

Getting Infrastructure Right

The Ten Key Governance Challenges and Policy Options



THE OECD FRAMEWORK
FOR THE GOVERNANCE OF
INFRASTRUCTURE

Infrastructure is mainly a governance challenge...

High-quality public infrastructure supports growth, improves well-being and generates jobs. Yet, infrastructure investment is complex, and getting from conception to construction and operation is a long road fraught with obstacles and pitfalls. Poor governance is a major reason why infrastructure projects often fail to meet their timeframe, budget, and service delivery objectives. Regardless of how public infrastructure services are delivered, an OECD survey of the state of infrastructure policymaking highlights a number of challenges that all countries face.*

Governance challenges are diverse and occur all through the policy cycle.

Designing a strategic vision is crucial but difficult. Many countries have no integrated strategy but instead rely on sectoral plans. Infrastructure projects are vulnerable to corruption, capture and mismanagement throughout the infrastructure cycle; most countries have recognised this, yet integrity instruments often leave gaps.

Political dynamics may undermine sound decision-making with regards to infrastructure when processes for identifying priority projects and choosing delivery modes are not sufficiently formalised.

Without well-managed consultation good projects may falter. Consultation is common in the preparation phase but less common in setting an overall vision or prioritising investments or assessing needs.

Coordination across levels of government is difficult despite the fact that a majority of public investment is made at the subnational level. This increases the risk of wasted resources and poor integration of services.

Uncertainty with regards to revenue flows and sources can erode confidence in a project's affordability.

Unstable regulatory frameworks can prevent long-term decisions. Regulators play a key role in ensuring that projects are attractive for investors, yet they play only a limited role in guiding policy formulation.

A lack of systematic data collection on performance undermines evidence-based decision-making and disclosure of key information. Central infrastructure units tend to focus on delivering the asset, while auditors are not usually tasked with following performance. Lack of disclosure of data on contracts and subsequent operation tends to reinforce concerns about fraud and lack of transparency.



*A survey of 25 OECD countries

Challenge 1. Develop a strategic vision for infrastructure

Establish a national long-term strategic vision that addresses infrastructure service needs. Ideally the strategy should provide guidance on how the needs should be met, although there has to be room for adjustment as more information is gathered. The strategy should be politically sanctioned, co-ordinated across levels of government, take stakeholder views into account and be based on clear assumptions.

Why is this important?

A necessary condition for a successful infrastructure programme is appropriate strategic planning. This requires identifying which investments should be undertaken, determining the essential components, needs and trade-offs, and how they should be prioritised. Conversely, weak or insufficient planning often impedes their successful implementation and operation later in the project cycle. The reason why designing a clear and coherent strategic vision is difficult stems essentially from the complex nature of infrastructure investment.

- The infrastructure issue cuts across different institutions, jurisdictions, levels of government, policy areas and professional disciplines, which makes it difficult to aggregate into a coherent view. Analysis tends to be done in silos reflecting the various stakeholders.
- Infrastructure development serves multiple objectives, with multiple policy goals such as growth, productivity, affordability, inclusive development and environmental objectives potentially being in opposition.
- Infrastructure has long-term impact and gestation

periods, and requires predictability and sober analysis, but infrastructure is extremely sensitive to political and economic/business cycles that vary markedly over time.

- Good infrastructure planning requires identification of necessary complementarities across sectors. For example, investments in housing need to be complemented by the right investment in transport networks (OECD, 2014).

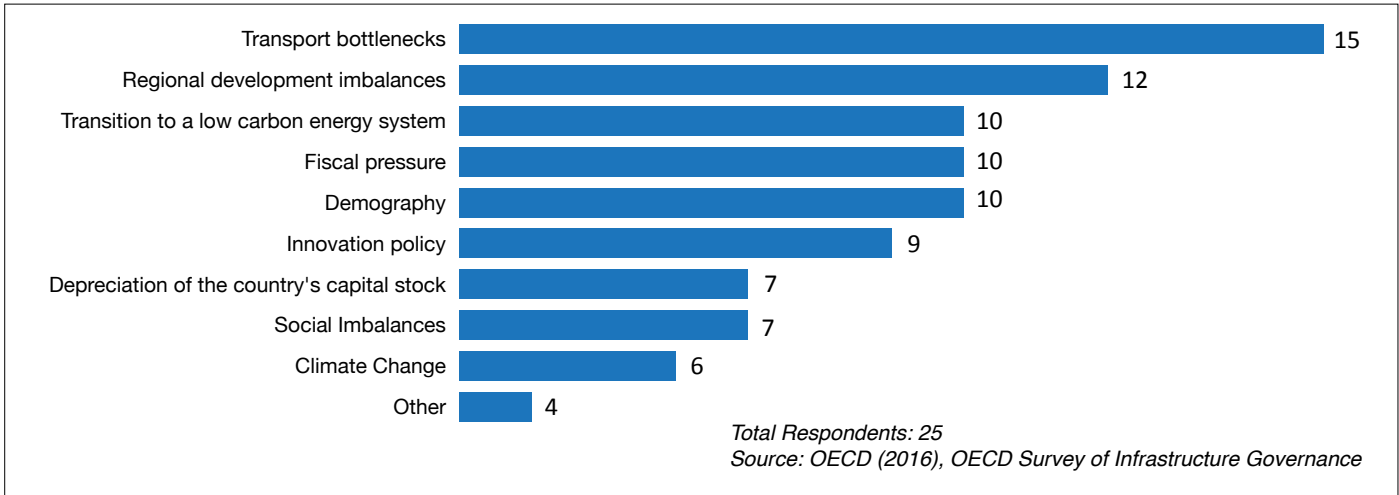
Key policy questions:

- Is there a whole of government vision for infrastructure investment in the medium to long term?
- Is there an established process for generating, monitoring and adjusting a national strategic infrastructure vision?
- Is there a dedicated unit or institution responsible for monitoring, generating, assessing, costing and creating debate around infrastructure policy?
- Are there appropriate tools and processes that link the allocation of public resources to the strategic infrastructure vision?

Benchmark indicators:

- Presence of a strategic infrastructure plan;
- Strategic frameworks for public investment implementation;
- Budget allocation to projects in plan;
- Dedicated process/units;
- Presence of inter-departmental/ministerial committees/platforms to design infrastructure strategies.

Figure 1. What are the key drivers of current strategic plans of OECD countries? (Number of respondents)



Challenge 2. Manage threats to integrity

Corruption entry points should be mapped at each stage of the public infrastructure project, and integrity and anti-corruption mechanisms should be enhanced. A whole of government approach is essential to effectively address related integrity risks.

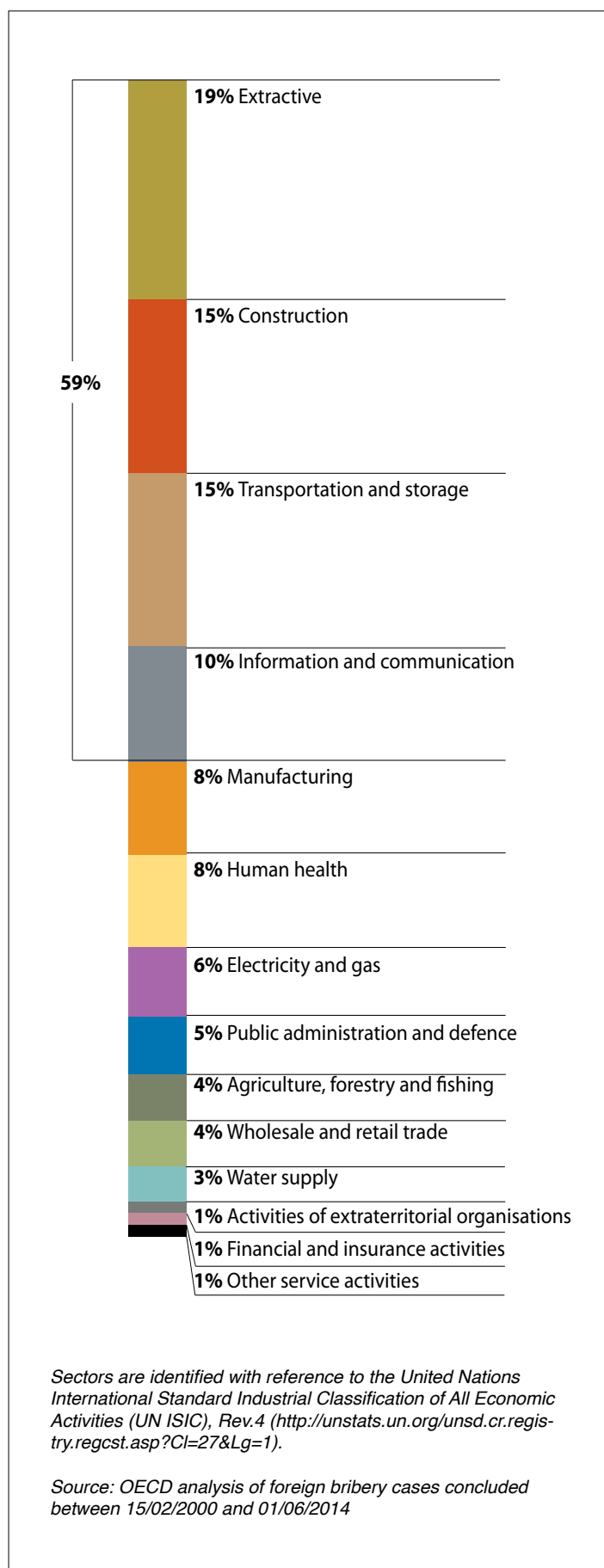
Why is this important?

Corruption allegations often surround government-led infrastructure projects. The extent of public officials' discretion on the investment decision, the scale and complexity of the projects, as well as the multiplicity of stages and stakeholders involved, make infrastructure projects highly vulnerable to corruption. The Construction Sector Transparency Initiative (CoST) estimates that 10-30% of the investment in a publicly funded construction project may be lost through mismanagement and corruption (CoST, 2012). Within the European Union, corruption costs are estimated to EUR 120 billion per year (European Commission, 2014). The OECD Foreign Bribery Report (2014) also suggests that nearly 60% of foreign bribery cases occurred in 4 sectors highly related to infrastructure: extractive (19%), construction (15%), transport and storage (15%) and information and communication (10%).

Fairness, fiscal prudence and cost-effectiveness may be undermined when politicians favour infrastructure that disproportionately benefits their donors or core electoral base to the detriment of the society as a whole.

A whole of government approach is essential to effectively address related integrity risks. Corruption can occur at every step of an infrastructure project, including the selection, tendering and implementation phases; and it can involve elected and non-elected public officials, lobbyists, civil society organisations, trade unions, regulators, contractors, engineers and suppliers. The OECD Integrity Framework for Public Investment (2016) proposes a set of specifically tailored measures seeking to safeguard integrity at each phase of infrastructure projects.

Figure 2. Nearly 60% of foreign bribery cases occurred in just four sectors

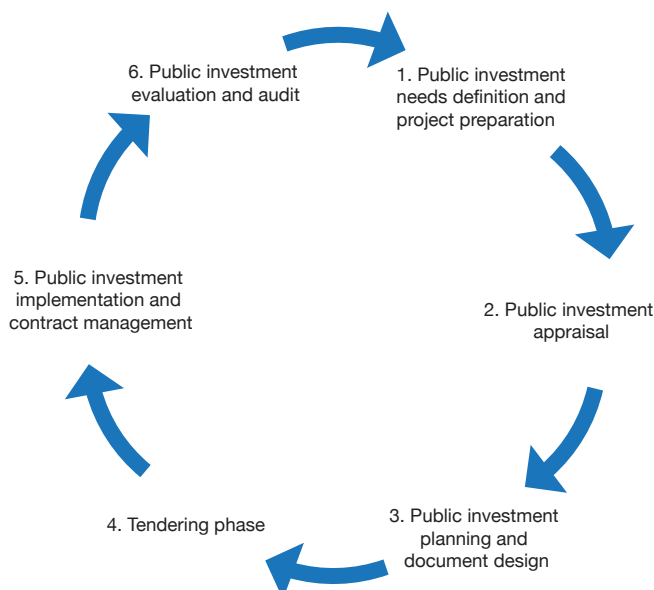


Key policy questions

Are there measures to:

- Prevent public officials and private sector employees from accepting or demanding bribes?
- Adequately identify and manage potential and apparent conflict-of-interest situations?
- Regulate and limit the use of confidential information by public officials?
- Prevent the selection of public investment from favouring a particular interest group/individual over the public interest?
- Ensure the objectivity and credibility of social, economic and environmental feasibility studies?
- Limit the influence of potential private operators, construction companies or lenders?
- Ensure that the design of the tender documents and specifications are not restrictive or tailored?
- Prevent bid rigging, collusion or market-sharing agreements of future contracts in a public investment?
- Ensure audit functions have adequate capacity and resources to provide timely and reliable audits, as well as to remain insulated from manipulation of audit processes?

Figure 3. Corruption can occur at every step of the infrastructure policy cycle.



Benchmark indicators

- Adequate conflict of interest policies for public officials (prohibitions of exercising certain activities or holding certain interests; post-employment measures; disclosure; advisory services);
- System of internal controls and financial reporting to monitor and identify irregularities;
- Measures in place to control the integrity of firms wishing to contract with public bodies;
- Existence of mechanisms to report wrongdoing related to infrastructure projects;
- Presence of sufficient technical resources within the organisation responsible for organizing public tenders;
- Existence of political contribution limits and spending limits in relation with election campaigns;
- Existence of standards regulating lobbying activities and ensuring they are conducted in a transparent manner.

Challenge 3. Choose how to deliver the infrastructure

When choosing how to deliver an infrastructure service, i.e. delivery modality, government should balance the political, sectoral, economic, and strategic aspects. Legitimacy, affordability and value for money should guide this balancing.

Why is this important?

The choice of how infrastructure is delivered and who should be in charge of its development has implications for public sector discretionary control, value-for-money and affordability. In many countries, however, the choice of modality is often based on habit and lacks specific criteria both for traditional infrastructure and private finance options.

One size does not fit all. Depending on risks allocation and the level of control exercised, government can identify the most efficient delivery mode from public works to private public partnerships or a number of hybrid approaches. Assessing costs and benefits of the different options should enable countries to take a fresh look at their infrastructure delivery choices. For instance, if the challenge is to introduce greater cost efficiency, a wider use of market mechanisms might be beneficial,

Checklist for investigating relevant delivery mode

Project size and profile

- Large initial capital outlay and long payback period?
- Is the project large enough to justify the additional legal, technical and financial costs of a PPP?
- Can quality enhancements in the design and construction phase generate savings during the operating phase of the project?
- Do these savings justify the additional transaction costs involved in bundling construction, operation and maintenance in a single contract?

Revenues and usage

- Can user fees be charged, are they affordable for the majority of users, and are they politically acceptable?
- Are user fees sufficient to cover the majority of capital and operating costs?
- Can usage be monitored?
- Can the quantity and quality of project inputs be specified and measured efficiently?
- Will design innovation be required to achieve improvements in efficiency and value-for-money?

Risks

- What is the level of uncertainty relating to future technological or societal conditions?
- How are risks allocated?
- Is demand relatively predictable over the lifetime of the project?
- Who is best placed to influence demand for the infrastructure-based service?
- Is the private sector willing to and capable of bearing some or all of the demand risk?
- Are there particular integrity risks in terms of corruption and undue influence that merit attention?

insofar as the right country circumstances are present, such as a competitive market. The framework presented offers a three-step process based on sectoral criteria, country criteria (national/sub-national levels) and project criteria. It suggests that countries:

- Assess how the country's circumstances (political economy, government's capacities, private sector's capacities, enabling legal environment, etc.) impact the sector;
- Set a preferred sectoral approach by assessing objectives and the characteristics of the sector;
- Choose a delivery model based on the project characteristics and overall approach.

Key policy questions:

- What is the extent of market failures?
- How politically sensitive is the sector?
- What characterises the enabling public, private and legal environment?
- What is the size and financing profile of the investment?
- What is the potential for cost recovery?
- What is the level of control government want to retain?
- Is it possible to identify, assess and allocate risk appropriately?

Challenge 4. Ensure good regulatory design

Good regulatory design and delivery are necessary to ensure sustainable and affordable infrastructure over the life of the asset.

Why is this important?

Uncertainty concerning the “rules of the game”, or the low quality of those rules, will impact the willingness to invest in, maintain, upgrade and decommission infrastructure and ultimately affects the quality of service delivery. Projects often involve many policy areas, several layers of legislation and regulation, and different levels of government.

Uncertainty with regards to revenue flows (user charges/tariffs) and sources of funding (budget subsidies) through the life-cycle of the asset can result in a lack of confidence in the project's affordability from both public sector and potential investors. Setting user fees is a difficult, highly political task. Information asymmetries between governments and operators on, for instance, capital costs, asset depreciation and consumers' preferences can make tariff setting challenging. If tariffs do not cover the long-term depreciation of capital assets, for instance, investment decisions could be short-sighted and infrastructure could fail to be appropriately

Table 1. In general, is the infrastructure regulation fulfilling its intended role?

Yes	To some extent
Australia	France
Belgium	Ireland
Czech Republic	Turkey
Denmark	
Finland	
Germany	
Hungary	
Italy	
Japan	
Korea	
New Zealand	
Philippines	
Switzerland	
United Kingdom	
14	3

Source: OECD (2016), *OECD Survey of Infrastructure Governance*

maintained and upgraded. Allocating subsidies from the public budget can also be a difficult process in times of fiscal stress.

While regulators are seldom involved in market structure decisions, they are expected to accompany and supervise the implementation of significant policy changes that affect infrastructure such as deregulation, unbundling, privatisation or tariff regulation. The information they collect and use for setting tariffs can help address information asymmetries. Regulators can bring to the table a consolidated economic or functional view of the sector or a given project, thus helping to bridge some of the co-ordination gaps that might exist between the different actors involved in the governance of infrastructure. The governance of regulators can also be taken as a reflection of the quality of the broader infrastructure investment regime. This effect can be particularly strong if the regulator is perceived as making decisions on an objective, impartial, and consistent basis, without conflict of interest, bias or improper influence.

Key policy questions:

- Is the overall regulatory framework for infrastructure sectors conducive to good governance of infrastructure?

- Are there multiple layers of regulatory requirements perceived as overly burdensome?
- Is there appropriate co-ordination between various regulatory bodies, as well as mechanisms for co-operation between regulators across borders?
- Are the functions, powers and capacities of regulators aligned with the role of regulators in the broader infrastructure permitting and approval process?
- What key data and information, including on costs of capital, asset depreciation and infrastructure consumer base, are available to inform tariff setting?
- Does the overall governance of regulators facilitate confidence and trust in the infrastructure investment regime?

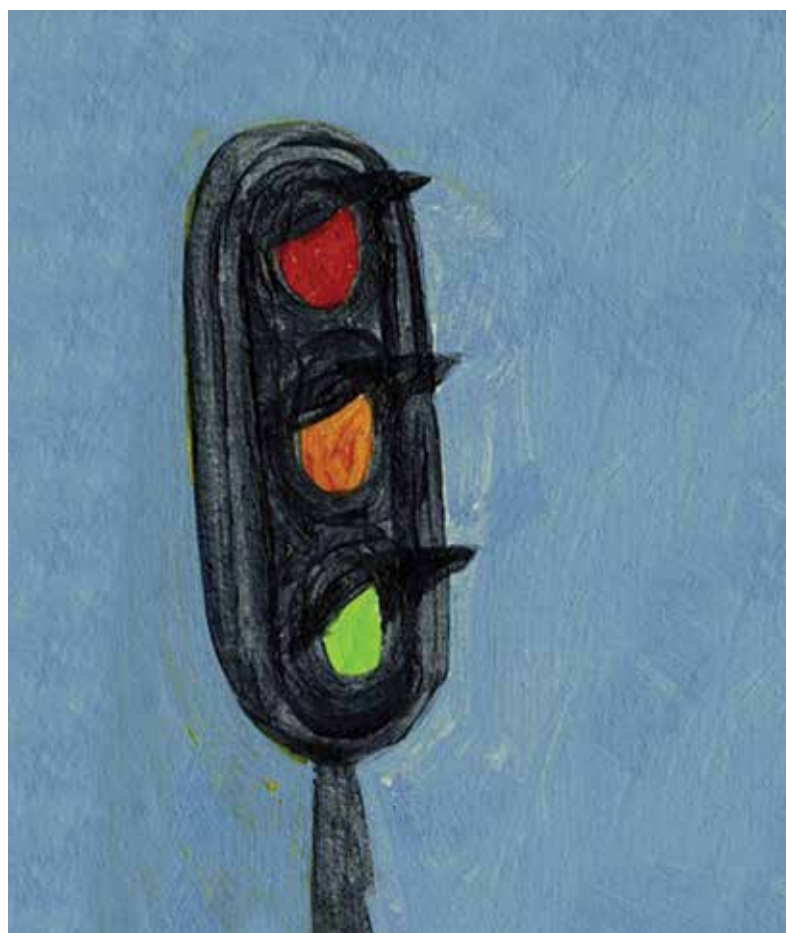
Benchmark indicators:

Use of evidence-based tools for regulatory decisions:

- Impact assessment;
- Ex-post evaluation;

Governance of regulators:

- Independence;
- Accountability;
- Scope of action of regulators.



Challenge 5. Integrate a consultation process

The consultation process should be proportionate to the size of the project and take account of the overall public interest and the views of the relevant stakeholders. The process should be broad-based, inspire dialogue and draw on public access to information and users' needs.

Why is this important?

Infrastructure impacts communities - without well-managed consultation, good projects may falter. Consultations in democratic countries should take into account the role of elected representatives and executives to take action on behalf of the public good in a timely fashion.

Policies, laws and large infrastructure projects should be developed in an open and transparent fashion, with appropriate and well-publicized procedures for effective and timely inputs from interested local, national and (if relevant) foreign parties. Consultation processes can enhance the legitimacy of the project amongst the stakeholders, as well-executed consultation can bring a sense of shared ownership. Structured public consultation not only fosters ownership in infrastructure projects, it also creates opportunities for various communities to become advocates of their benefits and provide incentives for good performance. It should be noted, however, that while consultation and citizen engagement is necessary for good governance, it is not an easy undertaking. The decision maker must actively weigh views against each other in order to avoid

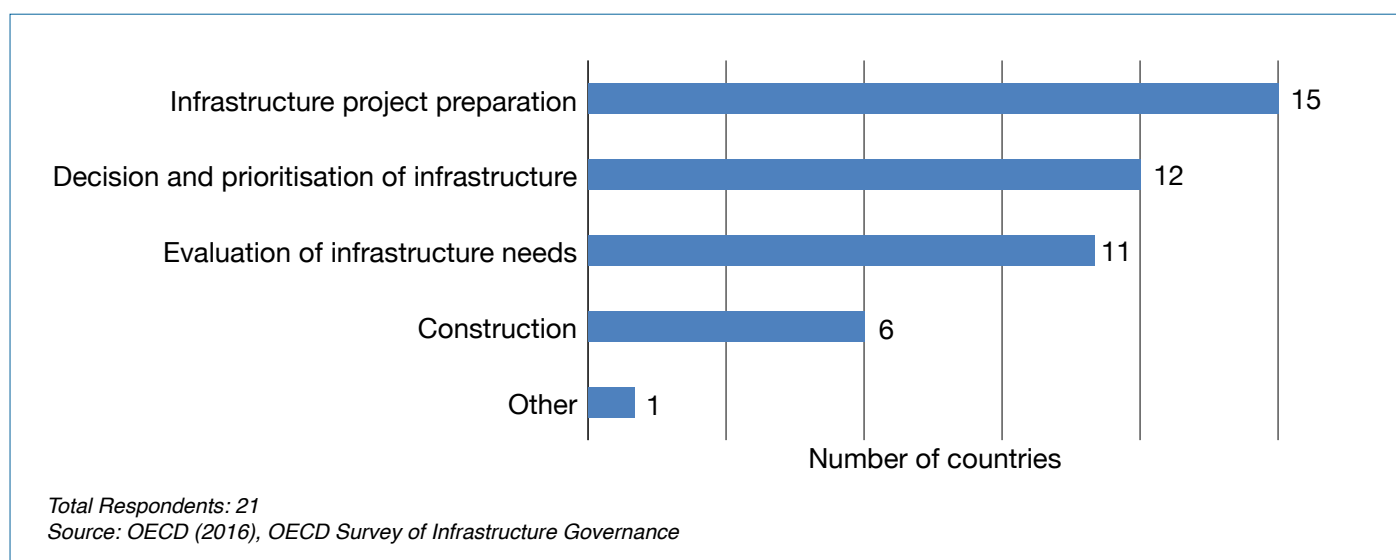
capture by specific interests. The views of stakeholders negatively affected by infrastructure projects have to be counterbalanced by such projects' contributions to the achievement of policy outcomes for society at large. Consultations must therefore be structured in such a way that the process can be finished in a timely manner and that policy capture and other distortions are avoided.

Key policy questions

- Is there an open government or consultation strategy?
- Are specific stakeholder groups consulted throughout infrastructure project phases?
- Are structured dialogue mechanisms in place to ensure systematic public consultation?
- Are there formal mechanisms to involve the public in the monitoring and implementation of infrastructure investments during the construction phase and upon completion?



Figure 4. At which stages of development do consultation processes take place in OECD countries?



- Is there a forum, process or procedure for determining the balance between stakeholder interests and the public good?

Benchmark indicators:

- National open government strategy or guidelines (either designed for infrastructure investments or that could be applied to them);
- Stakeholder consultation fora or participatory budgeting programs;
- Websites or other outreach tools to provide public information on infrastructure projects;
- Participatory auditing procedures.

Challenge 6. Co-ordinate infrastructure policy across levels of government

There should be robust co-ordination mechanisms for infrastructure policy within and across levels of government. The co-ordination mechanisms should encourage a balance between a whole of government perspective and sectoral and regional views.

Why is this important?

Public investment typically involves different levels of government at some stage of the investment process – be it through shared policy competencies or joint funding arrangements. Sub-national governments, defined as federated states, regions and municipalities, undertake

almost 60% of the total public investment across the OECD area (OECD, 2016). A large part of this investment is spent on infrastructure. Sub-national public investment ranges from 13% in Chile to 95% in Canada.

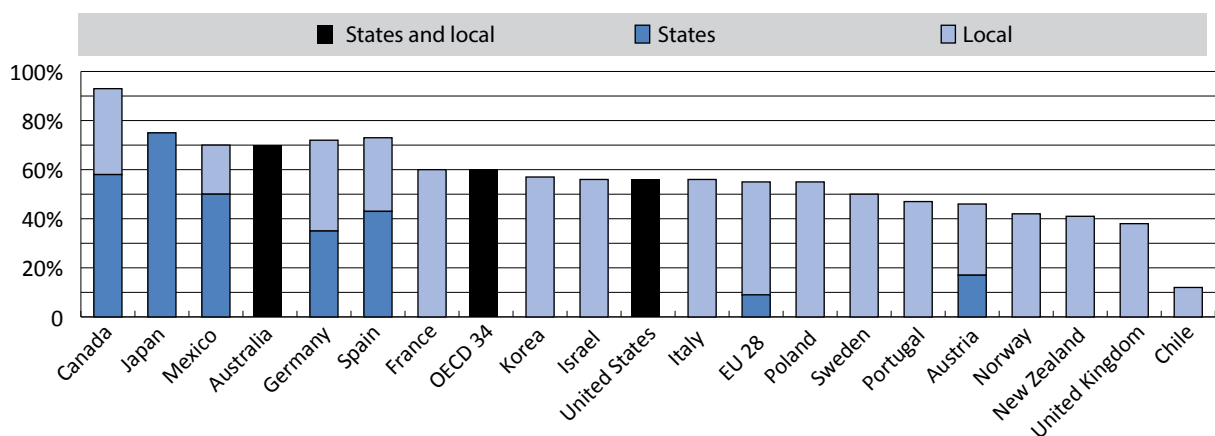
Collaboration for public investment strategies across jurisdictions and levels of government is difficult, even in situations where the actors involved clearly recognise the need for it. Transaction costs, competitive pressures, resource constraints, differing priorities and fears that the distribution of costs or benefits from co-operation will be one-sided, can all impede efforts to bring governments together.

The national government holds a key strategic role in convening investment priorities, strengthening capacities of different levels of government involved in managing public investment, and ensuring sound framework conditions for governing public investment.

Horizontal cooperation between sub-national governments can also be important for reaching economies of scale. Though the potential benefits of coordination across jurisdictions may seem obvious, coordination was perceived as a significant challenge by most SNGs surveyed in 2015 (OECD-CoR survey). More than three-quarters of SNGs reported the absence of a joint investment strategy with neighbouring cities or regions.

Cross-jurisdictional co-ordination can take a variety of forms, with the appropriate approach depending on the characteristics of the locality or region as well as the policy objectives and investment(s) being considered. Such co-ordination may, for example, take place in dialogue platforms, through the consolidation of several

Figure 5. Share of subnational public investment in total public investment



Source: Sub-national government structure and finance (data base)

SNGs' plans, or through financial incentives from the national government. Horizontal cooperation may also imply the mutualisation of capital funding toward facilitating access to finance.

Key policy questions:

- Are the competencies related to infrastructure development allocated clearly and coherently across levels of government?
- Do financing needs match the mandates granted to subnational governments for infrastructure development?
- What are the main coordination challenges for infrastructure policy across levels of government?
- What are the fiscal and policy coordination instruments across levels of government?
- What are the governance instruments or fiscal incentives to enhance coordination across jurisdictions for infrastructure investment? Do they work properly?

Indicators:

- Formal mechanisms/bodies for coordination of public investment across levels of government;
- Coordination bodies/mechanisms have a multi-sector approach (across multiple ministries/departments);
- Co-ordination mechanisms are frequently used and produce clear outputs/outcomes;
- Co-financing arrangements for infrastructure investment;
- Higher levels of government provide incentives for cross-jurisdictional co-ordination.



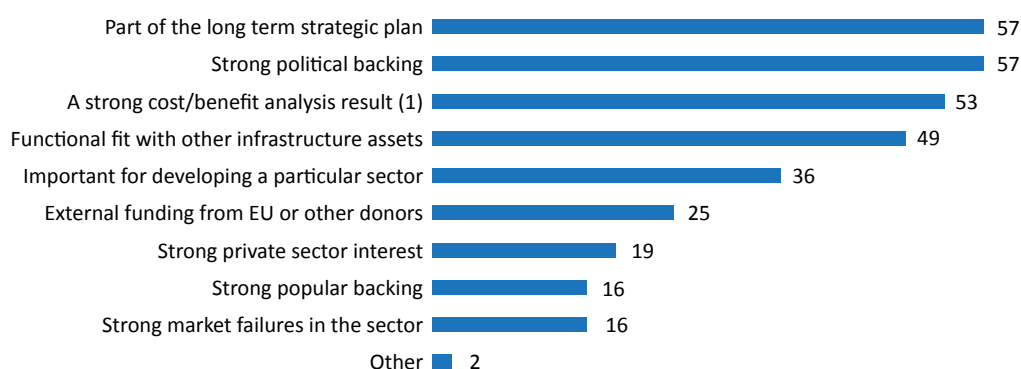
Challenge 7. Guard affordability and value for money

Governments must ensure that infrastructure projects are affordable and the overall investment envelope is sustainable. The asset should represent value for money. This requires the use of dedicated processes, a capable organisation and relevant skills.

Why is this important?

It is the responsibility of the decision-maker to ensure public infrastructure is affordable. This requires a strong link between the project development phase and the fiscal framework of the country. A country's overall infrastructure expenditure and the fiscal risks it carries in terms of guarantees should be based on medium and long-term fiscal projections and regularly updated. If the project is meant to be user-funded, a careful investigation of the ability and willingness of users to pay must be conducted. Overall value for money should be carefully assessed using a combination of quantitative (such as cost/benefit analysis) and qualitative tools that soberly seek to establish the overall societal return on investment. This process is inherently based on

Figure 6. What usually determines whether a project received funding/is approved for procurement?



Total respondents: 25. Ranking criteria between 0 (least/not important) and 5 (most important)

Note: (1) i.e. strong absolute value for money/socioeconomic benefit

Source: OECD (2016), OECD Survey of Infrastructure Governance

Table 2. Is there a formal process/legal requirement for ensuring absolute value for money from infrastructure projects?

Yes in all cases	In all cases above a certain value threshold	No	Only PPP Projects	On an ad hoc basis
Australia	Hungary	Austria	Mexico	Czech Republic
France (1)	Ireland	Chile		Denmark
Germany	Japan	Estonia		Finland
Italy	New Zealand	Luxembourg		Switzerland
United Kingdom	Norway	Slovenia		Belgium
	Korea	Spain		
	Turkey	Sweden		
5	7	7	1	5

Total respondents: 25, (1) excluding projects financed by local authorities

Source: OECD (2016), OECD Survey of Infrastructure Governance

assumptions that are open to discussion, but as long as these are transparently treated, the process is valuable.

This process should enable decision-makers to prioritise projects so that the maximum value is generated for society as a whole. A particular issue that needs to be managed is that many politicians prefer to build new projects with high visibility, rather than spending on maintaining and upgrading existing assets. This can oftentimes be a threat to value for money.

With respect to **relative value for money**, certain procurement modalities may improve the value for money compared to that realised through other forms of infrastructure procurement depending on public and private sector capabilities, the degree of certainty of future revenues and the desired allocation of risks and controls. In the face of many competing investment possibilities, the government should prioritize projects that contribute to the achievement of their development goals. Pipeline development should also be informed by the capabilities and capacities of the government itself and the potential financing market. The framework for infrastructure procurement should not unduly favour certain types of procurement modalities due to tradition, special subsidies, accounting rules etc.

Key policy questions:

- Is the infrastructure procurement process integrated into the ordinary budget process?
- Is there a long-term infrastructure strategy and is it linked to long-term fiscal projections?
- Is there a process for prioritisation across sectors and within sectors?

- Is cost/benefit analysis carried out?
- Are various delivery modalities analysed so as to ensure value for money?
- Is affordability analysis carried out?
- Are there dedicated units and capacities available to decision-makers with respect to infrastructure strategy, procurement and performance monitoring?

Benchmark indicators:

- Presence of infrastructure strategy document;
- PPP or Infrastructure Unit;
- Central Budget Authority role in green-lighting infrastructure projects;
- Supreme Audit Institution;
- Formal requirement to account for contingent liabilities and running costs;
- Accounting standards.

Challenge 8. Generate, analyse and disclose useful data

Infrastructure policy should be based on data. Governments should put in place systems that ensure a systematic collection of relevant data and institutional responsibility for analysis, dissemination, and learning from this data. Relevant data should be disclosed to the public in an accessible format and in a timely fashion.

Why is this important?

Most countries use some kind of numerical value analysis when choosing whether to pursue a particular investment as well as which delivery modality to use. The use of cost/benefit analysis, business case methodology and public sector comparators are necessarily based on assumptions as well as more verified data, including both quantitative and qualitative elements. The fundamental element that enhances the solidity of any kind of value for money test is data. Unfortunately, there is a lack of systematic data collection regarding the cost and performance of infrastructure assets. While many countries do collect data, most of the data that would be required to compare the overall costs of projects financed through various alternative mechanisms is not systematically collected, processed or disclosed.

This lack of collection and systematic publication of data also impedes effective monitoring of assets' performance. The use of key performance indicators to oversee the performance of infrastructure service delivery is, however, rapidly developing and proving a strong tool to monitor and benchmark the performance of infrastructure in their delivery phase. However, the experience of developing key performance indicators in the water sector, for example, shows the difficulty in agreeing on a common methodology for key performance indicators (KPI) and the capacity needed both on the regulators' part and the utilities' part to provide meaningful quality information that informs the key processes.

This lack of data collection also impedes systematic ex-post learning, although some Supreme Audit Institutions (SAI) are addressing this gap. Ideally the SAI would audit and assess individual projects, and perhaps the infrastructure programme in general, ex-post with regards to performance, finance and compliance, but this requires dedicated resources and tools. To enhance transparency, confidence and value for money, the government should disclose key data in a timely and manageable way on its own. This would include key budget data.

Key policy questions:

- Is there a mandatory system to ensure systematic collection of relevant financial and non-financial data during the project development?

- Is there a mandatory system to ensure collection of relevant financial and non-financial data about the performance of infrastructure?
- Is there sufficient data to compare various forms of infrastructure delivery models? Are they compared based on data?
- Is financial and non-financial data about the project (ex-ante and performance) disclosed to the public?

Benchmark indicators:

- Central unit (Central Infrastructure Unit, Central Budget Authority) for the collection, disclosure and analysis of data;
- Choice of delivery modality and projects is based on data;
- Infrastructure investment flow data (in sectorial breakdown);
- Infrastructure investment stock data (in sectorial breakdown).

Table 3. Is there a central, systematic and formal collection of information on financial and non-financial performance of infrastructure that makes it possible to compare various forms of infrastructure delivery models?

Yes	No
Australia	Austria
Finland	Belgium
Japan	Chile
Mexico	Czech Republic
New Zealand	Denmark
Korea	Estonia
Spain	France
	Germany
	Ireland
	Italy
	Luxembourg
	Norway
	Slovenia
	Sweden
	Turkey
	Switzerland
	United Kingdom
7	17

Total respondents: 24

Source: OECD (2016), OECD Survey of Infrastructure Governance

Challenge 9. Make sure the asset performs throughout its life

Ensure a focus on the performance of the asset throughout its lifespan by putting in place monitoring systems and institutions.

Why is this important?

It can be difficult to oversee the performance of infrastructure service delivery thereby maintaining value for money through the performance of the asset. OECD work on the governance of water regulators (OECD 2015) highlights that the establishment of a regulator strengthens the public interest, makes service providers more accountable, and enables an independent price-setting process. Countries are well aware of these challenges. Some have responded by enhancing the skills of sectoral units and regulators and streamlining the role and availability of specialised advisors. Others have set up dedicated units, especially in the field of PPPs, which are contract based, but increasingly with a broader remit of infrastructure in general.

The responsibility for identifying potential problems during the operational phase of the project rests primarily with the line ministry or agency. However, central agencies such as the Central Budget Authority, Supreme Audit

Institution and regulatory authorities should play their part and retain the appropriate level of responsibility during the operational phase. Particular attention should be paid to contractual arrangements and monitoring capacity at later stages of a project so as to ensure that incentives do not deteriorate as the cost of noncompliance falls. Special care should also be taken to ensure that value for money is maintained during renegotiation.

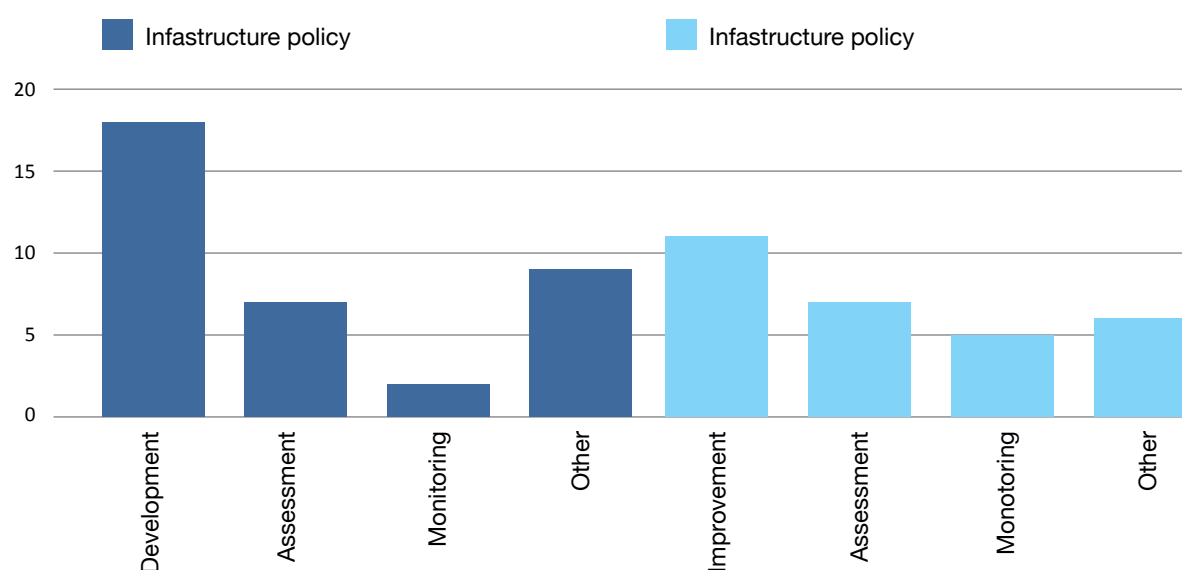
Key policy questions:

- Is there a strategy for how performance of the asset throughout the life of the asset is to be ensured?
- Are the line departments, sector regulators or Supreme Audit Institution responsible for monitoring asset performance?
- Are there programs in place for training and capacitating relevant institutions?
- Do PPP/concession contracts state the required output and performance?

Benchmark indicators:

- Policy document for ensuring performance from assets regulated by agency (sector regulator) or by contract with line department or similar;
- Strategy for re-negotiations;
- Ex-post evaluation of value for money.

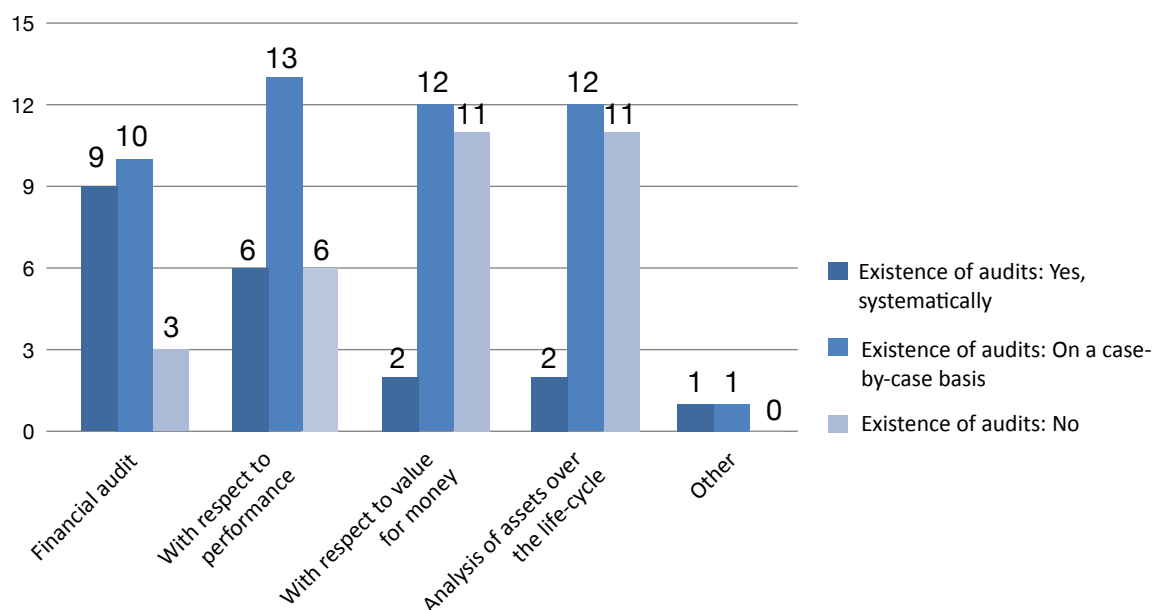
Figure 7. Central infrastructure bodies tend to focus on development but less on life cycle monitoring and evaluation



Total respondents: 25

Source: OECD (2016), OECD Survey of Infrastructure Governance

Figure 8. What type of Audits does the Supreme Audit Institution perform regarding infrastructure assets?



Total respondents: 25

Source: OECD (2016), OECD Survey of Infrastructure Governance

Challenge 10. Public infrastructure needs to be resilient

Infrastructure systems should be resilient, adaptable to new circumstances and future proof. Critical risks materialise and technological change can fundamentally disrupt sectors and economies.

Why is this important?

Multiple disasters in recent years have demonstrated the significant socio-economic impacts of disasters and the consequences for citizens who must live for an extended period without the safe drinking water and reliable electricity, communications, and mobility that

infrastructure provides. Disruptions to these critical systems spread the social hardships of disasters by cutting-off access to basic life lines (health services, food, fuel, payment systems), and produce large economic impacts by preventing the mobility of labour and inventory. Examples include the Great East Japan Earthquake in 2011 which caused nuclear reactors to shut down, resulting in a reduction of up to 50% in power output. Hurricane Sandy flooded key roads and tunnels connecting the boroughs of Brooklyn and Manhattan as well as train, subway and electrical power lines; 5.4 million commuters were stranded without means of transportation, and power was cut to more than 8 million homes, some of which remained dark for weeks.

A governance framework that ensures resilience measures are applied to multiple critical infrastructure sectors is essential. This is due to the functional dependencies and interdependencies between different sectors of critical infrastructure. Damages to one asset, for example electricity distribution, could result in downstream disruptions to various sectors, e.g. water purification. The high share of critical infrastructure that is privately owned or operated implies the need for governments to partner with the private sector. Complementary governance approaches to regulation



include those that foster regular exchanges, information sharing, mutual trust, and public cost sharing for private investment in critical infrastructure resilience.

Key policy questions:

- Are there policies in place to ensure that key infrastructure assets are resilient if disasters hit?
- Are key structures designed to sustain a foreseeable shock or are substitute or redundant systems available?
- Is there management capacity to identify options, prioritise actions, and communicate decisions to the people who will implement them?
- Are there tools in place to learn from past events?

Benchmark indicators:

- The presence of a disaster risk assessment plan;
- The presence of designated authorities responsible for tackling disasters.

Next steps:

The OECD works with countries to identify, mitigate and manage issues related to infrastructure governance through reviews, policy dialogues and information gathering.

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Read the full report:

OECD (2017) Getting Infrastructure Right: a Framework for Better Governance

Infrastructure poses many challenges, from technical and budgetary concerns to delivery and governance issues. But it is crucial for both productivity and inclusiveness. Businesses rely on modern infrastructure to remain competitive, while society depends on good infrastructure to ensure equal opportunity and equal access to services for citizens. Good governance of public infrastructure can thus yield substantial benefits for all. Based on a survey of 25 countries, this report provides an overview of current practices in infrastructure governance and presents practical tools to help policy makers better manage infrastructure.

Key OECD Recommendations that inform this work:

- OECD (2016), Integrity Framework for Public Investment
- OECD (2015) Recommendation of the Council on Public Procurement
- OECD (2015) Recommendation of the Council on Budgetary governance
- OECD (2015) High-Level Principles for Integrity, Transparency and Effective Control of Major Events and Related Large Infrastructure
- OECD (2014) Recommendation of the Council on Digital Government Strategies
- OECD (2014) Recommendation of the Council on Effective Public Investment Across Levels of Government
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