

TRANSLATING ENVIRONMENTAL LAW INTO PRACTICE

Progress in Modernising
Environmental Regulation and
Compliance Assurance
in Eastern Europe, Caucasus,
and Central Asia



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FOREWORD

Poor environmental compliance is one of the major concerns for environmental authorities in transition and emerging economies, as it clearly demonstrates the failure to implement environmental policies and laws. In order to address this failure, effective and efficient strategies and institutions for assuring compliance are needed.

Well-designed and effectively functioning systems for assuring environmental compliance benefit society by protecting human health and the environment. Furthermore, clear rules that are applied in a fair and consistent manner can help governments to reinforce the credibility of regulation, create a predictable investment climate, and strengthen the rule of law and good governance. The role of compliance in guaranteeing a level playing field for businesses is increasingly important in the global marketplace.

The need to strengthen environmental compliance in Eastern Europe, Caucasus, and Central Asia (EECCA) was recognised at the Kiev Ministerial Conference held in 2003 within the framework of the “Environment for Europe” process. Countries were called upon to improve the outcomes and cost-effectiveness at all stages of the regulatory cycle: design, compliance promotion and monitoring, non-compliance response, and evaluation and feedback. Ministers welcomed the “Guiding Principles for Reform of Environmental Enforcement Authorities in Transition Economies of EECCA” and invited the environmental enforcement authorities in these countries to implement the recommendations of the “Guiding Principles”. Also, countries were called upon to promote compliance with requirements of multilateral environmental agreements (MEAs).

The “Guiding Principles” address environmental compliance assurance in a systemic way. They aim at: (i) creating a reference model for the long-term reform of environmental enforcement authorities; (ii) fostering cooperation and information exchange among all parties involved, including governmental agencies, the regulated community, NGOs, and the general public, as well as the donor community; and (iii) providing a benchmark for self-assessment, regional surveys, or peer reviews.

In the period after the Kiev Conference, the OECD/EAP Task Force Secretariat provided support to EECCA countries to implement the recommendations of the “Guiding Principles”. This work was done under the umbrella of the Regulatory Environmental Programme Implementation Network (REPIN).

The EAP Task Force is an intergovernmental body that aims to facilitate reform of environmental management systems in the EECCA region. It brings together policy makers from EECCA, Central Europe and donor countries, as well as international institutions and other stakeholders. The Task Force was established at the 1993 “Environment for Europe” Ministerial Conference in Lucerne, Switzerland. The secretariat is hosted by the Environment and Globalisation Division of the OECD Environment Directorate.

The Sixth Conference of Ministers within the “Environment for Europe” process (Belgrade, October 2007) will provide an opportunity to assess progress in modernising environmental compliance assurance systems based on the recommendations of the “Guiding Principles”. To this end, the OECD/EAP Task Force Secretariat in close cooperation with REPIN members conducted a region-wide review that aims to identify achievements and challenges of the implementation of the “Guiding Principles”. The review also suggests priority steps to further strengthen environmental enforcement institutions and tools in the EECCA region. The study focuses mostly on issues of pollution prevention and control with a limited discussion of “green” enforcement.

The main target audience for the review’s policy conclusions and recommendations are high-level officials who will attend the ministerial meeting in Belgrade. The review will also be useful for environmental enforcement authorities in their efforts to raise support, domestically and internationally, for improving their effectiveness and efficiency. Other stakeholders, in particular NGOs and the regulated community, will get a better understanding of the objectives and challenges of environmental enforcement authorities in EECCA, thus being able to meaningfully engage in the reform of these authorities.

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This information, together with insights from interviews, discussions during several workshops involving over 250 people from the region, and available literature, have been summarised by Angela Bularga and Eugene Mazur from the OECD/EAP Task Force Secretariat, with input from Krzysztof Michalak, and with guidance from Brendan Gillespie. Support for data collection and analysis was provided by Natalia Zugravu. The report was edited for English language by Helen Shields. Natalia Chiumacenko translated the report into Russian and Tatiana Guseva edited the Russian version of the report. Selected parts of the Russian version were peer reviewed by Alexei Varnakov, Vladimir Tsevelev and Irina Shiriyeva (Russia). Aliona Roshmendilo provided administrative support.

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REPIN - A REGIONAL PARTNERSHIP FOR BETTER ENVIRONMENTAL POLICY IMPLEMENTATION

The Regulatory Environmental Programme Implementation Network (REPIN) is the main mechanism for dialogue on issues of environmental compliance assurance in EECCA. This dialogue involves senior policy makers from environmental ministries and managers/practitioners from environmental enforcement agencies in the EECCA region, but also representatives of the non-governmental sector. REPIN is open to the participation of officials and experts from the OECD and Central and Eastern Europe (CEE) countries and facilitates know-how transfer and donor assistance to EECCA countries. The Network holds annual meetings to discuss and agree on the work programme, country-specific projects, and monitor their implementation.

REPIN work has helped to revise policies and legislation, to reform environmental enforcement institutions, and to upgrade the knowledge and skills of environmental officials and experts in the EECCA region. The Network enlarged its scope of work after the Kiev “Environment for Europe” ministerial meeting and has concentrated efforts in three main areas: (i) environmental policy instruments; (ii) environmental compliance assurance strategies and tools; and (iii) performance of environmental enforcement authorities in EECCA. The REPIN’s working methods emphasise policy dialogue and peer learning, and analysis and good practice guidance to support reform efforts. A suite of practical tools to assist EECCA governments to implement reforms have been developed. Country-specific demonstration projects have been used to both develop and apply such tools.

REPIN is a member of the International Network for Environmental Compliance and Enforcement (INECE). This work also draws from, and, where appropriate, contributes to, activities of other international partnerships, including the IMPEL Network of the European Union (EU) and the Environmental Compliance and Enforcement Network for Accession (ECENA).

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ISO Codes for Countries and Country Currencies in EECCA

Country Code	Country Name	Currency Code	Currency Name
ARM	Armenia	AMD	dram
AZE	Azerbaijan	AZM	Azerbaijani manat
BLR	Belarus	BYR	Belarussian ruble
GEO	Georgia	GEL	lari
KAZ	Kazakhstan	KZT	tenge
KGZ	Kyrgyz Republic	KGS	som
MDA	Moldova	MDL	Moldovan leu
RUS	Russian Federation	RUB	new Russian ruble
TJK	Tajikistan	TJS	somoni
TKM	Turkmenistan	TMM	Turkmen manat
UKR	Ukraine	UAH	hryvnia
UZB	Uzbekistan	UZS	Uzbekistan som

ACRONYMS

CEE	Central and Eastern Europe
EBRD	European Bank for Reconstruction and Development
ECENA	Environmental Compliance and Enforcement Network for Accession
EEAs	Environmental Enforcement Authorities
EECCA	Eastern Europe, Caucasus, and Central Asia
EIA	Environmental Impact Assessment
ELV	Emission (Effluent) Limit Value
EMS	Environmental Management System
EQS	Environmental Quality Standard
EU	European Union
IFC	International Finance Corporation
IMPEL	EU's Network for the Implementation and Enforcement of Environmental Law
INECE	International Network for Environmental Compliance and Enforcement
MEA	Multilateral Environmental Agreement
NGO	Non-governmental Organisation
OECD	Organisation for Economic Cooperation and Development
PPO	Public Prosecutors' Office
PRIDE	Performance Rating and Information Disclosure scheme
PRTR	Pollution Release and Transfer Registry
REPIN	Regulatory Environmental Programme Implementation Network

RIA	Regulatory Impact Analysis
SER	State Environmental Review
SME	Small and Medium-sized Enterprise
UNECE	United Nations Economic Commission for Europe
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
WHO	World Health Organization

EXECUTIVE SUMMARY

In 2003, by endorsing the “Guiding Principles for Reform of Environmental Enforcement Authorities in Transition Economies”, the countries of Eastern Europe, Caucasus, and Central Asia (EECCA) agreed on a reference model to guide the modernisation of their systems for environmental regulation and compliance assurance. This report reviews progress in implementing the “Guiding Principles”. The main conclusion is that countries took action to comply with the “Guiding Principles”, mostly through elevating the status of environmental enforcement authorities, clarifying responsibilities, and providing training and a better infrastructure. While such improvements are an important basis for further reform, continued lack of progress in modernising strategies and instruments of work will inhibit institutional and environmental performance. Although the report shows that situation is uneven across the region, it was possible to identify the following patterns:

Environmental regulatory frameworks are converging with international benchmarks

The quality of regulatory requirements, which can have an important influence on the level of compliance, has started to improve. Core legal provisions for environmental management were largely established by 2003, and EECCA countries then launched a second cycle of lawmaking. The development of environmental codes (finalised in Kazakhstan, and on-going in Belarus, Kyrgyzstan, and Russia) emerged as a tool for making regulatory frameworks more coherent. Following international benchmarks, several countries introduced new policy instruments, for instance, Strategic Environmental Assessment and integrated permitting. However, discrepancies between new laws and unreformed by-laws still result in regulatory requirements that are unrealistic, thus difficult to implement and enforce. Regulatory Impact Analysis (RIA) has only been applied in a limited way. Mandatory consultations are often perceived as a procedural burden rather than a tool to balance stakeholder interests. Despite growing recognition that continuous feedback from practice is needed to correct environmental legislation, such feedback is limited, and when a law proves to be ineffective, lawmakers often issue a corrective document without consulting practitioners and without addressing the roots of the failure.

The short-term targets of institutional development have been met, but long-term challenges remain

During the early transition period, environmental enforcement authorities received marginal attention and support due to the focus on environmental policy planning and lawmaking. Driven by government-wide administrative reforms and, sometimes, international peer pressure, the institutional status of environmental inspectorates was recently strengthened in most EECCA countries. In 2004-2005, inspectorates were established in Kazakhstan and Georgia. In these two countries and Armenia, institutional reforms were preceded or accompanied by efforts to legally define the responsibilities and powers of inspectorates based on the recommendations of the “Guiding Principles”. Also, some EECCA inspectorates enjoyed higher budgets and a partly renovated infrastructure. At the same time, enforcement authorities are still exposed to intensive (up to 30% per year) staff rotation and brain drain due to uncompetitive salaries, limited social protection and sometimes unsupportive organisational cultures.

Institutional capacities remain particularly low at the sub-national level. The workload increased without a proportional adjustment in human, material, and financial resources. Commonly, limited powers and capacities do not allow sub-national units to effectively implement tasks that are delegated to them. In Kyrgyzstan, Moldova, Russia, and some other EECCA countries, the quality of regulation at the sub-national level is negatively influenced by insufficient institutional separation of permitting and inspection. Deficient vertical coordination sometimes leads to the duplication of on-site visits, as reported in Kyrgyzstan. Occasionally, national-level authorities provide policy and methodological guidance to sub-national units and local public authorities. However, vertical relations are often adversarial due to performance assessment systems that over-emphasise punishment of, rather than support for, poorly performing sub-national units.

Horizontal relations, in particular coordination and cooperation with other governmental actors (*e.g.* sanitary inspectorates, fiscal authorities, customs, etc.), have in general improved. For example, in Kazakhstan, eleven inter-agency memoranda of understanding were signed in 2004-2006, specifying concrete areas and mechanisms of cooperation with other authorities. Joint inspections with representatives of other governmental bodies continued in Belarus, Russia, and Uzbekistan. In Belarus and Georgia, the environmental enforcement authorities and the Ministries of Internal Affairs started to share data on administrative offences in order to increase sanctions when recidivism occurs.

Paradoxically, the exchange of information and cooperation within environmental authorities remains problematic; in particular, information flows between inspection and permitting units (where they are separated), and between inspection and ambient monitoring units are intermittent.

While judicial (either civil or criminal) response to non-compliance is still weak, the judicial authorities in some countries enhanced their environmental awareness and capacity to deal with environmental cases due to internationally-offered or NGO-led training. Regular analyses of court practice in the field of environment were launched in Belarus and Russia. Unfortunately, relations between inspectorates and courts continue to lack feedback on both outcomes of prosecution (as in Armenia, Kyrgyzstan, and Ukraine) and, more commonly, on the quality of evidence collected by environmental inspectors.

The need to interact with NGOs to promote compliance is now largely accepted but there are few concrete actions. Most frequently, interaction is limited to providing access to information upon request from NGOs. Other forms of interaction include workshops and sometimes joint inspections.

Enforcement is still suffering from unbalanced strategies, political pressures, and opacity

Compliance assurance is still poorly planned and often gravitates toward punitive instruments. Despite gradual re-focusing on environmental results, enforcement of pollution charges and fines remains an important element of work and creates perverse incentives for inspectors. Among non-compliance

responses, fines are predominant. NGOs report that the declared “zero tolerance” policy is applied selectively. Lack of sound and transparent enforcement policies, protectionism by high-level officials, pressure from sectoral ministries and opaque decision-making often distort the consistency and proportionality of regulation and enforcement, thus undermining the rule of law, public confidence and staff integrity.

The analytical basis for designing better strategies and boosting performance is very limited

Adequate capacity to collect, analyse and disclose compliance and enforcement information is essential not only for strategic and operational planning within inspectorates, but also for ensuring the transparency, accountability, and integrity of these authorities, and for empowering third parties to act as indirect regulators.

Currently, the information management approaches applied by environmental inspectorates favour the quantity of data over their quality or use. Thus, EECCA countries routinely collect over thirty (and sometimes up to one hundred) compliance and enforcement indicators that are broken down by medium-specific programme areas, geographic areas, or sometimes law articles.

Although some countries (*e.g.* Russia, Ukraine, and Kazakhstan) started to systematically analyse and disclose data on the greatest contributors to industrial pollution, the roots of non-compliance and its economic consequences are not quantified. The effectiveness and efficiency of compliance assurance instruments and strategies are not analysed. Good performance is associated only with high numbers of inspections, investigated violations, or monetary sanctions. The poor standardisation of terminology and procedures opens up opportunities for misinterpretation or manipulation of data. For the same reasons, the cross-country comparability of compliance and enforcement data is very limited.

Compliance assistance has become less sporadic, but is still limited

To a large extent, regulatees in EECCA exhibit poor knowledge of environmental requirements and low capacity to identify and adopt win/win opportunities. In order to address these problems, EECCA environmental authorities made efforts to improve the access to laws and selected by-laws through their web sites and other

means. Half of the countries report that they organise special events to inform the regulated community about legal developments or explain new regulatory requirements. However, unlike in OECD countries, there are no comprehensive compliance promotion programmes, and the implementation of compliance promotion activities by inspectorates is often seen, especially by NGOs, as exceeding the enforcers' mandate. The compliance promotion efforts still lack mechanisms based on local financing rather than volatile external technical assistance.

The probability of detecting non-compliance remains low

Despite institutional improvements, the probability of discovering non-compliance remains low. This is often due to continued legal restrictions imposed to prevent corruption whereby planned inspections of industrial facilities should not occur more often than once every year or two, and all site visits should be announced well in advance. Although the problem of corruption does exist, frequency restrictions are not likely to solve it. Measures such as full transparency of inspection procedures and systematic disclosure of inspection results, which are more likely to curb corruption, receive less attention.

At the same time, there are positive developments. The use of integrated approaches in inspection has widened and procedures of inspection were updated and better documented in several countries, *e.g.* in Georgia, Ukraine, and Kazakhstan. Modern monitoring tools such as spatial imaging are being adopted by higher-income countries. All inspectorates tend to prioritise their activities in order to use scarce resources more effectively, but the use of risk-based inspection approaches is limited by poor identification and profiling of the regulated community, as well as the absence of priority-setting methodologies and tools.

Compliance monitoring by regulatees themselves is still under-developed. Armenia, Georgia, Kazakhstan, and Russia improved the legal basis for enterprise monitoring and reporting. At the same time, environmental authorities still tend to impose an all-encompassing monitoring that turns out to be expensive and unattractive for companies. Self-reporting remains administratively cumbersome: commonly, companies are required to send three to four different reports to several authorities in different formats and with different deadlines. In contrast with permitting, this problem hardly received any attention within the “one-stop shopping” approach to regulation that has been actively promoted in the EECCA region.

Administrative, judicial, and social sanctions fail to provide sufficient deterrence

Several EECCA countries claim to have improved deterrence because of a more adequate level of fines. Indeed, in Armenia, Georgia, and Russia administrative fines were made more stringent, but in some other countries they were not even adjusted for inflation. Analytical tools to estimate illegal

financial gains from non-compliance and the affordability of fines are missing. Fine collection rates increased over the last few years. The sharpest increase was recorded in Georgia (from 6% in 2000 to 72% in 2006), and in Azerbaijan (from 20% in 2000 to 80% in 2006). The array of other administrative sanctions is wide but few of them are used in practice, and their application lacks proportionality. Criminal enforcement is still hindered by insufficient communication between environmental inspectorates, prosecuting authorities, and courts. The low capacity to collect and record non-compliance evidence and the opacity of decision-making on enforcement cases further undermine both administrative and criminal enforcement.

Social pressure on regulatees to achieve better compliance and enforcement by third parties has increased. Kazakhstan, Russia, and Ukraine adopted rating schemes to assess and disclose industry's environmental performance, thus promoting compliance through public pressure. In Russia, at least three different schemes exist, some of them linked to industry efforts in self-regulation while others are pursued by NGOs. However, the number of civil judicial enforcement cases remains insignificant despite support from advocacy groups that are active in Armenia, Belarus, Moldova, Ukraine and a number of other countries. Class-action lawsuits are not yet used.

As a result, the impact of current compliance assurance strategies is modest

Incoherent regulatory frameworks, poor economic incentives, and flawed compliance assurance strategies push companies to focus on short-term profits and disregard environmental regulatory requirements: almost every on-site visit uncovers one or several violations. Environmental crime (including organised

crime) is gaining ground. For example, in Russia, the number of recorded criminal cases related to the environment rose six-fold over the last decade. Illegal logging and smuggling are still dominant, as crimes linked to pollution and waste management are more difficult to discover or prove.

At the same time, spreading voluntary initiatives (such as adoption of environmental management systems and corporate reporting) signal a certain change in mindsets. Despite the fact that a limited number of companies are ISO 14 001 certified, the size and sometimes dominant market position of these companies marks certain progress in comparison with 2003. Environmental requirements in Western markets and pressure from local communities are important drivers for improved environmental performance in some EECCA countries.

Although the reform has been slow, its results provide a basis for further modernisation

Overall, the countries' responses to environmental non-compliance are more systematic nowadays than in 2003. At the same time, profound changes in regulatory frameworks and compliance assurance strategies are still required. A first step would be to finally establish statutory and permit requirements that are not only ambitious, but also fair, feasible, and clear.

It will be important to renounce the revenue-raising focus of work and re-orient the goals and strategies of environmental enforcement agencies to raising the level of compliance and achieving environmental results. Other priority actions include:

- (i) Better profiling the regulated community and quantifying compliance levels;
- (ii) Analysing and better influencing the incentive framework for businesses to improve environmental performance;
- (iii) Improving strategic and operational planning, inspection procedures, and performance management;
- (iv) Encouraging third parties (industry associations, financial institutions, or citizens' associations) to act as indirect enforcers; and
- (v) Adopting stepwise, transparent, and participatory enforcement policies.

Continued institutional strengthening is also necessary to develop better procedures and technical guidance, train staff, and improve infrastructure, as well as to ensure adequate staffing and budgets.

Progress toward the rule of law and environmental performance requires adequate incentives

“The stringency of our laws is tempered by the total laxity in complying with them”, says a Russian dictum that reflects well the compliance culture not only in Russia, but in the whole region both during and after the Soviet period. Indeed, for several decades, EECCA has been marked by pervasive environmental non-

compliance. Today, EECCA countries are at the point where integration into the global economy, pressure from the general public, and international cooperation could change the incentive framework, thus promoting the rule of law and environmental performance. Harnessing this opportunity is crucial in order to avoid social and economic costs of environmental pollution and degradation, and to ensure a level playing field for businesses.

1. QUALITY OF REGULATORY DESIGN

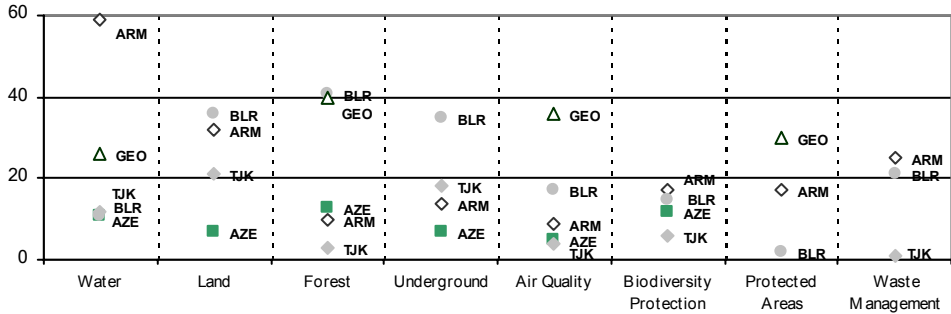
The “Guiding Principles” underline that environmental enforcement authorities (EEAs) cannot function effectively unless the legal frameworks establish requirements that are realistic and enforceable. If these pre-conditions are not met, authorities will face wide non-compliance and will be forced to allow for case-by-case exceptions that are likely to lower the credibility of regulation and nurture corruption. Businesses, in their turn, instead of complying, might dedicate more time and money to lobbying authorities to change the requirements or to asking for special treatment. Furthermore, the choice of regulatory instruments should take into account market and social incentives.

1.1 Overall evolution of legal frameworks

The transition period in EECCA was marked by an intensive development of legal frameworks for environmental management. For example, in 2005, the environmental legal framework in Russia comprised more than 30 federal laws as compared to only six laws/codes that existed in the early 1990s. In other EECCA countries, the scope of environmental law is similar. Legislation enacted over the first decade of transition comprised umbrella laws setting the key principles and institutional arrangements for environmental management, as well as many medium-specific laws. In the mid and late 1990s, in many EECCA countries, cross-cutting laws were developed or amended to promote a more systematic use of core instruments of environmental policy.

The development of implementing regulations has been slower than the adoption of framework acts, leaving in force many Soviet regulatory documents. As a consequence, it is not always clear which norms apply in a specific case. Moreover, some by-laws do not follow exactly the primary legislation (as reported by Belarus), thus multiplying the inconsistencies. The number of by-laws can be quite high (Figure 1), especially in priority policy areas. All these norms create confusion for regulators and regulatees alike.

Figure 1. Number of regulations establishing implementation mechanisms for medium-specific legislation in selected EECCA countries (2006)



Source: Data provided by the EECCA environmental enforcement authorities.

Once enacted, the majority of laws are relatively stable, although there are many exceptions to this observation (Table 1). EECCA countries report that amendments commonly aim to address gaps, overlaps, and contradictions in different laws. For instance, Armenia introduced 31 amendments to the Land Code over a period of four years. In general, medium-specific legislation is more stable than cross-cutting environmental legal acts. In this context, it is important to mention that while improving the legal framework is an important function of governmental authorities, it cannot become a goal in itself. Multiple and frequent amendments make the regulatory requirements unpredictable and difficult to address within a normal business planning process, thus increasing the costs of compliance.

Ambitious and often uncoordinated environmental lawmaking resulted in a high level of fragmentation and a general loss of simplicity and coherence. Therefore, since 2002-2004, a second cycle of lawmaking was launched in the EECCA region in order to improve the quality of legal acts.

Table 1. Some examples of the law amendment incidence in selected EECCA countries

Scope of laws	Armenia			Belarus			Tajikistan		
	Enacted	Last changed	No. of amendments	Enacted	Last changed	No. of amendments	Enacted	Last changed	No. of amendments
Water	2002	2005	12	1998	2006	1	2000	2005	3
Land	2001	2005	31	1999	2006	2	1996	2006	5
Air quality	1994	2005	7	1997	2006	2	1996	2004	1
State Environmental Review	1995	1997	4	1993	2000	1	2003	2006	2
Economic instruments	1998	2005	13	1991	2005	12	2004	2004	0

Source: Data provided by the EECCA environmental enforcement authorities.

Several countries decided to pursue this goal by means of codification. The first document of this kind was adopted in December 2006 in Kazakhstan (Box 1). Russia, Belarus, and the Kyrgyz Republic are also actively developing their environmental codes, and several other EECCA countries are likely to follow. This trend is consistent with the drive to streamline and simplify regulation (environmental in particular) in many OECD countries. However, there is a risk that scarce resources will be distracted to produce mere “law registers” instead of fully-fledged codes that would streamline and clarify complex regulatory requirements that have been introduced haphazardly over the last 15-16 years.

Box 1. A brief overview of the Environmental Code of Kazakhstan

The Environmental Code of Kazakhstan, an act of 342 articles and some 400 pages, seeks to incorporate most existing environmental laws and minimise the need for implementing regulations (some 80 by-laws were abrogated). The Code resolves many discrepancies in the preceding legal acts (albeit some contradictions remain within the Code) and advances important new concepts and instruments. For example, it mandates integrated permitting for large industry starting in January 2008. To prevent corruption, detailed inspection procedures are included in the Code. The focus of compliance monitoring shifts from governmental inspections to (verification of) self-monitoring by industrial operators. Also, regional discrepancies in pollution charge rates are resolved by introducing nationwide rates. In the Code, many other important reforms are mandated.

The Environmental Code was developed through stakeholder consultations. Unfortunately, the very tight schedule of its preparation influenced negatively the quality of these consultations. No in-depth social or economic analyses were conducted to assess the impact of regulation, although stakeholder consultations compensated to a certain degree for the absence of such analyses by guaranteeing that new requirements are not at odds with the interests of various stakeholders and the capacity to comply with, and enforce, new requirements.

Source: Kazakh Ministry of Environment (www.nature.kz)

Several countries (such as Armenia, Belarus, Kyrgyzstan, Russia, and Ukraine) initiated the revision of secondary legislation. This process is in its preliminary stages, but shows to be challenging due to the scale of reform that often covers hundreds of regulations and standards. First lessons learned, for instance, from Russia (Box 2), indicate that this process needs to be better designed - often, the very prescriptive character of secondary legislation inherited from Soviet times remains intact.

Box 2. Challenges in the process of secondary legislation reform in Russia

In Russia, the new Federal Law on Technical Regulation that came into force in July 2003 abrogated the Soviet-era standards, sanitary and construction norms, and other similar regulations (in total, around 60 000 secondary legal acts). According to expert opinion, up to 8 000 sectoral laws and a similar number of by-laws will need to be developed and approved during the seven-year transition period allowed by this law. There are hopes that this reform will considerably reduce the administrative burden on industries and stimulate the exclusion of some 8-10 billion USD per year from shadow economic activity.

At the same time, progress in enacting new regulations has been extremely slow, while old regulations have already been abolished. In early 2007, the Russian Union of Industrialists and Entrepreneurs pointed at important delays in implementing the Law and called for a better harmonisation with international standards. Heavy criticism was expressed *vis-à-vis* the highly prescriptive character of regulations in Russia, which seek to determine and control economic activity down to the smallest detail, thus stifling innovation.

Source: Web site of the Russian Union of Industrialists and Entrepreneurs, www.rspp.ru

1.2 Convergence with the EU environmental legislation

The substantive reform of environmental legislative frameworks in EECCA is largely based on the concepts of relevant European legislation. Indeed, several economic, political, and other factors make the EU *acquis communautaire* an attractive benchmark. The enlargement of the European Union to the borders of Belarus, Moldova, Ukraine, and Russia has provided a powerful incentive for these countries, particularly for Moldova and Ukraine, to focus environmental regulatory reform on moving their national environmental legislation closer to EU norms. In addition, trans-boundary environmental problems require calibrating relevant elements of the regulatory framework in these countries to be able to adequately address such issues together with the EU. Even in EECCA countries that do not identify European integration as a central political and/or economic goal, it is recognised that strengthened relationships with EU members in terms of trade and investment will require a certain degree of convergence of environmental regulation, *i.e.* adoption, to a feasible extent, of the main principles and features of the EU legislation, without necessarily transposing environmental directives article by article.

Although gradual convergence with key principles and standards of the EU environmental directives has been largely accepted as a policy direction in most EECCA countries, neither EECCA governments nor the donors have a clear sense of scope, priorities, and strategy for the convergence efforts. The first steps in drafting an EU convergence strategy have been taken in Ukraine, Moldova, and Georgia, but the

process is very slow due to the limited institutional capabilities of the environment ministries and, sometimes, lack of continuity. For example, a ten-year process of convergence (started in 1996, when the first concordance tables were produced for some 10 directives) had very modest results in Moldova. In addition, there is little capacity in EECCA countries to monitor the evolution of the EU environmental legislation, while currently it undergoes important changes within the “better regulation” process (see Box 3).

Box 3. The European Union’s “Better Regulation” initiative

The “Better Regulation” initiative is a centrepiece of the European Commission’s “Partnership for Growth and Jobs” (also known as the renewed Lisbon Strategy) launched in spring 2005. Its key objective is to ensure that the regulatory environment is simple and of high quality, since the regulatory framework in which businesses operate is a key factor of their competitiveness, growth, and employment performance.

To make sure that regulation is used only when necessary and that the burdens it imposes are proportionate to its aim, the European Commission put a number of processes and tools in place: (i) withdrawal or modification of pending legislative proposals; (ii) taking measures to simplify existing legislation; and (iii) insuring better quality of new proposals through systematic use of the Regulatory Impact Analysis and public consultation.

In 2006, the Commission gave new impetus to its actions in this field by:

- Proposing an ambitious strategy to reduce the administrative burden of existing regulation. A reduction target of 25% was fixed, to be achieved jointly by the EU and Member States by 2012;
- Adding a further 43 new initiatives to its rolling programme to simplify existing regulations, thereby contributing to the goal of enhancing competitiveness of the European economy;
- Setting a target date of 2008 for the finalisation of a programme to reduce the volume of the existing body of EU legislation through codification;
- Withdrawing in 2007 a further 10 proposals pending before the legislator;
- Creating an independent Impact Assessment Board;
- Taking more preventive action to strengthen the transposition and enforcement of EU laws.

An Action Programme, presented in January 2007, demonstrates the way in which the Commission intends to work with Member States to cut administrative burdens on businesses by a quarter by 2012. The measures could reduce the burdens on businesses by 1.3 billion euros on an annual basis. The Programme focuses on information obligations in thirteen selected priority areas including environmental law.

In the latter field, the following directives were selected as a priority for measuring administrative burdens associated with them:

- Regulation No. 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste;
- Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control;
- Waste Electrical and Electronic Equipment Directive 2002/96/EC;
- Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on end-of-life vehicles;
- Directive 2003/105/EC of the European Parliament and of the Council of 16 December 2003 amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances.

Source: “Better regulation” web site
http://ec.europa.eu/enterprise/regulation/better_regulation/index_en.htm

1.3 Lawmaking procedures

Lawmaking procedures play an important role in securing the quality of legislation. Lack or poor organisation of Regulatory Impact Analysis (RIA) and stakeholder consultations is detrimental to compliance because authorities may not find out about important factors impeding compliance or fail to secure target group support for a proposed regulation. RIA helps to quantify the likely costs of compliance on an individual citizen or business and clarify the costs of enforcement for the state. Consultation allows target populations to have an input into the terms of a proposed regulation so that they understand why it is necessary and how their concerns have been addressed. This can give them a sense of “ownership” or understanding that will increase their commitment to the objectives of regulation and, therefore, increase rates of compliance.

In EECCA, the first-generation legal acts were drafted and enacted within “technocratic” processes that hardly included public consultations and cost-benefit analyses to estimate the feasibility or requirements. This approach showed to be counterproductive in terms of achieving regulatory compliance. The *ex-ante* Regulatory Impact Analysis to estimate the potential costs and benefits of new legal provisions was and continues to be carried out sporadically and commonly has a very narrow character, mostly quantifying the costs for the state to enforce new legislation. Nine countries out of twelve assess administrative costs of enforcement, and only six countries report that they estimate compliance costs (for example, compliance costs were estimated in comparison with benefits of regulation when the Euro-2 standard for vehicles was introduced in Russia). Such analyses take the form of “explanatory notes” to draft laws and provide justification of why regulation is needed.

Traditionally, lawmaking in EECCA involves consultations between governmental authorities. Environmental inspectors can provide feedback on the enforceability of legislation, but cases still occur when feedback from practice is requested irregularly or not requested at all. As a rule, primary legislation is coordinated with other ministries and a legal opinion from the Ministry of Justice must be obtained before sending the draft to the government and further to the parliament. Sometimes, sectoral ministries object to new environmental legislation, as happened in Moldova with the introduction of integrated permitting.

Following national policies of encouraging entrepreneurship and attracting foreign investments, the interests of the regulated community are increasingly taken into account within the lawmaking process and the regulatory requirements are no longer “parachuted” on regulatees. For instance, the legal frameworks of Georgia and Kyrgyzstan are very explicit in this sense. The consultation process, however, seems to be very much focused on the regulated community. In some countries (*e.g.* in Azerbaijan), authorities have the right to decide whether consultations are needed at all. Furthermore, procedures providing for public consultation mechanisms may be deficient, as in Tajikistan (Box 4).

Box 4. Opportunities for public participation in environmental lawmaking in some EECCA countries

Azerbaijan. The procedural framework for lawmaking adopted in Azerbaijan allows for public participation, but the organisation of consultations is left to the discretion of the leading institution (the Parliament or relevant government agency). A body in charge of developing a draft law, as a rule, creates a commission consisting of its own employees and external experts. Representatives of various stakeholders, including NGOs, local authorities, scientists, and other governmental agencies, may be involved in the work at this stage. Law drafting may also be contracted out. The leading agency may publish the draft law and/or initiate national discussion; however, there is no obligation to do so.

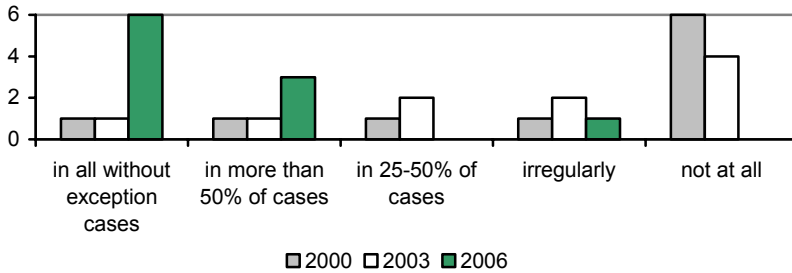
Russia. The consultation procedures within lawmaking are largely handled by individual governmental actors. Current law makes the lead author of a regulation responsible for organising working groups to contribute to the drafting process and to prepare background material. It is up to the author whether to consult with academic or other non-governmental bodies. He is obliged, however, to consult with regional governments when a draft law is in the joint domain of federal and regional authorities. It is possible to set up permanent advisory boards including representatives of government agencies and of public associations and businesses. Several such boards have already been established, including one by the Federal Service for Environmental, Industrial, and Nuclear Supervision in late 2006. These groups may discuss draft regulations and reform programs, offer opinions, or make their own regulatory proposals. However, proliferation of “consultative commissions” is reported to have little real impact.

Tajikistan. The general public, including NGOs, does not currently have any role in the legislative process, except for the extremely rare occasions when authorities themselves decide to seek public opinion on the draft.

Source: OECD, 2006 (Russia); UNECE, 2003 (Azerbaijan) and 2004 (Tajikistan).

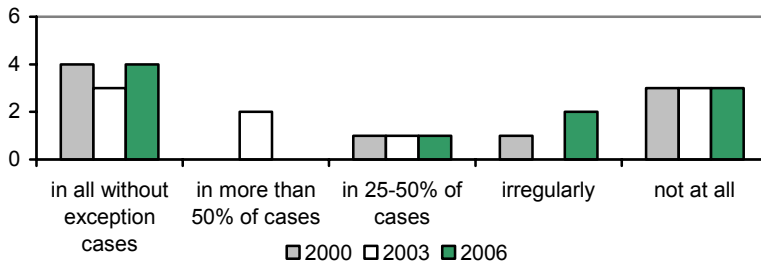
Stakeholder consultations will gain in quality if authorities involve a greater variety of non-governmental actors, including banks, insurers, citizens’ environmental and consumer associations, professional associations or research centres, etc. In general, the legal frameworks in EECCA encourage such stakeholder pluralism: in most EECCA countries, agencies that draft laws are obliged to publish drafts on their web sites and provide an entry point for comments and proposals (Figure 2). The environmental authorities in Georgia, Kyrgyzstan, Moldova, Russia, and Ukraine report that they already do this regularly; more rarely this is done in Armenia, Belarus, and Tajikistan. There are other means to provide access to draft laws, *e.g.* through newspapers or during meetings (Figures 3 and 4).

Figure 2. Number of countries that posted draft environmental laws on the environment ministry's web site (2000-2006)



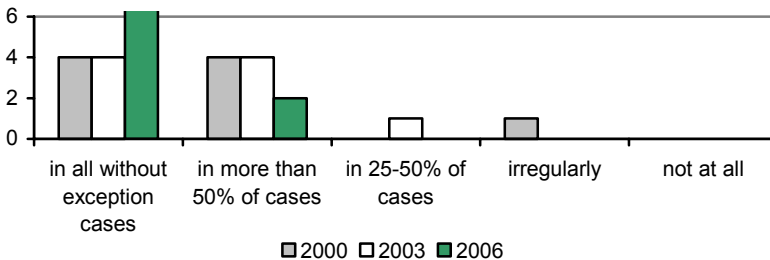
Source: EECCA Environmental Enforcement Authorities.
Data missing for Turkmenistan and Uzbekistan.

Figure 3. Number of countries that published draft environmental laws in newspapers (2000-2006)



Source: EECCA Environmental Enforcement Authorities.
Data missing for Russia, Turkmenistan, and Uzbekistan.

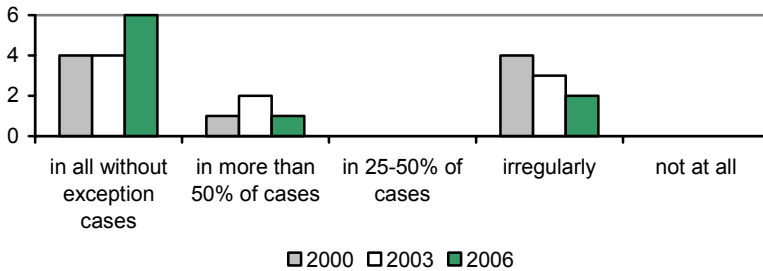
Figure 4. Number of countries where environmental authorities hold stakeholder meetings to seek feedback on draft environmental laws (2000-2006)



Source: EECCA Environmental Enforcement Authorities.
Data missing for Russia, Turkmenistan, and Uzbekistan.

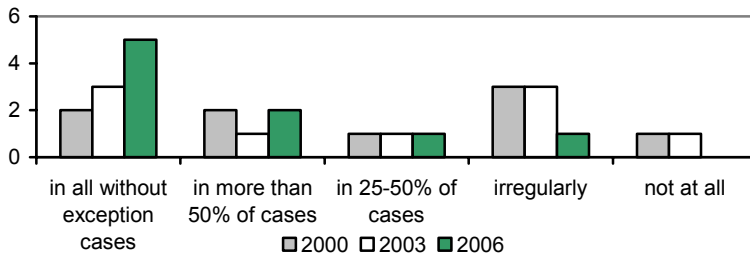
While important measures to improve procedural aspects of lawmaking have been taken, a next step is to prove that consultations are meaningful and stakeholder opinions make a difference. The environmental authorities from most EECCA countries report that they accept written comments on draft laws/regulations from NGOs and the regulated community (Figures 5 and 6) and explain what comments were (not) accepted, and why, in all cases without exception. The NGO community expressed a less optimistic view, particularly as concerns acceptance of comments or provision of explanations as to why they were rejected.

Figure 5. Number of countries where environmental authorities accept written comments on draft laws/regulations from NGOs



Source: EECCA Environmental Enforcement Authorities. Data missing for Russia, Turkmenistan, and Uzbekistan.

Figure 6. Number of countries where environmental authorities accept written comments on draft laws/regulations from the regulated community



Source: EECCA Environmental Enforcement Authorities. Data missing for Russia, Turkmenistan, and Uzbekistan.

1.4 Gradual phase-in of regulatory requirements

An important change in EECCA is the gradual phase-in of legal requirements. Until 2003, in many countries of the region, legal requirements used to come into force immediately after a law (or a normative act) was approved and officially published. This practice has changed. For instance, in Kyrgyzstan, due to an amendment to the Law on Legal and Normative Acts introduced in 2004, at least three months should pass after official publication for a legal act to come into force if interests of economic agents are concerned. If immediate compliance is not possible due to technical reasons, the law should provide for a longer implementation timeframe. These constructive changes in the lawmaking procedures are very helpful in addressing some of the current regulatory failures.

1.5 Realism of regulatory requirements

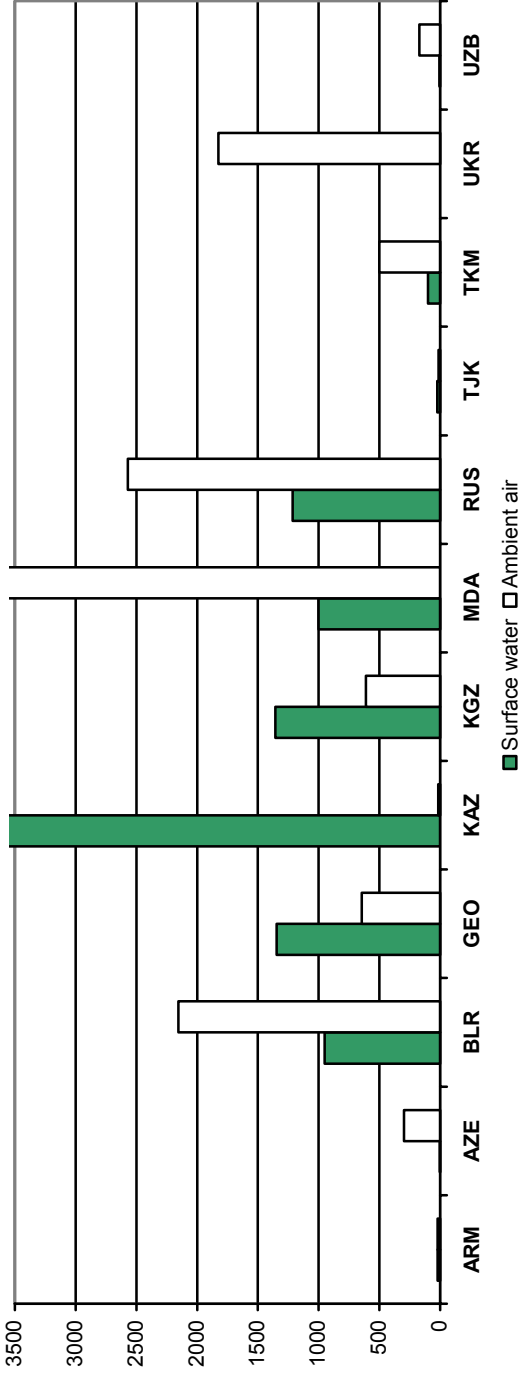
Compliance is likely to be low when a government is using policy instruments and setting regulatory requirements that fail to take into account market and social incentives. In EECCA countries, such a situation persisted for many years as core regulatory instruments remained mostly at odds with incentives faced by the regulated community. The lack of realism was particularly worrying.

The system of **environmental quality standards** is among the last legacies of the Soviet regulatory regime that have remained virtually intact. This system covers hundreds of parameters and sometimes mandates very low concentrations of pollutants compared with respective WHO guiding values and other international benchmarks.

Ambient standards (maximum allowable concentrations [MAC]) are determined without accounting for risk management factors¹. In some countries, the number of polluting substances that are currently regulated is very high (Figure 7) and cannot be effectively monitored with the limited technical capacity and human resources available (this refers to both authorities and regulatees). At the same time, a regulatory requirement makes sense only if it is possible to demonstrate compliance (or non-compliance) with it. In comparison with 2003, none of the countries reported an adjusted scope of regulation. The excessive stringency of a large number of MACs often resulted in the neglect of standards, well illustrated by the magnitude of past and present pollution problems.

¹ For insights, see the OECD/EAP Task Force report CCNM/ENV/EAP(2000)86.

Figure 7. Number of air and water pollutants that are regulated in EECCA countries (2006)



Source: EAP Task Force questionnaire; data for Russia are based on Krotov Yu. (2003), *Maximum Allowable Concentrations of Chemical Substances in Ambient Air, Water, and Working Area*. The number of regulated substances reflects the sum of MACs and the so-called TSELs (tentatively safe exposure levels).

Although no major progress has been achieved in changing the system of environmental standards, the reform process has started in several EECCA countries, *e.g.* Armenia, Kazakhstan, Moldova, and Russia. In Moldova, a demonstration project implemented by the EAP Task Force Secretariat with support from the UK is underway to facilitate convergence with EU surface water quality standards. Under this project, a new system of surface water quality standards was proposed for Moldova. In particular, it is suggested to reduce the list of regulated parameters from 1 083 (in the current regulation for fishery waters) to just 77. The proposed system distinguishes five water quality classes according to their intended use and can serve as an active management tool, where designation of a target water quality class would drive respective regulatory requirements.

The reform efforts are not always coherent. For example, in Kazakhstan, the Water Resources Committee of the Ministry of Agriculture has recently introduced “maximum allowable harmful impact norms” for surface water quality, which represent an attempt to combine the European water quality classification with the old MACs without turning water quality objectives and standards into tools of environmental planning based on risk management.

The general goal of the reform of the **Environmental Impact Assessment** (EIA) systems in EECCA countries has been to reduce the gap between the State Environmental Review (SER, also known as ecological expertise) systems inherited from the USSR and internationally accepted EIA standards. This intention was reflected in more than fifty EIA-related laws and regulations adopted in the region during the 1990s. Currently, all EECCA countries have laws requiring EIA, although these laws vary in consistency and comprehensiveness. The EIA practice has varied between countries in the region more than the legislation. In those countries where EIA/SER laws were passed in the early or mid-1990s (*e.g.* Russia, Ukraine, Moldova), practical experience has been accumulated, allowing these countries to contemplate the introduction of “second generation” EIA legislation.

However, no significant progress in the regulatory basis for EIA and SER has been reported since 2003, and enforcement of EIA is still weak. Experts from Russia are alarmed by a recent legal change that exempted EIA statements from review by competent environmental authorities that opened a window for neglect of environmental considerations. There is a new “coordination” mechanism allowing competent environmental authorities to be involved in decision-making on town-planning issues but this mechanism is considered to be too loose and ineffective.

Most EECCA countries continue to use case-by-case single-medium **permitting** for air, water, and waste, the scope of regulation spanning a large number of substances and practically all pollution sources, irrespectively of their size. Enterprises must still comply with a wide range of environmental statutes, each requiring a separate permit. Having centred their regulatory systems on compliance with excessively strict air and water quality standards, EECCA countries fail to consider the technical and economic feasibility of resulting emission/effluent limit values (ELVs).

This approach has led to permits being oriented toward end-of-pipe solutions rather than pollution prevention, and often to imposition of excessive costs on the regulated community. In practice, however, temporary (but routinely renewed) limits are often set at values close to actual pollution levels, providing no incentive for pollution reduction but, instead, resulting in budget revenues from pollution fees that provide a perverse incentive to authorities to leave intact the current system. An alternative approach is used in Armenia, which introduced longer-term compliance schedules negotiated between the authorities and the regulated facilities to compensate for the stringency of ELVs.

Over the last four years, EECCA environment ministries have come to realise the deficiencies of this Soviet-legacy permitting system. Most EECCA countries have started a permitting reform process, with industry's and donor support (*e.g.* from the Czech Republic, the EU Tacis Programme, and Sweden), trying to shift the regulatory emphasis to more realistic norms. The changes are largely inspired by the approach of the European Union's IPPC Directive (96/61/EC) but take different form in different countries (Box 5). The permitting reform process in EECCA countries is likely to intensify in the near future.

Box 5. Different models of environmental permitting reform in EECCA

In **Ukraine**, the political commitment to convergence with the EU legislation aligns the reform more closely with the European norms. With assistance from the World Bank, Ukraine's Ministry of Environmental Protection expects to draft a law on environmental permitting in 2007, which would stipulate a phased transition to integrated permitting based on best available techniques for large industry and simplified permit requirements for small and medium-sized enterprises (SMEs).

In **Georgia**, the diversification of regulatory requirements based on the environmental significance of installations and the concept of Best Available Techniques (BAT) were already introduced in 1996. The recent Law on Licenses and Permits lays a basis for procedural integration of the permitting process, where one designated permitting authority consults other stakeholder agencies.

However, the practical implementation of these principles is compromised by the narrowed range of installations that require an environmental permit, the eroded authority of the Ministry of Environmental Protection and Natural Resources, and numerous deficiencies of the permitting regulations themselves.

In **Kazakhstan**, separate medium-based environmental permits have been integrated into a single document, and the new Environmental Code calls for the introduction of integrated permitting for large industry already in 2008. However, there are serious capacity constraints for such radical short-term changes in the country.

In **Russia and several other EECCA countries** (e.g. Belarus and Kyrgyzstan), regulations are being drafted that are likely to replace environmental quality-based permit requirements with uniform technology-based ELVs, thereby limiting the discretion of permitting authorities. This reform is seen as a way to facilitate investments and alleviate the regulatory burden on industry. Results achieved so far are controversial.

Source: OECD/EAP Task Force Secretariat, 2007.

While the unfeasible, overly cumbersome environmental regulation can indeed be damaging to economic activity, a modern approach can help deliver vital environmental improvements in a way that fits with a competitive economy. Environmental requirements may adversely affect economic sectors manufacturing environmentally harmful products, but in these cases the benefits to society outweigh the costs. At the same time, there is significant evidence from international research that well-designed environmental management and regulation does not impede overall competitiveness and economic development but can be beneficial by creating pressure on firms to innovate and improve resource efficiency. These drivers come into play particularly in the context of global economic integration (which many EECCA countries aspire to join), where concerns about company image and investor confidence reinforce the impact of environmental regulation.

The reform of environmental permitting, standards and EIA requires strong political will, important legislative changes, effective stakeholder cooperation, and substantial human and technical resources. Furthermore, reforms of instruments of direct regulation can only be successful if they are closely interconnected. The permitting reform needs to be linked to the revision of environmental quality standards to less stringent, enforceable levels, striking a balance between what is desirable from an environmental point of view and what is feasible from a technical and economic standpoint. The essential improvements of the EIA system also require strengthened linkages with environmental permitting by, among others, converting mitigation requirements identified during EIA into permit conditions.

Ultimately, these reforms are as much in the interest of the regulated community (they will stimulate innovation and reduce the administrative burden) as of the environment. Improved awareness raising by NGOs and donor-funded demonstration projects would help environmental authorities to accelerate and better coordinate the reform process.

1.6 Law enforceability

In order to deter wrongful conduct and correct violations that take place, the law should determine appropriate remedies and sanctions. Legal systems must also indicate who should bear the loss when accidental harm occurs. These characteristics of legal systems reflect their “enforceability”. In EECCA, a very large spectrum of enforcement tools exists, including:

- Formal notices of violation and administrative orders to correct the situation;
- Monetary penalties (fines) - administrative (including through the judicial procedure) and criminal;
- Suspension or cancellation of permit(s), facility shut-down, forced corrective actions, or attachment of property, all of which may be required by administrative or judicial order; and
- Criminal punishment, including imprisonment.

In the last few years, some EECCA countries increased the level of administrative fines. In Armenia and Russia, fines were increased by a factor of two in 2002 and 2005, respectively. In other countries (e.g. in Uzbekistan and Tajikistan), the level of fines increased proportionally to minimum reference units. But in a few other countries (e.g. Moldova) they were not even adjusted for inflation. Fines are still quite low (Table 2) and there are large variations in their level, including within sub-regions, which are relatively homogeneous from the economic point of view. For instance, in the Caucasus, the maximum levels of administrative fines that may be imposed on companies differ by as much as 100 times between Georgia (approx. 40 000 USD) and the other two countries - Armenia and Azerbaijan - (approx. 400 USD). Criminal fines (imposed only on a natural person) seem to be high in relative terms but, in order to understand their deterrent effect, benefits of non-compliance, and the probabilities of being caught and punished should be quantified.

Table 2. Stringency of selected administrative and criminal sanctions in EECCA countries

Indicator	Armenia	Azerbaijan	Belarus	Georgia	Kazakhstan	Kyrgyzstan	Moldova	Russia	Tajikistan	Turkmenistan	Ukraine	Uzbekistan
Maximum administrative fine for a legal entity (thousand USD)	0.4	0.4	14.5	40.0	7.4	0.125	-	10.4	-	n.a.	-	2.6
Maximum administrative fine for a natural person ² (thousand USD)	0.2	0.05	0.7	40.0	0.5	0.038	0.079	0.087	0.075	n.a.	0.2	0.9
Maximum criminal fine (in minimum wages/units)	1000	1000	1000	-	1000	700	1000	5000	1000	75	800	200
Adjustment of reference units for fine calculation between 2003-2006 (yes/no)	No	Yes	Yes	-	Yes	No	No	No	Yes	n.a.	No	Yes
Maximum criminal fine compared to the GDP per capita (2005)	1.4	n.a.	4.3	-	2.0	3.6	1.8	3.3	10.6	n.a.	1.5	3.2
Maximum imprisonment (years) for environmental crimes except for ecocide	12	8	7	8	8	8	15	8	8	8	10	5
Maximum imprisonment of a person for ecocide (years)	15	15	15	20	15	20	20	20	20	-	15	-

Note: "n.a." – information is not available; "-" means that a specific sanction does not exist.

Source: Environmental Enforcement Authorities for data on administrative fines ; Criminal Codes of EECCA countries; EBRD (2007); minimum wage data accessed on the following websites: www.ilo.org , www.imf.org and www.state.gov

² In several EECCA countries, fines exist for "officials", i.e. managers of public or private entities. These fines are usually higher than ones for a natural person. In some cases, the fines for officials play the role of surrogate fines for legal entities.

As a rule, authorities escalate sanctions where soft restorative action fails to achieve results and, in principle, the current penalties at the top of the so-called “enforcement pyramid” are sufficiently serious. Overall, there are signs that the “enforceability” of legislation in EECCA is improving, but the improvements are still marginal to serve as a real deterrent to violations. Chapter 3 discusses how various sanctions are used and whether they are effective.

At the same time, the deficiencies of the current environmental liability system in EECCA remain unaddressed. The existing methodologies for environmental damage assessment are speculative, inaccurate, and often too complex to present to arbitration courts that are supposed to adjudicate on these issues (explaining very low collection rates of compensation for damage). Kazakhstan’s new Environmental Code envisages expert assessment of damages based on actual costs of a selected remedy but implementation guidance is yet to be developed. In Russia, this approach was allowed for several years but no analysis of practical implementation has been done so far.

Mandatory environmental insurance for hazardous industrial installations was introduced in Russia and several other EECCA countries. This instrument will remain dysfunctional until regulatees’ exposure to environmental liability becomes real.

2. INSTITUTIONAL ARRANGEMENTS

The “Guiding Principles” advocate that enforcement authorities are established as autonomous institutions, with clear, legally-defined responsibilities, and appropriate powers to monitor compliance and exercise administrative enforcement, as well as offer compliance assistance and ensure open communication with, and participation of, the general public. In a vertical structure, the mandate to take enforcement-related decisions should be delegated to the lowest level where issues can be effectively managed. National level authorities should support sub-national units in maintaining integrity, strengthening their capacity, providing methodological guidance and staff training, and establishing appropriate funding and performance-measurement mechanisms. The internal organisation should promote teamwork, and effective working relations should be established and maintained with other agencies and departments whose activities are linked to environmental enforcement.

In EECCA, the notion of “institution” has traditionally been associated with structures and organisation charts. As a result, “institutional reforms” are often reduced to multiple changes in the structure of governmental bodies. The modern interpretation of “institutions” shifts this notion towards working methods rather than structures. This implies a need to change the focus on the way in which certain organisational units work, interact, make decisions, and resolve problems.

2.1 Institutional status of environmental enforcement authorities

Most EECCA countries have specialised units responsible for the monitoring of compliance with regulatory requirements and administrative enforcement, though their institutional status and organisation vary. The enforcement authorities are usually well integrated into the environment ministries. At the national level, they can have the status of a department within a ministry (as in Azerbaijan) or a more autonomous unit reporting to the ministry (as in Armenia, Georgia, Kazakhstan, Moldova, Russia and Ukraine). Autonomous units (often called “inspectorates”) have, as a rule, legal identity and, sometimes, a separate budget. In Belarus, Tajikistan, and Uzbekistan a range of different inspectorates (for air, water, etc.) exist as subdivisions of the ministry (or the State Committee) responsible for environmental protection. In Turkmenistan, inspection is carried out by various departments of the Ministry of Environment.

During the early transition period, the enforcement arms of environment ministries received marginal attention and support due to the focus on policy planning and lawmaking. Since 2003, the importance and visibility of EEAs increased and they gained higher institutional status in almost all EECCA countries. For instance, heads of inspectorates are appointed by the Prime Minister in Kazakhstan, Moldova, Russia, and Ukraine. In Armenia, the Minister of Environment no longer has the right to decide on concrete enforcement cases. Following national priorities and based on the recommendations of the “Guiding Principles”, inspectorates were created in Kazakhstan (October 2004) and Georgia (September 2005). In Armenia, Georgia, and Kazakhstan, institutional reforms were preceded or accompanied by efforts to legally define the responsibilities and powers of inspectorates.

Contrary to good practice and general trends in EECCA, environmental enforcement authorities in Kyrgyzstan and Tajikistan were downgraded in the period after 2003 together with the main environmental authorities. In Kyrgyzstan, the inspectorate operates at the level of a department within the State Agency for Forestry and Environmental Protection (SAFEP) but, unlike its predecessor, the head of the Agency is not a member of the Cabinet. The Kyrgyz environmental authorities suffered particularly badly from the high instability (Box 6) of both structure and leadership, as changes have been occurring every six to twelve months. In Tajikistan, the entire State Committee for Environmental Protection (and its sub-division, including several specialised inspectorates) was integrated into the Ministry of Agriculture at the level of a ministerial department.

Box 6. The instability of the environmental enforcement authorities in Kyrgyzstan

The organisational structure of the national-level environmental enforcement authorities in the Kyrgyz Republic has been quite unstable over the last few years. Before 2001, the main environmental enforcement agency in Kyrgyzstan was the Main Division for Environmental Inspection (MDEI) of the Ministry of Environment Protection (MEP). Following the merger of the MEP with the Ministry for Emergency Situations in March 2001, the MDEI was transformed into the Department for State Environmental Control (DSEC). In 2003, the DSEC was merged with the former Department for Ecology and Environmental Monitoring, to form the DENRU - the Department for Ecology and Nature Resource Use. Within this Department, the permitting and inspection authority functioned at the level of a division. This very low institutional status persisted when the environmental and forestry authorities were merged in 2005 to form the State Agency for Forestry and Environmental Protection. Only in February 2007 an Inspection Department was created within the Agency.

Source: OECD (2005), *Environmental Enforcement in Kyrgyz Republic*; web site of the State Agency for Forestry and Environmental Protection, <http://ecokg.caresd.net/index.php>.

The structural instability of the environment ministries and frequently changing leadership can be observed in more than half of the EECCA countries. As a result, during very long periods of time officials from the subordinated units (including the inspectorates) concentrate on setting up the new structures and re-defining their respective roles, bringing the system of environmental management to the edge of institutional paralysis. Lately, a number of EEAs enjoyed certain stability, for instance in Armenia, Georgia, and Kazakhstan. Also in Russia, after multiple structural changes in 1999-2004, the compliance assurance system has seen a period free of institutional perturbations.

Even in countries where EEAs are autonomous, the independence of their decisions is often influenced by higher-level policy makers, especially when enforcement cases involve large companies (often those doing business in sectors related to natural resources use, *e.g.* oil extraction). For example, in Russia, the Minister of Natural Resources was closely involved in the decision-making and public communication on the controversial Sakhalin II case³, which goes against the authorities' goal to pursue a clear separation of policy making and enforcement functions.

The fact that most enforcement authorities in EECCA work under the umbrella of environment ministries is not a problem as such. On the contrary, it might be beneficial for better functioning of various elements of the regulatory cycle, especially for effective interaction with peers responsible for lawmaking and permitting. Experience from OECD countries has shown that a variety of organisational models exist and can function effectively if relationships are clearly defined and institutional arrangements allow the EEAs to take operational decisions free of political pressure.

Changes in the institutional structure were often driven by government-wide administrative reforms. For instance, this happened in Russia, where the executive bodies were streamlined in 2004 based on the principle of clear division of policy making and of regulatory and service provision functions. Similar lines of development could be observed in Kyrgyzstan and Moldova where "functional" analyses of government bodies were conducted by the UNDP in 2004 and 2006, respectively, within the framework of ambitious public administration reform. Also, Kazakhstan has recently embarked on such reforms.

³ The Minister of Natural Resources made several public declarations in relation to environmental compliance by the Sakhalin II project, blaming the project developers for criminal breaches of the environmental law.

International cooperation also supports the process of institutional development by sustaining policy dialogue among countries and creating peer pressure to catalyse reforms. For instance, a pilot Peer Review Scheme was launched in 2004 in the framework of the OECD/EAP Task Force in order to help countries of the region to implement the “Guiding Principles”. Experts representing OECD member states, other transition economies, international organisations, NGOs, and the private sector took part in the programme. So far, this scheme has been applied in two EECCA countries - Kyrgyzstan (2004) and Armenia (2005) - and has been confirmed to be an effective mechanism for distilling achievements and bottlenecks in the organisation of environmental enforcement systems⁴. Institutional building efforts in Georgia and Kazakhstan were supported by the Netherlands and Norway.

2.2 Scope of work

In the EECCA region, inspection and administrative enforcement in both “green” (nature protection) and “brown” (pollution prevention and control) areas is often combined in one inspectorate, as in Armenia, and Georgia. There are exceptions, for instance, Kazakhstan and Russia where different enforcement agencies are responsible for “green” and “brown” issues. In Belarus, several medium-specific inspectorates exist.

Changes in the scope of work may occur, often driven by a changing economic significance of natural resources or need to overcome institutional problems, including corruption. For instance, in 2004 the Russian government decided to separate “green” and “brown” enforcement and delegate the pollution prevention and control function to the agency in charge of industrial and nuclear safety. Unfortunately, this decision was taken less than two years after another major reorganisation that integrated supervision of natural resource use with supervision of regulated industrial sites and resulted in a higher level of institutional fragmentation. Today, at least seven agencies have environmental management functions at the federal level, while at the sub-national level their number is almost double or even larger, taking account of various competent authorities within regional administrations. Also, in Kyrgyzstan and Ukraine the control over forest resources was delegated several times to environmental enforcement authorities, and then withdrawn from their jurisdiction.

⁴ For more information, see www.oecd.org/env/eap

The implications of a wider scope of work are not clear in any country. On the one hand, it enables authorities to provide a more integrated approach to environmental management and should help to avoid institutional fragmentation and duplication of work. On the other hand, the effectiveness of more “integrated” enforcement agencies is often inhibited due to scarce resources.

2.3 Responsibilities

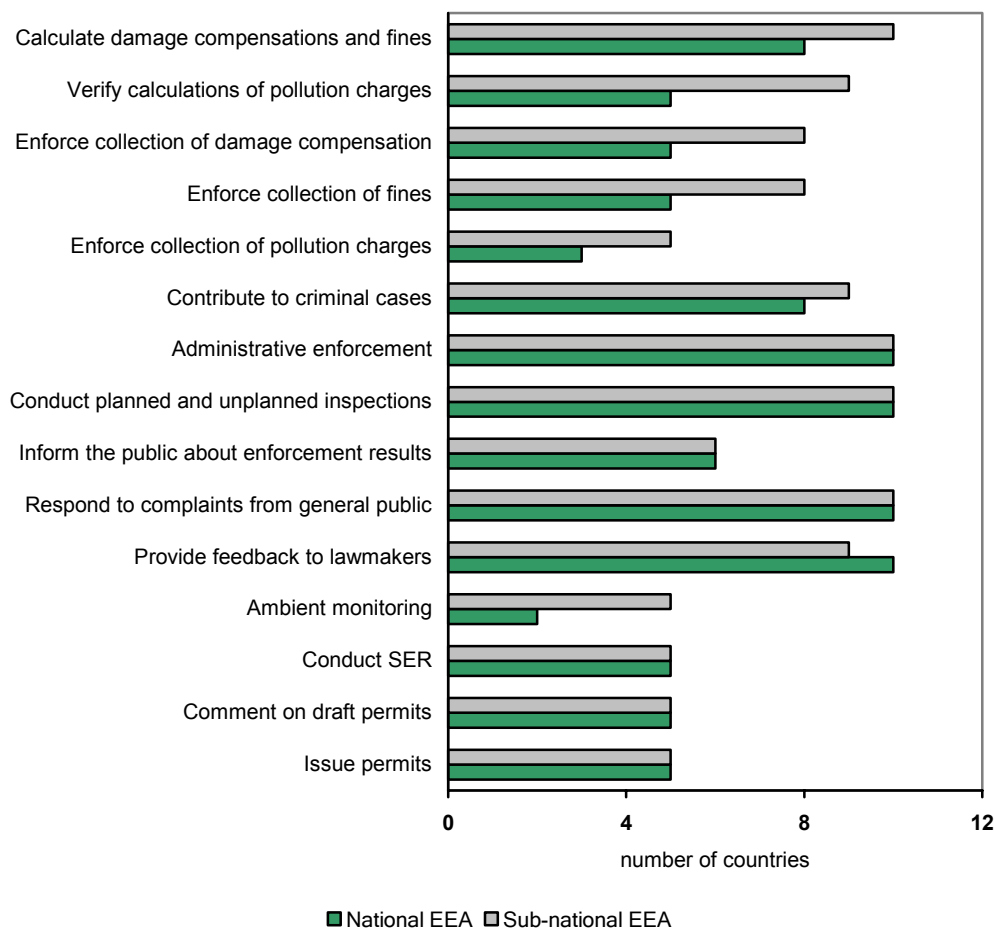
EECCA environmental inspectorates report having clearer and better defined responsibilities, as required by the “Guiding Principles”. Relevant legal provisions are either part of umbrella laws on environmental protection, or of horizontal or issue-specific laws. Recently, specific laws that regulate the functioning of environmental compliance assurance systems were developed in Armenia (2004) and Georgia (2005), and a separate chapter on environmental inspection was included in the Environmental Code of Kazakhstan (2006). Responsibilities of structural units within EEAs are then clarified in secondary legal acts (most often, regulations enacted by ministerial order).

Furthermore, in many EECCA countries there are framework laws⁵ addressing inspection matters in light of entrepreneurial rights protection and better coordination and division of functions between various inspectorates. Kyrgyzstan and Russia were the first ones to enact such laws in January and July 2001, respectively. Recently, this example was followed by several countries, including Uzbekistan (October 2005), Kazakhstan and Tajikistan (January and July 2006, respectively), and Ukraine (April 2007).

An inspectorate’s responsibilities in EECCA (Figure 8) universally include compliance monitoring and administrative enforcement, plus permitting in about half of the countries. Compliance promotion functions are rarely assigned to inspectorates from the region. As mentioned in the previous chapter, inspectorates may provide feedback to lawmakers. Some important functions, such as analysis of economic trends and law drafts, or of any emerging challenges, as well as strategic planning are not yet well covered in EECCA.

⁵ The “first generation” of these laws was quite environment-unfriendly, limiting the number of on-site visits to one planned inspection per year (or even two years, as in Russia), irrespective of the environmental risk of the regulated facilities. More recently, for example, in Tajikistan, these laws have allowed for risk-based planning of inspection activities. Most of them, unfortunately, still prescribe that inspections are always announced. Chapter 3 discusses these problems in more detail.

Figure 8. Responsibilities attributed to environmental enforcement agencies at the national and sub-national level in EECCA (2006)



Source: EECCA Environmental Enforcement Authorities.
Data missing for Turkmenistan and Uzbekistan.

Following good international practice, several countries made efforts to separate regulatory functions from direct government support to, or participation in, economic activities. The most illustrative are changes promoted within the administrative reform of 2004 in Russia (Box 7), where executive bodies were divided into ministries (with policy and lawmaking functions), “services” (in charge of permitting, inspection, and administrative enforcement), and agencies that are mandated to carry out economic activities.

Box 7. The 2004 administrative reform in Russia and its impact on environmental authorities

In Russia, the administrative reform of 2004 pursued the goal of clearly separating policy making, regulatory and compliance monitoring, and service provision functions of government authorities. Such a separation has the virtue of increasing the effectiveness of government authorities while reducing the conflicts of interests that arise when these functions are combined. Three types of executive bodies were instituted:

- Federal ministries, which are policy-making bodies. They conduct problem analysis, development, and evaluation of policies in their domains, as well as draft new legislation. Also, they coordinate and monitor activities of federal services and agencies within their jurisdiction. They are not authorised to perform enforcement functions, to manage state property, or to provide services;
- Federal services, which are federal executive authorities vested with permitting, inspection, and administrative enforcement functions, but are not authorised to develop primary legislation; and
- Federal agencies, which can provide public services and manage state property, maintain various types of registers, but are not authorised to engage in regulatory development or perform any compliance assurance functions.

The key authorities responsible for formulating and implementing environmental policy and law in Russia are the Ministry of Natural Resources (MNR) and the Federal Environmental, Industrial, and Nuclear Supervision Service (*Rostekhnadzor*, or RTN). The compliance assurance functions were delegated to two federal authorities: the RTN, accountable to the prime-minister, and the Federal Service for Supervision over Use of Natural Resources (*Rosprirodnadzor*) that is subordinated to the MNR. They supervise industrial impacts and natural resource use, respectively. There is little evidence that the reorganisation achieved its aims as functions are not totally separated and regulators continue to be exposed to political pressure.

Source: OECD, 2006.

In terms of assigning responsibilities, an important decision is whether to delegate environmental permitting to an EEA. The institutional relationship between permitting and inspection is important as it can affect the degree to which information is fed back from the process of setting the facility-specific regulatory requirements to complying with them, and *vice versa*. Opinions on this subject and real-life institutional arrangements may be situated at extremes: from a strict separation of these two functions to their assignment to the same individual.

To avoid conflict of interest, however, it is advisable that permitting and inspection are not assigned to the same sub-unit within the EEA. Box 8 provides some information on the institutional relationship between permitting and inspection in selected EECCA countries. There is clear variability, though in most cases the two functions are separated. The separation is achieved either by using different divisions within the

ministry of environment or the enforcement authority itself, or having staff assigned to the different roles. In some cases, *e.g.* in Kyrgyzstan and Uzbekistan, the same staff may undertake both functions.

Box 8. Institutional models used in EECCA countries to perform permitting and inspection

Complete institutional separation at both national and sub-national level

Such a model is being promoted in Ukraine. Previously, at the sub-national level, both functions were carried out by the territorial units of the Ministry of Environment Protection (MEP). Several departments within the Ministry issued permits. The national-level State Environmental Inspectorate was not involved in this process and had the right to inspect certain facilities and monitor the performance of territorial units of the Ministry. In 2007, the MEP decided to separate permitting from inspection at the sub-national level. While this organisational re-structuring can bring benefits by allowing staff to focus their work on compliance monitoring, it increases the risk of poor communication between inspectors and permit writers, and may impose additional costs. Also, Georgia uses a similar model whereby permits and licences are issued by one of the Ministry's departments, while inspection is conducted by a more autonomous unit - the Inspectorate for Environmental Protection.

Separation of permitting and inspection within the enforcement authority

This model is used by the Moldovan State Environmental Inspectorate. Traditionally, both permitting and inspection were undertaken by the Inspectorate but involved different subdivisions or personnel. When permitting staff needed to clarify issues, they could participate in inspections. Due to higher cost-effectiveness, this model was relatively well adapted to the country's needs. At the same time, the opacity of permitting and inspection procedures exposed this system to risks ranging from undisclosed poor design of permits to corruption.

Partial institutional separation

In Kazakhstan, permitting and inspection at the national level are under the jurisdiction of different bodies of the Ministry for Environmental Protection. At the sub-national level, permitting and inspection are undertaken by different units of the Territorial Departments for Environmental Protection.

Same staff undertaking both inspection and permitting

In Kyrgyzstan, at the national level, permitting and inspection are undertaken by the same staff. It is reported that inspection results are actively used in revising permits. However, such a model often forces staff to dedicate most of their time to permitting due to tight permitting deadlines, and sometimes engenders poor quality permits due to a heavy workload.

Source: Data provided by the EECCA environmental enforcement authorities.

Institutional separation of permitting and inspection calls for steady information flows, which are often inadequate in EECCA countries. Some countries have started to acknowledge and even address this problem: for example, in Georgia, a database of permits and licences was created to enable permit writers and inspectors to regularly share information. In terms of feedback from inspection to permitting, the current practices differ across the EECCA region. For example, in Azerbaijan inspectors are requested to visit the facility during the permitting period and to issue a report, which is taken into account when the decision to issue the permit is made. Permits can be suspended or cancelled when the requirements are not met or when other environmental violations are revealed. On the contrary, the results of inspections in Ukraine are not taken systematically into account while revising environmental permits.

The responsibility of some inspectorates in EECCA (*e.g.* in the Kyrgyz Republic, Moldova, and Russia) to enforce collection of pollution charges and monetary penalties generates concerns over the focus of activity, as many managers give priority to fiscal objectives. In conjunction with arrangements that re-direct part of the money to procure equipment or increase monthly allowances of environmental inspectors, this creates perverse incentives to seek out fines instead of promoting environmental performance of the regulated community. Delegating the enforcement of charge and penalty collection to fiscal authorities may correct this focus and bring efficiency gains.

2.4 Horizontal and vertical organisation

The horizontal organisation of environmental inspectorates in EECCA is evolving from a medium-specific toward a function-based model. The latter model was adopted by the newest inspectorates in Georgia and Kazakhstan. In a number of countries, the horizontal structures are based on a combination of criteria, as in Armenia, Moldova, or Ukraine. Kyrgyzstan and Tajikistan still have a medium-specific structure. While various structures can be effective in achieving environmental goals, the goal of optimising the use of public resources and reducing administrative burdens on the regulated community calls for constructing the environmental inspectorates around their core functions. Adopting the function-based model requires, however, a thorough analysis of functions, possibly their optimisation, and then clustering in a limited number of major groups.

Vertical organisation is another fundamental institutional issue. On the one hand, keeping the presence of central regulatory and enforcement authorities at the sub-national level helps ensure that at

least minimum environmental requirements are implemented and that the system is consistent and fair throughout the country. On the other hand, the involvement of sub-national authorities is important because they are closest to the actual environmental problems and best able to efficiently identify and correct them. Great geographic dispersion of regulated facilities provides another strong argument in favour of decentralisation. Finally, decentralisation offers the benefit of a higher public scrutiny of performance, including through local elections. Therefore, enforcement decisions should be delegated to the lowest level where issues can be effectively managed.

Except for Russia, where local authorities (including at the municipal level) recently received back the right to regulate and inspect a certain segment of the regulated community, environmental enforcement authorities in EECCA countries are subordinated to the central government, though their vertical organisation varies. The territorial units can report either directly to the Ministry of Environment (as in Kazakhstan, Kyrgyzstan, and Ukraine) or to the national-level EEA (as in Armenia, Georgia, and Moldova). In many cases, *e.g.* in Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, and Uzbekistan, they have a legal identity that allows for more autonomy. In Moldova, the legal autonomy of sub-national divisions of the State Ecological Inspectorate (except for three largest cities and an autonomous territorial unit) was withdrawn on the grounds of efficiency gains making the system of environmental enforcement strongly centralised. This change is very recent and analysis of its impact, especially in terms of cost savings, remains to be done.

A vertical organisation that allows double subordination - to both the central government and local authorities - is present in two countries. In Tajikistan, local-level environmental inspectorates are accountable to both environmental administration and local administration. In Ukraine, candidates for the chief inspector position at the local level must be endorsed by a local administration, which in fact creates another type of double subordination, and, therefore, engenders ambiguity about lines of reporting and responsibilities.

Due to the differences in social, cultural, political, and economic situations, it is almost impossible to identify a standard vertical structure of enforcement authorities and the optimal level of delegation of functions to sub-national units or local authorities. Those will follow the national administrative traditions and fiscal policy. To enable an effective vertical organisation, a number of principles need to be followed, including: clear definition of jurisdictions, standardisation of inspection tools, clear enforcement policy, capacity building and quality control, creation of

coordination mechanisms, and financial support to sub-national units. EECCA inspectorates report that most of these principles are taken into consideration within their vertical organisation although to a different extent. In all countries, central-level EEAs provide methodological guidance to sub-national units. More than half of EEAs set nationwide priorities and organise staff training, but only some of them report to be able to provide financial support.

In general, countries report a clearer division of jurisdictions between national and sub-national EEAs in comparison with 2003 (including Armenia, Georgia, Kazakhstan, and Uzbekistan). In many cases, there are lists of enterprises monitored by central-level inspectors, as in Kazakhstan and Ukraine. Such lists are usually defined based on a combination of criteria, such as the size of regulated facilities, complexity of activities, sectors, and the geographical scope of the facility's impact. The secondary legislation is a key source of such criteria: for example, in Russia they were approved by the Governmental Ordinance of 29 October 2002 No. 777 (revised in 2005) "On the List of Facilities Subject to Federal Environmental Control" (see Box 9).

Box 9. Criteria to attribute facilities to federal jurisdiction in Russia

In the Russian Federation, the following types of facilities are regulated and inspected by federal authorities:

- Nuclear power plants, military units, and facilities situated on land under federal ownership;
- Facilities that have adverse impact on the sites included in the World Cultural Heritage List and World Natural Heritage List, and facilities contributing to cross-border environmental pollution; and
- Facilities that annually store or dispose of more than 10 000 tonnes of waste of first or second class hazard; discharge more than 15 million m³ of wastewater; and have more than 500 tonnes of air emissions.

Source: Federal Service for Environmental, Industrial, and Nuclear Supervision, 2005.

Poor institutional capacity is a factor that diminishes the pace of environmental decentralisation. Practice shows that responsibilities need to be transferred gradually in order to ensure that lower-level EEAs accumulate sufficient knowledge and practical experience, which often is a time-consuming process. For instance, in Armenia, the State Inspection for Environmental Protection (SIEP) decided to empower its subdivisions that act in the country's main administrative units (*martzes*) and achieve a more balanced distribution of personnel. The sub-national units, however, lack capacity and could not immediately cope with more responsibilities. Therefore, simultaneously with delegating an enlarged

mandate to territorial units, the SIEP's central unit decided to provide intensive capacity building, including methodological and other types of support.

In Russia, regulatory and compliance monitoring responsibilities were delegated to local authorities without delegating powers that would be proportionate to these responsibilities (*e.g.* municipal-level inspectors had no right to impose administrative penalties and were simply supposed to report all violations to federal-level inspectors). Besides, delegation of responsibilities was done against the background of low institutional capacity and exposure to regulatory capture. In general, the issue of environmental federalism in Russia is very challenging and would need a careful analysis. A three-year "re-structuring moratorium" begun in 2004 suggests that timing is appropriate for undertaking such an analysis.

In smaller countries the jurisdictions are often shared and inspectors from the central level may be involved in joint on-site visits. While this is a good mechanism to support sub-national units, careful internal coordination is necessary. For example, the regulated community in Kyrgyzstan complained about cases where inspectors from the central and sub-national level visited separately the same facility claiming that the regulatee was under double jurisdiction. This goes against the goals of reducing administrative burdens on regulatees and making effective use of public finance.

Information exchange, coordination, and quality control mechanisms have utmost importance within a vertical structure. Internal coordination started to improve as planning improved (*e.g.* in Georgia) or resources became available to regularly conduct nationwide meetings of managers from sub-national units (as in Armenia, Kazakhstan, and Moldova).

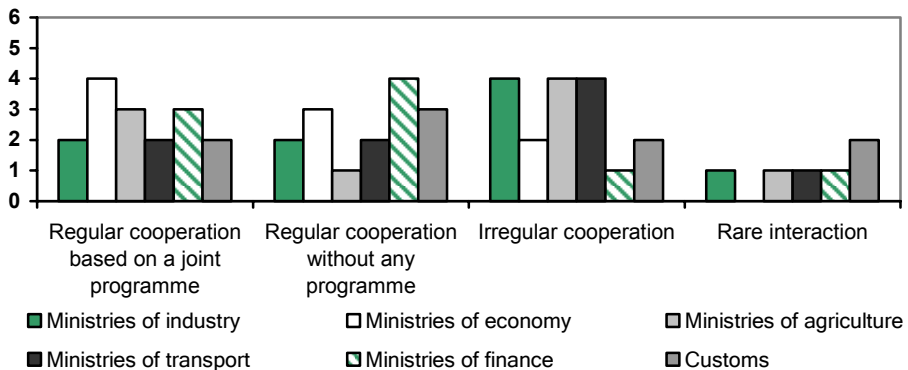
All national-level EEAs receive reports from, and assess the performance of, sub-national units. To this end, the State Committee for Environmental Control of Kazakhstan introduced performance rating schemes for sub-national units. The performance management approaches, unfortunately, often over-emphasise punishment of those who lag behind instead of building their capacity, which would help to achieve a consistent application of inspection methods and instruments across the country. At the same time, capacity-building mechanisms in EECCA have improved. Armenia, Georgia, Kazakhstan, and Moldova report that presently methodological support to sub-national units is provided more regularly, both upon request and during workshops organised by national-level staff in the regions.

2.5 Cooperation with other authorities

In every EECCA country, there is a wide range of official actors that are involved in the compliance assurance process. Currently, environmental enforcement authorities work with an increasing number of governmental partners, including a variety of ministries, such as those covering industry, economic development, agriculture, and transport.

Most EECCA countries report that they have improved cooperation with other executive bodies, indicating various forms of interaction, *e.g.* formal cooperation agreements or joint work programmes (Figure 9). In many instances, joint activities are implemented more or less regularly without formal arrangements. In a number of cases, as in Kazakhstan and Ukraine, the Ministry of Environment signs cooperation agreements with other government agencies, rather than the inspectorate itself. In Kazakhstan, such agreements were signed with 11 authorities, including a clause that enables inspectors to conduct joint on-site visits when necessary. In Uzbekistan, the State Committee for Environmental Protection agreed on regular interaction with the State Committee for Standardisation, the Ministry of Internal Affairs, and the Public Prosecutor's Office.

Figure 9. Mechanisms and regularity of cooperation between environmental enforcement authorities and other governmental bodies in EECCA (2006)



Source: EECCA environmental enforcement authorities. Data missing for Russia, Uzbekistan, and Turkmenistan.

Laws often prescribe cooperation among inspecting bodies with the aim of decreasing the administrative burden on industries through joint inspections. Such laws, for example, exist in Armenia, Kazakhstan, and Russia, but industry representatives voice the opinion that their implementation is still weak.

In comparison with 2003, there is also more diversity in partnerships beyond the traditional interaction with the ministries of health and departments of statistics (see Figure 9 above and Box 10). EECCA countries report that interaction with tax authorities (which are in some countries involved in the enforcement of pollution charges) have improved. Also, cooperation with customs is more regular, particularly on issues related to the CITES Convention, trans-boundary movement of waste, ozone depleting substances, and air emissions from vehicles in transit. At the same time, cooperation with the sectoral ministries such as ministries of industry, agriculture, and transport remains irregular, which is at odds with the environmental priorities in several EECCA countries.

Box 10. Cooperation between the State Inspectorate for Environmental Protection (SIEP) and other governmental authorities in Armenia

In Armenia, the Inspectorate interacts with several authorities on the basis of inter-departmental agreements, which have remained unchanged since 1999, and the Law of the Republic of Armenia “On Organising and Conducting Inspections” that provides for conducting joint inspections.

The SIEP and the State Tax Service (STS) share verification and enforcement functions regarding the payment of pollution and product charges.

Cooperation with the Customs Committee (CC) covers shipment of hazardous materials, biological resources, and waste; and verification of exhaust gases from transit vehicles. Currently, a methodology for joint activities to control imports to Armenia and export from the country of rare species of flora and fauna is being developed.

The Inspectorate also co-operates with the Ministry of Health; the Department of Emergency Situations; and the ministries of agriculture, industry, physical planning, national security, interior, and transport. Interaction with the Ministry of Justice takes place when draft legislative acts and regulations are coordinated.

Source: State Inspectorate for Environmental Protection of Armenia, 2005.

In many countries, adversarial relations with Public Prosecutors’ Offices (PPOs) persisted. Inspectors repeatedly reported that PPOs often limit their role in auditing the work done by environmental enforcement authorities without providing due support for investigation of criminal cases brought to courts by EEAs. This issue could constitute a topic of discussions between the ministries of environment and ministries of justice in EECCA.

In response to the need for specific knowledge in environmental crimes' investigation, many EECCA countries established specialised environmental prosecutors' offices in the 1990s. In some countries, as in Moldova, they were dissolved because of a poor performance but in other ones (e.g. in Kazakhstan, Russia, and Ukraine) the environmental prosecutors' offices continue to operate. For example, currently, in the Russian Federation there are 35 inter-*rayon* environmental prosecutors' offices and one inter-regional Volga environmental prosecutor's office (it comprises 15 branches based in the cities on the Volga river basin).

Judicial authorities in some countries enhanced their environmental awareness and capacity to deal with environmental cases due to internationally-offered or NGO-led training. Regular analyses of court practice in the field of environment were launched in Belarus and Russia.

However, the judicial enforcement continues to be ineffective. Only a very small fraction of cases transmitted for prosecution are processed, and the rate of convictions is even smaller (see the next chapter). Fines and damage compensation claims, proposed by inspectorates, are quite often revised down to levels that have no deterrent effect.

In general, there is a lack of feedback from courts on both outcomes of prosecution (as in Armenia, Kyrgyzstan, and Ukraine) and, more commonly, on the quality of evidence collected by environmental inspectors. A new reason for tension between EEAs and courts (or PPOs) is the need for inspectors to receive warrants for site visits.

More generally, the roots of problems in relations between EEAs and courts seem to concern three areas of courts' capacity:

- A heavy workload, thus limited capacity to deal with many of the cases that they have, regardless of whether these concern the environment or not;
- A general lack of understanding of environmental issues by lawyers, judges, etc.; and
- A feeling, in some instances, that the judicial authorities do not consider the environment as being as serious an issue as other areas of law enforcement.

An EEA is unable to address the problem of workloads of the courts on its own. However, it should be able to increase the effectiveness of non-compliance prevention and administrative enforcement, thus

reducing the number of cases going to court to only those that are most serious. When higher transparency and accountability of decision-making within EEAs is achieved, they could receive more powers to resolve cases through administrative enforcement.

Some failure in the courts may relate to inadequate preparation by the EEA of its cases. Inspectorates themselves generally state the need for a greater number of legal specialists among their staff to produce higher quality evidence. For example, since 2006 the number of lawyers working in the Inspectorate for Environmental Protection in Georgia increased and, due to relatively competitive salaries, the Inspectorate was able to hire many knowledgeable lawyers with practical experience. This resulted in a net increase in the number of cases won by the Inspectorate. However, from the information received, in a number of EECCA countries where judicial bottlenecks occur, it would seem that even if EEAs presented perfect cases every time, inadequate legal decisions would still be made.

Finally, relations of EEAs with local authorities are becoming more constructive as overlaps in functions are clarified. The improvement of these relations was promoted through guidance and initiatives from the national level (as in Moldova) or, quite often, through personal initiatives by local-level managers of EEAs. Also, local public administrations are becoming more environmentally aware and open to dialogue, as in the Caucasus, where Local Environmental Action Plans were developed in a number of cities under the leadership of a local administration but with close involvement of environmental authorities. Cooperation is improving at the operational level as well: in Moldova, for instance, heads of sub-national inspectorates are invited to attend coordination meetings organised by local authorities.

Because of frequent regulatory capture by local administration to pursue economic development at any cost (or favour certain companies), in EECCA it might be more effective to keep the regulatory and enforcement functions under close control of the central government. Of course, the federal organisation in Russia requires the adjustment of this model to country specifics and the delegation of regulatory and enforcement function to local public administrations. Simultaneously, a more effective federal, but also public, oversight of environmental law enforcement at the sub-national level will be required.

2.6 Decision-making policies and performance management

To ensure the credibility of environmental inspectorates and not distort the level playing field for businesses through heterogeneous inspection and enforcement, environmental enforcement authorities should secure standardisation of the work methods used to assure compliance. This should include development of decision-making policies, regulations, methodologies, inspection tools such as checklists, and standard reporting requirements. In addition to internal oversight, external scrutiny – exercised, for example, by PPOs and by NGOs – will be important in order to avoid any misuse of enforcement powers. These also have to be supported by effective reporting procedures that not only ensure that the guidance is implemented, but also identify where problems arise and perhaps allow the EEA to seek changes in legal acts.

Most EECCA countries report that a range of guidance documents that describe inspection procedures (new guidelines of this kind were enacted in Georgia in 2006), application of non-compliance responses (for example, enacted in Uzbekistan back in 1997), reporting procedures, sampling procedures, etc. Also, the EEAs report that the guidance documents are regularly updated. Discussions with practitioners give a less optimistic picture, as some countries have not updated their internal guidance documents for ten or more years. Inspection tools such as checklists are rare, although they exist in some countries, *e.g.* in Kazakhstan.

The issue of non-compliance response policies remains largely unresolved. The only example known to the authors of this review is a concise document developed in Ukraine in 1999 (Box 11). This policy explains what actions inspectors should take in a particular case as a follow up to a site visit. Communication with practitioners from this country led the report authors to believe that the policy remained a mere theoretical exercise.

Box 11. Policy of the State Environmental Inspectorate of Ukraine on follow-up enforcement actions

In 1999, an environmental inspector's handbook was developed in Ukraine to provide the staff of the State Environmental Inspectorate with detailed guidance on exercising the compliance assurance role. Among other things, the handbook gives instructions on follow-up enforcement actions. As a result of completed environmental inspection, the inspector may resort to the following actions:

No violations of norms/permit conditions have been detected:

Consider need for environmental improvements. Recommend improvements to the enterprise, if desired;

Consider if permit conditions are too loose. Recommend amendment of permit conditions to the relevant authorities, if appropriate; and

Review future inspection frequency. Recommend decreasing inspection frequency, if appropriate.

Violations were not registered before, and they did not result in serious environmental consequences

Prepare and send to the facility formal instructions to complete specific improvement measures within established deadlines. Deadlines for completion of the identified measures should be established on the basis of urgency of required improvement and upon consultations with appropriate experts in order to assess realistic periods for implementation. The instructions should also state that the facility will be inspected again after the deadlines have passed.

Repeated violation(s), without serious environmental threat

Impose a penalty on officials of the enterprise that were held responsible for correcting the earlier detected violation(s); and

Repeat formal instructions to the enterprise to correct the non-compliance within the established deadlines.

Detected violations are not eliminated for a long period, or they present a serious threat to the environment and/or human health

Consider application of sanctions by the chief oblast (regional) environmental inspector. Recommend applying penalty by the chief inspector, or temporarily suspend activity of the particular process until the detected violations are eliminated;

Consider need for compensation of damage as a result of the detected violations. Propose to the enterprise to compensate voluntarily estimated damage, if the latter can be proved; and

Consider if the detected violations constitute a case of criminal offence. Submit recommendation for criminal prosecution and collected evidence to the regional prosecutor's office.

Review enforceability of particular norms/permit conditions

Consider if environmental norms, applicable to the enterprise, and issued permits, are practically enforceable. Signal to the oblast chief inspector what regulatory requirements should be revised, if appropriate.

Source: State Environmental Inspectorate of Ukraine.

In each EECCA country, over thirty core environmental compliance and enforcement indicators are routinely collected within relatively structured frameworks. Examples of key indicators are the number of inspections, number of violations, number of fines and amounts collected, and number of criminal cases. The scope of collected data is quite comprehensive - commonly, the indicators cover the entire corpus of environmental legislation and are broken down by medium-specific programme areas, geographic areas, and sometimes by industry sectors. Often non-compliance patterns are analysed by specific article of the Administrative and Criminal Codes. Regular reporting to internal and external audiences ensures a certain level of transparency and accountability.

At the same time, indicators are hardly used to make strategic and operational decisions. Enforcement authorities measure the intensity of inspection and the extent of application of enforcement tools without showing the connection between these activities and expected behaviour (compliance) and environmental changes. Major problems include:

- Widespread use of output indicators as “targets” and association of high performance with high numbers of inspections, investigated violations, or monetary sanctions applied regardless of their behavioural and environmental effect;
- Lack of indicators that would demonstrate causal links between activities, compliance behaviour, and environmental results, as well as absence of measures of cost-effectiveness;
- Poor standardisation of terminology and processes used for performance measurement that opens up opportunities for misinterpretation or manipulation of data; and
- Absence of indicators that would cover the application of innovative instruments of compliance assurance.

Demand for environmental compliance and enforcement indicators is increasing as recognition is growing that continuous feedback from practice is needed to correct environmental legislation and policies. Currently, such feedback is limited and, when a law or a policy proves to be ineffective, government officials often yield to the temptation to issue a corrective document without understanding the roots of failure. Such a scenario, which perpetuates “symbolic” regulation and policy-making, becomes a serious threat to governments’ credibility.

Reporting on activities is relatively wide in scope and provided regularly (see Box 12). There are internal reports from individual inspectors and branches (developed on a weekly or monthly basis), and reports from the entire enforcement authority (these may be produced quarterly, semi-annually, and annually). The quality of reports, however, is very low as they focus on “bean counting”, *i.e.* presentation of results and anecdotal information with very little analysis. Also, internal reporting for official use tends to be poorly standardised and automated, and too frequent in the majority of EECCA countries. Ukraine has recently developed specialised software to facilitate reporting. In general, the issue of corporate reports needs further elaboration, including some reflection on the optimal frequency of reporting in order to optimise the use of inspectors’ time.

Box 12. Reporting procedures in Armenia and Russia

Armenia: Within the State Inspectorate for Environmental Protection of Armenia (SIEP), there is a hierarchical system of reporting: quarterly, each inspector submits a report to the head of their subdivision, which provides key performance indicators (names of inspected facilities; detected violations by area; number of prepared acts; decisions made; amounts of imposed fines and damages, in compliance with the current legislation). The head of a sub-national unit compiles the inspection results and submits a report to the head of the Inspectorate. The analytical division at the head office of the SIEP analyses the submitted reports, compiles them, and prepares a report with conclusions and proposals for the Inspectorate as a whole, which is submitted to the Minister of Nature Protection of Armenia.

Russia: There are two federal environmental enforcement authorities in Russia and both established relatively sound mechanisms for ensuring internal accountability that include semi-annual and annual reports from sub-national units, reports on operation monitoring by managers, cross-regional analysis of results, agency-wide annual meetings that gather representatives of all units, and missions of federal-level officials to regions. Reports on progress with programme implementation are provided to higher level policy makers. However, the agency in charge of natural resources supervision does not issue its own annual activity (corporate) report. The annual report produced by the agency responsible for supervising environmental impacts of industrial facilities is quite elaborate and is comparable to international benchmarks. The latest (2005) annual report is downloadable from the web site www.gosnadzor.ru. In addition, several pilot projects were implemented at the sub-national level to help authorities to design performance indicators. For example, one project was carried out at the Committee for State Environmental Control and Nature Use of the Saratov *Oblast* (Region), in the context of introducing performance-oriented budgeting approaches.

Source: OECD, 2005 (Armenia); OECD, 2006 (Russia).

Within the performance management and assessment systems, special emphasis is placed on establishing the mechanisms for ensuring internal accountability. Besides regular reporting, these oversight mechanisms include monthly and annual gatherings of sub-national EEAs (as done in Armenia, Moldova, Kazakhstan, and Russia), and missions of national-level officials to regions (for example, in Georgia a special unit was created to exercise such oversight). In addition, audits are used to identify cases of mismanagement or misbehaviour.

Besides, current reporting is not tailored to stakeholder needs. Reports do not use plain language and are overly abundant in factual data leading to an “inflation” of indigestible information. Often, they simply fail to identify and interpret trends in the intensity and outcomes of compliance assurance activities.

Unlike reporting on the state of the environment, the reporting on activities (including financial reporting) remains opaque for the general public. While environmental authorities have made certain efforts to become more transparent, none of the EEAs in EECCA countries having participated in the review publishes on its web site its long-term strategies, current work plans/inspection schedules, or facility-specific inspection reports and compliance data. Only Russia gives open electronic access to its annual report. Other countries communicated that they disclosed their reports to a wide range of stakeholders, including NGOs, but direct interviews with stakeholders do not support this allegation.

In some instances, the lack of transparency leads to corruption, *i.e.* the misuse of powers and the status of civil servant for private gain. Unfortunately, there are no studies that would give hard data on the magnitude and costs of environmental corruption in EECCA. Nevertheless, anecdotal information offers an opportunity to raise and discuss this issue at least in general terms.

In the field of environmental management, corruption can lead to (deliberate) design and implementation of environmentally damaging practices to enrich individuals. Environmental corruption also means trafficking in wildlife, hazardous waste, and natural resources, often through bribery during permitting or inspection. Besides being rooted in the lack of transparency and accountability, corruption is commonly nurtured by weak institutions, low salaries, a high level of bureaucracy, and low professionalism. It can also touch all levels of management - from high-level officials to field inspectors (see Table 3).

Table 3. Areas of environmental management vulnerable to corruption

Level of corruption	Areas vulnerable to corruption
Policy-level	<ul style="list-style-type: none"> • Relates mostly to high-level public officials and involves large illegal transactions or flawed policy making and law-making.
Mid-level	<ul style="list-style-type: none"> • Development of environmental and natural resources policy and regulations; • Improper use of state-owned resources and protected areas; • Public procurement and licence auctions; • Environmental assessments (including EIA), issuing permits and certificates.
Petty	<ul style="list-style-type: none"> • Inspections and non-compliance response to violations.

Source: USAID (2002).

Although many EECCA countries are exposed to high levels of corruption within their inspection bodies, most of the empirical data about environmental corruption are available from Russia (Box 13) where reporting on corruption seems to be more transparent than in other countries of the region. These data show that the incentive framework for EEA staff to behave with integrity is still largely missing.

Box 13. Examples of environmental corruption and respective responses in Russia

As the Russia's First Deputy Prosecutor General stated, the bribes market in Russia is comparable to the federal budget, and the forms of corruption vary significantly. Cases are common where officials combine their office with setting up, or working in, business entities. In Kemerovo Oblast, about 40 officials from the Federal Service for Environmental, Industrial, and Nuclear Supervision were also employed by the entities under their supervision. The prosecutors' offices indicate that corruption among inspectors responsible for biodiversity protection is particularly widespread. These inspectors are themselves often involved in illegal logging, poaching, or smuggling. Furthermore, auditing reveals, annually, cases of funds mismanagement. For example, in 2003 federal auditors conducted 255 audits of the Ministry of Natural Resources of the Russian Federation and its territorial units. As a result of these audits, four million roubles were recuperated out of a total of 7.2 million roubles misspent. The response to misconduct included criminal liability (*e.g.* six cases of criminal prosecution in 2003). Cases of mismanagement or misbehaviour have been made known to the general public through the Ministry's web site or other public information sources.

Source: Ministry of Natural Resources (www.mnr.gov.ru) and General Public Prosecutor's Office (www.genproc.gov.ru).

Surveys conducted by the International Finance Corporation (IFC) in several EECCA countries show that misbehaviour within inspectorates is acute in several countries. For example, in 2006, more than 50% of small and medium-sized enterprises operating in Tajikistan admitted unofficial payments to inspectors (Table 4). Besides, many firms complained about excessive administrative burdens because of uncoordinated and frequent inspections. In some countries, the latter problems have been resolved.

Table 4. Inspection in EECCA at a glance

Country	Average number of inspections per business per year	Total days spent on inspections per year, per inspected firm	Share of inspected firms openly admitting unofficial payments
Belarus	15	24	7%
Georgia	1	8	4%
Tajikistan	13	7	54%
Ukraine	9	13	21%
Uzbekistan	1	3	22%

Source: IFC surveys of Small and Medium sized Enterprises.

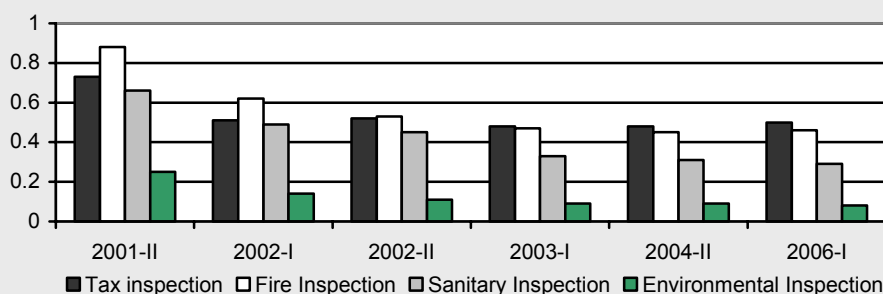
In order to fight corruption, civil service laws often prescribe strict rules of conduct backed by criminal sanctions. Several countries adopted codes of conduct, *e.g.* Armenia, Moldova, Kazakhstan, and Russia, which apply to all civil servants. The Georgian Inspectorate for Environmental Protection developed an internal code of professional ethics. Besides standard rules of conduct, this code addresses inspectors' conduct during on-site visits.

So-called "de-bureaucratization packages" were adopted in several EECCA countries to address the high level of administrative burden and corruption in the EECCA region. These efforts have streamlined inspection procedures and imposed an annual or biennial frequency of inspection, as well as required authorities to inform the regulated community of any developments in the regulatory framework, thus creating a pre-requisite for more intensive compliance assistance. Besides strict criteria and procedures for inspection, recently enacted inspection laws specify appeal procedures and allow for compensation of losses in the case of private rights violations by state agencies. While the goals of such laws are laudable, their implementation might have volatile results (Box 14).

Box 14. Results of six rounds of monitoring of the regulatory burden imposed on small and medium-sized enterprises in the Russian Federation

The Centre for Economic and Financial Research (CEFIR) in Moscow, in collaboration with the World Bank, is monitoring the level of the regulatory burden imposed by the government agencies on small businesses. The purpose is to document the progress of deregulation started by the Russian federal government. The reform package includes simplification of licensing, certification, and registration procedures, and reduction of inspection frequencies. The new law on inspection was introduced in August 2001. With its introduction, the number of site visits by all government bodies decreased significantly. For most of the agencies the frequency of inspections corresponds to legal requirements (not more than once in two years).

**The average number of inspections of SMEs in 2001-2006
(per company per 6 months)**



In 2002-2004, the amount of time spent on inspections by the management of small enterprises and monetary costs involved diminished. In the first round of CEFIR's surveys, the respondents claimed that the management of their enterprises spent an average of 11.4% of their time on all kind of inspections. In the second round, the number fell to 9.2%, and in the third round, to 8.2%. But the results of the second and the third rounds indicated that substantial abuses continued on the part of inspecting agencies in 2002 and 2003. For example, half of the unplanned inspections were conducted without a warrant, and the share of such cases stayed more or less unchanged. There were no significant changes in the amount of bribery either. Respondents mostly did not see a change in transparency of the inspection procedure and predictability of the enforcement policy. In the fifth round, the share of firms that had to pay bribes significantly increased. The sixth round (2006) shows that the overall trend towards deregulation has continued. Yet, there are also a few worrisome conclusions: in particular, an increase in the subjective perception of problems associated with corruption and unfair regulation of SMEs.

Source: Centre for Economic and Financial Research, www.cefir.ru

The environment can be affected by corruption in other sectors, for example, in agriculture, privatisation, public procurement, customs, the judiciary, and others. For example, privatisation conducted through corrupt procedures may allow new owners to use privatised land or facilities in an environmentally damaging manner; poorly formulated or implemented customs regulations and procedures may open opportunities for wildlife trafficking. In comparison with corruption in environmental authorities of EECCA, these cross-sectoral aspects of environmental corruption are even less studied.

Overall, corruption will remain a concern if a general country context is not favourable and officials do not have adequate incentives to remain honest. Studies implemented by the World Bank show that the effectiveness of corruption control is quite variable among EECCA countries and needs improvement. Although salaries have increased in EEAs and civil servants are more rigorously selected, these measures alone might be insufficient to fight corruption. In the future, it will be important to aim at raising the predictability of enforcement and transparency of inspection and enforcement to international benchmarks in order to fight corruption.

2.7 Human resources, infrastructure, and financing

Environmental inspectorates need adequate resources (human, material, and financial) in order to carry out their functions effectively and efficiently. The number and particularly the quality of human resources are decisive. However, even most skilled experts cannot fulfil their roles without funding and support facilities (including communication and measurement equipment, laboratories, and transport means). Access to these resources, at least to the extent required for ensuring a minimum level of enforcement presence, will very much depend upon the political will to translate environmental law into practice, as well as the country's level of economic development.

Given the diversity in the territory, population, and economic structure of the countries, the size of environmental inspectorates in EECCA varies to a considerable extent, as shown in Table 5. The majority of staff members are employed at the sub-national level. Their number, of course, primarily depends upon their scope of work. Defining the optimal level of staff is difficult in EECCA, as a primary parameter - the size of the regulated community - is very poorly quantified.

Table 5. Trends in staff numbers in EEAs of the EECCA region

Country	National		Sub-national	
	2002-2003	2006-2007	2002-2003	2006-2007
Armenia	70	83 ↗	122	112 ↘
Azerbaijan	81	81	408	152 ↘
Belarus	n.a.	↗	n.a.	↗
Georgia	12	58 ↗	153	242 ↗
Kazakhstan	20	31 ↗	408	505 ↗
Kyrgyzstan	11	16 ↗	174	231 ↗
Moldova	93	66 ↘	380	329 ↘
Tajikistan	118	n.a.	234	n.a.
Turkmenistan	25	No change	602	No change
Russia	n.a.	↘	n.a.	n.a.
Ukraine	93	78 ↘	2756	2622 ↘
Uzbekistan	36	n.a.	1109	n.a.

Source: EECCA Environmental Enforcement Authorities.

Rough estimations made by the EAP Task Force Secretariat in cooperation with a number of inspectorates show that the current numbers might be sufficient for inspection tasks if risk-based approaches were adopted. The extent and quality of work in other directions of activity will continue to suffer or will simply be ignored if staff numbers are not adjusted to match current challenges. Since a significant increase in staff numbers is unrealistic, the inspectorates in EECCA will also need to change their strategies and train staff so as to optimise the use of human resources.

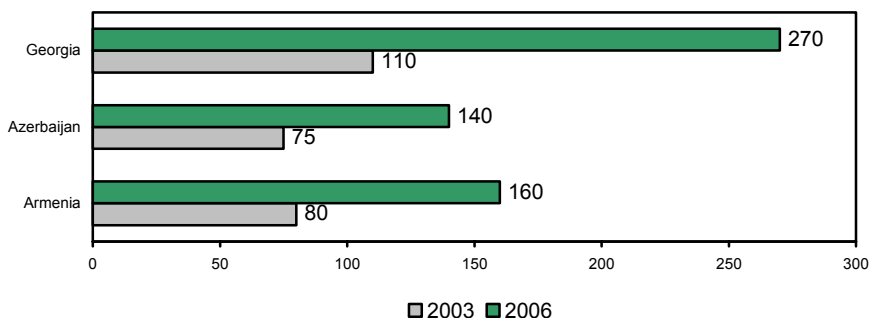
Since 2003, important changes in staff numbers have been noticed in several countries: in Georgia and Kyrgyzstan, the inspectorates have almost doubled in size; in Azerbaijan, the number of inspectors at the sub-national level has decreased from 408 to 152. Prior to 2003, important staff cuts have occurred in Russia. Fluctuations in staff numbers are often linked to re-structuring of the ministries of environment. They are also influenced by governments' agendas to reduce the size of their

bureaucratic apparatus. In general, the total number of staff employed might seem comparable with the numbers in OECD or CEE countries. However, the broad functions of the EEAs in some EECCA countries (where these functions include forestry, hunting, and nature protection) must be taken into account.

Where information was provided, all of the EEAs indicated that their inspectors have the status of civil servant. This implies that inspectors must follow the strict rules established for civil servants. At the same time, due to the civil servant status, the EEA staff enjoy higher social protection (although to a lesser extent than that of law enforcement agencies). In Armenia, the inspectorate's management considers that the civil servant status generated a number of inconveniences that diminish the effectiveness of work (*e.g.* by imposing fixed hours of work and making it impossible to discover and curb most violations or even crimes related to the use of natural resources, which mostly occur at night).

The comparison of salary levels between countries is difficult. Figure 10 provides some basic information on salary levels in a relatively homogenous sub-region. However, these data are not provided with the intention of making comparisons between the Caucasus countries, but merely to provide a very general view of the levels of salary and their impressive increase since 2003. In several countries, such as Armenia, Georgia, and Kazakhstan, staff salaries have been raised above levels that directly encourage corruption. These measures, however, are not yet sufficient to attract and retain highly qualified staff, or prevent corruption.

Figure 10. Monthly average wage (USD) of staff employed by the environmental enforcement authorities in the South Caucasus countries (2003 and 2006)



Source. Data provided by EECCA Environmental Enforcement Authorities.

Most of the employees are directly involved in inspection, with only a small percentage acting as managers and support staff. Table 6 provides information on the professional balance of staff in selected countries. While professional characteristics are usually balanced, a number of EEAs report a need for additional specialists in some areas, particularly lawyers. Given the problems noted above with the judicial enforcement and courts, this is an obvious need. Other gaps are also noted, especially in areas of concrete scientific specialisations, economics, and public relations.

Table 6. Professional distribution of staff within the environmental enforcement agencies, based on the example of the Caucasus countries

Category of personnel	Armenia	Azerbaijan	Georgia
Inspectors (all degrees)	79.0%	70.3%	83.6%
Managers	11.0%	10.0%	1.3%
Lawyers	2.0%	8.0%	4.0%
Laboratory staff	9.4%	5.0%	0.7%
Public relations	2.6%	1.7%	0.3%
IT system administrators	2%	0%	0.3%
Administrative and support staff	2.6%	5.0%	9.6%

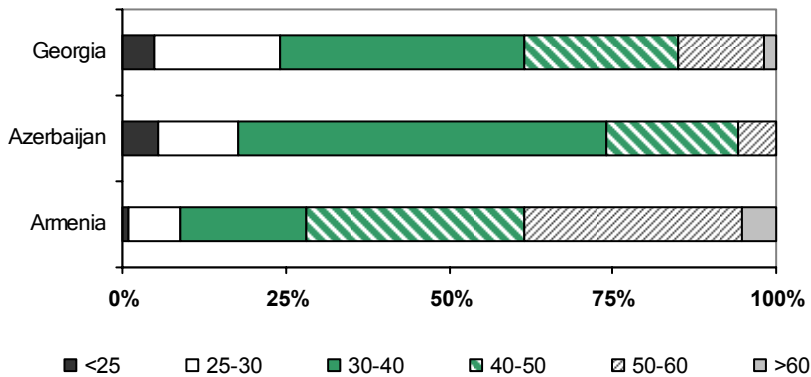
Source: Data provided by EECCA Environmental Enforcement Authorities.

Recruitment of good specialists remains a problem, as other government agencies and especially the private sector offer more competitive salaries and inspector's working conditions may be a disincentive for new staff to join. This is also increasingly leading to the problem of retaining existing staff. For example, in Kyrgyzstan and Ukraine the average period of employment of an inspector is only three years.

Most EEAs target young recruits from universities, usually with an environmental background. As a result, the age structure is becoming more balanced (Figure 11). In others, *e.g.* in Armenia, problems of recruitment have resulted in a rise in the age profile. Some EEAs, *e.g.* in Uzbekistan, are also making efforts to attract specialists with technical skills relevant to industry or from industries themselves. This can benefit the EEAs as the staff would be familiar with insider problems and opportunities for better compliance.

Similarly to other civil servants, EEA staff members have to be recruited through standard, open competition procedures. In Armenia, for example, this is done in a centralised manner by a specialised governmental agency. Although there are positive impacts from this procedure, such centralisation has also had unwanted effects. Because of a standard approach to assess candidates through written test verifying knowledge of laws, their practical and communication skills, as well as the job attitude are not assessed. Besides, the future employer is not involved in the recruitment process that sometimes causes problems with team integration of newly employed staff.

Figure 11. Age distribution of staff within the environmental enforcement agencies, based on the example of the Caucasus countries



Source: Data provided by EECCA Environmental Enforcement Authorities.

So

Once recruited, new staff require specific training, which is a prerequisite for strengthening the inspectors' skills, allowing transfer of experience and the consistency in applying inspection procedures across the country. Since 2003, progress was observed in this domain. In Kazakhstan, the Ministry of Environment established a training centre that targets both government employees and regulates. In Armenia, Azerbaijan, Kyrgyzstan, and Russia, official training programmes were developed. In Armenia, Azerbaijan, and Belarus, there is an annual schedule for personnel training. Since 2006, individual plans of raising qualifications exist in Belarus. In Armenia, Moldova, and Ukraine inspectors pass regular mandatory qualification reviews. Inspector manuals exist in Belarus, Georgia, and Moldova.

International support played a significant role in human capacity building, particularly as concerns the implementation of Multilateral Environmental Agreements. For example, the United Nations Environment Programme (UNEP) provided training, including for actors outside the system of environmental ministries, through the “Green Customs” and “Ozone” networks. Several regional and country-specific trainings were conducted within the framework of the OECD/EAP Task Force and UNECE. In addition, bilateral cooperation programmes helped to enhance staff knowledge and transfer know-how in specific areas. For example, Kazakhstan and Norway cooperate on environmental regulation and inspection of the oil and gas extracting industry.

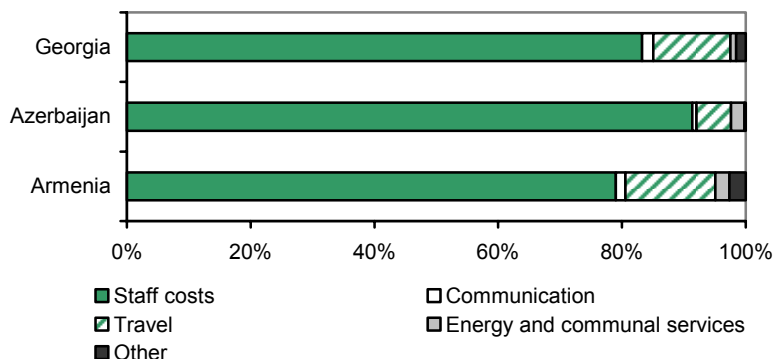
Unfortunately, the majority of EEAs still lack resources to provide adequate training. While the financial constraints of many EEAs in the EECCA are well understood, investing in training can prove to be cost effective. To see whether this is the case, analysis is required to determine whether training allows staff to become more efficient in fulfilling their tasks and how staff rotation influences the cost-effectiveness of training activities.

An alternative to using EEA staff is to contract out specific tasks to external consultants, which is common practice in OECD countries in those cases where specific expertise is required during short periods that do not warrant longer-term employment. Some EEAs in EECCA (for example, in Belarus, Kazakhstan, and Russia) do use such external services. However, many EEAs, while they would like to contract out specific tasks, are either unable to do so or can afford it only on rare occasions due to the financial constraints.

Except for Moldova, the EEAs in EECCA are mainly funded through the state budget. In Moldova, up to 50% of the revenue comes from permit fees or provision of services (*e.g.* sampling and laboratory tests to the regulated community). Similarly, laboratory services are provided to the regulated community in Russia and Kazakhstan. In the absence of transparency and strict rules to avoid conflict of interest, such practices can lead to corruption. Another negative aspect is transfer of payments on agencies’ accounts instead of the Treasury that generates perverse incentives for inspectors to impose certain services on regulatees.

Armenia, Georgia, and Kazakhstan reported a significant rise in budgets. Generally, this followed a higher allocation to the ministries of environment, although the increase in the inspectorates budgets in these countries was greater in comparison with other sub-units of the ministries. In most cases, the EEA budgets primarily cover staff costs, including salaries and social payments (see Figure 12).

Figure 12. Examples of money allocation across budget lines (2006)



Source: EECCA Environmental Enforcement Authorities.

In several countries, more funding was available for capital investment. For example, Belarus, Kazakhstan, and Ukraine are now rehabilitating their laboratory infrastructure. Sometimes, earmarked extra-budgetary funds are used to procure laboratory equipment (or even supplement salaries), as, for example, in Armenia and Moldova. In general, the infrastructure of environmental inspectorates has started to improve, even in the poorest countries.

Many EEAs also report having invested in the modernisation of information management systems. For instance, seven countries that participated in the review (except Armenia and Ukraine) say that they use Local Area Networks. The countries reported that centralised storage of information about inspection is in place, as well as databases with information on the regulated community and inspection results (except Kyrgyzstan and Moldova). Azerbaijan, Belarus, Tajikistan, and Ukraine mentioned that they have specialised software for data management. In Georgia, a modern information system for managing permitting and inspection data is being developed thanks to support from Norway. Problems with collecting data on the largest polluters within a number of the OECD/EAP Task Force projects demonstrate, however, that achievements in improving data management might have been depicted too optimistically by the countries.

Budget planning is still mostly based on historical figures rather than assessment of needs and advantages and disadvantages of various work scenarios. This practice is likely to change due to the adoption of performance-oriented budgeting and mid-term expenditure frameworks, *e.g.* in Azerbaijan, Moldova, Kazakhstan, Russia, and Ukraine. While performance-oriented budgeting (that presupposes a strong focus on outcomes of work) constitutes a positive change, it might be challenging for EEAs that do not possess proper skills and tools for target setting and still rely on an indicator system that focuses on inputs and outputs only.

3. STRATEGIES AND TOOLS

The “Guiding Principles” encourage the adoption by EEAs of a performance-oriented approach whereby compliance assurance is not an end but a means to achieve compliance and environmental improvements. Within such a system, enforcement strategies should be designed to deter violations and induce voluntary compliance. The choice of specific compliance assurance instruments or their mixes will depend upon the profile, in particular, the compliance history, of the regulated community. The regulated community has to be treated equitably, with consistency, in a transparent and proportionate manner. In order to enforce environmental law effectively and fairly, the EEAs should have access to the full range of informal, administrative, civil, and criminal remedies. Whatever remedies are available, guidelines should define the criteria for selecting one path of enforcement over another. Legal provisions and institutional arrangements for appeal should exist.

3.1 Planning approaches and strategic focus

Inspection activities in EECCA countries are commonly guided by annual plans, developed both at the national and sub-national level. These plans usually include a schedule of planned site visits. In Moldova, for instance, such schedules contain information on the facility to be inspected, its identification number (usually a fiscal code), the date (month), and duration of inspection, as well as contact details for the facility to be inspected. Unfortunately, the adherence to deadlines and results of implementation of annual plans are analysed only sporadically.

In some EECCA countries, the annual plans are based on clearly identified priorities. In Armenia, for example, these priorities (currently including combatting illegal logging, waste, air pollution, and excessive water resource use) are endorsed by the Minister of Nature Protection and are annually re-assessed. Within this process, the State Inspectorate for Environmental Protection can express its position on eventual priorities. When priorities are defined, the Inspectorate uses this information to produce an annual work plan for inspectors at the central and sub-national level. Several criteria are used to identify installations that would be inspected. They include, for example, environmental risks, compliance history, and seasonal variations in production volumes. Priority sectors are also identified. The inspection of facilities

representing these sectors is comprehensive, involving thorough assessments of impact on all environmental media. For large facilities, joint inspections are conducted involving specialists from the central and regional levels.

Georgia and Russia have made noticeable progress in strategic planning. The Georgian Inspectorate for Environmental Protection prepared a strategic plan for 2007-2010, which was formally approved by the Minister of Environment and Natural Resources. This document sets the Inspectorate's mission, vision, and values (Box 15), as well as six programme areas with specific targets and activities to achieve them. Also, the plan highlights how institutional development of the Inspectorate will be pursued.

Box 15. Mission, vision, and values of the Georgian Inspectorate for Environmental Protection

In 2007, the Inspectorate for Environmental Protection of Georgia adopted the Strategy of Environmental Compliance Assurance, including an operational plan for its implementation that aims to implement effectively and efficiently the Inspectorate's legal mandate and priorities established by the Government of Georgia.

The Strategy states that the Inspectorate will carry out its activities not only to ensure a safe environment; compliance with environmental legislation by the regulated community; but also to provide a level playing field for businesses; prevent economic losses from environmental pollution and degradation; and increase public awareness, trust, and support. To this end, the Inspectorate intends to use a mix of approaches: (i) creating incentives to improve and reward compliance; (ii) providing strict and timely response to non-compliance; and (iii) supporting improvement of legislation and facility-specific requirements through feedback from practice. The Inspectorate declared that its relationships with the regulated community will build on the principles of fairness, consistency, transparency, and proportionality.

The Inspectorate assumed the obligation to act transparently and disseminate timely, relevant information among staff, respective units of the Ministry, partner organisations, and citizens. To ensure high standards of its work, the Inspectorate will cooperate with law enforcement agencies and other governmental institutions; public organisations; the regulated community; and citizens, at the national, regional, and local level.

The Inspectorate will also cooperate with international organisations and other countries' inspection and enforcement agencies in order to better respond to challenges of globalisation and global environmental risks. The Inspectorate will analyse and use existing international experience in the field of environmental compliance assurance in order to continuously improve its performance.

Source: Georgian Inspectorate for Environmental Protection, 2007.

In Russia, a strategic planning framework was adopted in conjunction with performance-oriented budgeting. This framework was used by the Federal Service for Environmental, Industrial, and Nuclear Supervision to define, in a quite detailed manner, its needs for funding from the federal budget in 2007-2009. Such needs were identified for permitting and inspection, data management and profiling of the regulated community, training, and international cooperation. The plan, however, does not specify priority sectors or geographic areas. Some specific targets exist, particularly referring to the rate of accidents in certain sectors. At the same time, the plan foresees that outcome indicators will be developed and monitored by 2009. Hopefully, the change in the strategic focus of Russian authorities from outputs (such as the number of inspections conducted or fines collected) to outcomes (for instance, reductions in the number of accidents or emission levels) will drive similar change in other EECCA countries.

In general, the EEAs tend to focus on punitive instruments, thus their strategies are unbalanced and do not address some key roots of non-compliance, such as limited knowledge of legislation or low capacity within some industry branches to address environmental problems. Furthermore, due to limited capacity, inspectors mainly check papers (such as availability of permits or timeliness of payments related to pollution charges) rather than the technical state of facilities and industries' environmental performance.

Despite the adoption of performance-oriented budget planning in several other EECCA countries (*e.g.* Kazakhstan and Ukraine), activity and budget planning are not well linked. As a result, the policy makers do not receive a strong message with regard to the gap between the resources that would be required to implement policies and those actually provided.

3.2 Identification and profiling of the regulated community

As a background for strategic enforcement, the identification and profiling of the regulated community needs improvement. Presently, data on regulatees are scattered over a wide area and still kept mostly in paper form. Back in 2002, the majority of EEAs from the region stated that they clearly defined and identified the regulated community and this was not a problem. However, practical work and interaction with field inspectors within several demonstration projects showed that the situation with identification and profiling of the regulated community is far from perfect.

The structure of the regulated community has substantially changed over the last decade. Besides, many companies use deliberate strategies (*e.g.* a frequent change of names) to avoid fiscal and other regulatory responsibilities and inspection⁶. As a result, environmental authorities had limited success in collecting and systematising facility-specific data. Experience from Georgia, Kyrgyzstan, and Moldova has shown that even the most basic information about large industry - the number of enterprises - may be contradictory and difficult to obtain. SMEs rarely register their activity with environmental authorities. Given that certain estimates say that about 50% of economic activity in EECCA belongs to the shadow economy, merely half of the SME segment of the regulated community is known.

Fiscal and statistical authorities are commonly reluctant to disclose information on enterprises. At the same time, progress in identifying the regulated community was reported by countries where cooperation amongst governmental authorities was satisfactory or improved (Armenia, Georgia, Kazakhstan, and Uzbekistan).

3.3 Compliance assistance and voluntary corporate initiatives

Proactive measures by EEAs are important in meeting regulatory objectives. The EEAs should support the regulated community in understanding the environmental requirements and the repercussions of non-compliance. They should also be able to show the regulated community examples of better environmental management or provide technical assistance, especially to small and medium-sized enterprises, for applying low-cost measures in order to reduce pollution.

Compliance promotion is generally limited in EECCA. Currently, none of the EECCA countries has a comprehensive compliance assistance programme, though various elements of such programmes exist. In some countries, such as Russia and Georgia, there are even doubts as to whether an EEA should become involved in such activities. It is believed that regulatees should request compliance assistance from consulting companies on a commercial basis, which might be a sensible approach in the case of large companies.

⁶ In Russia, for example, authorities do not have a right to conduct planned inspections of SMEs earlier than three years after the firm is established. Similarly, in Uzbekistan a planned inspection may be conducted only two years after the official registration of a company.

At the same time, a number of EEAs do engage in various forms of information provision to the regulated community, for example:

- In Armenia, information is supplied to industry upon request;
- In Georgia, a booklet was produced for the regulated community explaining companies' rights and obligations;
- In Kazakhstan, the EEA staff regularly meet representatives of large industries to discuss challenges of implementation, and training to industry is provided by the training centre of the Ministry of Environment;
- In Tajikistan, inspectors participate in educational work with enterprises; and
- In Ukraine, the EEA organises workshops to inform enterprises on the implications of new regulations.

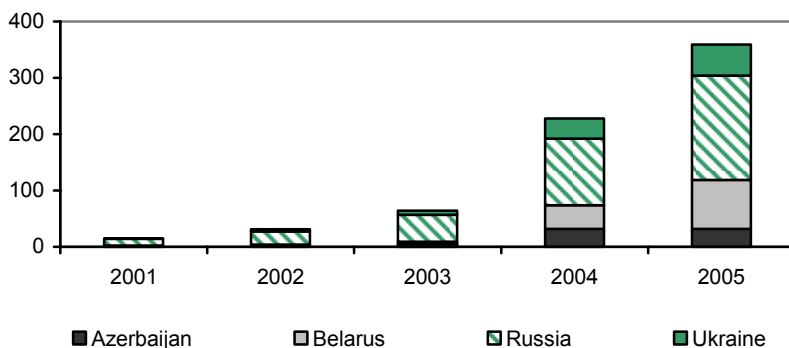
Online availability of legal acts and regular publishing of news has become a rather common feature in EECCA. The quality of web sites has risen in Georgia, Moldova, Kazakhstan, and Russia. Other countries have also continued their efforts to provide information pro-actively. Online forums and other forms of consultations are being established to receive feedback from regulatees. Several countries, *e.g.* Kazakhstan and Russia, subsidise magazines or newsletters targeted at industry.

Cleaner Production Centres, which were established in the late 1990s in almost all EECCA countries, remain in place but their outreach has not expanded very much and they still rely on external financing. The Cleaner Production Centres in Georgia, Moldova, and Kazakhstan received donor support to carry out facility-specific audits and develop cleaner production manuals in national languages.

The use of other policy tools that support and promote voluntary compliance, *e.g.* environmental management systems and corporate environmental reporting, is more limited. At the same time, certification according to the ISO 14 000 series is widening (Figure 13), in particular within export-oriented industry branches. Although only a limited number of companies are ISO 14 000 certified (*e.g.* as of December 2005, some 200 companies obtained ISO 14 001 certificates in Russia and a similar number in all other EECCA countries combined), this nevertheless constitutes a six-fold increase in comparison with 2003, thus denoting a change of attitudes. A new driving force in this process is the

engagement of sectoral ministries, for example, in Kazakhstan, where the staff of the Ministry of Industry were trained in ISO 14 000.

Figure 13. Trends in the cumulative number of ISO 14001 certified companies in selected EECCA countries



Source: International Organisation for Standardisation, www.iso.org

Promotion of EMSs has also played a positive role in the emergence of corporate environmental reporting. Unfortunately, only Russian companies registered their initiative to develop such reports on the web site of the Global Reporting Initiative. In this country, six large companies had issued reports on sustainable development and four companies published environmental reports in 2006.

Overall, key challenges to the introduction of EMS in EECCA fall into three categories:

- **Low level of overall management in enterprises**, manifested primarily in the inadequate use of modern approaches to planning and performance analysis, lack of attention to staff motivation, and poor organisation of training;
- **Narrow treatment of EMS and environmental activities in general.** In most cases, environmental activities of enterprises are viewed exclusively as “end-of-pipe” activities. Certainly, introduction and operation of add-on devices is an integral part of environmental activities. However, in many cases a preventive approach based on systemic analysis of the process as a whole can lead to much better solutions and economic effect. Creating an EMS is also initially viewed in many cases as restructuring the operations of the environmental protection

division while, in fact, it requires the top management's decision that such a system is important for the enterprise and its further involvement in setting up an EMS. Furthermore, the entire staff should be involved in raising environmental performance;

- **Inadequate understanding of the nature of the EMS standards.** Understanding the very nature of voluntary standards and how they relate to the command-and-control and other regulatory tools presents certain difficulties. The tendency to view them as mandatory is typical in the EECCA context, which is largely due to the position (or rather lack of a clear position) of the environmental authorities *vis-à-vis* EMS. Enterprise managers often view ISO 14000 standards as yet another regulatory tool that is about to be enacted rather than as an internal management and cost optimisation tool.

In sum, compliance assistance mechanisms still need development in EECCA. Firstly, allowing the regulatees to take responsibility for themselves (at least in part) can help the EEAs to concentrate resources on issues that present greater risks to the environment. Secondly, compliance promotion can raise the awareness of industrial managers to environmental issues generally, so that they not only consider the conditions set for them in permits, but also other areas of their environmental performance. Both of these issues are important in EECCA.

3.4 Compliance monitoring

Systematic monitoring of compliance, which implies collecting and analysing information on the compliance status of the regulated community, is essential to detect and correct violations, to provide evidence supporting enforcement actions, and to evaluate progress in environmental policy and law implementation. Besides government checks (inspections), the status of compliance can be verified through ambient monitoring near a facility, results of self-monitoring programmes, or citizens' compliance monitoring (mostly complaints).

3.4.1 Ambient monitoring

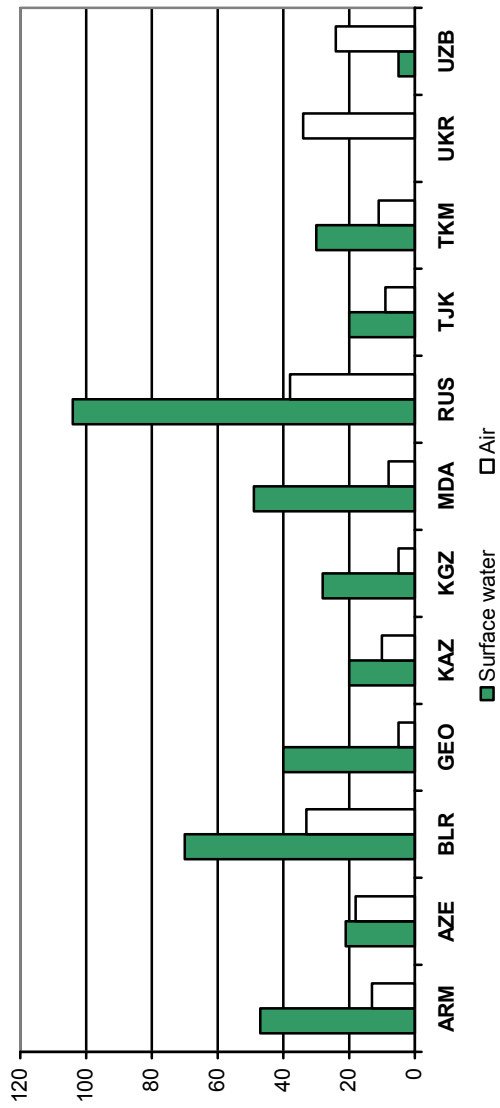
Ambient monitoring is useful to detect violations without entering a facility. It gives certain indications about whether permit requirements are correctly set to meet desired environmental quality. Although most often the connection of pollution with a certain facility may be difficult to establish and prove through ambient monitoring, “marker” pollutants and specialised software can be used for tracking ambient pollution back to specific sources that offers the opportunity to target on-site inspections.

The number of monitored parameters varies across the EECCA region. Russia and Belarus reported the highest number of monitored parameters. Also, the monitoring networks in these countries are the most extensive. Other countries concentrate their efforts on fewer priority substances: on average, 20-30 parameters are monitored for water, and 10-15 for air.

In most of EECCA countries there are a range of institutions that undertake ambient monitoring. These include the EEAs themselves (*e.g.* in Moldova, Kazakhstan, and Ukraine) but also specialised monitoring agencies of the Ministry of Environment and the Ministry of Health. The latter are usually better equipped with measurement instruments. Joint initiatives to track back exceedances of ambient standards to polluters, based on ambient monitoring data, are not known to the report authors. Gathering information through other systems, including other government agencies, often poses the problem of payment for data that is requested from the EEA. In addition, various monitoring systems may duplicate sampling at the same locations and use different methodologies, making comparisons of databases difficult.

All of the EEAs report problems with monitoring capacity. Currently, however, there is more variability, as compared with 2003, in the ability of EECCA countries to undertake monitoring (Figure 14; compare with Figure 7). In some EECCA countries, such as Belarus, Russia and Ukraine, significant monitoring is still undertaken and capacity problems may concern only certain parameters or locations. But in the Caucasus and Central Asia, capacity problems have reduced monitoring programmes to a critical minimum. This can severely affect compliance assessment and, subsequently, the ability of the EEAs to impose sanctions if those rely on evidence demonstrating the environmental impact.

Figure 14. Number of pollutants for which ambient concentrations are monitored (2006)



Source: Responses from EEECA countries to the EAP Task Force questionnaire, 2006.

There is clearly a major need for enhanced monitoring capacity. Some EEAs report the need for training of staff or additional staff numbers, especially if new equipment/parameters are to be used/analysed. However, others report that staff are well trained, but that they have limited equipment and little money for operating costs and staff re-training.

The ability of governments to rehabilitate monitoring networks varies, with countries such as Kazakhstan setting aside significant amounts for laboratory equipment, while others, such as Moldova, provide little or no financial support and request that laboratories achieve full cost recovery. In certain cases, donor countries provide support (e.g. Finland provided equipment to the Kyrgyz Republic, Tacis subsidised procurement of laboratory equipment in Moldova, and Germany and Finland supported the development of monitoring systems in the Caucasus region). However, it is important that donor projects take account of the need to support operating costs and training, otherwise the new laboratory infrastructure will soon deteriorate.

Case-by-case analysis is needed to determine an optimal design and capacity for EEA laboratory infrastructure. In this framework, one of the scenarios could be total outsourcing of such services, although it is recognised that this might lead to losing some of the highly qualified staff that is presently employed at the EEAs and other problems.

In some countries, the laboratory units were institutionally separated from the EEAs, as happened in Georgia and Russia. In Russia, the former laboratory units received the status of legal entities but are still state-owned. The institutional separation forced Georgian inspectors to abandon any sampling and laboratory analysis, while in Russia industry and consulting companies complain that EEAs indirectly impose recourse to services of governmental laboratories on the regulates to help these units to survive. As a result, private providers of laboratory services suffer from a distorted level playing field.

3.4.2 Self-monitoring

Although regulatory agencies have been historically conducting compliance monitoring, it is now good practice to reduce their costs by requiring operators to track and report data on their own environmental performance. The primary goal of compliance monitoring by industrial operators (also known as “self-monitoring”), however, is to ensure the earliest possible response to any environmental problem occurring because of malfunctions in production processes. Also, self-monitoring

data can help to optimise ambient monitoring systems and establish priorities for inspection.

For the regulated community, disclosure of facility-specific data and their comparison between enterprises within the same industrial sector, or with international benchmarks, can further indicate where cost-savings are possible. Furthermore, access to other companies' data can build trust that the government seeks guaranteeing a level playing field for businesses. The relevance of self-monitoring is growing in the context of Pollutant Release and Transfer Registers (PRTR) and ensuring public access to environmental information. While there are many other benefits of self-monitoring, they will be harnessed only if its results are actually used by stakeholders within decision-making processes. Imposing data collection for the sake of data will lead, most likely, to an erosion of the system's value.

In the EECCA region, environmental self-monitoring has a long history at the largest industrial facilities. Although the majority of self-monitoring programmes date back only three to five years, some of the oldest enterprises established such programmes in the mid-1970s, as shown by a survey of enterprises conducted by the EAP Task Force in Kazakhstan. The design of self-monitoring has many positive elements corresponding to good international practice, but some of its weaknesses diminish its potential benefits.

In most EECCA countries, the obligation for industrial operators to conduct self-monitoring is spelled out in the framework laws on environment protection, as well as in laws regulating air and water pollution. The obligation to conduct self-monitoring applies regardless of ownership and uniform requirements are established for public and private companies. Armenia and Georgia re-enforced this requirement in 2004 and 2005, respectively, within the process of upgrading their environmental legislation. So did Kazakhstan and Russia in 2006. Also, legal stipulations exist in the Administrative and Penal Codes to minimise the possibility of fraud and negligence. The secondary legislation, *e.g.* in Kazakhstan and Ukraine, gives further guidance on approaches and procedures of self-monitoring.

Government authorities also regulate the functioning of self-monitoring through requiring certification of laboratories and selective verification of self-reports during inspection, etc. Competent authorities may be allowed to use self-reporting data to enforce against violators (*e.g.* in Armenia, Kazakhstan and Ukraine).

The regulated community is in charge of developing individual self-monitoring programmes and of presenting them for approval to competent authorities. Enterprises bear full responsibility for implementing self-monitoring and providing the necessary expertise, equipment, and analytical facilities. Sometimes services are obtained on a sub-contract basis. The costs of self-monitoring are covered by the enterprise. Results of self-monitoring are communicated to competent authorities through regular statistical reports or immediately in case of emergency situations or accidents. For most of the countries, but particularly in low-income countries of the region, self-monitoring is limited to a handful of largest enterprises.

In principle, the frequency of monitoring depends on the hazard of a specific substance. For example, in Russia, the following frequency is established for ambient air pollutants: first category - once a quarter; second category - twice a year; third category - once a year; and fourth category - once every five years. But competent authorities often consider that industries have to monitor the maximum possible number of parameters without balancing the scope of self-monitoring with inherent costs. At the same time, competent authorities do not have adequate resources to keep track of, and analyse, the information received from the regulated community. This leads to a situation when industries create a merely superficial mechanism of self-monitoring disconnected from the overall management system and, therefore, of little value.

The quality of self-monitoring data raises doubts for a number of reasons:

- There is no statutory procedure to ensure the integrity of sampling, sample preservation, transportation, and analysis;
- The robustness and reliability of calculation methods are often challenged due to a high level of uncertainty and absence of quality control and quality assurance;
- There is evidence of major discrepancies between the measurements made by the state analytical laboratories and enterprise laboratories.

Quality problems with laboratory tests often lead to controversy, which sometimes has to be resolved in court. Consequently, both the industries and the competent authorities incur additional administrative costs.

Self-reporting remains administratively cumbersome in all EECCA countries: commonly, companies are required to send three to four different reports to different authorities in different formats and with different deadlines. For example, in Russia, enterprises are obliged to submit state statistical reports on environmental issues, including the so-called “2-TP” forms for air, water, waste, contaminated land, and pollution charges. The reports are to be submitted within a certain timeframe (January-early February) to several public authorities: “2-TP Air” to the Russian Statistics Agency; “2-TP Waste” to the Federal Service for Environmental, Industrial and Nuclear Supervision; and “2-TP Water” to the basin management department (for discharges into surface water body) and water utilities (for discharges into sewage network). Enterprise representatives often have to file reports with a respective institution personally. In contrast with licensing, this problem hardly received any attention within the “one-stop shopping” approach to regulation that has been actively promoted in EECCA.

Therefore, while potentially self-monitoring could be very effective, in EECCA this instrument is undermined by a number of factors, namely:

- Shortcomings or contradictions in setting legal and permit requirements that erode trust between public authorities and the regulated community;
- A lack of incentives for companies, in particular for managers, to address environmental issues within the overall framework of business administration;
- Limited capacities and a lack of coordination between environmental, health, and statistics authorities at different levels in handling data that is collected and reported by industrial operators; and
- Failure to set requirements for environmental data collection by enterprises and for management of resulting information by public authorities in a way that supports environmental decision-making and facilitates access to environmental information.

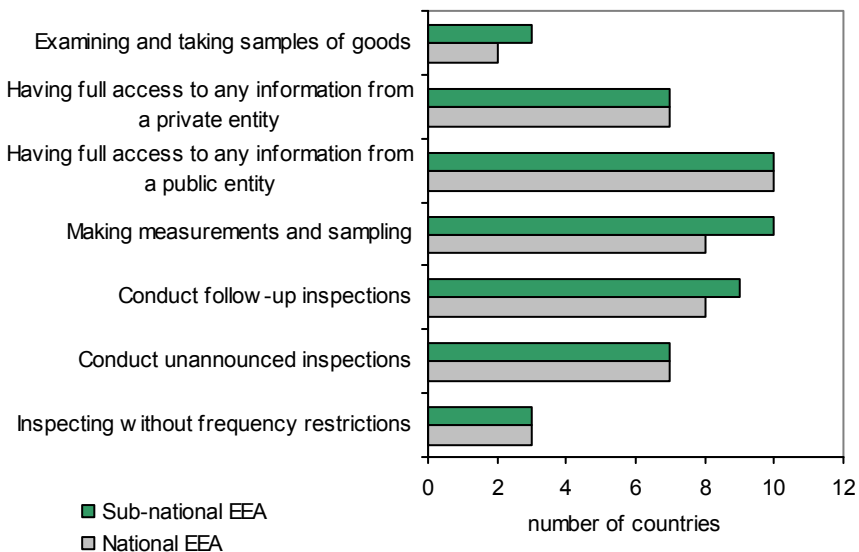
As the economic situation improves, EECCA countries will need to gradually extend the level of environmental self-monitoring by industrial operators. Meanwhile, flaws in the design of this system could be corrected.

3.4.3 On-site inspection visits

Inspections conducted by state authorities (or third parties⁷) remain the backbone of any compliance assurance programme. Potentially, this type of compliance monitoring provides the most relevant and reliable information. Inspection of individual facilities is important in ensuring that the compliance issues are checked integrally and that contact is maintained with operators to discuss remaining problems. An inspection must collect sufficient and high-quality evidence regarding the facility's compliance status.

Commonly, the inspection procedures are regulated by law (as in Armenia, Kazakhstan and Russia) or secondary legislation, *e.g.* an internal regulation approved by the Ministry of Justice (as in Georgia). The legal framework in EECCA gives a number of powers to inspectors, which still are not sufficient for ensuring effective inspection (see Figure 15). For example, only three countries out of nine may inspect facilities without frequency restrictions.

Figure 15. Inspection-related powers of EEAs in EECCA



Source: EECCA EEAs. Data missing for Turkmenistan, and Uzbekistan.

⁷ In certain cases, *e.g.* as part of privatisation procedure, competent authorities may require mandatory environmental (due diligence) audits.

In all EECCA countries, there are requirements that inspection be properly planned, conducted, and recorded. Inspections can be single-medium or integrated and the latter are reported to be the most common. They can also range from walk-through visits to in-depth investigations. In principle, prior to the visit, the compliance history and all permits are reviewed. In the majority of the countries, inspection schedules are announced to the regulated community. In Moldova, the Chisinau City EEA posted its inspection schedule on the web but this practice was used for only a limited period of time in 2005.

However, inspectors rarely prepare individual plans of inspection or develop site-specific inspection checklists. In Kazakhstan, for example, this is occasionally done for the largest enterprises and plans existed to use them more regularly.

Inspections can also be carried out *ad-hoc* upon request from citizens, mass media, public prosecutors offices, regional authorities, parliaments, etc. In many countries, particularly in Moldova, Russia, and Ukraine, practitioners shared their view that, in fact, most on-site visits are unplanned and inspectorates work as “fire brigades”.

The rate of unplanned site-visits increased over the last 3-4 years and sometimes reaches 90%, which is extremely high in comparison with international benchmarks. This approach often siphons public money from solving serious pollution or serious non-compliance to cases that might be influenced by a political or personal agenda, or simply trivial requests that could be easily solved by local police or local authorities.

On the one hand, the frequency of inspections is limited by law in several countries (*e.g.* in Moldova and Russia) but some countries, *e.g.* Armenia, have already renounced such restrictions. On the other hand some countries report a high number of inspections per year, although it is not clear whether these high numbers are due to inspection of industrial sites or individual entrepreneurs and vehicles. If the latter is true, inspectorate resources are not used in the most effective way. Further analysis of this issue is necessary, in particular to review and adopt international benchmarks of inspection frequency in EECCA.

In Georgia, Kazakhstan, and Kyrgyzstan prior consent from a court (or another authority) are required for every inspection, which puts a lot of administrative burden on inspectors. In Kyrgyzstan, all site visits have to be co-ordinated with the Commission for Entrepreneurship Development and inspections that are not planned are not permitted. In Uzbekistan, the Council for Coordination of Inspection Authorities

approves any inspection. Both in Kyrgyzstan and Uzbekistan, even in the case of accidents, when the EEA needs to undertake an immediate inspection, it has to report to a designated executive or judicial authority in order to receive entry permission (the so-called “inspection warrant”). Furthermore, in most countries each inspection has to be registered in a special log book that is kept by all facilities. Such rules were often imposed in response to widespread corruption in the inspection authorities.

While in many instances new procedures had a positive impact, including better planning of work, coordination among authorities, adoption of integrated on-site inspections, etc., some rules seriously undermine the ability to discover non-compliance. So far, the impact of these rules was quantified using firm surveys⁸ and only limited information exists about their consequences for environmental inspection (*e.g.* up to six fold decrease in the number of on-site visits in certain countries). Unfortunately, no studies are available on how the new inspection regime influenced public interests, *e.g.* the level of environmental protection.

When planned inspections do occur, inspectors are supposed to check environmental documentation and actual compliance, assess environmental protection measures, verify equipment, and make sure that pollution and user charges are calculated and paid correctly. In reality, in most cases, inspections focus on verification of relevant documentation. This happens because of limited human potential to assess production processes and environmental performances (poor knowledge of production processes, lack of practical experience, etc.) or, in some cases, because of limited availability of monitoring equipment. Another explanation is that inspectors rarely expect real changes in environmental performance since they believe that industries cannot afford to improve environmental performance.

On average, site visits last 1-2 days in the case of SME inspection, and up to one week when large facilities are checked. Some enterprises are then inspected repeatedly. For instance, in Russia, 10-15% of SMEs reported multiple inspections by environmental authorities in 2005-2006 in comparison with 25% in 2003 but it is not clear whether improved environmental compliance was the basis of this decrease.

⁸ Such surveys were conducted with support from the International Finance Corporation in Belarus, Georgia, Tajikistan, Ukraine, and Uzbekistan. In Russia, this work was supported by the United States Agency for International Development.

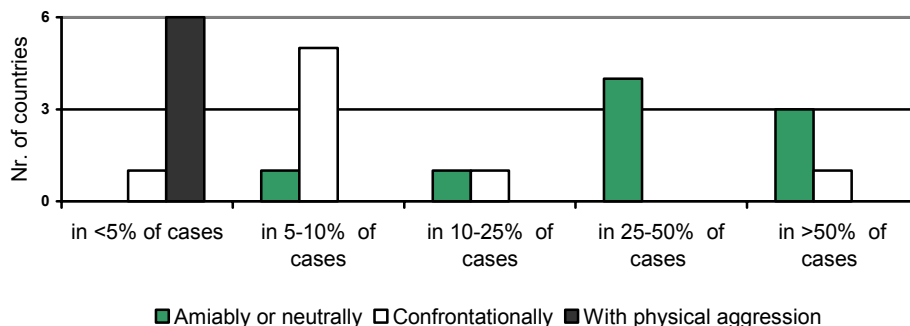
A mandatory requirement is that every on-site visit should result in an inspection record stipulating the violation(s) revealed, the legal requirements that have been violated, the cause(s) of non-compliance, and the corrective action(s) prescribed. Detailed narrative reports with findings are not routinely prepared. Commonly, paper registers of inspection-related documents exist at the sub-national level that creates problems for analysis and comparison of performance across regions.

In general, the precise characteristics of inspection work are hardly known. During the review, countries were requested to provide quantitative information on the inspection types and a number of other indicators⁹, but most of them struggled to provide answers, mainly because of data absence. Therefore, although a wide variety of inspection types are employed in EECCA countries, there was insufficient information to determine whether they are used appropriately. Interviews with field inspectors let authors of the review make the conclusions that integrated (multi-media) inspections are currently predominant. Their further use would be advisable in order to encourage better environmental performance. At the same time, more specialised inspections need to be used where this may be more effective or efficient.

Almost all of EEAs report a negative attitude towards inspection activity by enterprise managers (Figure 16), which is due to a combination of factors, ranging from problems in achieving compliance to pressures from inspectors to impose sanctions or, in some cases, to get bribes. Such a negative attitude is aggravated by the fact that the regulatory requirements are in many cases unfeasible and inspectors are usually blamed for this. In comparison with 2003, no changes in the attitude toward inspectors were reported by EECCA countries, except for Armenia and Kyrgyzstan. In Kyrgyzstan, environmental inspectors face confrontations more frequently during site visits. On the contrary, in Armenia inspectors have lately been treated more amiably.

⁹ These indicators included: % of single medium inspections; % of follow-up on-site visit; % of *ad-hoc* on-site visits; % of unannounced on-site visits; % of joint inspections with other authorities; and % of visits conducted out of total planned in annual inspection schedules.

Figure 16. Attitude towards inspectors by enterprise personnel, based on inspector opinion, in EECCA (2006)



Source: EECCA Environmental Enforcement Authorities. Data missing for Russia, Turkmenistan, and Uzbekistan.

3.4.4 Role of the general public in compliance monitoring

Citizens can also contribute to compliance monitoring by tracking regulatees' performance through independently compiled ambient quality and emission data, or independently assessed compliance. Many inspectorates find that clearly communicating their information needs to citizen monitors provides for collection of data that are quite useful in the identification of potential environmental violators.

Many EECCA countries (Belarus, Moldova, Russia, Ukraine, etc.) allow citizens to participate in compliance inspections conducted by government officials. Usually, a citizen must have been involved in the complaint process prior to the inspection although cases exist where citizens can receive the status of a "public inspector" and the mandate to write protocols about certain types of violations.

Inevitably, there will be legal limitations to public inspections. In enforcement investigations, for instance, "public inspectors", including NGOs, cannot force access to a site to gather evidence or impose formal sanctions. Their role is limited to establishing the fact of non-compliance.

Filing complaints is another mechanism that the general public can use to influence compliance monitoring activities. In EECCA, the statistics on complaints are not reliable but practitioners often mention that citizen complaints sometimes lead to a sort of “fire brigade approach”, already mentioned above, meaning that every complaint is followed by a reaction from the inspectorate by carrying out a site visit.

This approach can, in spite of the (temporarily) positive radiation towards the public, be rather risky for several reasons: not all complaints reflect a situation of non-compliance; not all situations of non-compliance indicated by a complaint are equally relevant; complaints can be “revenge-driven” or “competition-driven”. Finally, complaints will often not reflect the real environmental priorities and can draw limited resources away from strategic approaches.

3.5 Administrative and criminal enforcement

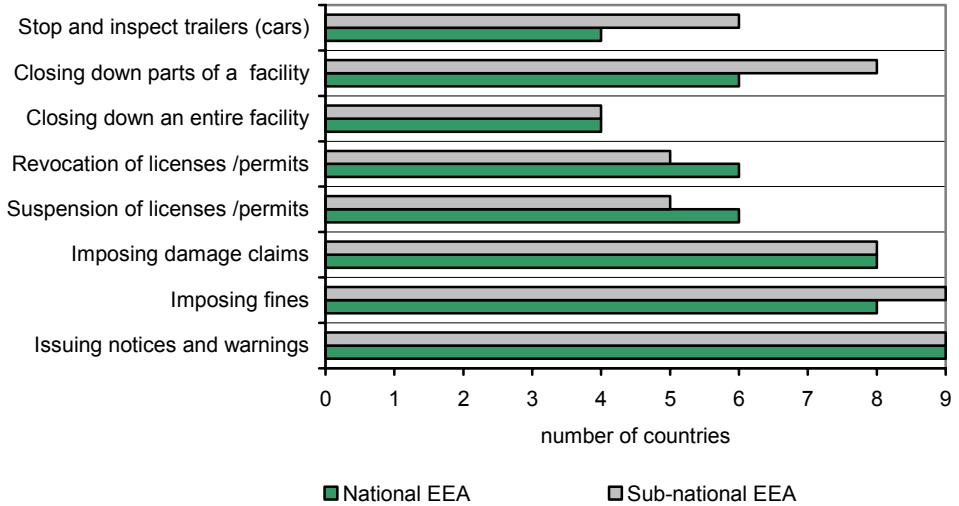
After revealing a violation and recording it in the “Control Act”, the EEAs report that they enter into a dialogue with the offender. In some countries (*e.g.* Armenia and Belarus), if the violation is not serious and the offender is ready to implement corrective measures, the EEA limits the response to an administrative order indicating the deadline for implementing corrective measures. In other countries, *e.g.* in Kazakhstan, inspectors believe that they must impose a fine and many identify the high number of fines with high performance.

Where there are violations involving serious negative impacts on the environment, the damages are evaluated and a claim for compensation is made¹⁰. If the offender voluntarily pays the damage claim, the problem is considered to be resolved. If it does not, a court action may be initiated.

Some other tools of administrative enforcement exist, *e.g.* revocation of licences and permits, but not all EEAs have access to them (Figure 17).

¹⁰ Please note that damage compensation fall under civil enforcement.

Figure 17. Administrative enforcement powers of the environmental enforcement authorities at the national and sub-national level in EECCA (2006)

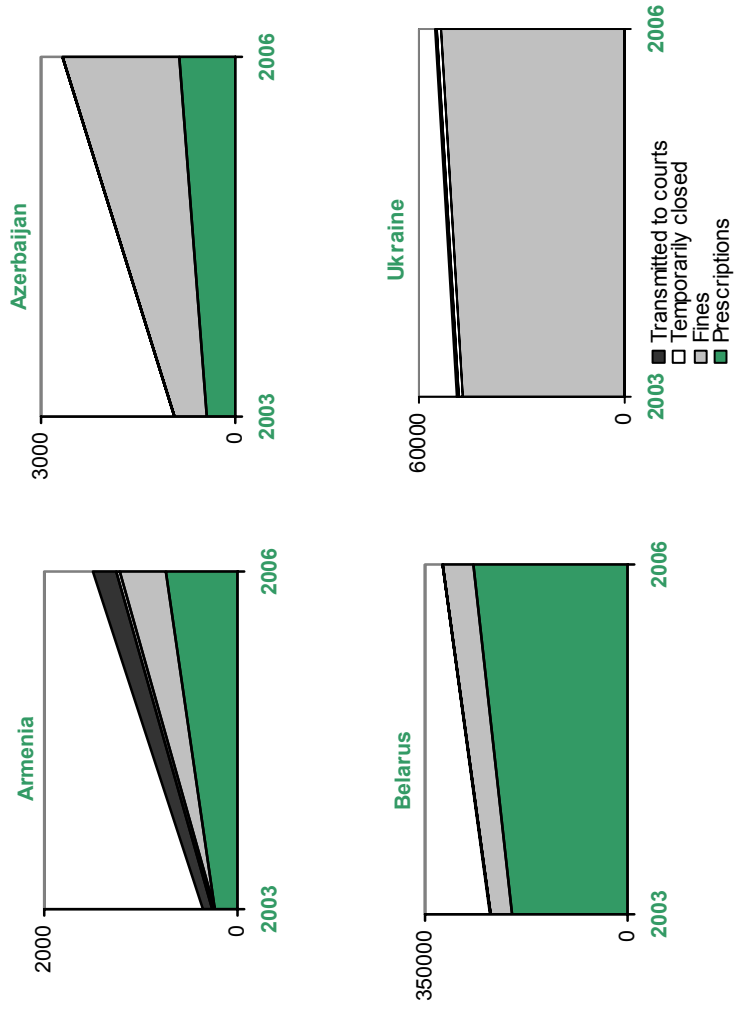


Source: EECCA Environmental Enforcement Authorities. Data missing for Russia, Turkmenistan, and Uzbekistan.

In practice, the most common leverage is financial. More severe sanctions are seldom used (Figure 18), although many inspectors believe that the most effective measure would be to close the facility in response to non-compliance, as fines are too small to be sufficient to act as a deterrent, with many operators preferring to pay the fines as a sort of “tax”.

Besides, EEAs still face political pressures to allow a facility to continue operation even though it should be closed for environmental reasons. Analytical tools to estimate unlawful financial gains from non-compliance and the affordability of fines are missing. Therefore, the application of fines often lacks proportionality.

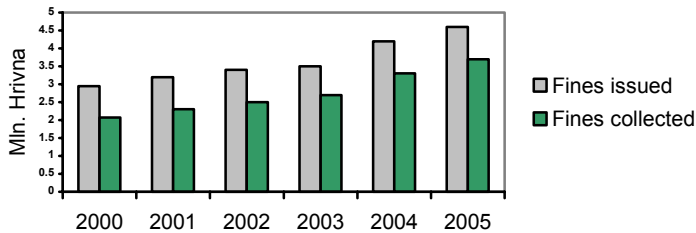
Figure 18. The balance between several types of enforcement actions in selected EECCA countries



Source: EECCA Environmental Enforcement Authorities.

Fine collection rates have increased over the last few years. The sharpest increase was recorded in Georgia - from 6% in 2000 to 72% in 2006; and in Azerbaijan - from 20% in 2000 to 80% in 2006. In other countries, which already had higher rates in 2003, improvements were less spectacular but steady - as in Ukraine (Figure 19), where the fines collection rates increased from 70.2% in 2000, to 77.1% in 2003, and reached 80.4% in 2005. Such increases generally improved the deterrent effect of sanctions.

Figure 19. The amount of fines issued and collected in Ukraine in 2000-2005 (million Ukrainian Hrivna).

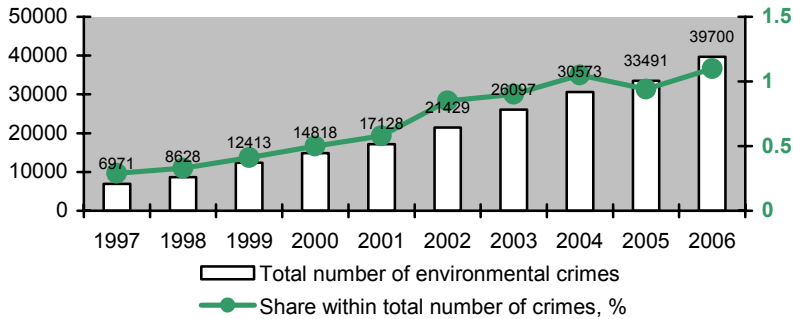


Source: State Environmental Inspectorate of Ukraine, 2006.

Unlike the fine collection rates, the rates of compensations for damages (CFD) are small. In Ukraine, where the fine collection rates reach some 80%, the rate of CFD collection was reaching about 50% in 2006. Low collection rates result from poor evidence of damage and flawed methods of damage calculation that are rejected by courts.

Environmental crime is gaining ground in EECCA, *e.g.* in Russia the number of recorded crimes more than doubled between 2001 and 2006 (Figure 20) and their share within the total number of crimes is steadily growing against the background of declining overall criminality. Increasingly, it has taken the form of organised crime or trans-national crime, particularly in the natural resources sector and hazardous waste disposal.

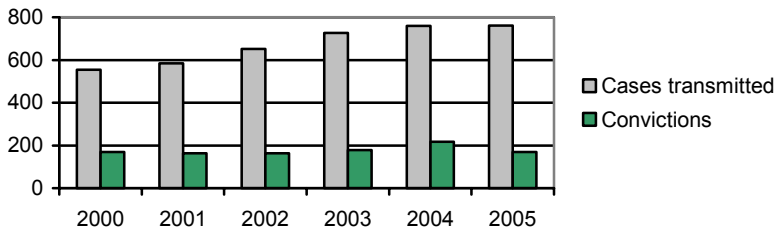
Figure 20. A decade of steady increase in the number of environmental crimes in Russia



Source: State of the Environment Reports of the Russian Federation, www.mnr.gov.ru (1997-2005); data for 2006 reflect only 11 months (www.gks.ru/free_doc/2006/b06_01/3-4.htm).

Some inspectorates initiate court action in cases where criminal behaviour is suspected, but the courts are not always supportive of the EEA in its enforcement actions, for instance, in Ukraine, only 20% of cases get to the phase of pronouncing a conviction (Figure 21). In many cases, the crime is recorded but offenders are not found. For example, the Russian Ministry of Internal Affairs reports that only 4.9% of environmental crimes were solved in 2003, 27.3% in 2004, and 10.2% in 2005.

Figure 21. The number of cases transmitted for criminal prosecution in comparison with the number of convictions in Ukraine in 2000-2005



Source: State Environmental Inspectorate of Ukraine, 2006.

Finally, specialists in environmental crime from EECCA consider that sentences pronounced in environmental cases are too mild and have little deterrent effect. For instance, analysis conducted in Russia shows that criminals are mostly sentenced to pay fines and only about two to three percent receive a jail sentence, 45 percent of which are for less than one year. This happens against the background of a relatively well-developed criminal legislation. One reason for this situation is the predominance of crimes related to the use of natural resources, where courts are confronted either with problems of the offender's extreme poverty, or, on the contrary, powerful criminal groups. Pollution-related crimes are quite difficult to prove due to the poor monitoring and investigation capacities of EEAs.

3.6 Citizen enforcement

In some countries, citizens and private groups are empowered by law to bring enforcement actions against violators through lawsuits. Citizen participation can be very effective when political leaders prevent inspectorates from challenging powerful private enterprises or large infrastructure projects promoted by the government. It is to counter such intermittent paralysis of an inspectorate that civil society representatives may act as "watchdogs" for non-compliance. Exposure in the mass media of the inspectorate's failure to enforce can put pressure on it to improve performance.

While most of the EEAs indicate the right of the public/NGOs to take court action, real-life examples are not so easy to find. Perhaps one of the most internationally-known cases is the action of Ukrainian NGOs against the construction of a navigation canal in the Ukrainian part of the Danube Delta (Box 16). In order to stop this infrastructure project, a Ukrainian NGO not only appealed in court but also to international organisations. Commonly, however, many citizens seek to redress violations through official state bodies, rather than launch court actions.

Another mechanism that citizens' organisations can use is "indirect enforcement" through institutions that provide finance for infrastructure projects, in particular the development banks active in the region, such as the Asian Development Bank (ADB), the European Bank for Reconstruction and Development (EBRD), and the World Bank. Commonly, IFIs are open to dialogue with NGOs and even have independent mechanisms for handling complaints, such as the EBRD's "Independent Recourse Mechanism". On the other hand, a whole network of NGOs - the CEE Bankwatch Network - is engaged in monitoring environmental impacts of IFI operations in CEE and EECCA.

Box 16. Use of international and domestic dispute resolution mechanisms in the Danube Delta case

In 2003, the Government of Ukraine approved a project to dig a deep-water navigation canal through Ukraine's portion of the Danube Delta Bilateral Biosphere Reserve. Ecopravo-Lviv (EPL), a Ukrainian public interest environmental law NGO, challenged this decision on both environmental and procedural grounds (including a lack of public participation in the EIA process).

First of all, EPL filed cases against the Government of Ukraine challenging the Government's decision to dig a deep-water navigation channel through Ukraine's portion of the Danube Delta Bilateral Biosphere Reserve. On 10 February 2004, the Commercial Court of Kyiv rendered a decision to sustain the suit by EPL against the Ministry of Environment Protection of Ukraine. The court based EPL's right to appeal to court on the Aarhus Convention, which Ukraine had ratified, even though the State had not yet adopted implementing legislation. The court held that the public was not given the possibility to participate in the EIA and, therefore, their rights had been violated. The court ruled that the consent by the Ministry of Environment regarding construction of the canal was illegal and the decision was invalid.

In addition to seeking remedies in national courts, EPL filed complaints with a variety of relevant international bodies in late 2003 and early 2004. These included:

- The Compliance Committee of the Aarhus Convention (on access to information, public participation in decision-making, and access to justice in environmental matters). Romania also subsequently filed a complaint with the Compliance Committee;
- The Implementation Committee of the Espoo Convention (on EIA in a transboundary context). The Implementation Committee refused, by a vote of 4-3 in 2004, to consider the complaint. Romania subsequently filed a complaint with the Implementation Committee;
- A Letter of Emergency Notification filed with the Executive Secretary of the Convention on the Conservation of Migratory Species;
- An Emergency Complaint filed with the Permanent Secretariat of the International Commission for the Protection of the Danube River;
- A Letter of Notification filed with the Secretariat of the African-Eurasian Water Bird Agreement (AEWA);

Also, EPL has raised the issue with the Ramsar Convention and the UNESCO Man and Biosphere Programme, and both institutions expressed concern about the canal. This strategy of seeking relief through multiple domestic courts and international dispute resolution mechanisms can be resource intensive. Also, non-state actors that seek recourse from an international mechanism may – but not necessarily – be required to exhaust domestic remedies first.

Source: www.epl.org.ua/files/Danube/Danube_EPL_actions.doc

Because of litigation-related costs, citizens in EECCA have a limited ability to exercise their right of access to justice. Mechanisms exist to address this problem. In some countries, citizen suit provisions in environmental laws contain fee-shifting that allow citizens who win to recover the cost of litigation, including reasonable fees for attorneys and experts. Citizen enforcers are not responsible for the fees of the opposing side if the citizens do not win. There are also so-called “public advocacy centres” that provide free-of-charge litigation services to the general public. Such centres were active in Armenia, Belarus, Moldova, Ukraine and a number of other EECCA countries, but discontinued financing paralysed their work.

3.7 Approaches to promote social disapproval of non-compliance

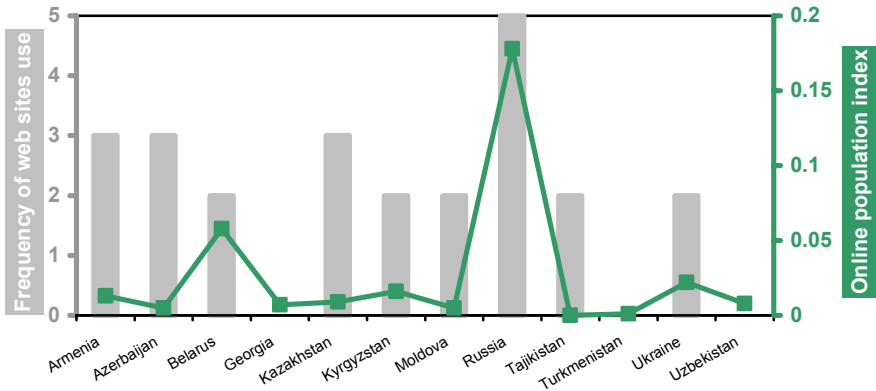
An important factor for compliance is to establish social disapproval of violators or inefficient enforcement actions. The public, for instance, may choose to boycott certain products if people believe the manufacturer is harming the environment. Such disapproval can result from public awareness of regulatees' environmental performance or of the responses provided by enforcement agencies to any violations.

Public authorities can generate broader support for environmental enforcement actions by publicising relevant information, in particular, about violators or successful enforcement actions. As mentioned above, they can reduce costs of inspection and enforcement by engaging the citizens in compliance promotion and detection of violations, as well as by providing access to justice.

The EEAs report that the role and rights of the public have been expanding in EECCA, and public's relationship with EEAs has improved since 2003. In a number of countries, the public has a right to request information on emissions and the results of enforcement.

The EEAs report that they use a variety of mechanisms for providing information to the public. The EEAs in Armenia, Azerbaijan, and Kazakhstan post inspection-related information on the Internet on a monthly basis (Figure 22). Television is often used as part of communication strategies in Azerbaijan, Georgia, and Moldova (Figure 23). In Georgia, a TV show “Eco-Patrol” was created to communicate news about inspection results and show offenders. The EEAs in Armenia, Azerbaijan, Belarus, Kazakhstan, Moldova, and Tajikistan deliver information through seminars and exhibitions.

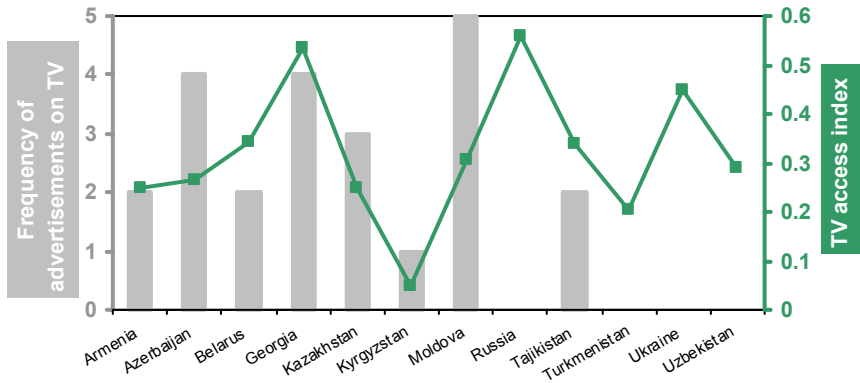
Figure 22. The frequency of the use of web sites for delivering compliance and enforcement information as compared to the “on-line population index” in EECCA



Frequency: 5 – several times a week; 4 - weekly, 3 - monthly, 2- annually; 1 – once in several years.

Source: EECCA Environmental Enforcement Authorities; UNPAN (2003-2005).

Figure 23. The frequency of the use of television for delivering compliance and enforcement information as compared to the “television access index” in EECCA



Frequency: 5 – several times a week; 4 - weekly, 3 - monthly, 2- annually; 1 – once in several years

Source: EECCA Environmental Enforcement Authorities; UNPAN (2003-2005).

Where implemented, awareness raising activities have proven effective in improving compliance. In a number of countries, publicising stories that expose polluters and show non-compliance cases or present effective enforcement actions is believed to have a greater influence than publicising successful stories of improved behaviour by the regulated community. At the same time, as the figures above show, a certain gravitation of EEAs toward communication through electronic and TV means is sometimes at odds with a very low access to the Internet (and even television in remote rural areas) in some EECCA countries.

The performance rating and information disclosure schemes are growing in popularity in EECCA due to their potential to reduce emissions at a lower cost because they do not require formal enforcement action. Several countries (Russia, Kazakhstan, and Ukraine) adopted various forms of rating schemes to assess and disclose industry's environmental performance, which help promoting compliance through public pressure. In Russia, at least three different schemes exist, some of them linked to industry's self-regulation efforts while other schemes are pursued by NGOs. The EAP Task Force Secretariat in cooperation with the World Bank carried out a feasibility study of implementing performance rating in Ukraine (Box 17).

**Box 17. Application of a performance rating scheme in EECCA:
Pilot project in Ukraine**

Adapted from Indonesia's Programme for Pollution Control, Evaluation, and Rating (PROPER) programme, the *Performance Rating and Information Disclosure (PRIDE) scheme* rates firms' environmental performance from best to worst in five colours - green, blue, yellow, red, and black - according to specially designed criteria. The scheme helps governments to: (i) assess industry's environmental performance; (ii) make information publicly available; (iii) use public and media pressure for better compliance with environmental requirements; and (iv) establish dialogue between enterprises, enforcement agencies, NGOs, and the public.

The ratings system draws on four major sources of information: reports on industrial firms' polluting emissions; inspection reports on their environmental management; records of public complaints, regulatory actions and penalties; and surveys that record data that are relevant for rating environmental performance. After verification with enterprises, the ratings are disseminated to the public through mass media (TV, radio, daily news). The rating is periodically reviewed (every 6, 12, 18 or 24 months) and updated, which allows enterprises to be re-categorised.

The programme has several positive features. Firstly, the performance rating system is simple, so that its implications can be easily understood and accepted by firms and the public. Secondly, it identifies both superior and inferior performances and opens ways for making and acknowledging progress. Finally, the ratings are colour-coded for easy communication by the broadcast and printed media.

The assessment of the feasibility of implementing a rating scheme in Ukraine shows that this policy instruments can be applied in the current legal, policy, and institutional framework in Ukraine as the Ukrainian legislation provides for many lists (inventories, registers) of polluters and for environmental monitoring. However, the criteria for their formation are based on emission or hazard indicators only and do not take into account the environmental management issues. In spite of the existence of such lists, citizens are not well informed about polluters in the regions of their residence.

The pilot project on environmental performance rating and information disclosure is being implemented in the Lviv *oblast* by the Regional Administration of Environment and Natural Resources. Around 150 enterprises in Lviv *oblast*, which are included in the Inventory of Objects Dangerous to Environment, are involved. Most enterprises are ready to provide voluntarily the information for the environmental performance rating programme and care about their reputation among the population. Some enterprises mentioned potential difficulties in the process of the project implementation, such as lack of staff time, commercial secrecy of information, accuracy of data, and monitoring and financial problems in addressing environmental impacts.

Source. OECD (2007).

Significant potential exists in the EECCA region for applying this instrument. An important factor is a growing role of communities in environmental enforcement and compliance.

At the same time, extending access to information about enforcement requires the EEAs to establish criteria balancing overall transparency with confidentiality related to the commercial and trade aspects of industrial operations. Secrecy is a historically grounded issue within the EECCA, as for much of the Soviet period information on the state of the environment, environmental pollution, and their impact on health was restricted. Overall, many EECCA countries have made significant progress from the original situation where access to information was strictly controlled. However, in none of the countries are facility-specific permits or inspection reports accessible for public review.

CONCLUSIONS AND RECOMMENDATIONS

Although progress was uneven across the region, the majority of countries have launched regulatory and institutional reforms, *e.g.* by introducing integrated permitting, elevating the status of Environmental Enforcement Authorities (EEAs), clarifying responsibilities, and providing training and better facilities. Compliance monitoring is becoming more efficient as countries adopt integrated approaches to inspection, promote self-monitoring by enterprises, and encourage social disapproval of violations through mass media communication and adoption of industry performance rating schemes. Overall, the systems of environmental compliance assurance are better organised now than in 2003.

At the same time, many problems remain unsolved. The regulatory requirements are still unrealistic, thus costly to implement and difficult to enforce. Regulatory Impact Analysis is used sporadically and consultations are perceived as a procedural burden rather than as a tool to balance stakeholder interests. The “fire-fighting” approach and emphasis on sanctions, rather than prevention of non-compliance, inhibit performance within EEAs. The focus on enforcing collection of pollution charges and fines creates perverse incentives for inspectors. Sanctions fail to provide sufficient deterrence and NGOs report a selective application of the declared “zero tolerance” rule because of political pressures and opacity of decision-making. Current indicators and data analysis practices provide limited support to strategic and operational management. The need to interact with NGOs to promote compliance is now largely accepted, but actual cooperation is usually unsatisfactory.

The probability of discovering non-compliance remains low due to legal restrictions stipulating that planned inspections of industrial facilities should not occur more than once every year or two and that all site visits should be announced. While such restrictions were introduced to fight corruption and administrative burden, measures that are more likely to address these problems, in particular assuring transparency of decision-making, procedures, and activity results, received marginal attention. EEAs suffer from brain drain due to unsupportive organisational conditions. Institutional capacities remain particularly low at the sub-national level. As a result, the impact of regulation and compliance assurance remains modest in EECCA.

Under these circumstances, profound changes in the regulatory frameworks and compliance assurance strategies are still required. Possible priority actions for the period after the Belgrade Ministerial Conference include:

- **Enhance the law-making process and move toward performance-oriented regulation.** In order to increase the effectiveness of regulation, EECCA countries may consider taking the following actions: (i) better link law-making with environmental policy development and practical implementation of laws; (ii) systematically apply the Regulatory Impact Analysis and conduct stakeholder consultations to ensure, among others, the feasibility of requirements; (iii) make legal frameworks in EECCA more coherent; (iv) decrease the number of primary and secondary legal acts through their integration; (v) ensure that legal requirements and non-compliance responses are proportionate to the risks and compliance behaviour that they address; and (vi) modernise the structure and language of laws.
- **Conduct better analysis to support the development of compliance assurance strategies:** In EECCA, more empirical analysis concerning roots of non-compliance and the incentive framework for businesses to improve environmental performance is needed. Further work is also needed on quantification of compliance levels, including in a sector-specific perspective. This has to be done in conjunction with better information management. Relevant data need to be part of integrated information systems, so that different divisions within EEAs and environmental authorities in general are able to share data on the regulated community.
- **Improve compliance assurance strategies and performance management.** Environmental authorities need to further identify and profile the regulated community in order to develop risk-based approaches, taking full account of incentives for the regulated community to comply and their actual compliance behaviour.

The EEAs need to develop compliance assurance strategies with clearly identified environmental outcomes, compliance targets, better balanced choice of instruments, and an implementation schedule. Such strategies should be designed with a good knowledge of the roots of non-compliance, and take into account overall environmental, economic, and social

priorities. Compliance assurance strategies should target prevention of non-compliance.

In conjunction with strategic planning, the EEAs will need to introduce the practice of drafting phase-in plans for newly adopted laws and regulations, which would take into consideration both compliance challenges of the regulated community and enforcement challenges, such as staff training and resource allocation.

In addition, the probability of discovering non-compliance should be increased through planned inspections, both announced and unannounced, and greater interaction with NGOs and citizens that are likely to report non-compliance. At the same time, complaints should not be the main driver in carrying out inspections but they should be carefully used for inspection planning and preparation purposes.

The legal limitations on inspection activity should be reviewed to reflect the risk of specific production processes and the compliance history of enterprises. The need for a sufficient number of planned site visits or for announced inspections should not be regarded as an attack on regulatees, but an essential element in ensuring the implementation of the law and protecting citizens and the environment. EEAs might discuss this issue with NGOs, which might assist in lobbying for change. At the same time, safeguards should be in place not to put unnecessary burden on enterprises and not to nourish a lack of trust between inspectors and managers.

It will be important that EEAs improve the methods of conducting site visits. First and foremost, attention should be paid to checking environmental performance, including the technical state of facilities, rather than the current focus on verifying documents and pollution charge payments. Furthermore, the evidence of non-compliance should be better recorded and the structure of inspection reports should be amended to contain more extensive information on observed phenomena, interviews carried out on site, samples taken, etc. These improvements should be reflected in internal guidance documents for inspectors on the procedure of sector-specific environmental inspections.

For cases where preventative actions fail, sanctions with sufficient deterrent effect will need to be designed and applied in a proportionate, consistent, stepwise, and transparent manner. These need to be supplemented by a higher transparency and accountability of EEAs to the government and the general public. To enable strategic enforcement, an improved system of environmental compliance and enforcement indicators is needed, as well as better planning approaches, both strategic and operational; sound tools to set priorities; and adequate data collection and information management systems.

- **Make better use of preventative instruments to re-orient regulatees' priorities on compliance.** There is a role for governments to increase the adherence within firms to financially viable environmental improvements leading to both public (environmental) and private (financial) benefits. This role lies in quantifying and explaining to businesses and other market players the economic and social gains of environmental regulation and compliance assurance (as well as losses from their absence), raising firms' environmental awareness, encouraging sector-specific benchmarking of environmental behaviour and performance, etc., thus raising the level of corporate environmental responsibility. Technical assistance programmes are needed for SMEs that do not have the internal resources and expertise to identify and implement win/win solutions;
- **Further empower stakeholders to act as indirect regulators and enforcers.** The environmental authorities will need to assume the role of catalysing and facilitating the participation of commercial and non-commercial parties, which may act as indirect enforcers. These range from industry associations, through financial institutions, to citizens' environmental and other pressure groups. To this end, it will be important to raise the transparency of regulation and enforcement.

Continued institutional strengthening is also necessary in such areas as development of better procedures and technical guidance (particularly for inspection and appeal), transparency and accountability, staff training and motivation (in order to raise performance and fight corruption), infrastructure improvement, as well as staffing and budget allocation.

There is also a clear need to raise prosecutors' and courts' awareness about environmental requirements and costs of environmental non-compliance. This need could be addressed through short courses for selected lawyers. The ministries of environment could also seek to influence the content of legal courses in universities, so that environmental law and the importance of environmental protection are better understood by the next generation of lawyers.

In sum, progress toward the rule of law and environmental performance requires changes in the incentives structure for both regulators and the regulated community. Political will to translate environmental law into practice remains the main element of success.

GLOSSARY

The following key terminology is used in this report:

A **Regulatee** (also referred to as the **regulated community**) can be a natural person or legal entity, including governments and their subsidiary bodies that are subject to legally-defined environmental requirements. The definition of “regulatee” extends to privately or publicly-owned enterprises in all their possible forms. It includes both owners and facility operators;

Compliance is a response to regulatory requirements manifested through the state of technical and behavioural conformity with the law;

Compliance assurance (or “enforcement” in a wide sense) is defined as the application of all available tools to induce compliance and includes:

Compliance promotion, which is any activity that facilitates or encourages voluntary compliance with environmental requirements;

Compliance monitoring, which is the collection and analysis of information on compliance status (through pre-inspection and inspection activities; ambient and emission monitoring, when needed; and other kinds of data gathering);

Enforcement, which can be defined as the set of actions that governments or others take to correct or halt behaviour that fails to conform with environmental requirements;

An **Environmental Enforcement Agency (EEA)** is defined as any part of a government structure, whose primary responsibility is to identify, monitor, prevent, or take action to correct non-compliance with environmental requirements. The EEA can be a sub-division of the main competent authority for environmental protection, an autonomous institution (usually called an “environmental inspectorate”), or any other unit of public administration that has relevant responsibilities.

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