulier la concession de service universel. A la fin de l'année 2000, 83 autres inscriptions et concessions ont été traitées. Ainsi, le nombre de fournisseurs de services de télécommunication annoncés à l'OFCOM s'est élevé à 315, dont 161 au bénéfice d'une concession.

1.3 Adaptation de la législation sur les télécommunications

S'agissant de la législation sur les télécommunications, c'est en 1999 qu'a été entreprise la première refonte importante des ordonnances d'exécution relatives à la loi sur les télécommunications. Ce

chantier a pris fin au début de l'année 2000, lors de l'entrée en vigueur (1er mai 2000) des dispositions concernées.

Ces travaux ont aussi été l'occasion, compte tenu de la nouvelle directive R&TTE de l'Union européenne, de procéder à l'adaptation de l'ordonnance du Conseil fédéral sur les installations de télécommunication. Ainsi, la Suisse reconnaît désormais la conformité des installations en se fondant sur des normes européennes. Il a fallu par conséquent réorganiser le système de surveillance de l'OFCOM de manière à ce que les installations ne soient plus contrôlées a priori (avant leur mise sur le marché, "pre-market"), mais a posteriori ("post-market") et de manière ponctuelle. Ce renversement permet aux fabricants et aux importateurs de mettre leurs produits plus rapidement sur le marché et ainsi d'accélérer l'introduction de nouvelles technologies tout en accroissant leur part de responsabilité dans l'opération. Cette nouvelle réglementation a entraîné un net ralentissement de la cadence des homologations. Alors qu'en 1999, pas moins de 650 équipements ont été homologués, ce chiffre est tombé à 185 pour l'année 2000. En revanche, les nouvelles procédures relatives à l'évaluation de la conformité, qui prévoient une obligation de déclarer plutôt qu'un contrôle préalable des installations, ont vu leur nombre s'accroître.

Finalement, l'Union européenne s'emploie à présent à actualiser sa législation sur les télécommunications, de sorte que la Suisse, elle aussi, se trouve au seuil d'une révision importante des bases légales dans ce domaine, une démarche qui s'inscrit dans un mouvement général d'eurocompatibilité.

2. Interconnexion

En Suisse, la réglementation relative à l'interconnexion se fonde sur la primauté des négociations entre les partenaires concernés. En Suisse, la Commission fédérale de la communication (ComCom) n'approuve ni ne détermine a priori les offres standard d'interconnexion et les prix d'interconnexion. La ComCom n'intervient qu'à titre subsidiaire, lorsque les parties n'ont trouvé aucun accord et que l'une d'entre elles a déposé une demande de décision en matière d'interconnexion. Les décisions de la ComCom peuvent faire l'objet d'un recours auprès du Tribunal fédéral. L'Office fédéral de la communication (OFCOM) instruit la procédure.

La réglementation en matière d'interconnexion repose sur les deux piliers que sont l'interopérabilité et la notion de "position dominante" sur le marché. A noter qu'au sens du droit suisse, cette notion n'est pas identique à celle définie par l'UE (significant market power). Les entreprises occupant une position dominante sur le marché sont tenues d'offrir les services d'interconnexion à des prix alignés sur les coûts. Quant aux entreprises n'occupant pas une position dominante sur le marché, elles doivent, en particulier dans le domaine de la transmission de la voix et des données, offrir l'interconnexion en vue de l'interopérabilité, à des prix usuels sur le marché et dans la branche en question. De tels prix sont généralement calculés à partir de valeurs comparatives tirées de divers pays d'Europe. Si la position dominante sur le marché pour un service d'interconnexion est contestée, la ComCom consulte la Commission fédérale de la concurrence (Comco).

En 1999, après une instruction conséquente quant aux procédures ainsi qu'une analyse détaillée des coûts auprès de Swisscom SA, deux importants litiges d'interconnexion ont fait l'objet d'une conciliation et d'un règlement, permettant ainsi aux prix d'interconnexion pour 1998 et 1999 d'être stabilisés.

L'année 1999 a également été marquée par d'intensifs travaux de préparation en vue de la détermination des prix d'interconnexion qui allaient être calculés dès 2000 selon la méthode dite des coûts additionnels à long terme (Long Running Incremental Cost, LRIC). Cette nouvelle méthode de calcul a été introduite à temps par Swisscom SA. Les tarifs qui en ont résulté n'ont toutefois pas été acceptés par tous

les fournisseurs, de sorte que la ComCom a hérité de deux demandes en vue de déterminer les prix d'interconnexion. Dans ces deux cas, l'OFCOM a été chargé d'instruire le dossier.

A cela s'ajoutent actuellement quatre autres procédures. La première d'entre elles concerne l'application du régime d'interconnexion aux lignes louées et aux médias de transmission, qui a fait l'objet d'une décision de la ComCom après que l'OFCOM a préparé le dossier. Dans cette procédure, l'obligation d'interconnexion de Swisscom en ce qui concerne les lignes louées dans le domaine du réseau de raccordement a été confirmée. Il en a résulté, pour ce segment de marché, des prix plus bas pour les concurrents. Cette décision a été attaquée auprès du Tribunal fédéral, de sorte qu'elle n'est pas encore entrée en vigueur. Quant à la seconde procédure, elle concerne le dégroupage des raccordements d'usagers. La décision principale concernant ce dossier n'est pas encore tombée. Les mesures provisionnelles ordonnées dans le cadre d'une procédure préliminaire en faveur du recourant ont toutefois été attaquées avec succès auprès du Tribunal fédéral. Finalement, les deux dernières procédures concernent les prix relatifs à la terminaison des appels mobiles. Ces procédures dépendent actuellement d'une décision finale de la ComCom. Pour la durée de la procédure, des prix provisoires ont néanmoins été fixés. Dans les deux cas, il s'agit de déterminer les prix concernant les services normaux de terminaison des appels mobiles et ceux concernant les appels de numéros gratuits Freephone (0800). Dans l'une des deux procédures, il s'agit en outre de déterminer les coûts relatifs aux appels adressés au service des renseignements et aux numéros d'appel d'urgence. Le point litigieux est ici de savoir, pour les appels entrants, s'il faut calculer deux tarifs différents, selon que l'appel est national ou international, et comment calculer les valeurs de référence.

2.1 Service universel

Dans le domaine de la fourniture des prestations du service universel, l'année 2000 a été le théâtre des préparatifs concernant la nouvelle mise au concours du service universel, celle-ci devant se dérouler dans le courant de l'année 2001. Dès 2003, la nouvelle concession remplacera l'actuelle concession de service universelle détenue par Swisscom. Les travaux préparatoires de cette mise au concours ont consisté à examiner le contenu du service universel et d'analyser l'évolution de l'offre et de la demande sur le marché. Il est question principalement d'accroître les droits relatifs à la communication individuelle électronique, et d'autre part, d'assouplir certaines règles au vu de l'intensité de la concurrence qui règne. L'examen portera sur la conception de la concession (une concession nationale ou plusieurs concessions régionales) et le financement du service universel au moyen d'un fonds alimenté par les redevances de concession versées par les autres fournisseurs de services. La consultation publique concernant la nouvelle réglementation proposée s'est terminée au mois de mai 2001.

2.2 Téléphonie mobile

2.2.1 GSM et communication mobile par satellite

Dans le domaine de la téléphonie mobile, l'OFCOM a exécuté pour le compte de la ComCom en 1998 la mise au concours de deux réseaux nationaux de téléphonie mobile GSM et a préparé les bases de décision relatives à l'octroi des concessions concernées, dont les bénéficiaires sont Orange Communications SA et diAx Mobile. Quant à Swisscom SA, l'entreprise a droit, de par la loi, à une concession. L'entrée sur le marché de ces deux nouveaux opérateurs en 1999 a été suivie d'une véritable explosion de la communication mobile qui, aujourd'hui encore, se poursuit. Ainsi, le nombre de raccordements de téléphonie mobile s'est accru de 23,4 pour cent entre fin 1998 et fin 1999, et de 60,9 pour cent entre fin 1999 et septembre 2000.

S'agissant des communications mobiles par satellite, la société italienne Iridium Italia Spa a obtenu une concession en mai 1998. L'entreprise concurrente Global Star a déposé une demande de concession.

2.2.2 Protection contre les rayonnements et coordination des emplacements d'antenne

L'essor qu'a connu la communication mobile a aussi engendré une opposition croissante de la part de la population contre les antennes érigées pour ces systèmes, une opposition qui devrait entre autre être affrontée par l'ordonnance sur la protection contre les rayonnements non ionisants (ORNI), entrée en vigueur le 1er février 2000. Cette ordonnance a permis de concrétiser la base légale nécessaire pour évaluer les installations d'émission, base au demeurant très contestée et ayant requis de longs préparatifs. L'ORNI fixe pour les zones sensibles des valeurs limites dix fois moins élevées que celles fixées dans le reste du monde. La Suisse a donc établi des exigences environnementales considérablement plus strictes que dans les autres pays.

Concernant la coordination des emplacements d'antenne, des recommandations et des conditions en vue de la coordination de la construction des antennes de téléphonie mobile ont été élaborées sous la direction de l'OFCOM et en collaboration avec la Conférence des directeurs des travaux publics, de l'aménagement du territoire et de la protection de l'environnement, les autorités compétentes et les exploitants de réseau. Les conditions définies figurent dans les concessions GSM, UMTS et WLL. Ainsi, on espère pouvoir stopper une prolifération anarchique des antennes, encourageant de la sorte un mode de construction d'antennes plus respectueux de l'environnement.

2.2.3 Boucle locale radio (Wireless Local Loop, WLL)

L'année 1999 a également été la période pendant laquelle les préparatifs en vue de la mise au concours des concessions WLL ont démarré. La technique WLL, qui permet d'effectuer un raccordement à large bande se substituant au monopole d'Etat détenu auparavant par Swisscom dans le domaine en question, devrait entraîner principalement une concurrence accrue dans ce secteur. La vente aux enchères de trois concessions nationales et de cinq concessions régionales portant sur neuf régions a eu lieu au printemps 2000. C'est notamment grâce à la bonne conjoncture et au vif intérêt des marchés financiers pour les entreprises de télécommunication que le montant étonnamment élevé de plus de 582 millions de francs a pu être engrangé. Cependant, malgré les coûts d'acquisition relativement élevés, aucune vraie solution de rechange au raccordement classique n'a encore été mise en œuvre. Les premières offres de ce type viennent seulement de faire leur apparition dans quelques villes. Et quelques concessionnaires ont d'ores et déjà indiqué leur manque d'intérêt pour la mise en œuvre de leurs projets initiaux. Il existe même un cas où un concessionnaire projette de transférer sur une autre entreprise la concession chèrement acquise, pour un prix notablement inférieur.

2.2.4 UMTS

C'est également en 1999 qu'ont commencé les préparatifs en vue de la mise au concours des concessions UMTS devant permettre l'éclosion des services mobiles de données à large bande de la troisième génération (troisième génération de téléphonie mobile). Au moment de la vente aux enchères, la situation ne se présentait toutefois plus sous d'aussi bons auspices que pour les concessions WLL. Le nombre initial de dix candidats admis pour quatre concessions pratiquement de même valeur est tombé, de manière un peu inattendue, à quatre dans les quelques jours ayant précédé la vente. Ce phénomène s'explique notamment par le fait que les marchés financiers ont refusé des crédits supplémentaires aux entreprises de télécommunication. Le cinquième candidat ayant annoncé son retrait, ou plutôt la fusion

avec un autre candidat en lice, le soir précédant la vente, la mise aux enchères a tout d'abord été reportée à une date ultérieure. Après examen des conséquences de la fusion précitée sur le marché suisse et de toutes les variantes possibles quant à la suite à donner aux événements, la ComCom a décidé d'aller de l'avant avec la mise aux enchères en proposant, comme initialement prévu, un montant de base minimal de 50 millions de francs. Les quatre concessions ont finalement été adjugées aux sociétés diAx, Orange, Swisscom et Telefonica, pour un montant total de 205 millions de francs.

2.3 Numérotation et adressage

L'année 1998 a surtout été la période au cours de laquelle a été préparée la mise en œuvre de la présélection du fournisseur des liaisons nationales et internationales (carrier preselection); en novembre de la même année ont été lancés les travaux concernant la portabilité des numéros, dont l'entrée en vigueur était prévue pour le 1er janvier 2000.

L'une des tâches essentielles de l'OFCOM est en outre l'attribution des ressources d'adressage. Les fournisseurs de services obtiennent en effet des blocs de numéros dont ils attribuent certains numéros de téléphone aux utilisateurs finaux. En 1999, l'OFCOM a attribué les ressources d'adressage suivantes: 511 blocs de 10 000 numéros, 286 blocs de 1 000 numéros ainsi que 333 autres ressources d'adressage. La demande s'est maintenue en 2000, même si elle n'était plus aussi forte. Cette année-là, 240 blocs de 10 000 numéros et 450 blocs de 1 000 numéros ont été attribués. Le ralentissement de la croissance en matière d'attribution des numéros est révélateur de la stabilisation du marché. Cette tendance est confirmée par le nombre de codes de sélection du fournisseur attribués (carrier selection codes).

C'est également en 2000 qu'ont été élaborées, en consultation avec les fournisseurs de services, les prescriptions concernant les numéros alphanumériques des plages 0900 et 0800, numéros dont l'attribution va débuter en septembre 2001. Cette attribution se déroulera de manière entièrement électronique par l'intermédiaire de l'Internet. Elle constituera l'un des premiers grands projets de la Confédération en matière de "e-government", où non seulement l'Internet servira à commander et à obtenir des ressources, mais aussi où le processus de production hébergé à l'OFCOM verra son déroulement et sa gestion être organisés de manière entièrement électronique.

En 1998 ont également été lancés les premiers travaux concernant l'introduction au 29 mars 2002 du plan de numérotation fermé. Grâce à ce dernier, le préfixe actuellement utilisé sera intégré au numéro d'appel, qui restera inchangé. Dans l'intervalle, les travaux préparatoires (prescriptions techniques et administratives pour la mise en œuvre du plan) sont terminés et les premières mesures en matière de communication ont été appliquées.

2.4 Signature numérique

La majeure partie des travaux préparatoires concernant l'introduction d'une nouvelle ordonnance sur les services de certification électronique ont été exécutés en 1999. Cette ordonnance, qui précise les exigences fondamentales imposées aux services de certification, permet aux fournisseurs concernés de se faire reconnaître lorsqu'ils remplissent les exigences posées. Ce mode de reconnaissance est un pas important en vue de susciter la confiance dans le commerce électronique et les relations électroniques entre administrations et administrés. L'ordonnance en question est entrée en vigueur le 1er mai 2000. Les prescriptions techniques correspondantes seront vraisemblablement adoptées au milieu de cette année.

Dans la phase actuellement en cours, le Conseil fédéral a l'intention d'adapter les dispositions légales concernant la forme écrite, en vue de conférer à la signature électronique la même portée juridique que celle de la signature manuscrite.

2.5 Prescriptions techniques et administratives

En collaboration avec des représentants des fournisseurs de services, d'autres prescriptions techniques et administratives importantes ont été élaborées, principalement l'an dernier, dans les domaines suivants: acheminement des appels d'urgence, activation de la présélection du fournisseur, indication de taxe et technologie des réseaux de raccordement. La collaboration avec les fournisseurs de services sous la direction et la coordination d'experts de l'OFCOM s'est avérée efficace.

2.6 Surveillance

En 1999 déjà, diverses procédures de surveillance ont été lancées en vue d'appliquer les règles de fonctionnement du marché des télécommunications (prix plafonds en matière de service universel, mise en œuvre de la sélection du fournisseur et présélection du fournisseur, obligation de desserte incombant aux réseaux de téléphonie mobile) et ce rôle dévolu à la surveillance a encore gagné en importance en 2000. Plusieurs procédures ont été ouvertes, afin d'assurer le respect des règles permettant de garantir le fonctionnement d'une concurrence efficace et la protection des consommateurs du marché des télécommunications: elles concernaient le maintien de l'obligation de desserte par les exploitants de réseaux de téléphonie mobile, le respect des prix plafond par Swisscom en tant que fournisseur du service universel, la mise en œuvre de la sélection du fournisseur appel par appel au sein d'un réseau mobile, le maintien du délai de cinq jours pour l'activation de la présélection du fournisseur au sein du réseau fixe ainsi que le retard pris dans l'établissement d'une base de données des emplacements par le concessionnaire du service universel. D'autres procédures encore ont dû être ouvertes concernant des cas de non-livraison des données servant à l'établissement de la statistique officielle sur les télécommunications. Dans ce contexte, la ComCom a décidé de prendre des sanctions administratives, dont l'une a été contestée auprès du Tribunal fédéral et confirmée par ce dernier.

3. Problèmes de concurrence et mise en œuvre des lois en matière de concurrence

3.1 En général

Au cours de ces cinq dernières années, c'est surtout le processus de libéralisation qui a marqué le secteur des télécommunications. En effet, jusqu'au 1er janvier 1998, les Telecom PTT (aujourd'hui: Swisscom SA) disposaient de droits monopolistiques très étendus. L'ouverture du marché offre à d'autres entreprises la possibilité de proposer des services de télécommunication et de faire ainsi concurrence à Swisscom.

La libéralisation du marché représente aussi un véritable tournant pour les questions de concurrence et l'organisation des autorités. Avant l'ouverture du marché, les problèmes de concurrence ne se posaient que dans des secteurs partiellement libéralisés et relevaient de la compétence de la Commission de la concurrence (Comco). Il n'y avait pas à proprement parler de régulateur pour le marché des télécommunications. Fixées par la loi fédérale du 6 octobre 1995 sur les cartels et autres restrictions à la concurrence (loi sur les cartels, LCart), les tâches de la Comco comprennent notamment la lutte contre les accords en matière de concurrence ainsi que contre les pratiques illicites d'entreprises dominantes. Le monopole de Swisscom sur le marché des télécoms était la source principale des problèmes de concurrence. Le cas de « Blue Window », décrit plus bas dans ce chapitre, en donne un exemple.

L'élaboration de la nouvelle loi sur les télécommunications (LTC) et plus particulièrement la définition de nouvelles conditions-cadre en prévision de l'ouverture du marché représentaient un enjeu important du point de vue de la concurrence. La Comco s'est engagée avec succès pour que les entraves à

l'accès au marché soient les plus faibles possibles (p. ex. pour le système de concessions), pour que les obligations liées au service universel soient neutres du point de vue technologique et concurrentiel, de même que pour une réglementation de l'interconnexion respectant les critères de non-discrimination et de transparence.

Depuis l'ouverture du marché (1er janvier 1998), l'interconnexion est devenue la question centrale en matière de concurrence. En Suisse, les entreprises dominantes ont, en vertu de la LTC, l'obligation de garantir l'interconnexion, dont les modalités sont réglées selon le principe de la primauté des négociations. Cependant, si les parties n'arrivent pas à trouver un accord dans les trois mois, elles peuvent saisir l'autorité de régulation compétente : la ComCom, qui est habilitée à fixer des conditions de l'interconnexion. Si à ce moment-là une question de position dominante intervient, la ComCom doit consulter la Comco. Cette obligation garantit que les instruments ou les principes du droit de la concurrence (p. ex. définition du marché ou restriction d'une position dominante) sont appliqués de manière unifiée dans les différentes branches économiques. La Comco reste l'autorité compétente pour toutes les autres questions relevant du droit de la concurrence. Dans la première phase qui a suivi l'ouverture du marché, les problèmes rencontrés étaient dus avant tout à la position dominante de Swisscom, avec en particulier la question récurrente du dernier kilomètre.

L'organisation du marché a été marquée, après son ouverture, par l'entrée en scène de très nombreuses entreprises (les autorités de régulation en ont enregistré plus de 200). Au cours de l'année passée, on a assisté à un premier phénomène de concentration. La Comco a alors pour mission d'examiner les concentrations d'entreprises soumises à l'obligation de notifier. Cette tendance augmentant le risque d'accords en matière de concurrence, la Comco se trouve placée devant de nouveaux défis.

3.2 Application de la loi sur les télécommunications

Dans divers avis destinés à la ComCom, la Comco a dû se prononcer sur la question de la position dominante de Swisscom. Le cas Commcare contre Swisscom présente un exemple intéressant. Dans cet avis, la Comco a estimé que Swisscom ne dispose plus d'une position dominante en ce qui concerne la location de lignes pour le réseau longue distance. Pour ce faire, elle s'est basée sur une approche désagrégée d'essence économique. Cette approche permet de limiter la réglementation à certains segments cruciaux qui ne peuvent pas être contestés par la concurrence (cf. DPC[6] 2000/1, p. 70 ss.).

Une procédure en suspens de la ComCom (l'avis de la Comco relatif à cette procédure paraîtra dans le recueil DPC 2001/1), d'une importance majeure pour le développement futur du jeu de la concurrence, porte sur la libéralisation du dernier kilomètre (dégroupage de la boucle locale). La LTC ne règle pas explicitement le dégroupage. La ComCom et la Comco sont néanmoins d'avis que, même dans le contexte légal actuel, le dégroupage peut avoir lieu, éliminant ainsi le dernier grand problème structurel en matière de concurrence.

3.3 Application de la loi sur les cartels

Les exemples suivants – quatre cas importants – sont présentés par ordre chronologique.

6 Revue, Droit et Politique de la Concurrence

3.3.1 Le cas Cablecom

En juin 1996, Cablecom a racheté l'entreprise Rediffusion. Les deux entreprises étaient principalement actives sur le marché de la télévision par câble. La nouvelle société Cablecom détenait environ 50 pour cent du marché de la télévision câblée. A ce stade, les Telecom PTT participaient à Cablecom à hauteur de 32 pour cent. La concentration s'est opérée quelques jours seulement avant l'entrée en vigueur de la nouvelle LCart. Ce fait est important vu qu'en Suisse, le contrôle des concentrations a été introduit par la nouvelle LCart. La Comco n'a donc pas pu examiner la fusion.

Le problème soulevé par la concentration tenait au double rôle des Telecom PTT, qui détenaient non seulement le monopole du marché de la téléphonie – et donc du réseau local, mais qui, en tant qu'actionnaire du plus important réseau de télévision câblée, pouvaient aussi contrôler la seule alternative à l'infrastructure téléphonique existant à cette époque. La Comco estimait que ce double rôle risquait d'entraver la concurrence au niveau du réseau local. La Comco n'a pas pu examiner la concentration pour l'interdire le cas échéant, mais a eu recours à un autre instrument de la LCart. Par le biais d'une recommandation (au sens de l'art. 45 LCart), elle a demandé au Conseil fédéral, propriétaire des Telecom PTT, de forcer ceux-ci à vendre leur participation à Cablecom. Le Conseil fédéral n'a finalement pas suivi cette recommandation : dans le conflit qui opposait le principe de la concurrence et les intérêts de la Confédération en tant que propriétaire, le Conseil fédéral a opté pour ces derniers.

Il convient de noter que les Telecom PTT (aujourd'hui Swisscom) se sont entre-temps défaits de leur participation à Cablecom.

3.3.2 Le cas Blue Window

Dans le cas de Blue Window (cf. DPC 1997/2, p. 161 ss) la Comco a constaté que Swisscom prenait une position dominante sur le marché de la téléphonie en Suisse et qu'elle s'est, à deux reprises, rendue coupable de pratiques illicites. Premièrement, Swisscom voulait réserver les numéros « 0842 » à sa filiale internet Blue Window. Ces numéros permettaient pour la première fois de séparer les coûts (l'internaute payant toujours le tarif local, tandis que le fournisseur de service se voit facturer la différence par rapport au tarif effectif). La Comco a, par le biais de mesures provisionnelles, obligé Swisscom à mettre le numéro à la disposition des tous les fournisseurs de services intéressés. La Comco a par ailleurs pu montrer preuves à l'appui que Blue Window couvrait une partie de ses coûts par une « subvention croisée » grâce aux revenus tirés des services de téléphonie, qui faisaient alors encore l'objet d'un monopole.

3.3.3 Le cas de l'ADSL

Au printemps 2000, Swisscom a annoncé l'introduction de services ADSL en Suisse. Le secrétariat de la Comco a ouvert une enquête préliminaire motivée par diverses plaintes de concurrents qui affirmaient que Swisscom mettrait les services ADSL à la disposition exclusive de sa propre filiale Internet Blue Window. Peu de temps après, Swisscom s'est déclarée prête à également fournir les services ADSL à ses concurrents. L'enquête préliminaire a été classée sans suite après examen d'autres pratiques qui auraient pu présenter un caractère illicite.

3.3.4 Le cas de la téléphonie mobile

En mai 2000, la Comco a ouvert une enquête contre les trois fournisseurs de téléphonie mobile Swisscom, Diax et Orange en raison de soupçons de pratiques illicites. Elle examine notamment si les trois

entreprises occupent ensemble une position dominante sur le marché et se rendent coupables de pratiques illicites en matière de prix sur leur réseaux respectifs ou s'il existe des accords en matière de concurrence dans ce domaine. L'enquête devrait aboutir cette année.

En conclusion, on peut retenir que la séparation des responsabilités entre l'organe de régulation sectoriel – la ComCom – et la Comco est judicieuse et que la collaboration a jusqu'ici parfaitement fonctionné. Concernant l'application des principes et des instruments en matière de concurrence, les organes concernés ont réussi à mettre en œuvre une approche unifiée qui soutient la comparaison avec d'autres secteurs où la Comco agit seule (l'exemple de la définition du marché en question en atteste). La pratique suisse est en grande partie conforme aux directives de l'UE en la matière.

UNITED STATES

Developing Local Competition. In 1996, the US Congress enacted a fundamental reform of federal telecommunications law, with the objectives of promoting competition and reducing or eliminating regulation in all telecommunications markets. The Telecommunications Act of 1996[1] provided interrelated mechanisms through which interexchange carriers and other competitors could enter markets for local telecommunications services and through which the regional Bell operating companies (known as "RBOCs") could enter long distance markets after opening their local monopoly markets to competition.[2]

To promote local competition, the 1996 Act provides for the pre-emption of state laws prohibiting such competition. In addition, Section 251 of the Act requires incumbent local exchange companies (known as "incumbent LECs")[3] to (*1*) interconnect their networks to those of other carriers at just, reasonable and non-discriminatory rates,[4] (*2*) lease elements of their networks, such as loops, switches and transport, at just, reasonable and non-discriminatory rates (these parts of the network are known as "unbundled network elements" or "UNEs"),[5] and (*3*) sell retail services at wholesale rates for resale by competitors to end users.[6]

Section 252 of the 1996 Act establishes a process to effectuate the obligations of incumbent LECs to share the use of their networks. Local service providers entering the market (called "competitive local exchange carriers" or "CLECs") must first attempt to negotiate contracts ("interconnection agreements") with incumbents. If the parties are unable to reach agreement, either party can ask the state public utility commission to arbitrate the dispute. Parties dissatisfied with a state commission's Section 252 arbitration decision may appeal that decision to a federal district court.[7]

Implementing the 1996 Act. Over the past five years, three telecommunications issues under the 1996 Act have generated significant disputes in which the Department of Justice, through the Antitrust Division, has become involved: the pricing of unbundled elements; the availability of combinations of unbundled elements; and non-discriminatory access to the operational support systems necessary to order, provision, repair and bill for wholesale products and services purchased from the incumbent LECs.

Pricing of Unbundled Network Elements. The state commissions set retail telecommunications rates. The state commissions have generally set the resale discount rate and wholesale prices for interconnection, network elements, transport and reciprocal compensation (the amount carriers pay each other for the transport and termination of each other's local traffic),[8] although parties are free to negotiate other rates, terms and conditions. In determining the wholesale rates for interconnection and for unbundled network elements, the 1996 Act requires state commissions to set rates that are "non-discriminatory" and "based on the cost of providing the interconnection or network element," which rate "may include a reasonable profit."[9] In January 2000, after much litigation, the US Supreme Court upheld the Federal Communication Commission's ("FCC") authority to prescribe, through regulation, the basic methodologies that should be used to determine the relevant costs for wholesale rates.[10] The most fundamental question regarding pricing, however, whether the relevant "cost" for wholesale rate-setting purposes should be an incumbent LEC's "historic" costs, or some form of "forward looking" cost, will be decided by the US Supreme Court during the 2001-2002 term.[11]

Combinations of Unbundled Network Elements. The FCC's local competition rules permit CLECs to lease virtually all of the individual network elements needed to provide service to end users. In January 2000, the US Supreme Court upheld the FCC rule which permits CLECs to purchase combinations of elements that are already combined in the incumbent's network. Whether an incumbent LEC properly can be required to combine previously uncombed elements at the request of a CLEC will be reviewed by the US Supreme Court during the 2001-2002 term.[12]

Operational Support Systems. As providers of local telecommunications services to millions of customers, incumbent LECs in the United States have developed and implemented sophisticated systems to manage their networks and communicate with customers. These operational support systems ("OSS") permit most routine transactions (e.g., billing inquiries, orders for new services and responses to service outages) to be handled reliably, quickly, at low cost and with minimal human involvement. The FCC's local competition rules require incumbent LECs to take steps to ensure that CLECs seeking to resell incumbent LEC services or use UNEs have suitable access to these OSS, so that CLECs can obtain service from incumbent LECs and provide service to their own retail customers in a reasonably efficient and reliable manner. Testing of the RBOCs' OSS by independent third parties whose work is overseen by the state public utility commission, as well as the institution of comprehensive performance measuring and reporting programs, the goal of which is to provide objective and precise indications of the quality of wholesale performance, have helped in ascertaining whether the RBOCs are adequately supplying these services at the time they request authority to offer long distance service under Section 271 of the Act.

RBOC Entry Into Long Distance Markets. RBOCs operate in 48 of the 50 states, and serve about 90 percent of the access lines in the United States. Section 271 of the Act prohibits the RBOCs from offering most long distance services to customers in a state in which the RBOC was an incumbent LEC at the time the Act was passed, until the FCC has authorised the RBOC to do so in that state. In order to grant authorisation to provide long distance services, the FCC must determine, *inter alia*, that the RBOC has satisfied 14 specified requirements (often called the "competitive checklist")[13] and that allowing the RBOC to offer long distance is in the public interest.[14] As of May 1, 2001, there have been 13 Section 271 applications requesting approval to offer long distance services.[15] Seven of those applications have been either rejected by the FCC or withdrawn before the FCC acted. So far, the FCC has approved five applications: Verizon's applications for New York (the first application approved, in December 1999) and Massachusetts and SBC's applications for Texas, and for Oklahoma and Kansas (a joint application). Of the approved applications, the Department of Justice ultimately supported the Texas application and did not oppose the others, although it identified problems with the applications, some of which were remedied by the RBOC before the FCC approved the applications. In making its determination on these applications, the FCC consults with the state public utility commission that is the subject of the application and must give substantial weight to the Department of Justice's evaluation of whether the local market is fully and irreversibly open to competition.[16]

CLEC Entry into Local Markets. In June 2000, incumbent LECs still provided services to 93.3 percent of local telephone lines nationwide, while CLECs provided services to 6.7 percent of these lines.[17] Market capitalisation of CLECs rose to $86 billion in 1999, but declined precipitously in 2000. The extent of competitive entry in local markets varies greatly among different services, customer groups, and geographic areas.

CLECs provide 64 percent of their end-user lines to large and medium-sized businesses. Overall, 24 percent of US telephone lines serve large and medium-sized businesses, and CLECs serve 17.5 percent of these lines, amounting to 4.2 percent of all US telephone lines.[18] There is considerable entry to serve large businesses, especially in major urban downtown areas. In most larger cities, several CLECs have entered, each deploying one or more switches and fibber transport facilities in geographic areas that have high concentrations of lucrative business customers. CLECs provide about one-third of end-user lines over

their own facilities. There is also significant entry by the same CLECs to serve medium-sized businesses with substantial telecommunications needs. Some of these medium-sized businesses, like large businesses, can be economically served by direct connections to CLEC networks. CLECs also use unbundled loops, resale or a combination of unbundled elements known as the "UNE-platform" to serve them. A few CLECs are offering local services to medium-sized businesses using "fixed wireless" technologies that are less dependent on incumbent LEC policies and practices than are services which require unbundled loops, resale or UNE platform arrangements.

Competitive entry to serve the mass market (residential and small business customers) has been slow to develop. Seventy-six percent of all US telephone lines serve residential or small business customers; CLECs serve 3.2 percent of these lines, amounting to 2.49 percent of all US telephone lines.[19]

Long Distance Markets. Long distance services are used by residential consumers as well as small, medium and large businesses. Long distance providers tailor their services to meet the needs of each type of customer, marketing and pricing these services differently depending on the customer. AT&T, WorldCom (formerly MCI) and Sprint continue to dominate mass market long distance services. Two regional Bell operating companies have entered the long distance market within several states in their own regions, gaining 20 percent market share in New York and Texas over the past year. There are also many small resellers active in the long distance market. Average mass market long distance prices have continued to decline since the passage of the 1996 Act, but there has been a growing disparity between basic rates paid by low-volume users, and the much lower discounted rates paid by higher-volume residential and business users.[20]

Universal Service Reform. Universal service traditionally has meant providing consumers in rural and insular areas of the United States with voice telephone service that is comparable in quality and price to that available in urban areas. These higher cost services for these areas have been paid for by implicit subsidies on products such as local exchange access for long distance calls, value-added vertical features, local service to large customers and basic local service to some urban customers. Section 254 of the 1996 Act provides for the adoption of specific, sufficient and competitively neutral subsidies to replace the universal service subsidies implicit in traditional monopoly rate making. Work at the FCC to implement these reforms at the federal level is on-going, as is work at the state public utility commissions to implement these reforms at the state level.[21]

Wireless Competition. Spectrum allocation and footprint build out have been the most important issues for wireless mobile services in the United States. In the early 1980s, the FCC allocated 50 MHZ of spectrum in the 800 MHz frequency band for two competing cellular systems in each of the 306 US metropolitan service areas and the 428 rural service areas. Beginning in 1995, the FCC allocated an additional 120 MHz of radio spectrum in the frequency band from 1850 to 1990 MHZ for the provision of personal communications service ("PCS"), a type of wireless mobile telephone service. The FCC divided the US into PCS markets based on Rand McNally's 493 basic trading areas, all of which are included in 51 major trading areas. In 1996, one Specialised Mobile Radio spectrum licensee began offering wireless mobile telephone services, comparable to that offered by cellular providers. By 1997, PCS providers began offering digital service. In March 2001, the FCC auctioned off additional spectrum in the 700 MHz band. Since the end of 1999, five of the 25 largest operators have merged with other carriers, and one joint venture has been formed. Currently there are six wireless carriers with footprints that cross the United States. No one carrier covers the entire United States. In 1999, 86 million people in the US subscribed to wireless telephone service, a nationwide penetration rate of approximately 32 percent, generating $40 billion in revenues. Eighty-eight percent of the total US population, have access to three or more different operators offering mobile telephone service. Sixty-nine percent of the US population live in areas with five or more mobile telephone operators competing to provide service. And four percent of the population can choose from among seven different mobile telephone operators. The average price of mobile

telephony in the United States has fallen substantially over the past several years. At present, these services are used by consumers to provide mobility as a complement to the basic local exchange services offered by incumbent LECs, rather than as a substitute for wireline services in the home or office.[22]

Review of Enforcement Actions. Over the past five years the United States, under the auspices of the US Department of Justice and the Federal Trade Commission, have investigated a number of telecommunications mergers to determine whether the proposed acquisition will substantially lessen competition in a relevant market in violation of Section 7 of the Clayton Act.[23] The US agencies examine whether the merger will lead to higher prices, lower service quality or less innovation than would be the case if the proposed acquisition were not consummated. Acquisitions examined have included those among regional Bell operating companies, incumbent LECs, major long distance carriers, cable companies, broadcast satellite assets and Internet service providers. (In those matters where telecommunications licenses must be transferred as part of the proposed acquisition, the parties cannot consummate the merger until the FCC grants the license transfer applications.)

Bell Atlantic-NYNEX. In April 1997, after a year-long investigation, the Department of Justice decided not to challenge the merger of two contiguous regional Bell operating companies, Bell Atlantic Corporation in the mid-Atlantic region and NYNEX in the Northeast Atlantic region. The investigation focused on the likelihood and efficacy of competition between the two RBOCs in the metropolitan New York City market for local services to residential and business customers.

British Telecom-MCI. In July 1997, the Department sought to modify and extend an existing 1994 consent decree in order to resolve the Department of Justice's concerns about British Telecommunications plc's proposed acquisition of MCI Communications Corporation. (The earlier settlement resolved the Department's concerns about British Telecom's acquisition of a 20 percent interest in MCI.) The modifications were needed in order to continue to ensure that British Telecom could not use its market power in the United Kingdom to discriminate in favour of MCI in the market for international calls between the United States and the United Kingdom. The modifications increased the amount of information the new company would provide to the Department to facilitate the detection of discrimination; required the new company to report complaints of US competitors to US and UK regulatory agencies; prohibited British Telecom from providing confidential information from other telecommunications providers to MCI or the joint venture; gave the Department access to the new company's documents and personnel by naming it as a party to the decree; and extended the term of the decree. The Department withdrew these proposed modifications after the parties to the proposed merger abandoned the deal.[24]

WorldCom-MCI. In July 1998, WorldCom, Inc. resolved the Department of Justice's concerns about its proposed acquisition of MCI Communications Corporation, the second largest telecommunications provider in the United States, by agreeing to sell MCI's Internet backbone business, internetMCI, to Cable and Wireless plc. The merger as originally proposed would have given the combined entity control of a large share of the Internet backbone as measured by the proportion of US Internet backbone traffic, giving the company the ability and incentive to cut off or reduce the quality of interconnection that it provided to its rivals in this unregulated market. During this investigation, there was a high degree of co-operation between the Department and the European Union.

AT&T-TCI. In December 1998, AT&T resolved the Department of Justice's concerns about its proposed merger with Tele-communications Inc. ("TCI"), the second largest US cable operator, by agreeing to place in a trust and eventually divest TCI's 23.5 percent interest in Sprint PCS, a mobile wireless telephone business. AT&T was the largest provider of national mobile wireless telephone services in the United States at that time.[25]

Primestar. In May 1998, the Department of Justice filed a civil antitrust suit to block Primestar Inc. from acquiring the direct broadcast satellite ("DBS") assets of News Corporation Limited and MCI. DBS is a service that uses orbiting satellites to transmit video programming directly to a subscriber's home. Acquisition of the orbital satellite slot owned by News Corp./MCI would have allowed five of the largest cable companies in the United States, which controlled Primestar, to control the only remaining DBS orbital slot of the three licensed by the FCC, and thus protect their monopolies by foreclosing more new video competition by DBS operators. The parties abandoned the deal after the suit was filed.[26]

SBC-Ameritech-Comcast. In March 1999, SBC Communications, Inc., a regional Bell operating company, resolved the Department of Justice's concerns about SBC's proposed acquisition of Ameritech Corporation, another regional Bell operating company, and Comcast Cellular Corporation by agreeing to divest one of the two cellular telephone systems in 17 markets in the Midwest. The Department sought these divestitures because these markets for wireless mobile telephone services were already highly concentrated and the proposed acquisitions would greatly increase concentration, giving SBC the ability to increase prices, reduce the quality and quantity of service and refrain from making network improvements.[27] The Department also required divestiture of Ameritech's systems in certain markets due to Ameritech's plans to compete with SBC in SBC's own region by marketing a bundled package of local and long distance services to Ameritech's cellular customers located in SBC's local telephone service area.

AT&T-British Telecom. In April 1999, after a nine-month investigation, the Department of Justice declined to challenge the creation of a joint venture by AT&T and British Telecom that combined the international assets of both companies.

Bell Atlantic-GTE-Vodaphone. In December 1999, Bell Atlantic Corporation (a regional Bell operating company now known as Verizon) resolved the Department of Justices' concerns about Bell Atlantic's proposed acquisition of GTE Corporation, an incumbent LEC and wireless mobile telephone service provider, and Bell Atlantic's proposed partnership with Vodaphone, a U.K. mobile telecommunications company, by agreeing to divest the companies' interests in one of two overlapping wireless businesses in 96 markets in 15 states.[28]

AT&T-Media One. In May 2000, AT&T Corporation agreed to resolve the Department of Justice's concerns about AT&T's proposed merger with MediaOne Group by divesting Media One's interest in Road Runner, the second largest provider of broadband Internet access. The Department sought divestiture of Roadrunner because AT&T owned a controlling interest in Excite@ Home, the largest provider of broadband Internet access, and the combination of interests in both Roadrunner and Excite@Home would have substantially lessened competition in the aggregation, promotion and distribution of broadband content.[29]

WorldCom-Sprint. In June 2000, the Department of Justice filed a civil antitrust suit to block the merger of WorldCom, Inc. and Sprint Corporation, two of the three largest US telecommunications companies. The Department asserted that the proposed merger would reduce competition in many markets: long distance services sold to residential consumers in the United States; Internet backbone services; international long distance services; international private line services; data network services to large business customers in the United States; and custom network services for very large US businesses. The European Union also opposed this merger on the Internet issue. The parties abandoned the transaction in July 2000.[30]

SBC-BellSouth. In August 2000, SBC Communications, Inc. and BellSouth Corporation resolved the Department of Justice's concerns about the combination of SBC's and BellSouth's domestic wireless assets in a proposed joint venture by agreeing to divest their interests in one of two overlapping wireless businesses in 16 markets in three states.[31]

AOL-Time Warner. In December 2000, the Federal Trade Commission ("FTC") accepted a proposed consent decree from America On Line, Inc. ("AOL"), the largest US Internet service provider, and Time Warner, Inc., a media conglomerate comprising a cable television system that serves 20 percent of US households, cable programming networks, publishing and recording interests and a film library. The decree resolved the FTC's concerns that the proposed merger would lessen competition in the residential broadband Internet access market, undermine AOL's incentives to promote digital subscriber line ("DSL") broadband Internet services as an alternative to cable broadband service and restrain competition in the nascent market for interactive television. AOL Time Warner is required to open Time Warner's cable system to at least three non-affiliated cable broadband Internet service providers and cannot interfere with the content passed along by non-affiliated ISPs. AOL Time Warner is also required to market and offer DSL services to subscribers in Time Warner's cable areas, and to offer the same price for its AOL service on DSL in its own TW Cable areas as it does elsewhere.[32] The FTC and the European Union co-operated in this investigation, although the European Union's resolution addressed different issues.

NOTES

[1] Pub. L. No. 104-104, 110 Stat. 56.

[2] In 1982, AT&T entered into a consent decree with the Department of Justice settling the Department's monopolisation claims. As part of the settlement, AT&T divested its local Bell operating companies and retained its long distance business. The 22 local Bell operating companies were organised into seven regional Bell operating companies which were prohibited from providing long distance services.

[3] Incumbent LECs include the RBOCs and other large incumbents, but permits certain exceptions for small, rural LECs.

[4] 47 U.S.C. § 251(c)(2).

[5] 47 U.S.C. § 251(c)(3); *see* 47 U.S.C. § 153(29) (defining network element).

[6] 47 U.S.C. § 251 (c)(4).

[7] 47 U.S.C. § 252(e)(4), (6).

[8] 47 U.S.C. § 252(d) (1-3). In April 2001, the FCC determined that telecommunications traffic delivered to Internet service providers ("ISPs") was not subject to reciprocal compensation because it is interstate access traffic. At the same time, the FCC established a transitional cost recovery mechanism for the exchange of this traffic to phase out such payments over time. *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996; Intercarrier Compensation for ISP-Bound Traffic*, CC Docket Nos. 96-98 & 99-68, Order On Remand and Report and Order, available at <http://www.fcc.gov/ Bureaus/Common_Carrier/ Orders/2001/fcc01131.pdf>.

[9] 47 U.S.C. § 252(d)(1).

[10] *American Tel. & Tel. v. Iowa Utils. Bd.*, 525 U.S. 366, 397 (1999).

[11] *FCC v. Iowa Utils. Bd., cert. granted*, -- U.S. --, 121 S. Ct. 878 (Jan. 22, 2001) (Docket Nos. 00-587, 00-590) .

[12] *FCC v. Iowa Utils. Bd., cert. granted*, -- U.S. --, 121 S. Ct. 878 (Jan. 22, 2001) (Docket Nos. 00-587, 00-590).

[13] 47 U.S.C. § 271(c)(2)(B)(i)-(xiv). The fourteen requirements are as follows: (1) interconnection at rates and terms that comply with Sections 251(c)(2) and 252(d)(1); (2) access to network elements (which includes the necessary operational support systems) at rates and terms that comply with Sections 251 and 252; (3) access to poles, ducts, conduits and rights of way; (4) unbundled loops; (5) local transport; (6) local switching; (7) access to 911, E911 (emergency services), directory assistance and operator services; (8) white pages listings for CLEC customers; (9) compliance with the numbering administration guidelines; (10) access to the databases and signalling needed to route calls; (11) number portability (the customer's ability to keep a phone number when changing carriers); (12) local dialling parity (having to dial the same number of digits for calls through all carriers); (13) reciprocal compensation; and (14) access to resale services.

[14] 47 U.S.C. § 271(d)(3)(C). The FCC must also determine that the RBOC has satisfied the so-called Track A/Track B requirements, which state that at least one facilities-based CLEC is operating in the state (Track A) or that none have asked to do so (Track B), 47 U.S.C. § 271 (c)(1)(A), (B); that there is an existing approved interconnection agreement or a general statement of available terms and conditions, 47 U.S.C. § 271(c)(2)(A); that the RBOC will provide long distance service through a separate affiliate, 47 U.S.C. § 272; and that the RBOC has complied with the requirements of Section 251, 47 U.S.C. § 271(c)(2)(B)(i), (ii) & (xiv).

[15] These applications are: SBC-Oklahoma I (1997); Ameritech-Michigan (1997); Bell South-South Carolina (1997); Bell South-Louisiana I (1998); Bell South-Louisiana II (1998); Verizon-New York (1999); SBC-Texas I (2000); SBC-Texas II (2000); Verizon-Massachusetts I (2000); SBC-Kansas & Oklahoma II (2000) (a joint application); Verizon-Massachusetts II (2001); SBC-Missouri (2001-pending); and Verizon-Connecticut (2001-pending). The Department of Justice's Evaluations of these applications can be found on the Department's website at <http://www.usdoj.gov/atr/public/comments/sec271/sec271.htm>. The Federal Communication Commission's Section 271 Orders can be found on the FCC's website at <http://www.fcc.gov/Bureaus/Common_Carrier/in-region_applications/>.

[16] 47 U.S.C. § 271(d)(3).

[17] FCC Local Telephone Competition: Status as of June 30, 2000 at 1, available at <http://www.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/IAD/lcom1200.pdf.> In 1999, the most recent year for which FCC data are available, CLECs held 5.8 percent of nationwide local revenues. *Trends in Telephone Service, Industry Analysis Division, Common Carrier Bureau, Dec. 2000*, at 9-2, available at < http://www.fcc.gov/Bureaus/Common_Carrier/ Reports/FCC-State_Link/IAD/trend200.pdf>. A more recent survey by a CLEC trade association states that CLECs served 8.2 percent of local telephone lines nationwide as of the third quarter of 2000 and that CLECs held 8.3 percent of the local telecommunications market in terms of revenues as of the fourth quarter of 2000. Association for Local Telecommunications Services Annual Report of the State of the Local Telecom Industry, 2001 at 25, available at <http://www.alts.org/Filings/022001/Annual Report.pdf.>.

[18] *See* FCC Local Telephone Competition: Status as of June 30, 2000 at tbls. 1 & 2.

[19] *Id*.

[20] *See Trends in Telephone Service, Industry Analysis Division, Common Carrier Bureau, Dec. 2000*, at 14-4 to 14-8, available at < http://www.fcc.gov/Bureaus/Common_Carrier/ Reports/FCC-State_Link/IAD/trend200.pdf>; *Statistics of the Long Distance Telephone Industry, Industry Analysis Section, Common Carrier Bureau, Federal Communications Commission, January 2001*, at 35, available at < http://www.fcc.gov/Bureaus/Common_Carrier/ Reports/ FCC-State_Link/IAD/ldrpt101.pdf >.

[21] *See* FCC Universal Service Home Page, available at <http://www.fcc.gov/ccb/ universal_service/welcome.html; *see also, e.g.*, Texas Public Utility Commission Substantive Rule Pertaining to Texas Universal Service Fund Assessment, available at <http://www.puc.state.tx.us/ telecomm/reports/txunfund.cfm#PUCT>.

[22] *Annual [FCC]Report and Analysis of Competitive Market Condition With Respect to Commercial Mobile Services*, Fifth Report at 9, 14, 18-19, available at <http://www.fcc.gov/wtb/reports/fc000289.pdf>.

[23] 15 U.S.C. § 18.

[24] Public documents relating to this matter are available at <http://www.usdoj.gov/atr/cases/mci0000.htm>.

[25] Public documents relating to this matter are available at <http://www.usdoj.gov/atr/cases/indx99.htm>.

[26] Public documents relating to this matter are available at <http://www.usdoj.gov/atr/cases/indx41.htm>.

[27] Public documents relating to this matter are available at <http://www.usdoj.gov/atr/cases/indx123.htm.>.

[28] Public documents relating to this matter are available at <http://www.usdoj.gov/atr/cases/indx133.htm>.

[29] Public documents relating to this matter are available at <http://www.usdoj.gov/atr/cases/indx4468.htm>.

[30] Public documents relating to this matter are available at <http://www.usdoj.gov/atr/cases/indx239.htm>.

[31] Public documents relating to this matter are available at <http://www.usdoj.gov/atr/cases/indx257.htm>.

[32] Public documents relating to this matter are available at <http://www.ftc.gov/opa/2000/12/aol.htm>.

BIAC

The Business and Industry Advisory Committee (BIAC) to the OECD, appreciates the opportunity to submit the following comments on issues relating to telecommunications to the Joint Group on Trade and Competition on competition issues in Telecommunications for discussion at the May 28, 2001 OECD WP2 Roundtable on this issue.

1. Access to the Local loop:

Regulations concerning interconnection should be consistent with the international obligations as set forth in the WTO Reference Paper on Basic Telecommunications Services. Accordingly, interconnection should be provided:

- under non-discriminatory terms, conditions (including technical standards and specifications) and rates are of a quality no less favourable than that provided for its own like services or for like services of non-affiliated service suppliers or other affiliates;

- in a timely fashion, on terms and conditions (including technical standards and specifications) and cost-oriented rates that are transparent, reasonable, having regard to economic feasibility, and sufficiently unbundled so that the supplier need not pay for network components or facilities that it does not require for the service to be provided; and

- upon request, at points in addition to the network termination points offered to the majority of users, subject to charges that reflect the cost of construction of necessary additional facilities.

2. Fixed-to-mobile Relationship:

The principle that should apply to any converging market is that regulation should be kept to a minimum and be limited to establishing full competition, ensuring access to essential facilities, and allocating scarce resources. Traditional forms of regulation should not be automatically applied to new and emerging services.

3. Access for value-added service providers (VANs) including Internet service providers (ISPs):

The Annex on Telecommunications of the General Agreement on Trade and Services requires WTO members to provide VANs, including reasonable and non-discriminatory access to the public telecommunication network (PTN). BIAC supports increased efforts to monitor and enforce the WTO TelecomsAnnex.

One example of unreasonable and discriminatory practices that BIAC members experience that limit competition and impede the growth or data and Internet services is:

- Discriminatory treatment of VANs and ISPs: This practice occurs when a provider of PTN delays leasing facilities, provides lower standards or service and repair, or provides access to PTN services and facilities under discriminatory terms and conditions to unaffiliated VANs and ISPs vis-à-vis similarly situated affiliated or preferred VANs and ISPs or their retail customers. For example;

- A provider of PTN may offer interconnection services at flat-rate wholesale prices to its affiliated ISP, which enables that ISP to offer flat-rate retail pricing to its Internet customers. In contrast, the same provider of PTN may offer interconnection services to unaffiliated ISPs only at metered-rate (per minute) wholesale pricing. The unaffiliated ISP then faces the difficult choice of either not offering flat-rate retail prices for its ISP services and losing customers, or offering flat-rate retail prices and bearing the risk that the per minute call origination fees charged by the PTN will exceed the revenue from flat-rate prices charged to Internet customers.

- A provider of PTN may offer discount calling plans to retail customers who use the services of its affiliated ISPs, but not to customers who use unaffiliated ISPs, or not to customers of unaffiliated ISPs that interconnect to the PTN through competing local carrier. These types of discriminatory retail pricing have a direct negative impact on unaffiliated ISPs. They may also discourage unaffiliated ISPs from using competing local carriers and thus inhibit competition in the market for basic telecommunications infrastructure and service.

Denial of access to public telecommunications networks and services: This practice occurs when a provider of PTN delays or refuses to lease facilities to unaffiliated VANs or ISPs, notwithstanding their legal obligations to provide such service. For example,

A provider of PTN may delay or deny provision of digital trunks, leased lines or other network connections to unaffiliated ISPs or VANs, effectively precluding them from providing valuable services to their customers. At the same time, an ISP or VANs affiliated with the PTN faces no such problems in obtaining digital trunks or leased lines to serve its customers and gain market share.

4. General Comments

Several pricing models are used, and one should not be the prescriptive guiding principle.

All definitions such as “essential facilities” should be consistent with international negotiated policy language.

AIDE MEMOIRE OF THE DISCUSSION

By the Secretariat

1. Introduction

The roundtable discussion was divided into two major parts. The first part dealt with regulatory developments and the second part with competition and antitrust issues.

2. Regulatory Developments

Given the importance of the EC rules to EU, EEA and Eastern European countries, the Chairman asked the Commission summarise the key recent developments and the current proposals for changes to the telecommunications regulatory regime in the EU.

The European Commission has started a second phase in the deregulation process. This second phase will involve consolidating the existing framework and strengthening the application of the mainstream competition rules in this sector. The Commission proposed in June 2000 a package of five directives to overhaul the entire telecommunications regime of the EC. These five directives, which consolidate and clarify the 25 existing texts, are the Universal Service Directive, the Data Protection Directive, the Framework Directive, the directive on Access and Interconnection and the so-called Authorization Directive.

The main change of the new directives is to move away from sector-specific regulation and towards competition based concepts. From now on, regulatory obligations will only apply to undertakings which are dominant within the meaning of article 82 of the EC Treaty (as interpreted by the European Court of Justice ("ECJ")). This is a move away from the sector-specific notion of Substantial Market Power ("SMP"), which was based on arbitrary market share thresholds (25 percent of the relevant market), towards a concept which is well-known to antitrust lawyers and has been applied for 40 years by the ECJ, the EC and by national competition authorities.

Another feature of the new proposals is that national regulators will not have unlimited power to impose regulatory obligations. There are only four so called *ex ante* obligations, which are listed in the access and interconnection directive. These can only be applied to an operator which has market power. The only exception to this rule is in relation to access to set-top box decoders. There, the Community legislators proposed that access to set-top boxes will be guaranteed irrespective of whether or not the undertaking controlling the set-top box is or is not in a dominant position.

Another controversial feature of the regulatory package is the proposal to grant the Commission a kind of veto right over the decisions of National Regulatory Authorities ("NRAs"). This provision is set out in article 6 of the Framework Directive. The idea is, rather than risk having 15 regulators in 15 member states acting in a divergent manner, the Commission would keep the right to approve draft decisions by NRAs so as to achieve the aim of harmonization of the regulatory regime for telecommunications in the

European Community. At the moment the Council of Ministers prefers that the Commission maintain an information role (i.e., that the Commission should be informed and consulted on draft measures by NRAs, but without a power to actually intervene and dictate the outcomes of the decisions). The European Parliament is, for the moment, a keen supporter of the Commission acting as a last instance authority with regard to the application of the *ex ante* regulatory obligations.

In April 2001 the Commission completed a document called the Draft Guidelines on Market Analysis and the Calculation of SMP. These guidelines are a response by the Commission to the request by the Council of Ministers in December 2000 to explain how the Commission sees the application of competition law to the telecommunications sector. The guidelines have two main chapters. The first addresses the definition of the relevant market in the context of the electronic communications sector and the second is on dominance, including both single and joint (or collective) dominance. The Commission proposes that the new regulatory framework be based on the Treaty's competition rules, which provide for the abuse of both single and a collective (or joint) dominant position. Thus the new regulatory framework introduces the concept of collective or oligopolistic dominance as a possible tool for regulating certain markets which exhibit oligopolistic features.

Germany is one country in the EU whose liberalization process has been very successful. The Chairman asked whether the new entrants are facilities-based and about the role of the Bundeskartelamt ("BKA").

Germany agreed that the liberalization of the telecommunications market in Germany has been very successful. The new competition is not, for the moment, primarily infrastructure based (it primarily involves resale of services) but, nevertheless, competitors have invested 2.5 billion euros in infrastructure over the last two-three years. In addition, the operators paid around 50 billion euros for UMTS licenses and will invest another 15-30 billion euro to build the related infrastructure. Over the last one-two years Deutsche Telekom ("DT") has voluntarily sold its stake in the cable TV network to competitors who are now starting to invest in the creation of an alternative infrastructure in two Länder (North-Rhine Westphalia and Hessen) which will provide high-speed internet and telephone services via cable.

One reason for the success of the liberalisation is that Germany had, from the beginning, call-by-call pre-selection and the possibility for new entrants to use the billing facilities of the incumbent. Another factor may have been the prices of the incumbent. From the first day of competition (1 January 1998) a competitor was able to offer calls at one third the price of DT, together with the possibility to bill through the incumbent and to offer services on a call-by-call basis. The level of the interconnection tariffs was not as important a factor as the level of consumer prices of DT. Consumers have been the winner.

The role of the BKA in the reform process has primarily been one of competition advocacy. The BKA has always supported the reform process. In addition, the BKA has a voice in some of the regulatory decisions of the regulatory authority (RegTP). For example, in pricing decisions, or decisions concerning the relevant market, the BKA must be heard and can give a statement. This ensures consistency of approaches.

From Germany, the Chairman moved to the US, noting that in previous CLP discussions of the reforms in the US, the "section 271" checklist did not allow entry by regional Bell operating companies ("RBOCs") into long-distance because there was no competition in local markets, but more recently there has been some important instances of RBOC entry into long-distance. Competing local exchange operators already have 17 percent of the market for local business lines which is probably higher than in any other country – but is this entry primarily through resale or through the development of new infrastructure?

The 1996 Telecommunications Act changed the competitive landscape in the USA. But legal challenges to the Act were predictable and have occurred. The two primary legal challenges have been, first, to the concept of unbundling the incumbent's network and, second, to pricing. Both of these challenges are still in the process of being resolved by the US Supreme Court.

The unbundling issue was divided into two parts: First, there was a question whether the incumbents needed to provide combined elements (i.e., the loop, switch and transport) as they are already combined in their own local networks. That issue was resolved by the Supreme Court in a decision in January 2000 which found that they did need to combine previously combined elements. On review to the US Supreme Court is the question of whether incumbents need to provide previously uncombined elements that the competitors want but that the incumbent does not already combine in its network.

The pricing issue was also divided into two parts. In the first part the Supreme Court, in its January 2000 decision, held that the FCC had the authority to regulate the broad methodology of pricing (while specific prices were set by the individual state commissions). The second part of the pricing issue related to the particular methodology chosen by the FCC. The incumbents favor historical cost. The FCC and most of the state commissions have set prices for unbundled network elements using forward looking costs. This issue will probably be decided by the Supreme Court during its 2001-2002 term.

In regard to the entry of local operators in long-distance, two of the four existing RBOCs have entered long-distance. Verizon, which operates in the Northeast, has the authority to offer long-distance in New York and Massachusetts. SBC, which operates in the Southwest, has authority to offer long-distance services in Texas, Kansas and Oklahoma. There are currently applications pending for a couple more states and a large number of applications are expected in the next year. Verizon, which has been in the New York market for the last year, has a penetration rate of about 20 percent in the long-distance market.

The New York market is particularly open to local competition. New entrants use different modes of entry. Some new entrants use all their own facilities such as cable TV networks (although this is not particularly easy). Some entrants rely on unbundled elements and combinations of elements where this is available. Finally, some entrants use resale, although there is a movement towards the use of own-facilities, combined with certain unbundled elements such as the local loop.

Although entrants do have a penetration of 17 percent of the total business lines, they focus on the large and medium-sized businesses. There is less competition for smaller businesses and in residential areas. This focus on larger businesses is a result of two factors: the higher density of urban centers (where most businesses are located) which lowers average infrastructure costs and the fact that business accounts are more lucrative than residential accounts. As regards wireless local loop ("WLL"), the current constriction in the capital markets has been problematic for WLL competitors, but the long-term future is probably good.

The Chairman asked Korea to explain why there has been substantial entry into international calls compared with the market for domestic long-distance, and to explain the relationship between the KFTC and the KCC.

In Korea, the telecommunications sector is governed by the Telecommunications Business Act ("TBA"). According to the Act, the telecommunications sector is divided into three components: (*a*) facilities-based services (local, long-distance, international, leased line services and wireless services such as cellular and PCS); (*b*) special services (mainly composed of international leased lines, voice resale and internet telephony); and (*c*) value-added services (data communications and Internet services). The licensing requirements are different for each of these three categories. Authorization is required for facilities-based providers, registration for special service providers and notification for value-added

providers. Licenses for facilities-based services are differentiated by the type of service involved (such as local, long-distance and international), so licensees need to apply for multiple licenses if they wish to offer a combination of services. These licensing requirements have some anti-competitive effect on the market.

There has been extensive entry in the international voice market because obtaining a license is easier than in facilities-based services, since only registration is required. Entry in long-distance market has been less, in part due to the steadily shrinking demand for long-distance service as demand shifts to the mobile phone service. The price competitiveness of domestic long-distance is often not large enough to outweigh the convenience of mobile telephony service.

Regarding the relationship of the KFTC and the Korean Communications Commission ("KCC"). The KCC is part of the Ministry of Information and Communications ("MIC") which carries out the dual function of both regulating and promoting the telecommunications industry. The KCC has authority to review cases involving offenses under the Telecommunications Business Act. At the same time the KFTC enforces the competition law in the telecommunications industry. In some areas, such as mergers, business transfers and access to essential facilities, the MIC and the KFTC are required to consult each other. For example, the TBA states that when defining the standards of unfair conduct, the MIC should consult with the KFTC. In addition, the approval of the Minister of Information and Communications is required in the case of business transfers for a facilities-based operator and the merger of an entity with a facilities-based carrier. Lastly, with regard to the access to essential facilities, the KFTC regulates refusal or restriction of use or access to elements essential to the production, supply and sale of goods and services of new competitors without a justifiable reason. The KFTC recently entered into a range of agreements with MIC regarding the application of the TBA to matters related to access to essential facilities in the telecommunications sector and a procedure for the communication of views and notification of the results of actions undertaken.

In Japan the Ministry for Post and Telecommunications asked for advice on how to enhance competition and how to promote the IT revolution. The resulting report made a number of proposals for how competition in telecommunications could be enhanced in Japan. The Chairman asked Japan to explain how much competition there is in local services and to describe some of the policies for promoting local competition set out in the Bill which is currently under discussion in the Diet.

Japan explained that, in 2000, NTT East and West (the local telecommunications incumbents) had a combined share of more than 92 percent of access lines. Recently a new service has been introduced which enables users to select a carrier without dialing extra numbers. This was introduced to facilitate freer access to the local loop. It is expected that the re-registration process will be continued for some time and even after October 2001, at which point customers will be charged 800 Yen ($7-8) for new registration or re-registration.

A draft bill was recently introduced to the Diet. This bill is designed to address competition in the local telecommunications market. In order to promote competition in this market the law introduces new asymmetrical regulations and establishes a universal service fund and a telecommunications disputes settlement commission. The bill allows further deregulation for carriers without market power. The foreign capital ownership restrictions of NTT will also be relaxed. In order to facilitate the laying of cables or other alternative local loop facilities the law aims to promote the installation of high speed broadband network structure such as optical fibre networks. These new measures are in addition to existing obligations on type I carriers (e.g., to establish, announce and authorize articles of interconnection, to unbundle local loop, to collocate, to disclose accounts and so forth). It is believed these measures will foster further local competition.

3. Competition Developments

3.1 Differential Pricing for on and off-Network Calls

Turning to competition issues, the Chairman noted that many countries have dealt with competition cases in the mobile part of the telecommunications industry. Norway describes two cases, the first is a case in which Telenor (the fixed-wire incumbent in Norway) charged less for Telenor customers calling Telenor mobile subsidiary than for calling other mobile operators. The second case involved one mobile operator charging less for calls to its own mobile subscribers than for calls to other mobile customers on other networks. Is differentiating prices between on-network and off-network calls anti-competitive?

For several years the two mobile operators in Norway have charged different prices depending on whether a call is terminated within the network or on another network. At the end of April 2001, NetCom, the smaller operator, launched a new pricing scheme which charges a single price independent of the network called or the time of day. Telenor has not yet responded to this move by NetCom. The NRA is aware that differential pricing may have detrimental effects on competition and will assess whether there is any need for intervention.

The second case concerned a discount scheme called “Family and Friends” mobile which Telenor wanted to initiate. Telenor wanted to offer to its fixed network subscribers a discount for calls from its fixed network to its mobile network. The fixed network customers would receive a discount of 25 percent on calls to three individually defined subscribers in the mobile network (presumably family and friends). The chosen mobile network subscribers would also receive a 25 percent discount on all calls to their counterparts on the fixed network. The participants in the scheme would get an increase in the fixed network tariff equivalent to about 1.5 euros per month. The discount scheme was to be financed by reductions in the origination and termination prices for Telenor’s mobile subsidiary. The Norwegian Competition Authority found that the discount scheme could restrict competition in the markets concerned because competitors would not be able to offer the same scheme without co-operating with Telenor’s fixed network operator. The authority reasoned that: (*a*) a discount scheme should include all mobile subscribers independent of which network they belong to; (*b*) discounts should be given on the basis of differences in the termination and origination prices of different mobile operators; and (*c*) all mobile operators should have the possibility to enter the scheme simultaneously. The competition authority prohibited Telenor from initiating a discount scheme unless it satisfied these principles.

In contrast to other EU countries, there has never been any legal monopoly to provide telecommunications services in Sweden. However, the former Swedish Telecom Administration (formerly Televerket, now Telia) had a de facto monopoly in large parts of the telecommunications sector. In 1993, when the Telecommunications Act and the Competition Act entered into force, Sweden moved from a situation of unregulated monopoly to a situation of regulated competition. As is shown in the Swedish submission, bringing about effective competition has not been entirely free of problems. Both the NRA (which has the abbreviation PTS) and the Swedish Competition Authority have intervened in the market on occasions. In particular, the dominant network owner has in a number of ways tried to foreclose competition.

For example, in 1996, Telia planned to gradually introduce a new service called “transferred call”. According to Telia, it had started to experience a net outflow of calls to other operator’s networks. The new service was designed to make it more troublesome and up to 3 times more expensive per minute for Telia's customers to call customers of other networks. The competition authority investigated and found that this new pricing system would have highly negative effects on competition in the telecommunications

market. If it were more expensive for a Telia subscriber to call another network's subscribers, customers would have limited incentive to subscribe to rival fixed networks. The Swedish Competition Authority was of the view that a dominant operator could be allowed to charge customers different prices if this could be motivated due to higher costs, depending *inter alia* on the type of traffic. But the burden of proof falls on the dominant operator. Telia was unable or did not present that kind of evidence so the Competition Authority decided to prohibit Telia from introducing this pricing scheme. Telia appealed to the Stockholm City Court which, in March 2000, upheld the decision of the Authority. Telia has appealed to the court of final instance (the Market Court), which has not yet issued a decision.

3.2 Mismatch in the Structure of Access and Final Prices

The Chairman noted that several submissions raised a related problem in the Internet market. Most interconnection is priced on a per minute basis, but there is an increasing tendency to offer flat-rate Internet access. This has lead rival operators to complain that they cannot compete with incumbents by offering their own flat rate service while paying a per minute access charge.

In Finland, some local incumbent operators have been accused of causing a price-squeeze in the market for Internet services when the local incumbent operator offers Internet access at a fixed price with unmetered surf time while at the same time only offering interconnection to other Internet service providers ("ISPs") at a per minute rate. The incumbent claims that it does not offer flat rate interconnection to its affiliate ISP. But, if this is true, the affiliate ISP is heavily unprofitable. The Finnish Competition Authority envisages three possible solutions to this problem. The first is to require the incumbent to offer interconnection to the competing operators at a fixed price. The second is to lower the per-minute interconnection prices. The third is to force the incumbent to raise its end-user price (which is not desirable for consumers). At present the incumbents are not willing to consider these solutions, so a court battle is likely.

The Netherlands described a related case in which WorldCom filed a complaint against KPN, the incumbent telecommunications company in the Netherlands, for not giving WorldCom the opportunity to charge end-users of the Internet directly. Internet users have to use KPN lines for dial-up access to the Internet. WorldCom asked for origination services to allow it to provide both metered and flat-fee (unmetered) Internet access services to end-users. The complaint was addressed both to the NMa (the Netherlands Competition Authority) and OPTA (the sectoral regulator). Both authorities have the power to deal with issues related to access and pricing of telecommunications services. In accordance with the recently revised collaboration protocol between OPTA and NMa, it was decided that OPTA would handle the case. The final decision of OPTA was that WorldCom would receive these origination services, although because of capacity concerns, flat rate services will, in the interim, only be available for ISDN services.

The Czech Republic also reported a case involving the pricing of access to an ISP and how these charges were passed on to final prices. The parties to this case were Czech Telecom ("CT), the incumbent telecommunications services provider, and Dattel, a telecommunications services provider in the region of the capital, Prague. In 1999, CT established a new tariff for Internet provision called Internet 1999 which was substantially lower than the ordinary tariffs. Dattel wanted to establish a similar tariff, but CT repeatedly refused to conclude an amendment to the interconnection agreement on the division of fees between the operators. According to the opinion of the Office for the Protection of Competition, CT, refused to accept an agreement with Dattel on such interconnection conditions as would allow CT to provide Dattel with a proportional part of the incomes from calls from customers in the network operated by CT to ISPs connected to the network of Dattel. As a result, Dattel was forced to provide internet calls with lower tariffs free of charge without receiving interconnection fees from CT. The Office imposed on

CT a fine of 2 million Crowns for breach of the competition law. The decision was appealed in 2000 and the decision was upheld by the Chairman of the Office.

The Chairman noted that the issue of the mismatch between the structure of access prices and final prices can arise in any telecommunications market. For example, if the cost of local calls is zero then, when you have a per minute access charge, you may have the same type of problem. A similar problem arose in Australia when Telstra introduced a flat-rate national calling service.

Telstra, the dominant carrier in Australia, introduced a capped $3 long-distance product for residential callers after 7 p.m. One of the smaller competitors (AAPT) complained to the Commission that the interconnection prices that were being charged by Telstra to AAPT would cause AAPT to sell a competing product at a loss if it matched Telstra's prices. The ACCC investigated the allegation and found that under some circumstances particular calls may be sold at a loss by a rival if it matched the Telstra retail price but this was not generally the case. The ACCC took the view that for there to be some sort of general misuse of market power in pricing the anti-competitive pricing behavior had to be broader than a particular call at a particular time of day. Given that you could not purchase this product individually (i.e., given that you could not purchase a single long-distance call of more than 20 minutes in duration after 7 p.m. at night), it is difficult to see how this action prevented the new entrant from competing in the long-distance residential market. The Commission concluded that there was not sufficient evidence to bring a case against the incumbent.

The Chairman underlined that the fact that you have per minute access charges does not imply, per se, that you cannot offer a flat rate internet service – it all depends on how high the per minute charges are and how long the average user is connected to the network. You can always find a balance between a per minute charge and a flat rate if the per minute charge is calibrated to the use of an average customer.

The Secretariat emphasized that this problem does not go away if you simply set the access prices so that competitors can break even on the average caller. The problem is that there are different types of users, with different usage patterns. If the entrant is paying access charges on a per minute basis then, for very heavy users the competitor might end up paying access prices which are more than the flat rate retail price. This would have the effect of preventing the entrant from competing for the heavy users – which might be the most lucrative market.

New entrant telecommunications companies often complain that the incumbent company likes them to remain as dwarfs. One way incumbent firms can keep rivals small is by limiting the range of customers that they can potentially compete for and profitably serve. One way they could do that is by offering access based on variable charges while, at the same time, offering their own customers flat rate charges.

The Chairman asked whether it was necessary to insist on a flat rate access charge every time you have flat rate final charge. Could you not have a system where you identify classes of users, such as heavy users and light users, residential, business and so on, and then set the access price according to the average use in each class?.

Italy acknowledged that they follow an approach based on the use of the average user of a segment of the market. Flat rates are not for the whole market – they are typically for a niche of the market. The approach of the Italian regulator is to identify the niche, determine the average use level in that niche and then check whether a competitor is able, on the basis of the per minute rates that he pays for the intermediate good, to make a similar offer on that market niche. Flat rates have a significant effect on consumer behavior. When flat-rate prices are authorized, it is necessary to monitor the usage of consumers that subscribe to that kind of plan.

Italy is considering an approach like the one proposed by the Secretariat but it is difficult to draw a close relationship between the downstream and upstream markets because the structure of the market is very different. Retail markets involve a relationship between an operator and its customers while wholesale market involve a relationship among operators. These operators pay each other for traffic exchanged on physical links that are limited in capacity. Whatever you try to do to make the relationship between wholesale and retail prices more coherent, it is impossible to have a wholesale price that is flat that can allow the same final price for consumers for a competitor of the incumbent. How can a flat price for interconnection of a certain amount of capacity (typically 2 to 34 Mbps) be related to unlimited final usage? There is a need for some new tools in this area. This is an important issue because flat rate prices are becoming more and more common.

In regard to flat rate prices for Internet usage. Internet usage is a particular kind of usage in the sense that you don't need to be there to consume. You can switch on your computer, connect it to the network and go away. When dealing with a flat price for the Internet we should also think of the incentives for inefficient consumer behavior. In fact there may be an incentive to stay connected to the network all day long. This would just create new costs for the operator and/or limit the possibility of usage by other customers.

The Chairman acknowledged that this is an important issue - that there are capacity constraints in the network and access charges should reflect those constraints, which is an argument against flat rate access charges.

3.3 Fixed-To-Mobile Termination Charges

OECD countries final tariffs in the mobile market are disciplined primarily through competition. But competition may not act as an effective discipline for mobile call termination. For any mobile network, calls to customers of that network are a form of monopoly. When customers choose whether to subscribe to one network or another, not much consideration is given to the price of calls made to that customer. That is why mobile operators tend to compete strongly over the price of calls made from mobile phones but do not compete strongly over mobile termination charges.

The Chairman asked Italy to describe the Telecom Italia ("TIM")/Omnitel case, where a rise in the fixed to mobile charge ("F2M") was accompanied by a similar increase in network interconnection charges between these two mobile operators when a new entrant was appearing on the scene.

In 1999 the Italian Antitrust Authority maintained that the two mobile companies, TIM and Omnitel had seriously breached the competition law prohibition on agreements which restrict competition. In view of the gravity of the infractions the authority decided to impose fines against TIM, (the largest mobile operator in Italy, with 1998 turnover of 11.9 billion lira, 15 million subscribers and 57 percent mobile market share) and Omnitel (1998 turnover of five billion lira, subscriber base of six million and a mobile market share of 43 percent). In this case the analysis focused on the termination charges on calls to TIM and Omnitel's networks as applied to other mobile phone and fixed network operators. The case involved three different violations of the antitrust law.

The authority found that TIM and OPI coordinated conduct in fixing consumer prices which were identical in their structure and level for fixed to mobile communication. In most EC countries the regulatory framework allows fixed operators to determine the price of F2M calls. However, in Italy, the F2M charges were fully under the control of the mobile operators – TIM and Omnitel. Therefore, until the communication authority ruling of the end of 1998 came into force, TIM and OPI were allowed to set

prices for F2M calls subject only to the obligation to inform the regulator about their price schemes. Given these regulatory conditions, the competition authority defined the market for call termination on the mobile networks as a part of the mobile service. The two operators, while competing strongly on the prices of mobile calls, maintained the F2M charges at an agreed common high level. Indeed, TIM and Omnitel regularly met to exchange information on the supply to the public of the F2M segment of the service. The two companies also pursued the objective of keeping the revenue from F2M charges at a high level by jointly attempting to avoid arbitrage based on international triangulation. This conduct was considered by the authority to be a restrictive concerted practice. This conclusion was repealed by the Council of State (the Italian Supreme Administrative Court).

On the other hand, the authority found, (and the Council of State confirmed) that in January 1999, TIM and OPI restricted competition by agreeing to raise simultaneously the F2M charges, issuing a common communication to this effect. The parties also reached agreement to raise the cost of interconnection between their respective networks to the highest of the costs the two networks had separately declared to the Ministry of Communications as the cost to be applied to the third DCS-1800 license. The authority considered this agreement a serious restriction of competition. When Wind (the 3rd mobile phone operator) entered the market both TIM and Omnitel revised their interconnection charges upwards by almost 300 percent, from 170 lira per minute to 500 lira per minute, thus creating a common negotiation base from which to obtain a higher price from the new entrant. Wind was forced to agree with Omnitel and TIM interconnection agreements which provided for prices that corresponded to or were higher than the 500 lira per minute agreed upon by the parties. With respect to the other fixed line operators, TIM and Omnitel applied the same interconnection charges which were equivalent to the prices charged by them to end consumers. These practices led to a loss in welfare to consumers by reducing the benefits of liberalization in the telecommunications market. It also induced new entrants to pass on the costs for such services to end consumers, thus restricting the margin for autonomous action by new operators, reducing the competitive benefits for consumers. The original fines imposed by the authority, of around 100 billion lira for TIM and 50 billion lira for OPI, were reduced by the Council of State to around a total of 55 billion lira.

The European Commission has also looked at the question whether fixed-to-mobile (“F2M”) termination rates can be controlled under standard competition rules (as the proposed new directives would require). The key question is whether the market for termination to a networks own subscribers can be the relevant market for applying the competition rules. Under the new proposals of the Commission there is a question whether the authorities will be able to conclude that the service of termination on a specific network is a relevant market on which that network has a dominant position, and if so, whether excessive or abusive termination rates could be the subject of ex post or ex ante intervention.

Australia is considering regulating F2M on the basis of an index of M2F prices. The Chairman asked the ACCC to explain its special powers in the telecommunications industry – when there is a possibility that anti-competitive behavior is occurring the ACCC can reverse the burden of proof on the dominant firm – but how does this work in practice and how often is it used?

Australia agreed that although access price determinations in Australia usually involve setting an individual price (and not a limit on a basket of prices) there is one exemption to this rule in the case of charges for GSM termination. The ACCC has made a proposal that for each mobile carriers’ GSM termination, the access price must reduce in line with changes to an index of the same carriers’ mobile retail charges. The objective of this is to link price changes in the more competitive market - the retail market - with the less competitive termination charge. This requirement would apply to all the mobile operators. The Commission issued a draft report on this topic in December 2000 and has accepted submissions. A final decision will be taken in subsequent months.

In regard to the special provisions in Australia's competition law, Under the telecommunications-specific regime in the competition law, there is what is called the competition rule, which states that a carrier must not engage in anti-competitive behavior if it has a substantial degree of market power. What is useful about this is that it doesn't require the usual burden of proof that goes with the general anti-competitive provisions of Australian competition law. The effect is to turn the burden of proof around the other way. It is therefore a very powerful instrument. It is a power that has only been used twice. The ACCC has issued competition notices against Telstra with regard to customer transfer processes and Internet peering.

Rather than issue a competition notice, the ACCC has more often chosen to go to court. The objective in taking these actions has not been to seek penalties. The objective is to get behavioral changes that facilitate competition and provide opportunities for the smaller carriers. In every case where the Commission has taken action it has been successful in modifying behavior as desired. In those cases where penalties were sought, the objective is still to get a modification of behavior. For example, in the slamming case (where customers are transferred to another carrier without their knowledge or understanding) two companies each paid penalties of $A500 000 to a public awareness campaign designed to stop the practice. In another case regarding payphones, the ACCC took action against Telstra but suspended the action after Telstra agreed to recommence negotiations with the entrant.

3.4 Mandatory Roaming

In order to stimulate competition in the mobile market, some countries have sought to introduce roaming obligations or capacity licensing. The Chairman asked Finland to explain a case in which Telia mobile tried to expand its network by asking the two national operators (Sonera and Radiolinja) to offer roaming. When these offers were refused the competition authority intervened.

In the late 1990s there were only two nationwide national mobile networks in Finland – Sonera and Radiolinja. A new entrant, Telia, has a license for nationwide GSM-1800 network but it has not been willing to invest in extensive network rollout. Also, Telia had been offered a GSM 900 license but declined because it did not want to build its own network in Finland. During 1998, Telia negotiated national roaming with Sonera and Radiolinja. These negotiations failed and Telia complained to the Finnish competition authority ("FCA"). Telia accused Sonera and Radiolinja of either individually or jointly having abused their dominant position by charging excessive prices for national roaming. In November 1999, Telia and Radiolinja reached a service provider agreement but did not agree on the terms and conditions for national roaming.

The FCA issued its decision on this matter in January 2000. The FCA found that the relevant product market was access to national mobile networks including national roaming, virtual network operator agreements and service provider agreements. The FCA found that Sonera and Radiolinja were not jointly dominant or individually dominant in this market. In particular, Sonera and Radiolinja had not been acting as a single economic entity. The rapid technological development of the mobile networks, the rapidly growing demand for mobile services and the different cost structures and financial resources of Sonera and Radiolinja increased competition between those companies. In the absence of dominance, there was no possibility of a finding of abuse. This case is pending at the Competition Council.

Finland does have sector specific regulation that will give roaming rights to the new 3G mobile operators on a temporary basis to the existing GSM networks - this temporary roaming will be for a maximum of six years.

The Chairman observed that other countries, such as Italy, have mandated temporary national roaming, not only for UMTS but also for the existing GSM systems.

Italy explained why it has chosen mandatory roaming to improve competition in the mobile sector. The Italian choice was to have facilities-based competition in the mobile sector, but in order to induce rapid growth in competition in the whole country from the beginning Italy mandated national roaming for a temporary period. The period was supposed to allow the new entrants time to build their own network. From the introduction of mobile services, the second operator that entered the market had access to roaming from the first operator, the third operator had roaming from the 1st and 2nd operators and so on. A similar choice was made for UMTS services. All the 3G operators that do not hold a license for 2G services have the opportunity to have roaming from 2G operators for a period of time (six years, with a slight differentiation between urban and rural areas) in order to become immediately commercially viable.

The most difficult aspect of mandating roaming is pricing. Italy has mandated cost-oriented roaming. This is proving effective in developing competition but not so effective in developing alternative infrastructure. Operators sometimes prefer to use other operators' networks rather than build their own infrastructure. Recently, one of the operators that had access to roaming for a fixed period of time has chosen to enter commercial negotiations with an existing operator after this period of time has expired.

The Italian regulatory authority is considering undertaking analysis on the number of mobile networks that are commercially viable in Italy. This is important for decisions as to whether or not to mandate site-sharing for UMTS, as in Germany. Although the first and second networks are typically viable, with more networks there can be problems.

Ireland reported on a case which resembles the Finnish case just described. This case was about airtime resale, rather than roaming, but as in the Finnish case, the Irish High Court examined a market in which there were two operators, one of them with 60 percent market share, and concluded that they were not either individually or collectively dominant. This was a private action which originated from a breach of contract dispute. It was not taken by the competition authority but by the party that was refused airtime. This case illustrates some of the important things that will have to be addressed in the EU context, such as the fact that a market with a few players is not necessarily an oligopolistic market, or the importance of looking at each of the markets on a case by case basis. This case illustrates the difficulty faced by competition authorities or regulators in setting prices for either airtime resale or for roaming in such a way as not to discourage infrastructure-based competition.

In 1999 Meridian was reselling airtime which they purchased at a discount of 40 percent off the retail price from Eircell. The complaint raised a number of issues relating to access in the mobile market. The Irish competition authority identified three categories of access: First, simple airtime resale. Second, a form of indirect access to mobile by way of carrier select or carrier pre-select. Third, a more advanced form of access, mobile virtual network operator ("MVNO"). On the basis of the consultation the Irish competition authority came up with the view that the resale of airtime, while offering advantages to consumers, was of limited benefit and in many cases based on simple arbitrage opportunities and the resellers were not adding a lot of value in the market. Indirect access providers, given that they require some investment in infrastructure, are more likely to be in a position to offer more advanced services. Third, in relation to MVNOs. This has the potential to offer significant benefits to customers. The problem is that no country has actually mandated access for MVNO within the existing EU framework. Where it has been done it has been done on the basis of national legislation. The Irish legislation does not provide for such access. The court has decided that Eircell does not have dominance in the mobile market, so Meridian's case in terms of access to airtime for resale has essentially collapsed. The framework is somewhat gray in relation to the ability of a regulator to mandate access in the form of MVNO, essentially because MVNO involves both interconnection (which is clearly mandated in the case of an operator

designated as having significant market power) and roaming agreements, which are generally considered to be a matter for commercial negotiation.

The Secretariat raised a question about the number of operators that can survive on the market. In the past it has been common to view spectrum scarcity as the primary constraint on the number of mobile operators. However, it seems likely that for many countries the primary limitation is not spectrum but the cost of building out a nationwide network of sufficient geographic coverage to be able to attract customers. It is clear that networks with small geographic scope are not able to compete in the market without some sort of roaming agreements. 3G networks will be more expensive to build out than existing networks because they require more cell sites per unit of area to provide the same geographic coverage. If only a few networks can survive in Italy, other countries face an even bigger problem. Countries like New Zealand have a much lower population density than Italy and have a lower GDP per capita. So mobile networks face higher infrastructure costs per subscriber and lower demand for mobile service. If only a few mobile networks could survive in equilibrium. Would that change public policy towards this sector in any way?

Consider, for example, public policy towards spectrum auctions. Competition authorities have tended to be advocates of auctions as a way of allocating spectrum. But conventional auctions, where the spectrum is allocated to the highest bidders, may not be appropriate when there are only a limited number of potential mobile networks. In the extreme case where only one network could survive because the costs of building out a network were sufficiently large, a spectrum auction would amount to selling a license to act as a monopoly. This is not economically efficient. Rather, if only one firm could survive, it would make more sense to allocate the spectrum through a tendering system where bidders are asked to specify the prices they would charge final consumers. The company offering the lowest (quality adjusted) prices to consumers would win the auction. The broader question is whether conventional auctions make sense when the equilibrium number of networks is small.

The European Commission emphasized that under EC Directives, member states cannot create scarcity or decide to limit the number of licenses. The Licensing Directive 97/13 says clearly that only if member states can prove that there is not enough spectrum available then is refusal to grant a license justified. Member states cannot decide themselves whether they want two, three or five players. At the same time it is important for member states to make as much spectrum available as possible.

3.5 Abuse of Dominance

The Chairman turned the discussion towards of the abuse of dominance cases that have arisen in telecommunications. For example, many countries have had abuse of dominance cases involving ADSL. The Chairman asked Mexico to explain a case in which the incumbent operator Telmex was abusing its dominant position in leased lines and resale.

Mexico reported that Avantel and Alestra, the two main competitors in the Mexican telecommunications market, are subsidiaries of two of the main telecommunications firms in the US, MCI and AT&T. These two companies filed a complaint about three practices of Telmex. The decision of the Competition Commission was that the incumbent was guilty of seriously violating the competition law. One case involved the leasing of lines. Avantel and Alestra seek to offer integrated services to large businesses, including Internet, local, and long distance services. Since Avantel and Alestra do not have their own facilities to all businesses, they need to lease lines from Telmex. Telmex was delaying the provision of dedicated circuits and other lines that these companies were requesting. Telmex also charged them more for the use of its lines than the price charged to its own customers, and thus more than those that Avantel and Alestra could charge to their clients.

The resale market complaint related to the use of long-distance lines between two cities in which competitors do not own a network. New operators do not have lines connecting all cities in part due to the way the market was opened. Initially competition was permitted in only a few cities. Gradually the number of cities has been increased. New operators can only carry traffic originating in cities open to competition, but they have to be able to terminate traffic to any subscribers all over Mexico. In order to do so, they need access to the incumbent's network. In addition, some cities simply do not have enough room for several infrastructure competitors. In this case, Telmex was charging more per minute for the use of that infrastructure than they were charging their own final customers. Following the decision of the competition commission, Telmex was required to suspend the practice and to pay an economic sanction of about $3 million dollars.

The third complaint related to 0800 numbers. These numbers are for free dialing – the cost of the call is paid by the company which hires that number. 0800 numbers can also be dialed from public telephone booths. But, in the case of the 0800 numbers that were held by the competitors to Telmex, Telmex (which also provides public telephone booths) also charged for the price of a local call. This part of the cost was not charged to the final contractor of the number. The competitors of Telmex were planning to use the 0800 numbers to compete in the long-distance market. This is important because a number of long-distance international calls (especially from poor or migrant labor) between Mexico and the US are made from public booths. This put Avantel and Alestra in a difficult position because their clients had to purchase two different cards - one sold by Telmex and the other sold by Avantel and Alestra.

Ireland drew the meeting's attention to two cases relating to unfair cross-subsidisation in the Irish market. The first related to the incumbent's frame relay business. There were complaints that Eircom was in a position to provide a frame relay product using only one leased line (its own retail arm had effective co-location with the network business whereas competing operators were required to obtain a leased line connecting their network to the Eircom network). The incumbent accepted this position and agreed to allocate a notional charge for the second leased line to its frame relay business, solving the discrimination issues.

There followed an investigation based on the allocation of that charge into whether the incumbent was unfairly cross-subsidising its frame relay business. The Irish competition authority conducted an investigation, looking at the cost and revenues going forward on the basis of a NPV technique. The conclusion was that there was no evidence of unfair cross-subsidisation based on the projected revenues and the allocation of costs because the NPV turned out to be positive.

The second case of alleged unfair cross-subsidisation related to the incumbent and its internet ISP affiliates. In this case, the allegation was that at least one of the incumbent's ISPs was heavily loss making. The Irish competition authority initiated an own-initiative investigation into the incumbent's activities towards its ISP. As before, it was found that proving unfair cross-subsidisation is a difficult exercise, particularly in the Internet market where estimating future revenue is quite difficult. Decisions had to be taken as to what constitutes revenue to the ISP. You could take a very wide definition, including e-commerce or multimedia revenues or you could look more narrowly at call revenue transferring to the ISP or advertising revenue. The conclusion was that, based on a narrow definition of revenue, that there was no evidence of unfair cross-subsidisation.

Linked to that complaint were concerns about the provision of leased line capacity and interconnect capacity by the incumbent to other licensed operators. This has been problem for some time. A complaint was made by another licensed operator who was having difficulty obtaining capacity for its own ISP. In this particular case Eircom was found to be in breach of its license in relation to the provision of capacity to one operator.

Spain highlighted two cases which show how the incumbent operator Telefonica has tried to limit competition in those activities which have been liberalized through abuse of its dominant position. The first case involved BT and Telefonica. In March 1996, BT accused Telefonica of violating articles 6 and 7 of the Spanish competition act and article 86 of the EC treaty. The denounced practices consisted of discriminatory and predatory pricing, establishing exclusivity clauses in contracts and linked provision of competitive and monopolized services. Telefonica was a monopolist until November 1995 in basic telephony and carriage services in Spain. Firms demanding international voice communication could obtain it through the basic telephone system monopolized by Telefonica, leasing circuits and services. Telefonica provided these services to the International Money Market Brokers Association. In 1993, BT offered its value-added services to the association, but its offer was rejected. In January 1999, the Tribunal for the Defense of Competition decided that Telefonica had abused its dominant position and imposed a fine of 580 million pesetas, ordering it to desist its infringement.

The second case took place when the monopoly in fixed telephony was lifted in 1998. Retevision, the second operator in the market at that moment accused Telefonica of having infringed articles 6 and 7 of the competition act in Spain. Telefonica has regulated tariffs and cannot offer any discount which the government has not previously allowed. Telefonica was accused of launching an advertising campaign in order to block the services of the new operator by offering discounts it was not allowed to make. The cost of this campaign was estimated at one billion pesetas – the most expensive publicity campaign carried out by Telefonica at that time. The Servicio de Defensa de la Competencia reported to the Tribunal in April 1999 which decided in 2000 that Telefonica had abused its dominant position, imposed a fine of 1400 million pesetas and ordered Telefonica to publish this resolution at Telefonica's expense in the two largest national newspapers.

The Slovak Republic reported a case involving a combination of excessive price, entry discrimination and the restriction of the production of goods to the detriment of users. Slovak Telecom ("ST") is the largest provider of telecommunications services in Slovakia, and owns and operates a telecommunications network covering the whole territory of the Slovak Republic. ST was accused of deliberately changing the specification of its local loop service. This service was previously available to any consumer paying 2000 Slovak Crowns (46 euros). Slovak Telecom changed the specification of this basic service, calling the "new" service Analog Plus. This had the effect of increasing the price from 2000 to 6000 Slovak Crowns for consumers wishing to purchase the same service. If the existing user did not order the new service, ST threatened the installation of frequency filters to the local line limiting the bandwidth to 3400 Hz. Internet users, which want to keep the character and quality of the existing service must therefore now buy the new Analog Plus service which is three times more expensive. According to the Slovak competition authority, this activity of ST amounts to an abuse of its dominant position in local loops and has a direct impact on the market for internet service.

Switzerland also reported an abuse of dominance case involving an internet service provider. This case dates back to 1996 under the former telecommunications regime in Switzerland. At that time, Telecom PTT held a legal monopoly on the telephone network used for access to Internet services. The Competition Committee received a complaint from alternative Internet service providers who were refused the same conditions for the use of the network as Telecom PTT offered to its own ISP, Blue Window. In particular, the other ISPs complained that Blue Window was able to offer a service at a single tariff throughout the country. The competition authority held that there was an abuse of a dominant position by Telecom PTT because it did not offer access at nondiscriminatory terms and conditions to all the ISPs. Telecom PTT was required to offer the same service under the same financial and technical conditions to all the ISPs on the market.

Switzerland went on to discuss the problems with wireless local loop ("WLL"). In Switzerland, WLL is not considered as a product which could replace the copper or fibre local loops throughout the

country. But it could complement or invigorate competition in the market for local loops in some areas. However, the auction for WLL spectrum occurred during the time of "easy money" in the financial markets. This auction earned 400 million euros for the Swiss government for concessions that, in other comparable countries, earned only one million euros six months later. Indeed, the incumbent enterprises exited early from the auctions without winning concessions. The winning bidders paid dearly for their concessions. Today restrictions on the financial markets prevent these companies from investing further in these services. Access to funds through bank loans, financial markets and supplier credit has completely dried up for this application. The little money that is available from the financial markets is currently targeted towards 3G services.

Switzerland also discussed the experience with Cablecom, a cable television network that controls more than half of the market for the provision of television and radio by cable in Switzerland. Several years ago Swisscom held a controlling block of the shares of Cablecom. The Competition Commission recommended that Swisscom be required to sell its shareholding in the cable operator but the government refused because it regarded safeguarding the value of the enterprise as more important than promoting the rapid establishment of competition in the market. But, more recently, Swisscom has voluntarily sold its share in Cablecom for several reasons: First, it was a source of embarrassment that was affecting their brand image. Second, they believed they would need funds to purchase 3G licenses and to build the necessary infrastructure to provide this service. Third, it is not necessarily ideal for an enterprise to invest in two local loops for the development of the means to distribute television programming, which they would have to do if they kept both enterprises. Cablecom was sold to the group NTL which is active in Europe in cable television.

3.6 Mergers

Turning to the issues of mergers, the Chairman noted the US submission provides a detailed summary of the mergers which have occurred in the US regime. The Chairman noted that several US local operators were allowed to merge and questioned whether concerns about potential competition were raised.

The United States began by explaining the system for merger review in the US. Telecommunications mergers in the US are reviewed, as are all other mergers, by either the FTC or the DOJ. The standard used for assessing a merger is whether the merger will substantially lessen competition in a relevant market. Telecommunications mergers are also reviewed by the FCC where there is a common carrier license that has to be transferred. The FCC's standard is whether the merger enhances competition (rather than substantially lessens competition). Therefore the FCC may have different outcomes when looking at the same mergers. A decision is made whether any given merger will be reviewed by either the FTC or the DOJ but not both.

One of the common themes of the mergers set out in the submission is that the merging entities are typically simultaneously in several different parts of the market. Often remedies have involved action in the wireless markets. In at least 4 cases the merging parties were required to divest assets where there were overlapping wireless markets. There have been a number of mergers in the wireless market as companies seek to put together a large national footprint. In many of these cases, individual market shares in the mobile markets have been over 35 percent. The combined assets of the entity have ranged from 75-95 percent in those cases where the authorities have required divestiture.

In both the Bell Atlantic/Nynex merger and the SBC/Ameritech mergers, the Department of Justice conducted long and detailed investigations. The Department decided not to oppose those mergers. The investigations looked at the likelihood of the competitor's entry into the merging parties markets, the effect on potential competition in the markets and the degree of entry that could be expected from other

competitors. Analyzing all those component lead the Department not to take action on those portions of those mergers.

There have also been mergers between Inter-Exchange Carriers ("IXCs"). There are now three major IXCs in the US: AT&T, Sprint and MCI. Important IXC mergers included WorldCom/MCI and WorldCom/Sprint. The major focus of concern in both of these mergers was the Internet backbone market. The DOJ did not oppose the WorldCom/MCI merger when the parties, before presenting the transaction, divested MCI's internet backbone business. The DOJ opposed the WorldCom/Sprint merger by filing a complaint, and later the parties abandoned the transaction. The EU also opposed this transaction because it would have reduced competition in a number of markets including long-distance, international private lines, data network services and some custom network services.

Another group of merger cases involve competition in the cable markets. The DOJ filed a complaint against a group called Primestar (a group of 5 cable providers) when they attempted to purchase the assets of News Corp and MCI which owned the last orbital slot that could be used to provide Direct Broadcast Satellite services. The parties later abandoned that transaction. In the AT&T/MediaOne merger there was a vertical concern. The DOJ required MediaOne to divest its broadband internet access service due to concerns that having two broadband internet access service providers together would have lessened competition in the aggregation, promotion and distribution of broadband content.

The FTC looked at similar issues in the AOL/Time Warner deal. This case involved a number of concerns, including the effect on competition in the residential access market, that the combined entity would not promote DSL in the areas where Time Warner had its cable operators and that they would restrain competition in the nascent interactive TV market. A number of conditions were imposed on that merger before it was approved by the FTC. Specifically AOL-TW has to open its cable system to three non-affiliated broadband ISPs, they cannot interfere with the content of those providers and they have to market and offer DSL services in the areas where Time Warner has its cable operations at the same rate that they would offer DSL services in other areas.

A spokesman from BIAC, commenting on the Secretariat's background paper noted that, with respect to access to the local loop, BIAC believes that regulations concerning interconnection should be consistent with the international obligations set forth in the WTO reference paper on basic telecom services. Accordingly interconnection should be provided: (*a*) on non-discriminatory rates, terms and conditions and technical standards and specifications; (*b*) in a timely fashion, on terms, conditions and cost-oriented rates that are transparent, reasonable, have regard to economic feasibility and are sufficiently unbundled so that the access seeker need not pay for network components or facilities that it does not require the service to be provided; (*c*) interconnection should be provided upon request at points in addition to the network termination points offered to the majority of users subject to charges which reflect the cost of construction of necessary additional facilities.

With respect to fixed-to-mobile calls, BIAC believes that the principle that should apply to any converging market is that regulations should be kept to a minimum and should be limited to establishing full competition, ensuring access to essential facilities and allocating scarce resources. Traditional forms of regulation should not be automatically applied to new and emerging services.

With respect to access to value-added service providers including internet service providers, BIAC supports increased efforts to monitor and enforce the WTO telecommunications annex which requires WTO members to provide value-added services. One example of unreasonable discriminatory practices that US Council of International Business member companies experience which limit competition and impede the growth of data and Internet services is discriminatory treatment of value added service providers and ISPs. This occurs when the provider of a telecommunications network delays leasing

facilities, provides lower standards of service and repair or provides access to the communications networks services and facilities under discriminatory terms and conditions to unaffiliated companies or their customers. e.g. a provider of an integrated telecommunications network may offer service at flat rate wholesale prices to its affiliated ISP - which enables that ISP to offer flat retail pricing to its Internet customers. In contrast the same provider of the PSTN may interconnection services to unaffiliated ISPs only at a metered rate wholesale pricing. Further, a provider of the public telecommunications network may offer discount calling plans to retail customers who use the services of its affiliated ISPs but not to customers who use unaffiliated ISPs or not to customers who use unaffiliated ISPs which interconnect to the PSTN through a competing local carrier.

Another BIAC representative noted that the background paper proposes a price floor for the incumbent which is, in some circumstances, based on stand-alone cost. This would, in practice, be unreasonably high and would prevent any form of competition coming from the incumbent.

Turkey reported on the establishment of a new independent regulatory body in telecommunications. The tasks of the new Telecommunications Authority are: to license operators in the telecommunications sector, to establish administrative, financial and technical regulations, to perform a monitoring and oversight function for this regulation, to issue technical standards and to test equipment in accordance with those standards, and to impose administrative and financial measures on those who break the rules and regulations. In addition, a Telecommunications Policy Council has been established as an informal consultative body. The telecommunications authority commenced operations on 15 August 2000.

The Chairman brought the discussion to the end, noting that the sector has come a long way in a few years in the growth of competition. The Chairman also noted the similarity in approach of the regulators and competition authorities. Both aim at introducing greater competition. The Working Party has noted in the past that on occasions regulators speak a different language to competition authorities, but this was not evident in the discussion today. The discussion revealed how many problems are common to many countries, such as abuse of dominance concerns, or the appropriate relation between access prices and final prices. This working party can assist with these problems through sharing experiences and learning from each other. The Chairman concluded by thanking all the guests including representatives of the regulatory authorities and BIAC.

AIDE-MÉMOIRE DE LA DISCUSSION

par le Secrétariat

Introduction

La table ronde est divisée en deux parties principales. La première est consacrée aux faits nouveaux en matière de réglementation, et la seconde aux problèmes de concurrence et aux aspects antitrust.

Faits nouveaux en matière de réglementation

Étant donné l'importance des règlements de la CE pour l'Union européenne (UE), l'Espace économique européen (EEE) et les pays d'Europe orientale, le Président demande à la Commission de rappeler les principaux faits nouveaux et les propositions actuelles concernant les modifications du régime réglementaire des télécommunications dans l'UE.

La Commission Européenne a démarré la deuxième étape du processus de déréglementation. Cette deuxième étape portera sur la consolidation du cadre existant et le renforcement de la mise en œuvre des principales règles de concurrence dans ce secteur. La Commission a proposé en juin 2000 un ensemble de cinq directives visant à réformer l'ensemble du régime des télécommunications de la CE. Ces cinq directives, qui unifient et clarifient les 25 textes en vigueur à ce jour, sont : la Directive sur le service universel, la Directive sur la protection de l'information, la Directive sur le cadre réglementaire, la Directive sur l'accès et l'interconnexion et la Directive dite sur les autorisations.

La modification essentielle apportée par ces nouvelles directives consiste à sortir du cadre de la réglementation propre au secteur considéré et à s'orienter vers des notions fondées sur la concurrence. Désormais, les obligations réglementaires ne s'appliqueront qu'aux entreprises dominantes au sens de l'article 82 du traité de la CE (tel qu'il est interprété par la Cour de Justice des Communautés européennes - CJCE). Il s'agit d'un abandon de la notion propre au secteur de « puissance significative sur le marché - PSM », qui était fondée sur des seuils arbitraires de parts de marché (25 pour cent du marché concerné), au profit d'une notion bien connue des juristes spécialistes des affaires antitrust et appliquée depuis 40 ans par la CJCE, la CE et les autorités nationales chargées de la concurrence.

Autre caractéristique de ces nouvelles dispositions : les régulateurs nationaux n'auront plus un pouvoir illimité d'imposer des obligations réglementaires. Il n'existe que quatre obligations dites *ex ante,* qui figurent dans la Directive sur l'accès et l'interconnexion. Elles ne peuvent s'appliquer qu'à un opérateur possédant une puissance de marché. La seule exception à cette règle concerne l'accès aux boîtiers décodeurs. Dans ce cas, les législateurs de la Communauté ont proposé que l'accès aux boîtiers décodeurs soit garanti, que l'entreprise contrôlant le boîtier décodeur soit ou non en position dominante.

Une autre caractéristique de l'ensemble de la réglementation, sujette à contestation, concerne la proposition d'accorder à la Commission une sorte de droit de veto sur les décisions des autorités réglementaires nationales (ARN). Cette disposition figure dans l'article 6 de la Directive sur le cadre

réglementaire. L'objectif est d'éviter de prendre le risque de laisser les 15 régulateurs de quinze États membres agir de manière divergente, en accordant à la Commission le droit d'approuver les projets de décisions des ARN, afin de réaliser l'harmonisation du régime de réglementation applicable aux télécommunications dans la Communauté européenne. A ce jour, le Conseil des Ministres préfère que la Commission garde un rôle d'information (autrement dit, que la Commission soit informée et consultée sur les projets de décisions des ARN, sans toutefois avoir le pouvoir d'intervenir effectivement pour imposer l'aboutissement de ces décisions). Le Parlement Européen se montre actuellement très favorable au fait de laisser agir la Commission en tant qu'autorité compétente en dernier ressort en ce qui concerne l'application des obligations *ex ante* de la réglementation.

En avril 2001, la Commission a élaboré un document intitulé : « Projet de lignes directrices sur l'analyse du marché et le calcul de la puissance sur le marché ». Ces lignes directrices ont été établies par la Commission en réponse à la demande du Conseil des Ministres de décembre 2000, afin d'expliquer comment la Commission envisage l'application du droit de la concurrence au secteur des télécommunications. Les lignes directrices comportent deux grands chapitres. Le premier se rapporte à la définition du marché en cause dans le cas du secteur des communications électroniques, et le second traite de la position dominante, qu'il s'agisse de celle d'une entreprise unique ou d'un groupement d'entreprises (position dominante collective). La Commission suggère que le nouveau cadre réglementaire se fonde sur les règles de concurrence du Traité, qui prévoient les abus de position dominante tant individuelle que collective (ou conjointe). Ainsi, le nouveau cadre réglementaire introduit la notion de position dominante collective ou de domination oligopolistique comme outil éventuel permettant de réguler certains marchés présentant des caractéristiques oligopolistiques.

L'Allemagne est un des pays de l'UE où le processus de libéralisation a été réalisé avec succès. Le Président demande si les activités des nouveaux entrants portent sur les installations et s'informe du rôle du « Bundeskartelamt » (BKA).

L'Allemagne confirme que la libéralisation du marché des télécommunications s'est effectuée avec succès dans ce pays. Le nouveau type de concurrence ne porte pas actuellement en premier lieu sur les infrastructures (il concerne en priorité la revente de services), mais les entreprises en concurrence ont néanmoins déjà investi 2,5 milliards d'euros dans les infrastructures au cours des deux ou trois dernières années. En outre, les opérateurs ont payé environ 50 milliards d'euros pour des licences UMTS et doivent investir 15 à 30 milliards d'euros supplémentaires dans la construction des infrastructures correspondantes. Au cours des deux dernières années, Deutsche Telekom (DT) a vendu ses parts du réseau de TV câblée à des concurrents qui commencent aujourd'hui à investir dans la réalisation d'une infrastructure parallèle dans deux Länder (Rhénanie du Nord-Westphalie et Hesse), destinée à la fourniture des services téléphoniques et Internet à haut débit sur le câble.

L'une des raisons du succès de la libéralisation en Allemagne tient à ce que ce pays disposait, dès l'origine, de la présélection appel par appel, et que les nouveaux entrants pouvaient utiliser les moyens de facturation de l'opérateur historique. Une autre raison possible peut avoir été les prix pratiqués par l'opérateur historique. Dès le premier jour de la concurrence (1er janvier 1998), un concurrent pouvait offrir des appels au tiers du prix de DT, tout en ayant la possibilité de facturer les appels par l'intermédiaire de l'opérateur historique et d'offrir des services sur une base appel par appel. Le niveau des tarifs d'interconnexion avait moins d'importance que le niveau des prix à la consommation pratiqués par DT. Ce sont les consommateurs qui ont été avantagés.

Le rôle du BKA, dans le processus de réforme, a surtout été celui d'un défenseur de la concurrence. Le BKA a toujours apporté son appui au processus de réforme. En outre, le BKA a son mot à dire dans certaines des décisions réglementaires de l'autorité de régulation (RegTP). Par exemple,

s’agissant des décisions relatives aux tarifs ou au marché concerné, le BKA doit être entendu et il peut donner son avis. Cela confère de la cohérence aux démarches adoptées.

Après l'Allemagne, le Président se tourne vers les États-Unis, faisant remarquer que, lors des précédentes discussions du Comité du droit et de la politique de la concurrence au sujet des réformes aux États-Unis, la liste de contrôle de "l’article 271" n'autorisait pas l'entrée sur le marché de l'interurbain des opérateurs Bell régionaux *[regional Bell operating companies - RBOC]*, en raison de l'absence de concurrence sur les marchés locaux ; cependant, il y a eu récemment des exemples importants d'entrées d'opérateurs RBOC sur le marché de l'interurbain. Les opérateurs locaux en concurrence détiennent déjà 17 pour cent du marché des lignes professionnelles locales, chiffre probablement supérieur à celui de tout autre pays - mais on peut se demander si cette pénétration sur le marché est avant tout due à la revente, ou au développement de nouvelles infrastructures.

La Loi de 1996 sur les télécommunications *[1996 Telecommunications Act]* a modifié l'environnement de la concurrence aux États-Unis. Toutefois, il était prévisible que cette loi donnerait lieu à des actions en justice, et c'est ce qui s'est produit. Les deux principales actions ont visé, premièrement, la notion de dégroupage du réseau de l'opérateur historique, et, deuxièmement, la tarification. Ces deux actions encore en cours devant la Cour Suprême des États-Unis.

La question du dégroupage a été subdivisée en deux parties : d'abord, le point de savoir si les opérateurs historiques devaient fournir des éléments combinés (autrement dit la boucle, la commutation et la transmission) tels qu'ils sont déjà combinés dans leurs propres réseaux locaux. La Cour Suprême s’est prononcée sur ce point en janvier 2000, en statuant qu'il était absolument nécessaire de maintenir combinés des éléments qui l’étaient initialement. La Cour Suprême des États-Unis est encore saisie de la question de savoir si les opérateurs historiques sont tenus de fournir aux concurrents qui le désirent des éléments qui n'étaient pas combinés antérieurement et qu'ils n'ont pas encore combinés dans leur propre réseau.

Le problème de la tarification a, lui aussi, été subdivisé en deux parties. En ce qui concerne la première, en janvier 2000, la Cour Suprême a soutenu que la FCC avait le pouvoir de réglementer la méthodologie générale de tarification (alors que des tarifs particuliers étaient établis par les commissions locales d’États). La seconde partie se rapportait à la méthodologie particulière choisie par la FCC. Les opérateurs historiques sont partisans de la méthode des coûts historiques. La FCC, ainsi que la plupart des commissions d’États, ont fixé les tarifs applicables aux éléments du réseau dégroupé en utilisant les coûts prévisionnels. Cette question doit faire l'objet d'une décision de la Cour Suprême pendant la session 2001-2002.

En ce qui concerne l'entrée des opérateurs locaux sur le marché de l'interurbain, deux des quatre RBOC actuels ont déjà pénétré ce marché. Verizon, opérateur du Nord-Est est habilité à fournir les services de l'interurbain dans les États de New York et du Massachusetts. SBC, opérateur du Sud-Ouest, est habilité à offrir ces services au Texas, dans le Kansas et l'Oklahoma. Il existe actuellement des demandes en instance dans deux États supplémentaires, et l'on prévoit l'année prochaine un grand nombre d'autres demandes. Verizon, qui est présent sur le marché de l’État de New York depuis l’année dernière, a un taux de pénétration d'environ 20 pour cent sur le marché de l'interurbain.

Le marché de New York est particulièrement ouvert à la concurrence locale. Les nouveaux entrants emploient différents modes de pénétration. Certains d'entre eux utilisent l'ensemble de leurs installations comme les réseaux de TV câblée (encore que cela ne soit pas particulièrement aisé). D'autres comptent sur des éléments dégroupés et des combinaisons d’éléments là où cela est disponible. Enfin, certains utilisent la revente, bien qu'il y ait une évolution vers l'utilisation des propres installations des opérateurs, conjointement avec certains éléments dégroupés, comme la boucle locale.

Bien que les entrants aient effectivement un taux de pénétration de 17 pour cent sur l'ensemble des lignes professionnelles, ils ciblent le marché des grandes et moyennes entreprises. La concurrence est moindre sur le marché des petites entreprises et des zones résidentielles. Cet objectif prioritaire que constituent les grandes entreprises tient à deux facteurs : la densité plus élevée dans les centres urbains (où se trouvent la plupart des grandes entreprises) qui abaisse le coût moyen des infrastructures, et la rentabilité plus élevée des comptes d'entreprises par rapport aux comptes des zones résidentielles. En ce qui concerne la boucle locale radio (BLR) le resserrement actuel des marchés de capitaux pose des problèmes aux concurrents pour la BLR, mais l'avenir à long terme est probablement favorable.

Le Président demande à la Corée d'indiquer la raison de l'importante entrée sur le marché des appels internationaux par comparaison au marché de l'interurbain national, et d'expliquer la relation existant entre la KFTC et la KCC.

En Corée, le secteur des télécommunications est régi par la Loi sur les entreprises de télécommunications. Conformément à cette Loi, le secteur des télécommunications se décompose en trois parties : (a) les services basés sur les installations (services locaux, interurbains, internationaux, sur lignes louées et services radio tels que téléphone cellulaire et service de communication personnelle) ; (b) les services spéciaux (constitués essentiellement de services sur lignes louées internationales, de revente vocale et de téléphonie Internet) ; et (c) les services à valeur ajoutée (transmission de données et services Internet). Les conditions requises pour l'attribution de licences sont différentes pour chacune de ces trois catégories. Il faut une autorisation pour les entreprises qui fournissent des services basés sur les installations, un enregistrement dans le cas des fournisseurs de services spéciaux et, une notification dans celui des fournisseurs de services à valeur ajoutée. Les licences pour les services basés sur les installations diffèrent selon le type de service concerné (local, interurbain et international), de sorte que les titulaires de licence doivent souscrire plusieurs licences s'ils souhaitent fournir une combinaison de services. Ces prescriptions en matière de délivrance de licences ont pour effet d'entraver dans une certaine mesure la concurrence sur le marché.

La pénétration sur le marché international de la téléphonie vocale a été importante, car l'obtention d'une licence est plus aisée que pour des services basés sur les installations, un simple enregistrement étant requis. La pénétration sur le marché de l'interurbain a été moindre du fait, en partie, de l'effritement régulier de la demande qui s'oriente vers le service téléphonique mobile. La compétitivité des tarifs du service national interurbain est souvent insuffisante pour l'emporter sur la commodité du service téléphonique mobile.

En ce qui concerne la relation existant entre le KFTC *[Korea Financial Telecommunications and Clearings Institute]* et la Commission coréenne des communications *[Korean Communications* Commission - KCC], la situation est la suivante : la KCC fait partie du Ministère de l'information et des communications (MIC) qui est investi de la double mission de réglementer et de promouvoir l'industrie des télécommunications. La KCC a pour mandat d'examiner les cas d'infraction à la Loi sur les entreprises de télécommunications *[Telecommunications Business Act -TBA]*. Parallèlement, le KFTC assure la mise en œuvre du droit de la concurrence dans le secteur des télécommunications. Dans certains domaines, tels que les fusions, les transferts d'activités et l'accès aux installations essentielles, le MIC et le KFTC sont tenus de se consulter. Par exemple, la TBA stipule que, lors de la définition des normes de pratiques déloyales, le MIC et le KFTC doivent se consulter. En outre, l'approbation du Ministre de l'information et des communications est requise en cas de transfert d'activités s'agissant d'un opérateur propriétaire d'installations, ou en cas de fusion d'une entité avec une entreprise de télécommunications propriétaire d'installations. Enfin, en ce qui concerne l'accès aux installations essentielles, le KFTC réglemente le refus ou la limitation, dans le cas de nouveaux concurrents, de l'utilisation ou de l'accès aux éléments essentiels pour la production, la fourniture et la vente de biens et services sans raison légitime. Le KFTC a récemment passé une série d'accords avec le MIC, concernant l'application de la TBA à des aspects liés à

l'accès aux installations essentielles dans le secteur des télécommunications, ainsi qu'une procédure pour la communication des avis, et la notification des résultats des actions entreprises.

Au Japon, le Ministère des postes et télécommunications a demandé conseil sur la manière de développer la concurrence et de favoriser la révolution des TI. Le rapport correspondant a formulé un certain nombre de propositions visant la manière dont la concurrence dans le secteur des télécommunications pourrait être intensifiée au Japon. Le Président demande au Japon de présenter le niveau de concurrence atteint dans les services locaux, et de décrire certaines des stratégies visant à promouvoir la concurrence locale exposées dans le projet de Loi actuellement examiné par la Diète.

Le Japon explique qu'en 2000, NTT Est et Ouest (les opérateurs historiques) détenaient ensemble une part représentant plus de 92 pour cent des lignes d'accès. On a récemment mis en place un nouveau service permettant aux utilisateurs de choisir une entreprise de télécommunications sans avoir à composer de numéros supplémentaires. Ce système est destiné à faciliter un accès plus libre à la boucle locale. Le processus de ré-enregistrement devrait se prolonger encore un certain temps et même au-delà d'octobre 2001, date à laquelle les clients devront payer 800 Yen ($7-8) pour un nouvel enregistrement ou un ré-enregistrement.

La Diète a récemment été saisie d'un projet de loi qui a pour objet de traiter des questions de concurrence sur le marché des télécommunications locales. Pour promouvoir la concurrence sur ce marché, la Loi introduit de nouvelles règles asymétriques et établit un fonds pour le service universel ainsi qu'une commission de règlement des litiges dans le secteur des télécommunications. Ce projet de loi permet une plus importante déréglementation au profit des opérateurs sans puissance de marché. Les restrictions concernant la participation étrangère au capital de NTT seront aussi assouplies. Afin de faciliter la pose de câbles ou d'autres installations de rechange de la boucle locale, la loi vise à promouvoir l'installation de structures de réseau à haut débit et à large bande tels que les réseaux à fibres optiques. Ces nouvelles dispositions s'ajoutent aux obligations existantes pour les opérateurs de type I (s'agissant, par exemple, de créer, annoncer et d'autoriser les articles relatifs à l'interconnexion, de dégrouper la boucle locale, de réaliser la colocalisation, de divulguer des comptes, etc.). On estime que ces mesures vont favoriser la concurrence locale.

Faits nouveaux en matière de concurrence

Tarification différentielle applicable aux appels en réseau et hors réseau

Passant aux questions de concurrence, le Président remarque que plusieurs pays ont eu à traiter des affaires de concurrence dans la partie « mobiles » du secteur des télécommunications. La Norvège évoque deux cas ; le premier, celui de Telenor (opérateur historique de Norvège sur lignes fixes) qui facturait des coûts moins élevés à ses abonnés lorsqu'ils appelaient la filiale mobile de Telenor plutôt que d'autres opérateurs mobiles. Le second cas concernait un opérateur mobile qui facturait, pour les appels à ses propres abonnés, des coûts moins élevés que ceux destinés à d'autres clients de services mobiles sur d'autres réseaux. La tarification différentielle pour des appels en réseau et hors réseau est-elle anticoncurrentielle ?

Depuis plusieurs années, les deux opérateurs mobiles de Norvège facturent des prix différents selon qu'un appel aboutit sur leur réseau ou sur un autre réseau. A la fin du mois d'avril 2001, NetCom, le plus petit des deux opérateurs, a lancé un nouveau système de tarification faisant payer un prix unique, indépendant du réseau appelé ou de l'heure de la journée. Telenor n'a pas encore réagi à cette initiative de

NetCom. L'ARN a conscience du fait qu'une tarification différentielle peut avoir des effets préjudiciables sur la concurrence et va déterminer s'il est nécessaire d'intervenir.

Le second cas concernait un système de remise applicable aux mobiles appelé "Famille et Amis" que Telenor souhaitait introduire. Telenor voulait accorder à ses abonnés au réseau fixe une remise pour les appels de son réseau fixe à son réseau mobile. Les clients du réseau fixe bénéficieraient d'une réduction de 25 pour cent, sur les appels destinés à trois abonnés distincts du réseau mobile (vraisemblablement parents ou amis). Les abonnés au réseau mobile ainsi sélectionnés bénéficieraient aussi, d'une réduction de 25 pour cent sur tous les appels à destination de leurs homologues sur le réseau fixe. Les participants à ce système se verraient appliquer une augmentation équivalant à environ 1,5 euro par mois du tarif d'abonnement au réseau fixe. Le système de remise devait être financé par des réductions des coûts d'origine et de terminaison pour la filiale mobile de Telenor. L'Autorité norvégienne de la concurrence a estimé que ce système de remise pourrait restreindre la concurrence sur les marchés visés, car les concurrents ne seraient pas en mesure d'offrir le même système sans collaborer avec l'opérateur du réseau fixe de Telenor. L'autorité a considéré que : (a) un système de remise devrait inclure l'ensemble des abonnés aux services mobiles, indépendamment du réseau auquel ils appartiennent ; (b) les remises devraient être accordées sur la base des différences de prix de terminaison et d'origine des différents opérateurs mobiles ; et (c) l'ensemble des opérateurs mobiles devrait avoir la possibilité d'adhérer au système simultanément. L'Autorité de la concurrence a interdit à Telenor de lancer un système de remise qui ne respecterait pas ces principes.

Contrairement aux autres pays de l'UE, il n'y a jamais eu en Suède de monopole légal pour la fourniture des services de télécommunications. Cependant, l'ancienne Administration suédoise des Télécommunications (anciennement Televerket, aujourd'hui Telia) jouit d'un monopole de fait dans une grande partie du secteur des télécommunications. En 1993, lors de l'entrée en vigueur de la Loi sur les télécommunications et de la Loi sur la concurrence, la Suède est passée d'une situation de monopole non réglementé à celle d'une concurrence réglementée. Comme l'indique la note présentée par la Suède, la mise en place d'une concurrence effective n'a pas été complètement exempte de problèmes. A la fois l'ARN (désignée par l'acronyme PTS en Suède) et l'Autorité suédoise de la concurrence sont intervenues en certaines occasions sur le marché. Notamment, le propriétaire de réseau dominant a tenté de bloquer la concurrence de plusieurs manières.

Par exemple, en 1996, Telia a projeté de mettre en place progressivement un nouveau service appelé "transfert d'appels". Selon Telia, il commençait à y avoir une sérieuse fuite des appels vers les réseaux de l'autre opérateur. Le nouveau service était conçu pour rendre plus difficile et jusqu'à trois fois plus cher à la minute pour les clients de Telia d'appeler les clients d'autres réseaux. Après enquête, l'Autorité de la concurrence a estimé que ce nouveau système de tarification aurait des effets gravement préjudiciables sur la concurrence sur le marché des télécommunications. S'il était plus cher pour un abonné de Telia d'appeler les abonnés d'un autre réseau, les clients seraient moins enclins à s'abonner aux réseaux fixes concurrents. L'Autorité suédoise de la concurrence a considéré qu'un opérateur dominant pouvait être autorisé à facturer à ses clients des prix différents si cela était justifié par des coûts plus élevés, dépendant, entre autres, du type de trafic. Mais la charge de la preuve incombe à l'opérateur dominant. Telia n'a pas été capable, ou a omis de présenter ce type de justification, si bien que l'Autorité de concurrence a décidé de lui interdire de mettre en service ce système de tarification. Telia en a appelé devant la Cour de la Ville de Stockholm qui a confirmé, en mars 2000, la décision de l'Autorité de la concurrence. Telia a alors porté l'affaire devant le tribunal compétent en dernier ressort (le Tribunal de Commerce) qui pas encore rendu de décision.

Décalage entre la structure de l'accès et les prix finaux

Le Président fait remarquer que plusieurs contributions soulèvent un problème de cet ordre sur le marché de l'Internet. L'interconnexion est en grande partie facturée sur la base d'un tarif à la minute, mais l'accès à Internet tend de plus en plus à être offert à un taux forfaitaire. Il s'ensuit que les opérateurs de la concurrence se plaignent de ne pouvoir rivaliser avec les opérateurs historiques en proposant leur propre service à un taux forfaitaire alors qu'ils payent l'accès à la minute.

En Finlande, certains opérateurs historiques locaux ont été accusés d'écraser les prix sur le marché des services Internet, lorsqu'ils offrent l'accès à Internet à un prix fixe, sans limite de temps de navigation, tout en offrant en même temps l'interconnexion à un tarif à la minute aux autres fournisseurs de services Internet (FSI). L'opérateur historique se justifie en faisant remarquer qu'il n'offre pas non plus l'interconnexion à taux forfaitaire à sa filiale FSI. Mais si c'est exact, la filiale FSI est extrêmement peu rentable. L'Autorité finlandaise de la concurrence envisage trois solutions possibles à ce problème. La première consiste à obliger l'opérateur historique à offrir l'interconnexion à prix fixe aux opérateurs concurrents. La deuxième consiste à abaisser les tarifs à la minute de l'interconnexion. La troisième consiste à contraindre l'opérateur historique à augmenter le prix facturé aux utilisateurs finaux (solution peu souhaitable pour les consommateurs). A l'heure actuelle, les opérateurs historiques ne sont pas enclins à envisager ces solutions, de sorte qu'un recours en justice est à prévoir.

Les Pays-Bas évoquent un cas similaire où WorldCom a déposé une plainte contre KPN, l'opérateur historique de télécommunications des Pays-Bas, pour avoir refusé à WorldCom la possibilité de facturer directement les services Internet aux utilisateurs finaux. Les utilisateurs d'Internet sont obligés d'utiliser les lignes de KPN pour composer les numéros d'accès à l'Internet. WorldCom a demandé des services d'émission d'appel lui permettant de fournir aux utilisateurs finaux des services d'accès à Internet à la fois à temps compté et à forfait (ou à durée illimitée). La plainte a été déposée auprès de la NMa (l'autorité néerlandaise de la concurrence) et de l'OPTA (organisme de régulation du secteur). Ces deux autorités sont compétentes pour traiter les questions relatives à l'accès et à la tarification des services de télécommunications. Conformément au protocole de collaboration entre l'OPTA et la NMa, récemment révisé, il a été décidé que l'OPTA traiterait ce problème. L'OPTA a décidé en fin de compte que WorldCom bénéficierait de ces services d'emission d'appel, bien qu'en raison de problèmes de capacité, les services à forfait soient uniquement disponibles, à titre provisoire, pour les services via le RNIS.

La République Tchèque rend compte aussi d'un cas portant sur la tarification de l'accès aux FSI, et de la manière dont ces redevances ont été répercutées sur les prix finaux. Les parties concernées étaient Czech Telecom ("CT") fournisseur historique de services de télécommunications, et Dattel, prestataire de services de télécommunications dans la région de Prague, la capitale. En 1999, CT a établi un nouveau tarif applicable à la fourniture de services Internet, appelé « Internet 1999 », nettement inférieur aux tarifs ordinaires. Dattel a voulu instaurer un tarif analogue, mais CT a refusé à maintes reprises de conclure un avenant au contrat d'interconnexion, portant sur la répartition des redevances entre opérateurs. De l'avis du Bureau de la Protection de la Concurrence, CT a refusé de passer un accord avec Dattel sur des conditions d'interconnexion qui permettraient à CT de fournir à Dattel une part proportionnelle des recettes tirées des appels de clients du réseau exploité par CT aux FSI connectés au réseau de Dattel. En conséquence, Dattel a été contraint de fournir les appels Internet à des tarifs inférieurs, sans recevoir de redevances d'interconnexion de CT. Le Bureau de la Protection de la Concurrence a infligé à CT une amende de 2 millions de couronnes pour infraction au droit de la concurrence. Cette décision a été confirmée en appel par le président du Bureau en 2000.

Le Président fait remarquer que la question relative au décalage entre la structure des prix d'accès et les prix finaux peut se manifester sur n'importe quel marché de télécommunications. Par exemple, si le coût des appels locaux est nul, alors, quand il y a une taxe d'accès prélevée à la minute, on peut rencontrer

le même type de problème. Un problème analogue est apparu en Australie quand Telstra a introduit un service national d'appel à taux forfaitaire.

Telstra, opérateur dominant en Australie, a mis en service un produit sur l'interurbain limité à $3 pour les appelants résidentiels après 19 heures. L'un des petits concurrents (AAPT) a porté plainte auprès de la Commission australienne de la concurrence et de la consommation *[Australian Competition and Consumer Commission - ACCC]*, alléguant que les prix d'interconnexion facturés à l'AAPT par Telstra l'obligeraient à vendre un produit concurrent à perte, s'il devait aligner ses prix sur ceux de Telstra. L'ACCC après enquête, a constaté que, dans certaines circonstances, des appels particuliers peuvent se vendre à perte chez un concurrent, s'ils sont alignés sur le prix de détail de Telstra, mais que ce n'était généralement pas le cas. L'ACCC a considéré que, pour qu'il y ait en quelque sorte abus de puissance sur le marché au niveau de la tarification, il fallait que le comportement anticoncurrentiel soit de plus vaste portée qu'un appel particulier à une heure particulière de la journée. Étant donné que l'on ne peut acheter ce produit individuellement, (autrement dit, que l'on ne pourrait pas acheter uniquement un appel interurbain pendant plus de 20 minutes après 19 heures), il est difficile de comprendre comment cette disposition a empêché le nouvel entrant de participer à la concurrence sur le marché résidentiel interurbain. La Commission a conclu qu'il n'y avait pas suffisamment de preuves pour intenter une action contre l'opérateur historique.

Le Président souligne que le fait qu'il y ait une taxe d'accès prélevée à la minute n'implique pas, en soi, que l'on ne puisse pas offrir un service Internet à taux forfaitaire -- tout dépend du niveau des taxes à la minute et de la durée pendant laquelle l'utilisateur moyen est connecté au réseau. Il est toujours possible de trouver un équilibre entre une taxe à la minute et un taux forfaitaire, si la taxe à la minute est déterminée par rapport à l'utilisation d'un client moyen.

Le Secrétariat fait valoir que le problème subsiste si l'on se contente de fixer les tarifs d'accès uniquement de façon à ce que les concurrents puissent rentrer dans leurs frais au niveau du client moyen. En fait, le problème tient à ce qu'il existe différents types d'utilisateurs avec différents modes d'utilisation. Si l'entrant paye des taxes d'accès prélevées à la minute, dans le cas de gros utilisateurs, le concurrent pourrait finir par payer des taxes d'accès plus élevées que le prix de détail à taux forfaitaire. Cela aurait pour effet d'empêcher l'entrant de participer à la concurrence pour les gros utilisateurs -- lesquels devraient représenter le marché le plus lucratif.

Les nouveaux entrants du secteur des télécommunications se plaignent souvent du fait que l'opérateur historique apprécie de les voir rester petits. Une façon pour les entreprises historiques d'empêcher leurs rivaux de grandir consiste à limiter la gamme de clients pour lesquels ces derniers peuvent rivaliser et qu'ils peuvent desservir de façon rentable. L'une des façons, dont ils pourraient le faire, serait d'offrir l'accès moyennant des taxes variables, tout en offrant parallèlement à leurs propres clients des tarifs forfaitaires.

Le Président demande s'il est nécessaire d'insister sur une facturation à taux forfaitaire de l'accès chaque fois que le prix final est à taux forfaitaire. Ne pourrait-il pas y avoir un système permettant d'identifier les catégories d'utilisateurs, tels que les gros utilisateurs, les petits utilisateurs, les résidentiels, les professionnels, etc. puis de fixer le prix de l'accès selon l'utilisation moyenne dans chaque catégorie ?

L'Italie reconnaît qu'on utilise dans ce pays une méthode fondée sur l'utilisation d'un segment du marché par l'utilisateur moyen. Les taux forfaitaires ne s'appliquent pas à l'ensemble du marché -- ils sont normalement réservés à un créneau spécialisé de ce dernier. La méthode adoptée par l'organisme régulateur italien consiste à déterminer ce créneau, à établir le niveau moyen d'utilisation dans ce créneau, et à vérifier ensuite si un concurrent est capable, sur la base des tarifs à la minute qu'il paye pour le produit intermédiaire, de faire une offre similaire sur ce créneau du marché. Les taux forfaitaires ont un effet

significatif sur le comportement du consommateur. Lorsque des taux forfaitaires sont autorisés, il est nécessaire de suivre l'utilisation des consommateurs qui se sont abonnés à un tel système.

L'Italie étudie une méthode semblable à celle qui est proposée par le Secrétariat, mais il est difficile d'établir une relation étroite entre les marchés en amont et en aval, étant donné que la structure du marché est très différente. Les marchés de détail impliquent l'existence d'une relation entre l'opérateur et ses clients, tandis que le marché de gros implique une relation entre opérateurs. Ces derniers se rémunèrent mutuellement le trafic échangé sur des liaisons matérielles limitées en capacité. Quoique l'on puisse faire pour rendre la relation entre prix de gros et prix de détail plus cohérente, il est impossible de fixer un prix de gros forfaitaire, qui soit susceptible d'entraîner le même prix final pour les consommateurs dans le cas d'un concurrent de l'opérateur historique. Comment un prix forfaitaire d'interconnexion pour une certaine capacité (généralement de 2 à 34 Mbits/s.) peut-il être lié à une utilisation finale illimitée ? De nouveaux outils sont nécessaires dans ce domaine. Il s'agit d'une question importante, car les tarifs forfaitaires se pratiquent de plus en plus.

En ce qui concerne les taux forfaitaires pour l'utilisation d'Internet, il faut considérer qu'il s'agit d'une utilisation particulière, en ce sens que l'on n'a pas besoin d'être présent pour consommer. On peut brancher son ordinateur, se connecter au réseau et s'en aller. Lorsqu'on a à faire à un tarif forfaitaire pour l'Internet, il faut aussi prendre en compte les incitations à comportement inefficace du consommateur. En réalité, il peut même y avoir incitation à rester connecté toute la journée au réseau. Cela aurait juste pour effet d'engendrer de nouveaux coûts pour l'opérateur et/ou de limiter les possibilités d'utilisation par d'autres clients.

Le Président reconnaît qu'il s'agit là d'une question importante -- qu'il existe des contraintes de capacité sur le réseau, et que les taxes d'accès devraient refléter ces contraintes, argument qui milite à l'encontre de l'application de taxes d'accès à taux forfaitaire.

Charges de terminaison d'appel de réseau fixe à réseau mobile

Le Président ouvre ensuite le débat sur les questions de concurrence sur les marchés de la téléphonie mobile. Dans la plupart des pays de l'OCDE, les tarifs appliqués aux utilisateurs finaux sur le marché de la téléphonie mobile sont régis au premier chef par la concurrence. Mais la concurrence ne peut jouer en tant qu'instrument efficace de discipline pour la terminaison des appels vers les mobiles. Pour tout réseau de téléphonie mobile, les appels vers les clients de ce réseau constituent une forme de monopole. Lorsque les clients choisissent de s'abonner à l'un ou l'autre de ces réseaux, ils ne prennent pas vraiment en compte le prix des appels qu'ils reçoivent. C'est la raison pour laquelle les opérateurs mobiles ont tendance à exercer une forte concurrence au niveau des prix des appels émis par les téléphones mobiles, mais n'en font pas de même pour les charges de terminaison des appels vers les mobiles.

Le Président demande à l'Italie de rappeler l'affaire Telecom Italia (TIM)/Omnitel, où l'augmentation de charge de fixe à mobile (FàM) s'est accompagnée d'une augmentation analogue des tarifs d'interconnexion entre ces deux opérateurs mobiles, au moment de l'apparition d'un nouvel entrant sur le marché.

En 1999, l'Autorité italienne antitrust a confirmé que les deux sociétés de mobiles TIM et Omnitel avaient gravement enfreint la législation sur la concurrence qui interdit la conclusion de contrats susceptibles de restreindre la concurrence. En raison de la gravité des infractions, l'autorité a décidé d'infliger des amendes à TIM (le plus grand opérateur mobile d'Italie, avec un chiffre d'affaires en 1998 de 11,9 milliards de lires, 15 millions d'abonnés et une part du marché de la téléphonie mobile de 57 pour cent) et à Omnitel (ayant un chiffre d'affaires en 1998 de 5 milliards de lires, une base de 6 millions

d'abonnés et une part du marché de 43 pour cent). Dans ce cas, l'examen s'est axé sur les charges de terminaison des appels vers les réseaux de TIM et d'Omnitel appliquées aux autres opérateurs de réseaux de téléphone fixes et mobiles. L'affaire a impliqué trois infractions distinctes à la législation antitrust.

L'autorité a conclu que TIM et OPI ont coordonné leur action en fixant, pour les communications de fixe à mobile, des prix à la consommation qui étaient identiques dans leur structure et leur niveau. Dans la plupart des pays de la CE, le cadre réglementaire permet aux opérateurs de réseaux fixes de déterminer les prix des appels FàM. Cependant, en Italie, les charges FàM dépendaient entièrement des opérateurs mobiles -- TIM et Omnitel. Par conséquent, jusqu'à l'entrée en vigueur de la décision prise à la fin de 1998 par l'autorité compétente en matière de communications, les opérateurs TIM et OPI étaient habilités à fixer les prix des appels FàM sous réserve seulement de l'obligation de tenir l'organisme de régulation informé de leurs systèmes de tarification. Étant donné ces conditions réglementaires, l'autorité de la concurrence a qualifié le marché de la terminaison des appels sur les réseaux mobiles d'élément du service mobile. Les deux opérateurs, tout en se livrant une vive concurrence sur les prix des appels à partir des mobiles, ont maintenu les tarifs FàM à un même niveau élevé convenu d'un commun accord. De fait, TIM et Omnitel ont tenu des réunions régulières pour échanger des informations sur la fourniture au public du segment FàM de ce service. Les deux sociétés se sont aussi efforcées de maintenir les recettes tirées des charges FàM à un niveau élevé en essayant conjointement d'éviter un arbitrage basé sur la triangulation internationale. Cette conduite a été considéré par l'autorité comme une pratique restrictive concertée. Cette conclusion a été annulée par le Conseil d'État (Cour suprême administrative italienne).

D'autre part, l'autorité a jugé (ce que le Conseil d'État a confirmé) qu'en janvier 1999, TIM et OPI ont limité la concurrence en convenant d'augmenter simultanément les charges FàM et en diffusant un communiqué commun à cet effet. Les parties se sont aussi mises d'accord pour porter le coût de l'interconnexion entre leurs réseaux respectifs au niveau le plus élevé des coûts communiqués séparément par les deux réseaux au Ministère des Communications comme constituant le coût devant s'appliquer à la troisième licence DCS-1800. L'autorité a estimé que cet accord constituait une limitation sérieuse de la concurrence. Lorsque Wind (le 3ème opérateur de téléphonie mobile) est arrivé sur le marché, TIM et Omnitel ont tous deux révisé leurs tarifs d'interconnexion à la hausse de presque 300 pour cent, les portant de 170 lires par minute à 500 lires par minute, créant ainsi une base commune de négociation destinée à obtenir du nouvel entrant un prix plus élevé. Wind a été contraint de passer avec TIM et Omnitel des accords d'interconnexion, qui ont fixé des tarifs qui correspondaient ou étaient supérieurs aux 500 lires par minute convenues par les parties. En ce qui concerne les autres opérateurs de lignes fixes, TIM et Omnitel ont appliqué les mêmes charges d'interconnexion, équivalentes aux prix qu'ils facturaient aux consommateurs finaux. Ces pratiques ont abouti à une perte de bien-être pour les consommateurs en réduisant les avantages de la libéralisation sur le marché des télécommunications. Elles ont aussi incité les nouveaux entrants à répercuter les coûts de ces services sur les consommateurs finaux, limitant, de ce fait, la marge d'autonomie des nouveaux opérateurs, d'où une réduction des avantages concurrentiels pour les consommateurs. Les amendes infligées initialement par l'autorité, de 100 milliards de lires environ pour TIM et de 50 milliards de lires pour OPI, ont été réduites par le Conseil d'État à une somme globale d'environ 55 milliards de lires.

La Commission Européenne s'est aussi penchée sur la question de savoir si les tarifs de terminaison de fixe à mobile ("FàM") peuvent être contrôlés conformément aux règles courantes de la concurrence (comme l'exigerait les dispositions des nouvelles directives proposées). La question essentielle est de savoir si le marché des terminaisons d'appels pour les abonnés d'un réseau peut constituer un marché se prêtant à l'application des règles de concurrence. Selon les nouvelles propositions de la Commission, il s'agit de savoir si les autorités seront en mesure de conclure que le service des terminaisons sur un réseau donné constitue un marché approprié sur lequel le réseau jouit d'une position dominante, et, si tel est le cas, de déterminer si des tarifs excessifs ou abusifs de terminaison peuvent faire l'objet d'une intervention ex post ou ex ante.

L'Australie étudie la réglementation des FàM sur la base d'un indice des prix MàF. Le Président demande à l'ACCC d'expliquer les pouvoirs particuliers dont elle est investie dans le secteur des télécommunications -- lorsqu'il existe une possibilité de comportement anticoncurrentiel, l'ACCC peut inverser la charge de la preuve en l'imposant à la société dominante -- mais comment cela fonctionne-t-il dans la pratique et avec quelle fréquence ?

L'Australie reconnaît que, bien que dans ce pays, la détermination des prix d'accès implique habituellement l'établissement d'un prix individuel (et non une limitation d'un panier de prix), il existe une exception à cette règle dans le cas des charges de terminaison d'appels GSM. L'ACCC a proposé que pour chaque terminaison d'appel GSM des opérateurs mobiles, le prix de l'accès doive diminuer proportionnellement aux variations d'un indice des prix de détail des appels mobiles de ces mêmes opérateurs. L'objectif, en l'occurrence, est de rattacher les variations de prix sur le marché le plus concurrentiel -- le marché de détail -- aux charges moins concurrentielles des terminaisons d'appel. Cette disposition devrait s'appliquer à l'ensemble des opérateurs mobiles. La Commission a publié un projet de rapport sur ce sujet en décembre 2000 et a accepté des observations. Une décision finale sera prise dans les mois à venir.

En ce qui concerne les dispositions particulières du droit australien de la concurrence, selon le régime propre au secteur des télécommunications en matière de droit de la concurrence, il existe ce qu'on appelle le règle de concurrence, qui stipule qu'un opérateur ne doit s'engager dans aucune pratique anticoncurrentielle, dès lors qu'il détient un certain niveau de puissance de marché. L'intérêt de cette règle tient à ce qu'elle ne nécessite pas l'habituelle charge de la preuve, qui accompagne les dispositions anticoncurrentielles générales du droit australien de la concurrence. Elle a pour effet d'inverser la charge de la preuve. Il s'agit donc d'un instrument très puissant, qui n'a été utilisé qu'en deux occasions. L'ACCC a émis des avertissements en matière de concurrence à l'encontre de Telstra, concernant les processus de transfert de clients et les accords d'échange de trafic sur Internet.

Plutôt que d'émettre un avertissement de concurrence, l'ACCC a choisi plus souvent d'engager une action devant les tribunaux. L'objectif de ces actions n'était pas de demander des sanctions. Il s'agissait de parvenir à des modifications de comportement facilitant la concurrence et offrant leur chance aux petits opérateurs. Dans chacun des cas où la Commission a engagé une action, elle a réussi à obtenir le changement de comportement souhaité. Dans les cas où des sanctions ont été recherchées, l'objectif visé était encore d'obtenir un changement de comportement. Par exemple, dans l'affaire de détournement de clients (lorsque des clients sont transférés à leur insu, ou sans explication, vers un autre opérateur) deux sociétés ont payé chacune des amendes de 500.000 AUD à une campagne d'information publique destinée à faire cesser cette pratique. Dans une autre affaire relative aux publiphones, l'ACCC a engagé une action contre Telstra, mais l'a suspendue après que Telstra a accepté de reprendre les négociations avec le nouvel entrant.

Itinérance obligatoire

Afin de stimuler la concurrence sur le marché de la téléphonie mobile, certains pays ont cherché à introduire des obligations d'itinérance ou des licences de capacité. Le Président demande à la Finlande de rappeler le cas où l'opérateur mobile Telia a essayé d'étendre son réseau en demandant aux deux opérateurs nationaux (Sonera et Radiolinja) d'offrir l'itinérance. Devant leur refus, l'autorité de la concurrence est intervenue.

A la fin des années 90, il n'y avait en Finlande que deux réseaux mobiles nationaux sur l'ensemble du territoire national -- Sonera et Radiolinja. Un nouvel entrant, Telia a obtenu une licence pour un réseau GSM-1800 couvrant l'ensemble du territoire, mais il n'a pas voulu investir dans le déploiement

d’un vaste réseau. De plus, une licence GSM 900 avait été offerte à Telia, mais cette dernière a décliné cette offre, ne souhaitant pas construire son propre réseau en Finlande. Au cours de l'année 1998, Telia a entamé des négociations en matière d'itinérance nationale avec Sonera et Radiolinja. Ces négociations n'ont pas abouti, et Telia a déposé une plainte auprès de l'Autorité finlandaise de la concurrence (AFC). Telia a accusé Sonera et Radiolinja d'avoir, soit individuellement, soit conjointement, abusé de leur position dominante en facturant des prix excessifs pour l'itinérance nationale. En novembre 1999, Telia et Radiolinja sont parvenus à un accord de fourniture des services, mais n'ont pas réussi à s'accorder sur les conditions de l'itinérance nationale.

L’AFC a rendu sa décision dans cette affaire en janvier 2000. La FCA a conclu que le marché pertinent était celui de l'accès aux réseaux mobiles nationaux, y compris l'itinérance nationale, les accords d'opérateur de réseau mobile virtuel et les accords de fournisseurs de services. Elle a estimé que Sonera et Radiolinja n'avaient pas de position dominante sur ce marché, ni conjointement ni séparément. Plus précisément, Sonera et Radiolinja n'avaient pas agi en tant qu’entité économique unique. Le développement technologique rapide des réseaux mobiles, la croissance rapide de la demande de services sur réseaux mobiles, ainsi que les structures de coûts et les ressources financières différentes de Sonera et Radiolinja ont intensifié la concurrence entre ces deux sociétés. En l'absence de dominance, l'abus n'a pu être démontré. L’affaire est en instance devant le Conseil de la concurrence.

Il existe effectivement en Finlande une réglementation spécifique à ce secteur, qui accordera des droits à l'itinérance temporaire aux nouveaux opérateurs mobiles 3G sur les réseaux GSM existants -- cette itinérance temporaire est prévue pour une durée maximale de 6 ans.

Le Président fait remarquer que d’autres pays, l'Italie par exemple, ont imposé l'itinérance nationale temporaire non seulement aux systèmes UMTS, mais aussi aux systèmes GSM en place.

L'Italie explique pourquoi elle a choisi l'itinérance obligatoire, afin de stimuler la concurrence dans le secteur de la téléphonie mobile. L’Italie a opté pour une concurrence basé sur les installations dans le secteur de la téléphonie mobile, mais afin d'encourager un rapide développement de la concurrence dans tout le pays dès le démarrage, l'Italie a imposé l'itinérance nationale à titre temporaire. Cette période était supposée donner aux nouveaux entrants le temps de construire leur propre réseau. Dès l'apparition des services mobiles, le deuxième opérateur qui a pénétré le marché a eu accès à l'itinérance auprès du premier opérateur, le troisième opérateur a obtenu l'itinérance auprès du 1er et du 2ème opérateur et ainsi de suite. Un choix analogue a été effectué pour les services UMTS. L'ensemble des opérateurs 3G n'ayant pas de licence pour les services 2G peuvent obtenir l'itinérance auprès des opérateurs 2G pendant une certaine période (6 ans, avec une légère différenciation entre zones urbaines et zones rurales) afin devenir immédiatement viables sur le plan commercial.

L'aspect le plus délicat de l'itinérance obligatoire est sa tarification. L'Italie a imposé l'itinérance basée sur les coûts. Cette méthode s'avère efficace pour le développement de la concurrence, mais elle ne l'est pas autant pour le développement de l'infrastructure parallèle. Les opérateurs préfèrent parfois utiliser les réseaux d'autres opérateurs plutôt que construire leur propre infrastructure. Récemment, l'un des opérateurs qui avait eu accès à l'itinérance pour une période déterminée, a choisi d'engager des négociations commerciales avec un opérateur existant, à l'expiration de cette période.

L'autorité réglementaire italienne envisage d'entreprendre l'étude du nombre de réseaux mobiles commercialement viables en Italie. Cet aspect revêt de l’importance pour les décisions d'imposer ou non le partage des sites pour les réseaux UMTS comme en Allemagne. Bien que le premier et le second réseaux soient effectivement viables, avec davantage de réseaux, il peut y avoir des problèmes.

L'Irlande rend compte d'une affaire qui rappelle celle que la Finlande vient de décrire. Il s'agit de revente de temps d'antenne et non d'itinérance, mais, comme pour l'exemple finlandais, la Haute Cour irlandaise a examiné un marché de deux opérateurs, dont l'un détenait une part de marché de 60 pour cent, et a conclu qu'ils n'étaient ni individuellement, ni conjointement dominants. Il s'agissait d'une action privée, résultant d'un litige pour rupture de contrat. Elle n'était pas engagée par l'autorité de la concurrence, mais par la partie à laquelle le temps d'antenne était refusé. Cette affaire illustre quelques-uns uns des aspects importants qu'il faudra aborder dans le cadre de l'UE, comme le fait qu'un marché où interviennent peu d'acteurs n'est pas forcément un oligopole, ou l'importance de considérer chacun des marchés au cas par cas. Cette affaire met en lumière les difficultés rencontrées par les autorités de la concurrence ou les régulateurs lors de la fixation des tarifs applicables, soit à la revente de temps d'antenne, soit à l'itinérance, sans pour autant décourager une concurrence au niveau des infrastructures.

En 1999, Meridian revendait du temps d'antenne qu'il achetait à Eircell avec une remise de 40 pour cent sur le prix de détail. La plainte visait plusieurs questions relatives à l'accès au marché de la téléphonie mobile. L'autorité irlandaise de la concurrence a défini trois catégories d'accès : premièrement, la simple revente de temps d'antenne ; deuxièmement, une forme d'accès indirect au service mobile par la sélection ou la présélection de l'opérateur ; troisièmement, une forme d'accès plus avancée, l'opérateur de réseau mobile virtuel (ORMV). Après consultation, l'autorité irlandaise de la concurrence en est venue à estimer que la revente de temps d'antenne, tout en offrant des avantages aux consommateurs, présentait un intérêt limité, et était bien souvent fondée sur de simples possibilités d'arbitrage, sans que les revendeurs apportent beaucoup de valeur ajoutée sur le marché. Les fournisseurs d'accès indirect, du fait qu'ils ont besoin d'opérer certains investissements dans l'infrastructure, sont davantage susceptibles d'être à même de proposer des services plus avancés. Troisièmement, en ce qui concerne les ORMV, ils sont virtuellement à même d'offrir des avantages notables aux usagers. Le problème tient à ce qu'aucun pays n'a réellement imposé l'accès aux ORMV dans le cadre actuel de l'UE. Là où cela existe, cela a été fait en vertu de la législation nationale. La législation irlandaise ne prévoit pas un tel accès. Le tribunal a statué que Eircell n'a pas de position dominante sur le marché de la téléphonie mobile, de sorte que l'affaire de Meridian, portant sur l'accès au temps d'antenne pour la revente, a pour l'essentiel capoté. Quant à la possibilité pour un régulateur d'imposer un accès revêtant la forme d'un ORMV, le cadre réglementaire est assez flou, essentiellement du fait que les ORMV impliquent à la fois l'interconnexion (qui est manifestement imposée dans le cas d'un opérateur reconnu comme ayant un pouvoir de marché notable) et des accords d'itinérance, qui sont généralement considérés comme une affaire de négociation commerciale.

Le Secrétariat soulève le problème du nombre d'opérateurs capables de survivre sur le marché. Dans le passé, il était courant de considérer que la limitation du spectre constituait la principale contrainte pesant sur le nombre des opérateurs mobiles. Cependant, il paraît vraisemblable que, pour de nombreux pays, la principale limitation ne concerne pas le spectre, mais le coût de réalisation sur l'ensemble du territoire, d'un réseau ayant une couverture géographique suffisante pour attirer la clientèle. Il est évident que des réseaux à faible couverture géographique ne peuvent rivaliser sur le marché sans une forme ou une autre d'accords d'itinérance. Les réseaux 3G coûteront plus cher à l'installation que les réseaux actuels, car ils nécessitent davantage de sites cellulaires par unité de surface pour une couverture géographique identique. Si quelques réseaux seulement sont capable de survivre en Italie, d'autres pays sont confrontés à un problème encore plus grave. Des pays comme la Nouvelle Zélande ont une densité de population beaucoup plus faible que l'Italie et un PIB par habitant inférieur. Les réseaux mobiles y sont donc confrontés à des coûts d'infrastructure par abonné plus élevés et à une demande de services mobiles plus faible. Si quelques réseaux mobiles pouvaient survivre à l'équilibre, cela serait-il de nature à modifier de quelque manière la politique menée par les pouvoirs publics à l'égard de ce secteur ?

Considérons, par exemple, la politique des pouvoirs publics à l'égard des ventes aux enchères de fréquences du spectre. Les autorités de la concurrence ont tendance à défendre ce principe des ventes aux enchères pour l'attribution des fréquences. Mais les ventes aux enchères traditionnelles, où les fréquences

sont attribuées aux soumissionnaires les plus offrant, peuvent ne pas convenir si le nombre de réseaux mobiles potentiels est limité. Dans l'hypothèse extrême où ne pourrait survivre qu'un seul réseau, en raison de coûts de construction nettement élevés, la vente aux enchères des fréquences du spectre équivaudrait à la vente d'une licence de monopole. Ce n'est pas rationnel du point de vue économique. Si seule une entreprise est capable de survivre, il serait plus logique d'attribuer les fréquences par un système d'adjudications où l'on demanderait aux soumissionnaires de préciser les prix qu'ils factureraient aux consommateurs finaux. L'adjudicataire serait la société offrant aux consommateurs les prix les plus bas (compte tenu de la qualité). La question de savoir si des enchères classiques ont un sens lorsque le nombre de réseaux à l'équilibre est faible, constitue un plus vaste problème.

La Commission Européenne fait valoir qu'en vertu des Directives de l'UE, les États Membres ne peuvent créer de pénurie ni décider de limiter le nombre des licences. La Directive 97/13 sur les licences stipule clairement que le refus d'accorder une licence ne se justifie que si les États Membres peuvent démontrer que le spectre disponible est insuffisant. Les États Membres n'ont pas le droit de décider eux-mêmes s'ils souhaitent 2, 3 ou 5 intervenants sur le marché. Parallèlement, il importe que les États Membres mettent à disposition un spectre de fréquences aussi large que possible.

Abus de position dominante

Le Président oriente la discussion sur les cas d'abus de position dominante qui se sont présentés dans le secteur des télécommunications. Par exemple, de nombreux pays ont enregistré des cas d'abus de position dominante mettant en jeu le procédé ADSL. Le Président demande au Mexique de présenter un exemple où l'opérateur historique Telmex abusait de sa position dominante sur les marchés des lignes louées et de la revente.

Le Mexique indique que Aventel et Alestra, les deux principaux concurrents sur le marché mexicain des télécommunications, sont des filiales de deux des grandes sociétés de télécommunications des États-Unis, MCI et AT&T. Ces deux concurrents ont déposé une plainte visant trois pratiques de Telmex. La Commission de la concurrence a statué que l'opérateur historique était coupable d'avoir gravement enfreint le droit de la concurrence. L'une des affaires concernait la location des lignes. Avantel et Alestra s'efforcent d'offrir aux grandes entreprises des services intégrés, comprenant l'Internet, le service local et l'interurbain. Comme Avantel et Alestra ne possèdent pas d'installations propres pour desservir toute leur clientèle, elles sont tenues de louer des lignes auprès de Telmex. Telmex retardait la fourniture des circuits et autres lignes spécialisés que ces sociétés demandaient. En outre, Telmex leur facturait l'utilisation de ses lignes à un prix plus élevé que celui appliqué implicitement dans les tarifs appliqués à ses propres clients.

La plainte concernant le marché de la revente portait sur l'utilisation de lignes longue distance entre deux villes dans lesquelles les concurrents n'ont pas de connexion. Les nouveaux opérateurs n'ont pas de liaisons par lignes avec toutes les villes, en raison pour une part du mode d'ouverture du marché. Initialement, la concurrence se limitait à quelques villes. Peu à peu, le nombre des villes a été accru. En outre, certaines villes n'ont tout simplement pas assez de place pour l'implantation de plusieurs infrastructures concurrentes. Dans ce cas, Telmex facturait l'utilisation de son infrastructure un prix à la minute plus élevé que celui appliqué à ses propres clients finaux. Par décision de la Commission de la concurrence, Telmex a été contraint de suspendre cette pratique et de payer une pénalité d'environ 3 millions de dollars.

La troisième plainte concernait les numéros 0800. Ces numéros sont réservés aux appels gratuits -- le coût de l'appel est payé par la société qui loue ce numéro. Les numéros 0800 peuvent aussi être appelés à partir de cabines publiques. Mais dans le cas des numéros 0800 détenus par les concurrents

de Telmex, Telmex (qui fournit aussi les cabines téléphoniques publiques) facturait aussi le prix de l'appel local. Cette partie du coût n'était pas facturée au détenteur final du numéro. Les concurrents de Telmex projetaient d'utiliser les numéros 0800 pour la concurrence sur le marché du trafic longue distance. Il s'agit d'un aspect important, car un bon nombre d'appels longue distance internationaux (en particulier de travailleurs pauvres ou migrants) entre le Mexique et les États-Unis sont émis à partir de cabines publiques. Avantel et Alestra ont donc été mises dans une position difficile, car leurs clients devaient acheter deux cartes différentes -- l'une vendue par Telmex et l'autre par Avantel et Alestra.

L'Irlande attire l'attention des participants sur deux affaires relatives à l'utilisation abusive des subventions croisées sur le marché irlandais. La première visait le service à relais de trame de l'opérateur historique. Les réclamations portaient sur le fait que Eircom était à même de fournir un produit à relais de trame à l'aide d'une seule ligne louée (son propre service à la clientèle bénéficiant d'une colocalisation efficace avec le service des réseaux, alors que les opérateurs concurrents devaient obtenir une ligne louée reliant leur réseau au réseau Eircom). L'opérateur historique a tenu compte de cette remarque et a accepté d'affecter un tarif fictif à la seconde ligne louée pour la connexion à son service à relais de trame, résolvant ainsi les questions de discrimination.

Une enquête été menée par la suite, sur la base de l'affectation de ce tarif, afin de déterminer si l'opérateur historique ne faisait pas bénéficier indûment son service à relais de trame d'une subvention croisée. L'autorité irlandaise de la concurrence a mené une enquête, considérant le coût et les recettes à venir à l'aide de la méthode de la valeur actuelle nette (VAN). Sa conclusion a été que rien ne prouvait un recours abusif à des subventions croisées, sur la base des recettes projetées et de l'affectation des coûts car la VAN s'est avérée positive.

Le second cas présumé de recours abusif à des subventions croisées concernait l'opérateur historique et ses filiales de fourniture de services Internet (FSI). Dans ce cas, le grief était qu'au moins un des FSI de l'opérateur historique était fortement déficitaire. L'autorité irlandaise de la concurrence a, sur sa propre initiative, mené une enquête sur les activités de l'opérateur historique à l'égard de ses FSI. Comme précédemment, elle a estimé qu'il était difficile de démontrer un recours abusif à des subventions croisées, surtout sur le marché de l'Internet, où l'estimation des recettes à venir est très ardue. Il a fallu prendre des décisions quant à ce qui constituait des recettes pour les FSI. On pouvait prendre une définition très large, incluant le commerce électronique ou les recettes multimédia, ou l'on pouvait considérer d'un point de vue plus strict le transfert des recettes des appels aux FSI ou les recettes de la publicité. La conclusion a été que, sur la base d'une définition stricte des recettes, rien ne prouvait l'existence d'un recours abusif à des subventions croisées.

Cette plainte était liée à des préoccupations visant la fourniture de capacité de lignes louées et d'interconnexion que l'opérateur historique était susceptible d'offrir aux autres opérateurs titulaires d'une licence. Il s'agissait d'un problème qui se posait depuis un certain temps. Un autre opérateur, titulaire de licence, a déposé une plainte, car il avait des difficultés à obtenir de la capacité pour son propre service FSI. Dans cette affaire particulière, Eircom a été déclaré en infraction par rapport aux conditions de sa licence, relatives à la fourniture de capacité à un opérateur.

L'Espagne met en lumière deux affaires montrant que l'opérateur historique Telefonica a tenté de restreindre la concurrence dans les secteurs d'activité où est intervenue la libéralisation, en abusant de sa position dominante. La première affaire a mis en cause BT et Telefonica. En mars 1996, BT a accusé Telefonica d'avoir enfreint les articles 6 et 7 de la Loi espagnole sur la concurrence et l'article 86 du traité de la CE. Les pratiques incriminées consistaient à pratiquer une discrimination par les prix et des prix d'exclusion, à établir des clauses d'exclusivité dans les contrats et à lier la fourniture de services concurrentiels et de services de monopole. Jusqu'en novembre 1995, Telefonica jouissait d'un statut de monopole pour la fourniture des services de télécommunications de base et des services de transmission.

Les entreprises qui demandaient les services de communications téléphoniques internationales pouvaient les obtenir par l'intermédiaire du système téléphonique de base, monopole de Telefonica, en louant des circuits et des services. Telefonica fournissait ces services à l'Association internationale des agents de change *[International Money Market Brokers Association]*. En 1993, BT a offert ses services à valeur ajoutée à cette association, mais son offre a été rejetée. En janvier 1999, le Tribunal de défense de la concurrence a statué que Telefonica avait abusé de sa position dominante et lui a infligé une amende de 580 millions de pesetas, lui ordonnant de mettre un terme à cette infraction.

La seconde affaire est intervenue lors de la suppression du monopole sur la téléphonie fixe en 1998. Retevision, second opérateur du marché de l'époque, a accusé Telefonica d'avoir enfreint les articles 6 et 7 de la Loi espagnole sur la concurrence. La tarification de Telefonica est réglementée, et Telefonica ne peut offrir aucune remise, qui ne soit au préalable autorisée par le gouvernement. Telefonica a été accusée d'avoir lancé une campagne publicitaire destinée à bloquer les services du nouvel opérateur en offrant des remises qu'elle n'était pas autorisée à proposer. Le coût de la campagne a été estimé à 1 milliard de pesetas, -- campagne publicitaire la plus onéreuse menée par Telefonica à l'époque. Le « Servicio de Defensa de la Competencia » a porté l'affaire, en avril 1999, devant le Tribunal qui a statué en 2000 que Telefonica avait abusé de sa position dominante, lui a infligé une amende de 1 400 millions de pesetas et a ordonné à Telephonica de faire publier à ses frais cette décision dans les deux plus grands journaux nationaux.

La République Slovaque fait état d'une affaire mettant en jeu à la fois des prix exagérés, une discrimination à l'entrée, et la restriction dans la fourniture des produits au préjudice des utilisateurs. Slovak Telecom ("ST") est le plus grand fournisseur de services de télécommunications de Slovaquie ; il possède et exploite un réseau de télécommunications couvrant l'ensemble du territoire de la République slovaque. ST a été accusé d'avoir modifié délibérément les caractéristiques du service de sa boucle locale. Autrefois, ce service était offert à l'ensemble des consommateurs au prix de 2 000 couronnes slovaques (46 euros). Slovak Telecom a modifié les caractéristiques de ce service de base, nommant ce "nouveau" service Analog Plus. Cela a eu pour conséquence une augmentation du prix qui est passé de 2 000 à 6 000 couronnes slovaques pour les consommateurs désireux d'acheter le même service. Si l'utilisateur existant ne commandait pas ce nouveau service, ST menaçait d'installer des filtres de fréquences sur la ligne locale, limitant la largeur de bande à 3 400 Hz. Les utilisateurs d'Internet qui veulent garder le caractère et la qualité du service existant sont donc tenus d'acheter maintenant le nouveau service Analog Plus, qui coûte trois fois plus cher. Selon l'autorité slovaque de la concurrence, ce comportement de ST constitue un abus de position dominante au niveau des boucles locales et a une incidence directe sur le marché en ce qui concerne le service Internet.

La Suisse signale aussi un cas d'abus de position dominante concernant un prestataire de service Internet. Ce cas, qui remonte à 1996, relève de l'ancien régime des télécommunications en Suisse. A cette époque, Telecom PTT jouissait d'un monopole légal sur le réseau téléphonique utilisé pour l'accès aux services d'Internet. La Commission de la concurrence a reçu une plainte émanant d'autres fournisseurs de services Internet auxquels avaient été refusées les mêmes conditions d'utilisation du réseau que Telecom PTT offrait à Blue Window, son propre FSI. En particulier, les autres FSI se sont plaint du fait que Blue Window pouvait offrir un service à tarif unique dans tout le pays. L'autorité de la concurrence a estimé qu'il s'agissait bien d'un abus de position dominante de la part de Telecom PTT puisque cet opérateur n'offrait pas l'accès à des conditions non discriminatoires à l'ensemble des FSI. Il a été commandé à Telecom PTT d'offrir le même service aux mêmes conditions financières et techniques à tous les FSI opérant sur le marché.

La Suisse passe ensuite à l'examen des problèmes ayant trait à la boucle locale radio (BLR). En Suisse, la BLR n'est pas considérée comme un produit qui pourrait remplacer les boucles locales en cuivre ou en fibres optiques dans tout le pays. Mais elle peut être utilisée en complément ou comme stimulant de

la concurrence sur le marché, pour les boucles locales dans certaines zones. Toutefois, la vente aux enchères des fréquences de BLR a eu lieu à une époque d'"argent facile" sur les marchés financiers. La vente a rapporté 400 millions d'euros au gouvernement suisse pour des concessions qui, dans d'autres pays comparables, n'ont rapporté qu'un million d'euros six mois plus tard. De fait, les opérateurs historiques se sont rapidement retirés des enchères sans acquérir de concessions. Les adjudicataires ont payé très cher les leurs. Aujourd'hui les restrictions sur les marchés financiers empêchent ces sociétés d'investir davantage dans ces services. L'accès aux capitaux, par le biais de prêts bancaires, des marchés financiers et du crédit-fournisseur, est complètement tari pour cette application. Le peu d'argent encore disponible sur les marchés financiers est actuellement prioritairement affecté aux services 3G.

La Suisse évoque aussi le précédent de Cablecom, réseau de télévision par câble, qui contrôle plus de la moitié du marché de la fourniture de télévision et de radio par câble en Suisse. Il y a plusieurs années, Swisscom détenait une minorité de blocage dans le capital de Cablecom. La Commission de la concurrence a recommandé d'imposer à Swisscom de revendre sa participation dans le câblo-opérateur, mais le gouvernement a refusé, considérant comme plus important de sauvegarder la valeur de l'entreprise plutôt que de promouvoir une mise en place rapide de la concurrence sur le marché. Mais dernièrement, Swisscom a volontairement vendu ses parts de Cablecom pour plusieurs raisons : premièrement, il s'agissait d'une source d'embarras affectant son image de marque ; deuxièmement, Swisscom pensait avoir besoin de capitaux pour acheter des licences 3G et pour construire les infrastructures nécessaires à la fourniture de ces services ; troisièmement, pour la mise en place de moyens de diffusion des programmes de télévision, l'idéal pour une entreprise n'est pas forcément d'investir dans deux boucles locales, ce que l'opérateur Swisscom aurait dû faire s'il conservait les deux entreprises. Cablecom a été vendu au groupe NTL, qui gère en Europe des réseaux de télévision par câble.

Fusions

Passant aux problèmes des fusions, le Président remarque que la note soumise par les États-Unis donne la liste récapitulative détaillée des fusions intervenues sous le régime du droit américain. Le Président observe que plusieurs opérateurs locaux des États-Unis ont été autorisés à fusionner, et demande si cela a posé des problèmes au niveau de la concurrence potentielle.

Les États-Unis commencent par décrire le système appliqué à l'examen des fusions aux États-Unis. Les fusions dans le secteur des télécommunications aux États-Unis sont examinées, comme toutes les autres fusions, soit par la FTC *[Federal Trade Commission]*, soit par le DOJ *[Department of Justice]*. La référence utilisée pour évaluer une fusion consiste à déterminer si elle est de nature à affaiblir la concurrence de façon significative sur le marché en question. Les fusions dans le secteur des télécommunications sont aussi examinées par la FCC *[Federal Communications Commission]* lorsqu'une licence d'exploitant de réseau doit être transférée. La référence de la FCC consiste à déterminer si la fusion renforce la concurrence (au lieu de l'affaiblir de façon significative). Par conséquent, la FCC peut aboutir à des résultats différents lorsqu'elle considère les mêmes fusions. Une décision est prise sur le point de savoir si une fusion donnée quelconque est examinée soit par la FTC, soit par le DOJ, mais pas par les deux à la fois.

L'un des points communs aux fusions, dégagé dans le document, est le fait que des entités qui fusionnent, se trouvent d'ordinaire en même temps dans plusieurs secteurs du marché. Les recours ont souvent impliqué une intervention sur le marché des services de téléphonie sans fil. Dans quatre cas au moins, les parties souhaitant fusionner ont été obligées de se défaire de certains actifs, quand les marchés de la téléphonie sans fil se chevauchaient. Il y a eu un certain nombre de fusions sur le marché de la téléphonie sans fil, car les sociétés cherchent à édifier un important réseau national. Dans bon nombre de ces cas, les parts individuelles de marché, sur les marchés de la téléphonie mobile, ont dépassé les 35%.

Les actifs conjoints de l'entité ont atteint de 75 à 95% dans les cas où les autorités ont demandé la cession d'actions.

Dans les fusions tant de Bell Atlantic/Nynex que de SBC/Ameritech, le DOJ a mené des enquêtes longues et minutieuses. Le DOJ a pris la décision de ne pas s'opposer à ces fusions. Les enquêtes ont porté sur la probabilité de l'entrée d'un concurrent sur les marchés des parties souhaitant fusionner, l'effet sur la concurrence potentielle sur ces marchés, et le niveau d'entrée auquel on pourrait s'attendre de la part d'autres concurrents. L'analyse de l'ensemble de ces éléments a conduit le DOJ à ne pas intervenir sur ces parties de ces fusions.

Des fusions sont aussi intervenues entre les exploitants de réseaux interurbains (ERI). Il existe actuellement aux États-Unis trois principaux ERI : AT&T, Sprint et MCI. Parmi les fusions importantes de ERI, on peut citer celles de WorldCom/MCI et de WorldCom/Sprint. L'intérêt essentiel de ces deux fusions vise le marché de la dorsale d'Internet. Le DOJ ne s'est pas opposé à la fusion WorldCom/MCI dans la mesure où les parties, avant de présenter leur projet de fusion, s'étaient séparées de l'activité de réseau de base Internet de MCI. Le DOJ s'est prononcé contre la fusion de WorldCom/Sprint en déposant une plainte ; par la suite, les parties ont renoncé à la transaction. L'UE s'est aussi élevée contre cette transaction, car elle aurait réduit la concurrence sur un certain nombre de marchés, notamment ceux de l'interurbain, des lignes internationales privées, des services de réseaux de données ainsi que de certains services réseaux personnalisés.

Un autre groupe de cas de fusion a trait à la concurrence sur les marchés du câble. Le DOJ a déposé une plainte contre un groupe dénommé Primestar (réunissant 5 fournisseurs de services par câble) pour avoir essayé d'acheter les actifs de News Corp et de MCI, qui détenaient le dernier créneau orbital utilisable pour la fourniture des services de radiodiffusion directe par satellite. Les parties ont renoncé ultérieurement à la transaction. La fusion AT&T/MediaOne comportait un problème d'intégration verticale. Le DOJ a demandé à MediaOne de se séparer de son service d'accès Internet à large bande en raison des problèmes liés au fait que deux fournisseurs de services d'accès Internet à large bande opérant ensemble auraient affaibli la concurrence au niveau de l'agrégation, la promotion et la distribution de contenu sur large bande.

La FTC s'est penchée sur des problèmes similaires dans le cas de la transaction AOL/Time Warner. Cette affaire a suscité un certain nombre de préoccupations, visant notamment l'effet sur la concurrence sur le marché de l'accès résidentiel, liées au fait que l'entité combinée ne favoriserait pas les services de ligne d'abonné numérique (DSL) dans les zones où Time Warner avait ses câblo-opérateurs, et qu'elle limiterait la concurrence sur le nouveau marché de la télévision interactive. Un certain nombre de conditions ont été imposées à cette fusion avant que la FTC ne l'approuve. En particulier, AOL-TW a dû ouvrir son réseau câblé à trois fournisseurs de services Internet à large bande non affiliés, elle ne peut pas intervenir sur le contenu de ces fournisseurs, et elle doit commercialiser et offrir des services DSL dans les zones où Time Warner a ses propres câblo-opérateurs, au même tarif que celui auquel ils offriraient des services DSL dans d'autres zones.

Un représentant du BIAC observe, à propos du document de référence du Secrétariat, qu'en ce qui concerne l'accès à la boucle locale, le BIAC estime que les réglementations relatives à l'interconnexion devraient être compatibles avec les obligations internationales énoncée dans le document de référence de l'OMC sur les services de télécommunications de base. En conséquence, il convient de fournir l'interconnexion : (a) à des taux, modalités et conditions, normes et spécifications techniques non discriminatoires ; (b) en temps opportun, suivant des modalités, à des conditions et moyennant des taxes fondées sur les coûts, qui soient transparentes, raisonnables, compte tenu de la faisabilité économique, et qui soient suffisamment détaillées pour que celui cherche à obtenir l'accès n'ait pas à payer pour des éléments ou installations du réseau dont il n'a pas besoin pour le service à fournir ; (c) l'interconnexion

devra être fournie sur demande, à des points en plus des points de terminaison du réseau accessibles à la majorité des utilisateurs, moyennant des tarifs qui reflètent le coût de la construction des installations additionnelles nécessaires.

En ce qui concerne les appels fixe à mobile, le BIAC estime que le principe qui devrait s'appliquer à tout marché convergent est de faire en sorte que la réglementation soit maintenu à un niveau minimal, et qu'elle se contente d'établir la pleine concurrence, d'assurer l'accès aux installations essentielles et d'affecter des ressources peu abondantes. Les formes traditionnelles de réglementation ne devraient pas s'appliquer automatiquement aux services nouveaux et en train d'apparaître sur le marché.

En ce qui concerne l'accès aux fournisseurs de services à valeur ajoutée, y compris les fournisseurs de services Internet, le BIAC est partisan d'intensifier les efforts en vue d'assurer le suivi et la mise en œuvre de l'annexe de l'OMC sur les télécommunications, qui impose aux membres de l'OMC de fournir les services à valeur ajoutée. Un exemple de pratiques discriminatoires non fondées, rencontré par les compagnies membres du *US Council of International Business*, qui limite la concurrence et entrave le développement des services de données et d'Internet, concerne le traitement discriminatoire du RTPC et des FSI. Cela se produit lorsque le fournisseur de réseau de télécommunications retarde la location d'installations, assure un service et des réparations de qualité moindre, ou fournit l'accès aux services et aux installations de réseaux de communications à des conditions discriminatoires, aux sociétés non affiliées ou à leurs clients : par exemple, un fournisseur de réseau intégré de télécommunications peut offrir un service à des prix de gros forfaitaires à sa filiale FSI -- ce qui permet à cet FSI d'offrir des prix de détail forfaitaires à ses clients Internet. En revanche, ce même fournisseur du RTP peut offrir des services d'interconnexion à des FSI non affiliés uniquement à un tarif de gros facturé à la durée. En outre, un fournisseur de réseau public de télécommunications peut offrir des régimes d'appel avec ristourne à des revendeurs, qui utilisent ses filiales FSI, et ne pas les offrir à des clients qui ont recours à des FSI non affiliés qui se raccordent au réseau RTP par l'intermédiaire d'un opérateur local concurrent.

Un autre représentant du BIAC fait remarquer que le document de référence propose un prix plancher pour l'opérateur historique qui est, dans certaines conditions, fondé sur le coût de fourniture isolée. Il s'agirait, dans la pratique, d'un montant beaucoup trop élevé qui bloquerait toute forme de concurrence de la part de l'opérateur historique.

La Turquie rend compte de la création d'un nouvel organisme réglementaire indépendant pour les télécommunications. La nouvelle Autorité des télécommunications a pour mission : d'octroyer des licences aux opérateurs du secteur des télécommunications, d'établir les règlements administratifs, financiers et techniques, d'exercer des fonctions de surveillance et de tutelle visant cette réglementation, d'établir des normes techniques et de vérifier la conformité des équipements à ces normes, ainsi que d'infliger des sanctions administratives et financières à ceux qui enfreignent les règles et les réglementations. En outre, un organisme consultatif informel a été créé, à savoir le Conseil de la politique des télécommunications. L'autorité des télécommunications est devenue opérationnelle le 15 août 2000.

Le Président met un terme à la discussion en faisant remarquer que ce secteur est revenu de loin en quelques années s'agissant du développement de la concurrence. Il fait aussi observer la similitude des démarches adoptées par les régulateurs et les autorités de la concurrence. Les uns et les autres ont pour objectif d'intensifier la concurrence. Le Groupe de travail a relevé dans le passé qu'en certaines occasions les régulateurs ne tenaient pas le même discours que les autorités de la concurrence, mais ce n'est pas ce qui ressort des débats de ce jour. La discussion a mis en évidence la similitude des problèmes rencontrés dans de nombreux pays, tels que les problèmes d'abus de position dominante, ou la relation appropriée entre prix d'accès et prix finaux. Le Groupe de travail peut faciliter la solution de ces problèmes en permettant de mettre en commun l'expérience acquise et de tirer des enseignements les uns des autres. En

conclusion, le Président remercie l'ensemble des invités, notamment les représentants des autorités réglementaires et du BIAC.