

OECD/IMF Reference Note on the Governance of Quality Infrastructure Investment

June 2019

This Note provides reference on the sound governance of quality infrastructure investment (QII), by looking at why the governance of infrastructure matters (Section 1), and ways to achieve the good governance of quality infrastructure (Section 2). Countries are invited to consider it on a voluntary basis, taking into consideration their national circumstances.

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2019 G20 Presidency of Japan
Infrastructure Working Group
**OECD/IMF Reference Note on the Governance of Quality Infrastructure
Investment¹**
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Introduction

The global scaling-up of quality infrastructure investment is a key priority for the G20 to support inclusive growth and development. According to the G20 Leaders' Declaration (2016), quality infrastructure investment should help ensure economic efficiency in view of life-cycle costs, safety, resilience against natural disasters, job creation, capacity building, and the transfer of expertise on mutually agreed terms and conditions, while addressing social and environmental impacts and aligning with economic and development strategies.

Analysis shows that substantial benefits can be realised by better managing public infrastructure investment through the life cycle of an asset and across levels of government. The quality of public governance correlates with the quality of infrastructure and public investment more generally, and with growth outcomes at both national and subnational level.

This non-binding Reference Note is aligned to the G20 Principles for Quality Infrastructure Investment (QII) as part of the 2019 G20/Infrastructure Working Group Agenda. The purpose of the note is to provide background and policy options on the governance of quality infrastructure investment to policy makers and practitioners, first by looking at why the governance of infrastructure matters (Section 1), then by presenting complementary IMF and OECD tools on infrastructure governance (Section 2). Section 2 includes policy options and country examples to illustrate the way in which countries have implemented policies. An annex provides more information on available IMF, OECD, and World Bank tools that are complementary to facilitate strong infrastructure governance.

1. Why the Governance of Infrastructure Matters

According to the G20 Principles, quality infrastructure investment aims to maximise the positive economic, environmental, social, and development impact of infrastructure and create a virtuous circle of economic activities, while ensuring sound public finances. In a constrained fiscal environment, investing better contributes to filling the infrastructure gap by achieving higher quality outputs and outcomes for every unit of money spent.

Strong infrastructure governance across all stages of the infrastructure investment cycle is key to ensure sustainable economic growth. Countries with stronger infrastructure governance frameworks have more efficient, predictable, credible, and productive investments. In contrast, weak infrastructure institutions can lead to unproductive projects, which can reduce the growth dividend from public investment.

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Strong infrastructure governance is also essential for ensuring overall macro-level debt sustainability, given that infrastructure investment can have a significant impact on a country's overall public finance position. As indicated in "Principle 6" of the G20 Principles, well-designed and well-functioning infrastructure governance institutions would allow countries to rigorously assess the financial sustainability of individual projects and prioritise among potential infrastructure projects, subject to available overall financing. In addition, the impact of public infrastructure projects, including possible contingent liabilities,² on macro-level debt sustainability needs to be considered and made transparent, given that infrastructure investment can have significant impact on public finances. Conversely, weak institutions could lead to the selection of unsustainable and low-priority projects that would endanger macro-level debt sustainability.

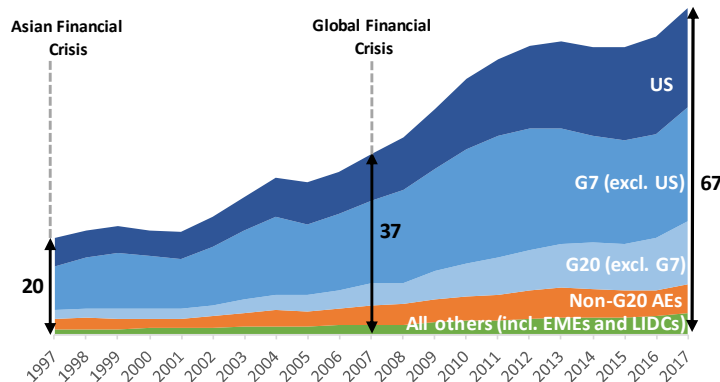
Furthermore, strong infrastructure governance helps curb corruption. Opaque public procurement processes, off-budget expenditure and limited public access to information on investment projects all create vulnerabilities to corruption. In this regard, background on public procurement processes is contained in a separate note titled, Multilateral Development Banks' Reference Note on Translating QII Principles into Procurement Practice.

The focus on infrastructure governance is especially important in the current context where many countries have large infrastructure needs to achieve sustainable and equitable economic growth, while facing limited fiscal space due to elevated public debt. Global public debt levels have more than tripled to US\$67 trillion in the last twenty years (Figure 1). G20 countries have carried the bulk of this increase, with an increase in public debt of US\$40 trillion between 1997 and 2017. Public debt in emerging market economies has also been rising, reaching levels not seen since the 1980s, and the number of low-income developing countries at high risk of debt distress or in debt distress now stands at about 40 percent of these countries. Transparency and sustainable financing practices by borrowers and lenders will be crucial for debt sustainability, as will the allocation of spending—for example, between investment in viable productive economic infrastructure and recurrent expenditure.

Countries may have other options than borrowing to meet increased infrastructure spending needs. They can: (i) raise more revenues or lower non-capital spending; (ii) increase private-sector participation; and (iii) make public infrastructure spending more efficient. In all three cases, stronger infrastructure governance would help countries to obtain higher returns for every unit of money spent on public investment, while ensuring that total infrastructure spending remains within sustainable budget envelopes.

² Contingent liabilities are defined by the IMF 2019 revised Fiscal Transparency Code, as "payment obligations whose timing and amount are contingent on the occurrence of a particular discrete/uncertain future event or series of future events." Examples of contingent liabilities include explicit or implicit government guarantees for infrastructure funding of subnational governments, state-owned enterprises and public private partnerships contracts.

Figure 1. Global public debt tripled in the last twenty years
(in US\$ trillions)

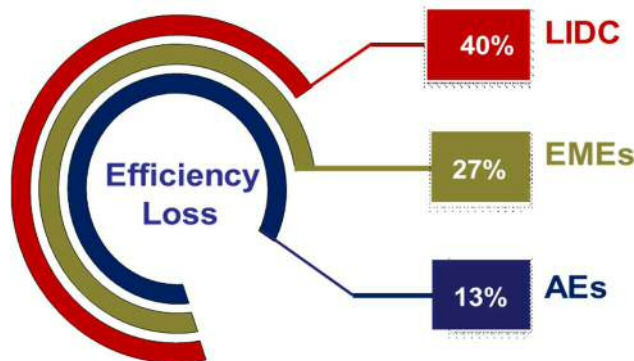


Source: IMF Global Debt Database, (2018).

Many countries are fostering private-sector involvement in infrastructure provision, for example in the form of public-private partnerships (PPPs). Predictable revenue cash flows generated by infrastructure assets could help expand the pool of investors and encourage the private sector to expand their investment in infrastructure projects. Yet, all too often PPPs are pursued to bypass budgetary constraints. If not well designed, executed, and managed, PPPs can expose public finances to large fiscal risks. The strong public-sector governance institutions needed to assess and manage these associated fiscal risks are still lacking in many countries.

IMF analysis indicates that there is substantial scope for strengthening public infrastructure governance. It shows that, on average, countries lose about 30 percent of the potential returns to their infrastructure investments due to inefficiencies, and could close about two-thirds of this gap by strengthening institutions for infrastructure governance (Figure 2). For example, weak project appraisal/selection results in low-quality projects and therefore low-quality infrastructure outcomes. Lack of adequate maintenance funding leads to rapid deterioration of existing infrastructure.

Figure 2: Better infrastructure governance could improve investment efficiency



Source: IMF, Making Public Investment More Efficient, (2015).

2. Good Governance Frameworks for Quality Infrastructure

Substantial benefits can be realised through the better governance of public infrastructure (OECD, 2013; OECD, 2017; IMF, 2015a; IMF, 2018). Several governance frameworks can help support the principles for QII. The IMF and the OECD have each developed assessment tools and practical guidance on infrastructure governance that can help assess, prioritise and inform reforms to boost the effectiveness and quality of infrastructure investment (see also Annex 1).

The IMF's Public Investment Management Assessment (PIMA) provides a macro-fiscal perspective to assessing the public investment cycle, from investment planning, to medium-term budget allocation, to the management of project implementation:

- *Planning fiscally sustainable public investment* ensures public investment supports a country's development objectives in a sustainable way and is effectively coordinated across sectors and levels of government.
- *Allocating public investment to the right sectors and projects* requires comprehensive, unified, medium-term budgeting and objective criteria for appraising and selecting projects.
- *Delivering productive and durable public assets* ensures timely and cost-effective implementation of public investment projects and infrastructure assets properly accounted for and reported.

The OECD's Framework for the Governance of Infrastructure provides guidance to ensure that infrastructure investment has the governance dimensions to support the delivery of QII and is discussed in the remainder of this section. It is based on ten dimensions that can be pursued through a variety of organisational and institutional models that reflect a country's individual circumstances. Transparency and openness, with appropriate engagement from civil society and business sectors are key throughout the investment cycle, as is developing an open government approach and encouraging Responsible Business Conduct (RBC) to ensure that infrastructure projects respond well to environmental and social considerations.

Taken together, the PIMA and these ten dimensions provide a comprehensive framework for countries to support the delivery of QII in a complementary and mutually reinforcing way that creates a strong enabling environment. They present tools that are complementary, emphasising synergies, and different and related aspects of infrastructure governance.

Both frameworks emphasise the importance of fully integrating the process of preparing and implementing budgets for infrastructure investment in a country's budget system (Box 1). This would ensure that a nation's strategic planning is translated into costed and fully-funded spending and provide the information and analysis on infrastructure investment that is required by policy-makers and other stakeholders. Without effective budgeting of capital spending, there is a risk that infrastructure projects could endanger debt sustainability. Allocating public investment to the right sectors and projects helps to ensure financing and maximise value for money. Delivering productive and durable assets ensures the good performance and resilience of infrastructure. Efficiency can be enhanced through timely recycling of bankable brownfield assets, as it will speed-up the turnover of public investment in infrastructure and free up additional funds for future investment in greenfield infrastructure assets. Through the evaluation and audit of completed infrastructure investment projects, important lessons can be learned to improve the planning and implementation of future projects.

Box 1: Effective Budgeting of Capital Expenditure

Central to the sustainability of a country's debt position and the productive investment in infrastructure is a unified budgeting system that fully integrates spending on infrastructure projects with recurrent spending. Such a system informs macro-economic assessments of debt sustainability and supports decisions on allocating financial resources to infrastructure investments. The characteristics of such a system include:

- Establishing and observing debt-related fiscal targets and/or fiscal rules applicable to national and subnational governments.
- Implementing a medium-term fiscal and expenditure framework that includes both capital and recurrent spending and identifies the fiscal space available for new projects.
- Prioritising projects in the context of strategic plans and within the available fiscal and financing envelopes.
- Ensuring that funding is available in the budget throughout the project implementation phase.
- Reliably costing investment plans and updating these plans when changes occur.

- Transparently reporting and managing multiyear spending commitments, including the costs of operations and maintenance.
- Accounting comprehensively in budget documents for all spending on capital projects.
- Publishing information on actual and contingent liabilities arising from investment projects, including from state-owned enterprises and PPPs.

Source: IMF and OECD

Strategic vision and planning

1) Establish a national long-term strategic vision that addresses infrastructure service needs

A necessary condition for a successful infrastructure programme is appropriate strategic planning. This requires identifying which investments should be undertaken and when, whether the investment is financially sustainable, and determining the essential trade-offs of the investment. These matters are referred to in Principle 6.2 of the G20 Principles for QII. A strategic plan should provide guidance on how needs can be met, recognising there has to be room for adjustment as more information is gathered. It is important to ensure that diverse perspectives of stakeholders are taken into account when preparing such a plan, which should be politically endorsed, coordinated across levels of government, and be based on clear assumptions. An example of a strategic plan is the Netherlands' National Policy Strategy for Infrastructure and Spatial Planning, which links spatial developments and infrastructure within a broad vision for the future of the country in 2040.

Policy options include:

- The presence of a long-term strategic plan aligning projects with budget allocations.
- Regular updates of the costs of long-term infrastructure plans and alignment with the medium term-expenditure framework.
- Strategic frameworks for public investment implementation.

2) Manage threats to integrity

Corruption allegations often surround government-led infrastructure projects. The scale and complexity of the projects, as well as the multiplicity of stages and stakeholders involved, make infrastructure projects highly vulnerable to corruption.

As developed in the 2019 Anti-Corruption Working Group work on Promoting Integrity and Transparency in Infrastructure Development, the potential for corruption should be mapped at each stage of a public infrastructure project, and integrity and anti-corruption mechanisms should be enhanced. The G20 Principles for QII also identify the importance of anti-corruption efforts to safeguard the integrity of infrastructure investment.

A whole-of-government approach is essential to effectively address integrity risks and prevent corruption from happening. Measures of mitigating such risks include adequate supervision and training of staff involved in infrastructure investment. Particular attention should be paid to harmonise anti-corruption procedures which should be clearly visible and cover all types of tenders and contracts related to infrastructure projects. Citizens can also play an important role in ensuring transparency and monitoring infrastructure project. For example, Chile developed an online platform for promoting transparency and public engagement in monitoring infrastructure projects.

Policy options include:

- Adopting a risk-based approach to address potential irregularities, through risk maps, and other mitigation measures and internal controls.
- Ensuring an adequate degree of transparency throughout the project life cycle, especially in procurement processes.
- Open data and accessibility to documents held by the public administrators and by private providers of public services strengthens the monitoring and scrutiny of public decision making.

- Ensuring that the understanding of integrity risks is comprehensive by integrating RBC due diligence in the infrastructure project life cycle (Box 2).
- Making sure that stakeholders uphold high standards of conduct expected of public officials, and that channels exist to report wrongdoing, including by implementing protections for whistle-blowers.

Box 2: Responsible Business Conduct for Quality Infrastructure

The promotion by governments of responsible business conduct (RBC) in infrastructure investment is part of governance, as it encourages private sector participants to take into account clearly defined environmental and social objectives. Integrating RBC in the infrastructure project life cycle can be a practical way for governments to balance economic, social and environmental objectives during preparation, financing and delivery of infrastructure and for private sector participants to show they are addressing the most significant impacts on communities and the environment. RBC standards, such as the OECD Guidelines for Multinational Enterprises provide operational guidance on how to integrate stakeholder engagement and can significantly improve project a) quality, b) bankability, and c) efficiency in risk pricing by suppliers. Experience shows that without a broad and balanced view of all sustainable development dimensions – namely environmental, social, and governance, along with economic – infrastructure projects themselves and the communities where they are being developed are under risk. RBC in this context can help with:

- Arriving to a comprehensive picture of risk and impact, as well a dynamic, ongoing, and responsive risk management.
- Meaningfully managing relationships with communities and impacted people.
- Designing PPPs and private sector participation strategies.
- Including RBC considerations into public procurement.
- Improving the bankability of projects and long-term stability of assets.

Source: OECD

3) Establish clear criteria to guide the choice of delivery mode and financing

The choice of how infrastructure is delivered and who should be in charge of its development has implications for public sector discretionary control and value-for-money. However, in many countries the choice of modality is often based on habit and lacks specific criteria for both traditional infrastructure and private finance options. When choosing how to deliver an infrastructure service, i.e. delivery modality, government should balance the political, sectoral, economic, and strategic aspects. Legitimacy and value-for-money should guide this balancing. For example, in the United Kingdom, the HM Treasury Business Case Guidance provides a framework for preparing business cases for spending proposals.

Financing choices and instruments can also affect governance. For example, bonds or loans with covenants, combined with investor and rating agency scrutiny, can affect management activities and enforce legally binding behaviours on key managers of infrastructure projects. Many countries are fostering private-sector involvement in infrastructure provision, for example in the form of PPPs. However, these are not without fiscal costs and risks, and should be made transparent and managed with strong public-sector governance institutions. The Public Private Infrastructure Advisory Facility is one of several important sources of information to help guide policymakers and practitioners.

Policy options include:

- Assessing how the country’s circumstances (including, political economy, government’s capacities, private sector’s capacities, enabling legal environment) impact the sector.
- Using data and cost/benefit analysis, multi-criteria analysis and conflict assessment tools to inform the choice of delivery modes.
- Choosing a delivery model based on project size, source of revenues, usage, and risk.

Enabling environment

4) Ensure good regulatory design

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. Regulated and standardised systems should be established to analyse the environmental viability and social impact of alternative investment projects.

Good regulatory design and delivery are necessary to ensure sustainable infrastructure over the life of an asset. For example, the German multisector economic regulator, the Bundesnetzagentur has a role in the electricity transmission network planning process. The electricity transmission system operators work together to draft plans, containing all effective measures for the necessary optimisation, development and expansion of the network, which are required over the next ten years to ensure safe and reliable network operation.

Policy options include:

- Using evidence-based tools for regulatory decisions, including ex post evaluation.
- Considering the governance of regulators: including, independence accountability, scope, and enforcement.
- Co-operation across infrastructure sectors and administrative boundaries, to address emerging challenges such as data regulation.

5) Integrate consultation processes

Consultation processes can enhance the openness and legitimacy of a project amongst the stakeholders, as well-executed consultation can bring a sense of shared ownership. Views of stakeholders and affected people and communities should be integrated early in the process so that decisions benefit from meaningful stakeholder engagement. Consultations in subsequent stages of the infrastructure project cycle (e.g. tendering, construction and ex-post consultation on service delivery) support RBC, cost-effective delivery and the sustainable provision of services.

Consultation processes should be proportionate to the size of a project and take account of the overall public interest and the views of the relevant stakeholders. The process should be open, broad-based, inspire dialogue and draw on public access to information and users' needs. For example, in New Zealand, all infrastructure development processes require an "Assessment of Environmental Effects", which often includes a study of archaeological and cultural heritage.

Policy options include:

- Ensuring meaningful stakeholder engagement on environmental and social impacts with communities and impacted people from beginning of a project.
- Adopting national open-government strategies or guidelines.
- Requiring that private sector participants and public investment entities undertake RBC due diligence according to international standards.

6) Co-ordinate infrastructure policy across levels of government

Public investment typically involves different levels of government at some stage of the investment process – be it through decision-making, shared policy competencies or joint funding arrangements. Furthermore, subnational governments manage a large share of public investment (on average almost 60% in OECD countries and 40% at the global level).

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 central government sectoral and subnational perspectives. For example, in Indonesia discussions take place between central and subnational governments to coordinate investment spending with national priorities, including through reviews by the

Ministry of Home Affairs of the budget plans of subnational governments to ensure alignment with national priorities.

Policy options include:

- Using formal mechanisms to co-ordinate public investment across levels of government
- Designing platforms and incentives for cross-jurisdictional dialogue and co-operation, including cross-border mechanisms when necessary.
- Developing adequate governance systems for metropolitan, urban and rural areas.

Financing and value-for-money

7) Value-for-money

Governments must ensure that infrastructure projects are fiscally sustainable, which requires a strong link between the project development phase and the fiscal framework of the country. For example, in 2007 Denmark introduced a budgeting regime, where estimates for a project's cost is supplemented with a 50% reserve at the earliest stages of planning. If a project comes in under-budget, the remaining funds can be assigned to other projects.

A country's overall infrastructure expenditure and the fiscal risks it carries in terms of guarantees and other contingent liabilities should be based on medium-term and long-term fiscal projections that are regularly updated. The overall value-for-money of investment projects should be carefully assessed using a combination of quantitative (such as cost/benefit analysis) and qualitative tools that seek to establish the return on investment to investors and society. Governments should also carefully consider the quality of financing terms. Adopting international financial reporting standards assists investors and stakeholders understand the quality of an investment and its financial treatment.

Policy options include:

- Implementing a comprehensive and unified budget framework (which fully integrates capital and recurrent spending) to ensure sustainability in the medium- and long-term.
- Establishing dedicated procedures for identifying and clearly allocating risks between public and private parties.
- Specifying formal requirements to account for, and report, contingent liabilities and forward obligations.

8) Generate, analyse and disclose useful data

Infrastructure policy should be based on data to inform decision making and stakeholder engagement, as identified in Principle 6.4 of the G20 Principles for QII, which includes the use of digital technology. 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. Effective monitoring and evaluation frameworks should be designed and integrated into the decision-making process. To this effect, digital and open source information will help enhance infrastructure investment policies, improve the management of public resources, promote transparent and accountable projects, and improve ex-post evaluation. For instance, the multilateral platform SOURCE provides project developers with a means to manage project information and preparation throughout the infrastructure project cycle and helps disseminating related materials³.

³ See also the other Reference note from European Bank for Reconstruction and Development and World Bank Group on "MDB Infrastructure Cooperation Platform: project preparation workstream Phase II guidance note on project preparation across the full project cycle".

Aligned with the QII principle, Italy has implemented an advanced monitoring system of public infrastructures investments, based on a central repository that is connected with the budget cycle to support decision making on infrastructure planning and project review, and to foster public engagement, integrity and anticorruption. Further, Mexico is considering an Infrastructure Observatory and an infrastructure data initiative that consists of a platform that will focus on infrastructure statistics and will improve data availability.

Policy options include:

- Embedding appropriate information and communication technologies into infrastructure projects in the planning phase.
- Ensuring accessibility and interoperability of information systems, devices and applications.
- Establishing central units for the collection, disclosure and analysis of data.
- Preparing a comprehensive framework to identify and report all modes of financing infrastructure projects.
- Undertaking results and impact assessment, including a sustainable development and a gender perspective.

Performance and resilience

9) Make sure an asset performs throughout its life

Countries must ensure a focus on the performance of an asset throughout its lifespan by putting in place monitoring systems and institutions. Particular attention should be paid to contractual arrangements and monitoring capacity at later stages of a project to ensure incentives do not deteriorate. By way of example, South Africa has guidelines and standards on the maintenance of public infrastructure. The Infrastructure Maintenance Budgeting Guideline helps to ensure that adequate infrastructure maintenance is planned and funded taking into account the factors that can influence the life cycle costs of infrastructure.

Policy options include:

- Preparing policy documents on the expected performance of regulated assets.
- Preparing strategies to manage potential re-negotiations.
- Evaluating the value-for-money of a project during the life cycle of a project.

10) Public infrastructure needs to be resilient

In recent years, environmental shocks have demonstrated the significant socio-economic impacts of such events, 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.

A governance framework that ensures resilience measures applied to critical infrastructure sectors is essential. This is due to the functional dependencies and interdependencies between different sectors of critical infrastructure. Resilience refers to the use of financing mechanisms, such as disaster risk reduction insurances, as well as the design and maintenance of infrastructure assets. For example, the Trusted Information Sharing Network for Critical Infrastructure Resilience was established by the Australian Government, with the aim of assisting critical infrastructure organisations to better prevent, prepare, respond to and recover from disruptions and adverse events.

Policy options include:

- Understanding interdependencies across infrastructure systems.
- Insurance mechanisms may help reduce risks linked to projects that are in the operation phase.
- Taking the economic, environmental and social costs of service disruptions into account when calculating the benefits of critical infrastructure investments.
- Defining the policy mix to prioritise cost-effective resilience measures across the infrastructure life cycle.

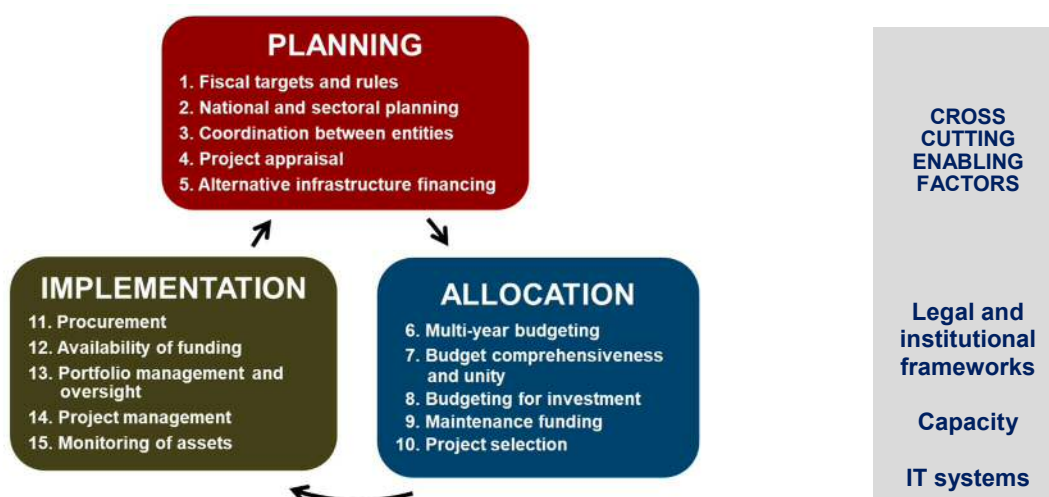
Annex 1. Assessment Tools and Practical Guidance on Infrastructure Governance

International organisations have stepped up efforts to strengthen infrastructure governance. The IMF and the OECD as well as the World Bank, as a global development partner on infrastructure, have developed a range of assessment tools and practical guidance on infrastructure governance⁴.

IMF

On the macro-fiscal side, the IMF’s Public Investment Management Assessment (PIMA) framework is a standardised assessment tool that analyses the strengths and weaknesses of infrastructure governance institutions and identifies priority actions and reforms to improve infrastructure governance. The PIMA framework examines the strength of 15 infrastructure governance practices (institutions) across the infrastructure investment cycle: planning, allocation and implementation (Figure 3), including institutions to ensure macro-level debt sustainability. PIMAs assess both the design of the infrastructure governance framework (“on paper”) and its effectiveness (“in practice”). The PIMA is designed to be applied to countries at all levels of income and development. Each PIMA assessment includes an overview of strengths and weaknesses of a country’s infrastructure governance, comparisons with peer countries, and a detailed and sequenced action plan that focuses on practical steps countries should take to strengthen the efficiency of infrastructure investment.

Figure 3. The Public Investment Management Assessment (PIMA) Framework



Source: IMF (2018).

Further, to support countries in assessing risks related to PPP projects, the IMF (jointly with the World Bank) has developed the PPP Fiscal Risk Assessment Model (PFRAM). PFRAM is a spreadsheet-based analytical tool to assess the potential fiscal costs and risks arising from individual or from a portfolio of PPP projects, based on international accounting and statistical standards. The IMF also supports countries improve the transparency of decision making on public investment and PPPs, based on the standards and guidance in the IMF Fiscal Transparency Code (disclosure of all financial obligations and risks related to ongoing investment projects and PPPs, use of cost-benefit analyses for major projects, open and competitive tender processes).

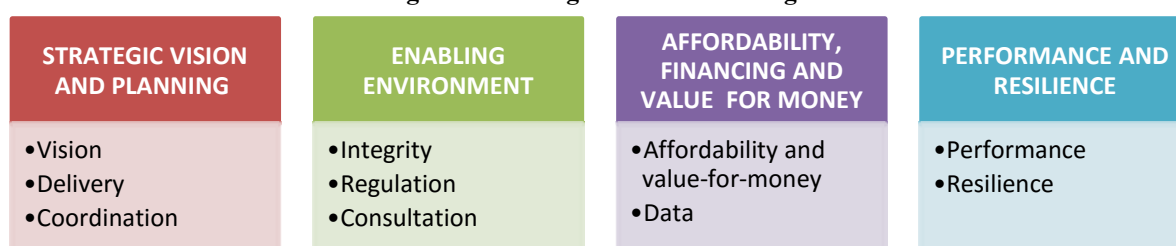
⁴ Recent initiatives also include the multilateral platform SOURCE, as well as other initiatives such as the Global Infrastructure Hub (GIH), the Global Infrastructure Facility (GIF) and the OECD’s Centre on Green Finance and Investment.

Finally, the IMF has also developed the Debt-Investment-Growth (DIG) model to assess the macroeconomic implications of scaling-up infrastructure, including on debt sustainability and help quantify the macroeconomic effects of raising public investment efficiency. Subsequent variants allow to factor in natural resource management, building resilience to natural disasters, and governance issues.

OECD

The OECD Network of Senior Infrastructure and PPP Officials is the main knowledge-sharing platform to exchange best practices between OECD countries. In 2015, the OECD developed a Framework for Infrastructure Governance (Figure 4); it covers PPPs, fiscal policy and governance across levels of government, regulatory policy, integrity and anti-corruption, budgeting, and public sector innovation. The framework identifies challenges and policy options relating to how governments plan, prioritise, deliver, regulate and evaluate infrastructure investments, providing recommendations and examples of good practice.

Figure 4: Getting Infrastructure Right



Source: OECD (2015)

OECD has developed diagnostics and supports policy reform efforts in specific countries on a comparative basis. The support is available to member and non-member countries. The OECD periodically surveys member countries on current practices and procedures of capital budgeting, investment and infrastructure, including governance, strategic planning, sustainable infrastructure management, affordability, and value-for-money. Based on this data, the OECD is developing an Infrastructure Governance Index.

The OECD has developed the Recommendation on Effective Public Investment across Levels of Government to help countries strengthen capacity across levels of government and to build adequate capacities to manage public investment. Based on this framework, the OECD has developed an Implementation Toolkit with checklists for self-assessment and a database of good practices. The OECD works with national, regional and local governments to identify key challenges and improve public investment across levels of government through its country reviews. The OECD has developed jointly with UCLG the World Observatory on Subnational Finance and Investment to collect data and indicators in 100+ countries to assess subnational fiscal space for infrastructure investment. The OECD's assistance to countries includes support on subnational PPPs and subnational climate finance for infrastructure through the OECD's Centre on Green Finance and Investment.

World Bank

The World Bank has developed a range of tools and frameworks that support quality infrastructure:

- The framework for assessing public investment management (PIM), which helps countries evaluate the strengths and weaknesses of public investment management practices through eight “must-have” features.
- A framework for climate resilient PIM, incorporating climate risks and resilience through a three tier approach (i) in the PIM system, (ii) in the portfolio and project selection through climate screening and (iii) in the project design through climate-informed cost-benefit analysis and stress-testing.

- PIM country profiles assessing the public investment flows and stocks as well as the allocative and operational efficiency of public investments along the 11 core dimensions of the PIM system.
- The PPP Toolkit including the Country PPP Readiness Diagnostic helps countries develop an enabling environment for PPPs, the Infrastructure Prioritisation Framework to prioritise PPP projects; sectoral PPP toolkits (energy, water, transportation, and waste); the Pro-Poor Municipal PPP toolkit; and the Procuring Infrastructure PPPs Methodology.
- The Toolkit on Enabling SME Participation in FCV Infrastructure Services is based on lessons learned in case studies and provides guidance to policy makers and other stakeholders. It is designed to create an enabling environment in which SMEs can deliver essential infrastructure services to critically underserved populations.
- Infrastructure Sector Assessment Programs (InfraSAPs), a sectoral strategic planning tool identifying key bottlenecks to private solutions and commercial finance for infrastructure investment.

References

- Gaspar, V., D. Amaglobeli, M. Garcia-Escribano, D. Prady and M. Soto (2019), [“Fiscal Policy and Development: Human, Social and Physical Investment for the SDGs.”](#) IMF Staff Discussion Note SDN/19/03.
- International Monetary Fund (2015a), [“Making Public Investment More Efficient.”](#) IMF Policy Paper, Washington DC.
- International Monetary Fund (2015b), [“Improving Public Investment Efficiency in the G-20.”](#) IMF Policy Paper, Washington DC.
- International Monetary Fund (2016), [“Corruption: Costs and Mitigating Strategies.”](#) IMF Policy Paper, Washington DC.
- International Monetary Fund (2018), [“Public Investment Management Assessment—Review and Update.”](#) IMF Policy Paper, Washington DC.
- International Monetary Fund (2019), [“Fiscal Transparency Code.”](#) Washington DC.
- International Monetary Fund and World Bank Group (2018), [“Debt vulnerabilities in Emerging and Low-Income Economies.”](#) prepared for the October 13, 2018 Development Committee Meeting.
- OECD (2013), Investing Together: Working Effectively Across Levels of Government, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264197022-en>
- OECD (2014), [OECD Council Recommendation on Effective Public Investment across Levels of Government](#), OECD Publishing.
- OECD/UCLG (2016), Subnational Governments around the world: Structure and finance, OECD Publishing.
- OECD (2015), OECD Principles of Budgetary Governance, OECD Publishing, Paris, <http://www.oecd.org/gov/budgeting/principles-budgetary-governance.htm>
- OECD (2016), Survey of Infrastructure Governance in OECD countries.
- OECD (2017), Getting Infrastructure Right: a Framework for Better Governance, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264272453-en>.
- OECD (2017a), Investing in Climate, Investing in Growth, OECD Publishing, Paris, <https://doi.org/10.1787/9789264273528-en>.
- OECD (2018), Capital Budgeting and Infrastructure Governance Survey in OECD countries.
- OECD-UCLG (2016). Subnational governments around the world: structure and finance. OECD and United Cities and Local Government (UCLG). Retrieved from <http://www.oecd.org/cfe/regional-policy/sngs-around-the-world.htm>