

2. Enabling environment for project preparation

2.1. OVERVIEW

Globally, governments are accountable for the development of infrastructure (both economic and social) and the delivery of basic services in an affordable and inclusive manner. This is irrespective of whether such infrastructure is financed, created and managed by public authorities, or with the involvement of the private sector through public-private partnerships (PPPs).

Nurturing a conducive enabling environment for infrastructure investment is largely the responsibility of governments (both national and sub-national). It is often a key differentiator between countries that successfully scale up infrastructure and those that face challenges in doing so.

1. In the context of infrastructure projects, an effective enabling environment comprises two key ingredients: **A robust policy framework** that facilitates clarity, consistency and stability of government actions, while providing for agility to adapt and manage changes in the wider infrastructure ecosystem. This covers *sector-agnostic cross-cutting policies or legislation* (for instance, public procurement legislation, enabling policy or legislation defining the boundaries and scope of PPP projects in infrastructure), or *sector-specific enabling legislation* underlying the provision of essential infrastructure services (for instance, electricity sector legislation, urban transport policy), including in water supply, electricity, public transport etc.
2. **Well-governed public institutions** with a clear role, mandate, and commensurate capacity to operationalise policy into effective project preparation and smooth implementation. These institutions have to be set up under both the national and sub-national governments in line with the country's constitution. Within the boundaries allowed by the constitution, this could cover different institutional models. For instance, some countries have sought to create *centralised* agencies mandated to catalyse project preparation at the national level, say, under the ministry of finance, or in a *decentralised* manner, where capacity building efforts for improving project preparation are focused on line departments and GCAs.

Stable policy and capable institutions are foundational requirements to support effective infrastructure project preparation and implementation, and have become particularly important as governments increasingly look to attract private investment.

The implementation of infrastructure projects through the PPP model is becoming increasingly necessary and is being driven by a need to (i) bring in efficiency gains, know-how and competition benefits; (ii) tap external financing resources given fiscal pressures and constraints in public investment; and (iii) separate regulator-manager roles in infrastructure delivery for greater accountability.

Projects developed using the PPP model require significant additional evaluation and analysis in terms of viability, bankability, balanced risk allocation, contractual commitments of both parties, value for money delivered by the project, and the assessment of fiscal commitments and contingent liabilities of the government.

While a conducive enabling environment is equally important for projects implemented in a conventional mode with public investment, project preparation is significantly more complex in a PPP arrangement, which makes the underlying enabling environment and stakeholder involvement even more important.

This chapter addresses the aspects of enabling environment for project preparation in two parts:

- **Policy framework (Section 2.1)**
- **Public institutional capacity (Section 2.2)**

2.2. POLICY FRAMEWORK

2.2.1. Summary

Infrastructure projects typically involve large, upfront investment commitments with service delivery and future revenues potentially impacted by a variety of risk factors during the course of the project's full lifecycle.

Other things remaining equal, infrastructure investments are therefore relatively risky. For instance, in urban water supply projects, delays in the provision of targeted household connections in a timely manner, or, even when the construction phase is completed well on time, user resistance and political reluctance to effect tariff increases, can lead to a slower than expected increase in revenues. This could impact service delivery (by constraining resources needed to operate and maintain the network), which, in turn, can further accentuate user dissatisfaction and reluctance to pay.

The ability of governments to mitigate risks, as illustrated above, is key to ensure the efficient use of public investments and attracting private participation in infrastructure projects. A robust policy framework provides a strong signal of the government's recognition of these risks, as well as its commitment to allay concerns that citizens, investors and private developers may have. It is not surprising that many countries, in the early stages of scaling-up infrastructure, tend to formulate an infrastructure or PPP legislation or policy to reiterate this commitment and provide assurance to the concerned stakeholders.

In larger countries, especially those with a federal structure, an aligned cascading of policies to sub-national governments is critical. Further, in addition to cross-cutting policies to create the enabling ecosystem, sector-specific policies and legislation are also often necessary to support infrastructure development and effective project preparation.

Finally, stand-alone policies or legislation are a necessary condition but not sufficient. They need to be followed up with a web of guidelines, regulations, standards and enforcement capacity, coupled with capable and empowered institutions, to operationalise policy intent and to translate the government's vision into action.

2.2.2. Guidance

Key elements of guidance under policy framework are summarised below:

- A. A clear policy and legislative framework signals government commitment to infrastructure development.
- B. While legal and policy frameworks ought to provide stability, they need to be agile and designed to evolve to meet the ever-changing needs of infrastructure development.
- C. Follow-up guidelines, standards and processes are key to make policy actionable.
- D. An aligned cascading of policies and legislation across the national and sub-national levels is important.
- E. Sector-specific legislation or policies may also be necessary to drive infrastructure project preparation, in addition to cross-cutting policies.
- F. Adapting and replicating contextually relevant policies from global experience can accelerate capacity creation for infrastructure development.

A. A clear policy and legislative framework signals government commitment to infrastructure development.

At a fundamental level, a robust policy framework for infrastructure should tackle the following imperatives:

Set priorities and aspirations:

Governments need to articulate, in clear terms, their focus areas, aspirations and shifts in policy with respect to infrastructure development. These are typically influenced by socioeconomic development priorities, political commitments made, and outcomes of mid- to long-term planning processes.

For instance, the Republic of Korea has prepared five-year economic development plans since 1962 that have outlined infrastructure development priorities and the change in these over the decades. Early infrastructure priorities were driven by the need to facilitate industrialisation, including, for instance, development of the Seoul-Busan expressway. Since the mid-1990s, there has been a shift towards rational decision-making, as reflected in the increased adoption of several tools and frameworks, including Total Project Cost Management (TPCM), Pre-Feasibility Studies (PFS), and Value-for-Money, that have since underpinned infrastructure decisions in the country.

Clarify accountability and accompanying resource allocation:

The policy framework should define accountability for various aspects of infrastructure provision, supported by commensurate financial and functional empowerment for the institutions that are mandated with infrastructure development and service provision. In particular, policies to facilitate the clear demarcation of responsibilities at different levels of government (national, provincial, local), and within various government authorities, significantly improve the efficacy of governments in addressing infrastructure deficits.

Inadequate provision of basic services, including water supply and sanitation, is often attributed to diffused accountability among different levels of government, weak decentralisation efforts and inadequate empowerment of local governments.

Facilitate private participation and PPPs:

PPP laws and policies provide an overarching enabling framework to provide a clear institutional framework to develop, procure and implement infrastructure using the PPP model. They define competent authority(ies) responsible for project preparation and implementation, while clarifying investment targets, and the types of PPP envisaged. They define competitive procurement terms and conditions, as well as mechanisms for the treatment of unsolicited proposals. They allow for other enabling requirements necessary to implement PPP projects, including, for example, a harmonised approach to deal with exits and terminations and enabling requirements like lender step-in rights.

A UNESCAP⁶ study of 42 countries in the Asia-Pacific found that over 40% of the countries had enacted PPP legislation, while another 31% of countries had formulated PPP guidelines. In other words, over 71% of countries surveyed had a PPP law or guidelines in place. The World Bank reports that over 45 countries⁷ have enacted some form of legislation with the aim of fostering private investment in infrastructure. Refer to Exhibit 2.1 for a summary of salient aspects of infrastructure and PPP legislation and policy in select countries.

While a PPP legal enactment is seen to provide a stronger basis than a PPP policy, which will provide investors with more certainty and reduce the risk of entering into a new market, PPP policies tend to provide relatively greater flexibility, which may also be necessary in the early stages of an infrastructure PPP program. For instance, while countries like the Republic of Korea and South Africa have enacted PPP laws, other countries, like the Netherlands and the UK, do not have legislation but instead have implemented well-articulated and robust policies and guidelines.

From an investor's standpoint, while specific enabling laws or policies on the government's approach to PPPs are important, investors often look to the wider web of policies to assess if the other two imperatives listed above are addressed, and if sectoral policies provide assurance and authorisation for undertaking an infrastructure project with private capital.

⁶ https://www.unescap.org/sites/default/files/PPP%20Policy-Legal-Institutional%20Frameworks_2017.pdf

⁷ <https://ppp.worldbank.org/public-private-partnership/legislation-regulation/laws/ppp-and-concession-laws>

LEGISLATION OR POLICY: The Netherlands' MIRT policy framework and South Africa's PFMA legislation

The Netherlands' Ministry of Infrastructure and Water Management (MIWM) oversees the policy, implementation and inspection of infrastructure development in the Netherlands. To aid with the development of policies, the MIWM houses separate directorate-generals, responsible for designing overarching policies for development in areas of mobility, water management, aviation and maritime affairs and the environment. For large infrastructure projects, the MIWM has adopted a unique collaborative approach, namely *The Multi Year Programme for Infrastructure, Spatial Planning and Transport (MIRT)* framework. MIRT comprises infrastructure projects and programs in which the national and regional governments collaborate to find a common solution to specific problems, after conducting analysis from different perspectives and development objectives. MIRT projects can be either implemented through public financing or through PPPs on a Design-Build-Finance-Operate-Maintain (DBFOM) basis. Each year, the MIRT is presented to the Lower House as an appendix to the budget of the MIWM and this provides the necessary political and fiscal commitment to the MIRT. The MIRT program has rules, procedures and a framework to direct how a project initiative that needs state funding should be developed and how decisions on project initiatives should be made.

South Africa has a comprehensive legislative framework for infrastructure procurement in the form of the *Public Finance Management Act 1999 (PFMA)*. The PFMA seeks to regulate financial management in the national government and provincial governments; to ensure that all revenue, expenditure, assets and liabilities of those governments are managed efficiently and effectively; and to provide for the responsibilities of persons entrusted with financial management in those governments. It forms an overarching framework for government spending, including in infrastructure. Regulation 16 of the PFMA governs infrastructure PPP projects. This regulation takes the user through the components of the regulation and explains how it applies to the distinct phases of the PPP project cycle, from inception to the management of the PPP agreement. The South African National Treasury's *PPP Manual* complements the provisions of the PFMA. The *PPP Manual* is issued as a National Treasury PPP Practice Note in terms of the PFMA, along with *Standardised PPP Provisions*, issued as National Treasury PPP Practice Note Number 01 of 2004, and *Standards for Infrastructure Procurement and Delivery Management*, effective from 2016. South Africa's legal and policy framework has helped to crowd-in significant levels of private investment in infrastructure, with South Africa planning and executing projects exceeding ZAR 300 billion (US \$22 billion) annually.

Exhibit 2.1 Country lens - National level PPP policies and legislation

COUNTRY	CONCESSION LAW	PPP LAW/ACT	PPP GUIDELINES
Australia			<input checked="" type="checkbox"/> <u>National PPP Policy and Guidelines</u>
Brazil	<input checked="" type="checkbox"/> <u>Administrative / Sponsored Concessions</u> <u>Public Service Concessions</u>	<input checked="" type="checkbox"/> <u>PPP Law</u> <u>Investment Partnership Program</u>	
Canada	<input checked="" type="checkbox"/> <u>Government Contracts</u> <u>Regulations SOR/87-402, 2018</u>		<input checked="" type="checkbox"/> <u>Guidelines to Implementing Budget 2011 Direction on Public-Private Partnerships</u>
Chile	<input checked="" type="checkbox"/> <u>Law and Regulation of Concessions of Public Works</u>		
China			<input checked="" type="checkbox"/> <u>Circular of the General Office of the State Council on Guiding Opinion on Promoting the Public-Private Partnership Mode in the Public Service Fields</u>
Kenya		<input checked="" type="checkbox"/> <u>PPP Act 2013</u>	
India			<input checked="" type="checkbox"/> <u>Guidelines on Formulation, Appraisal and Approval of Central Sector PPP Projects</u>
Indonesia	<input checked="" type="checkbox"/> <u>Government Goods and Services Procurement Policy (LKPP) Regulation No. 19 of 2015</u>	<input checked="" type="checkbox"/> <u>Presidential Regulation No. 38 of 2015 concerning Cooperation Between Government and Business Entities in Procurement of Infrastructure</u>	

Exhibit 2.1 Country lens (continued) - National level PPP policies and legislation

COUNTRY	CONCESSION LAW	PPP LAW/ACT	PPP GUIDELINES
Mexico		<input checked="" type="checkbox"/> <u>PPP Law</u>	<input checked="" type="checkbox"/> <u>PPP Guidelines</u>
Netherlands	<input checked="" type="checkbox"/> <u>Directive 2014/23/EU of the European Parliament and of the Council of 26 February 2014 on the Award of Concession Contracts</u>		<input checked="" type="checkbox"/> <u>Public-Private Comparator Manual 2013</u>
Philippines		<input checked="" type="checkbox"/> <u>The BOT Law, as amended by Republic Act No. 7718</u> <u>Executive Order No. 136 Series 2013</u> <u>Executive Order No. 8 Series 2010</u>	<input checked="" type="checkbox"/> <u>PPPGB Guidelines and Issuances</u>
Republic of Korea		<input checked="" type="checkbox"/> <u>Act on Public-Private Partnership in Infrastructure</u> <u>Decree of the Act on Public-Private Partnership in Infrastructure</u>	
Rwanda	<input checked="" type="checkbox"/> <u>Public Procurement Law</u>	<input checked="" type="checkbox"/> <u>Law No. 14/2016 of 02/05/2016 Governing Public Private Partnerships</u> <u>National Investment Policy</u>	<input checked="" type="checkbox"/> <u>Public Private Partnership Guidelines</u>
South Africa		<input checked="" type="checkbox"/> <u>Treasury Regulation 16 to the Public Finance Management Act (PFMA) 1999</u>	<input checked="" type="checkbox"/> <u>Public Private Partnership Manual</u>
United Kingdom	<input checked="" type="checkbox"/> <u>The Concessions Contracts Regulations 2016</u> <u>Infrastructure Act 2015</u>		<input checked="" type="checkbox"/> <u>Public Private Partnerships Guidance</u>

B. While legal and policy frameworks ought to provide stability, they need to be agile and designed to evolve to meet the ever-changing needs of infrastructure development.

Care must be taken to ensure that infrastructure policy and legislation takes into account country-level contextual factors and is aligned with the strategic needs and stages of evolution of the country, in terms of its infrastructure stock and gaps. It is particularly important to ensure that the policy framework provides for adequate agility and flexibility to adapt to and incorporate changes.

There are two ways in which agility can be built into the design of the framework. First, the overarching

policy should ideally articulate ‘principles’ rather than rigid operating processes, which should preferably be defined separately through accompanying guidelines and regulations. Second, given the evolutionary nature of the infrastructure sector, policies governing these principles should be subject to a periodic review (typically about every three to seven years), to provide a window for incorporating changes that may become necessary. Guidelines and regulations issued under policies or legislation should ideally have relatively shorter review periods.

Global experience suggests that countries have found it necessary to make at least some changes to the policy and legislative frameworks for infrastructure from time to time.

CHANGES TO POLICY FRAMEWORK: The cases of the Republic of Korea and Indonesia

The Republic of Korea amended its infrastructure PPP legislation multiple times within a decade of its enactment. Although Korea enacted its first PPP Act (the Private Capital Inducement Act) in 1994, the policy framework provided by this Act did not translate into large investments, owing to limited risk evaluation, inadequate process rigour and limited budgets. Following the Asian Financial Crisis in 1997, a new PPP law, ‘The Act on Private Participation in Infrastructure’, was adopted to remove some of these constraints. This law abolished the former categorisation of infrastructure projects and improved procurement processes. The Private Infrastructure Investment Centre of Korea (PICKO) was created to provide project preparation support, including preparation of feasibility studies, project reviews, bid evaluation, negotiations and concluding concession agreements, and the Project Investment Management Centre (PIMA) was created as an affiliate of the Korea Development Institute (KDI) for the preparation of pre-feasibility studies (PFS). A ten-year plan, with a pipeline of potential PPP projects, was also formulated. These changes led to a significant improvement in the investment climate and an increase in investment activity. By 2002, over ten new road projects were in operation. Encouraged by these improvements, Korea again amended its PPP Act in 2005, which paved the way for the merger of PICKO and PIMA to form the Private Infrastructure Investment Management Centre (PIMAC) under this Act. Since then, the PPI Act 2005 and the PPI Act Enforcement Decree 2005 have provided the overarching legal framework for both public and private infrastructure investments. The PPP Basic Plan and PPP Implementation Guidelines provide the framework for project preparation and implementation. The efficacy of

Korea’s policy framework and project preparation processes is reflected in its infrastructure delivery outcomes. By 2015, an estimated 684 projects involving an outlay of US \$80 billion have been implemented since the framework became operational in 2005.

Indonesia’s new Presidential Regulation 2015 for Infrastructure seeks to improve on its earlier regulation and encourages greater private participation in infrastructure. Indonesia’s progression in project preparation has been founded with a learning-by-doing approach, based on its own challenges and lessons learned. While Indonesia’s PPP regulations date back to 2005, they have recently been updated and replaced by new Presidential Regulations in 2015. New rules governing the establishment and operation of PPPs were put in place by Presidential Regulation No. 38 of 2015, which focuses on collaboration between the government and private sector for the procurement of essential infrastructure. The new regulation repeals the previous PPP regime established by Presidential Regulation No. 67 of 2005. The updated regulation is a reaction to the weak response to PPP projects conceived earlier, and to address other challenges, including gaps in project preparation, delays in land acquisition, lack of long-term project finance, and insufficient policy coordination among various government ministries and agencies in the earlier years. The regulation provides greater assurance relating to timely land availability and greater government support for infrastructure PPPs. Although relatively recent, Regulation 38 of 2015 considers developments in infrastructure and PPPs globally, and is a response to Indonesia’s desire to increase the use of private capital for infrastructure.

C. Follow-up guidelines, standards and processes are key to make policy actionable.

While an overarching policy or legislation for infrastructure development is necessary, it is by no means sufficient. It ought to be accompanied by appropriate guidelines, standards and processes to translate policy intent into action and catalyse infrastructure implementation. While several countries have put such frameworks in place, the United Kingdom (UK) is considered to be a frontrunner, having formulated a web of replicable guidelines, standards and processes across a whole host of areas relating to infrastructure project preparation.

Given that the UK was among the earliest to give a significant push to bring in private participation in infrastructure delivery, it is not surprising that several other countries have seen value in replicating some of the practices adopted here. For instance, Australian state governments have adopted the United Kingdom's Office of Government Commerce (OGC) Gateway Review Process for quality assurance across all jurisdictions, adding modifications to enhance the outcome and make it more relevant to the Australian context.

NUTS AND BOLTS: The United Kingdom's comprehensive guidance for project preparation

The UK has a variety of tools and frameworks that are used at different stages of the project preparation lifecycle, including the following:

Project identification. To support project identification, the UK's project preparation framework provides a multitude of tools:

- **Early Development Pool (EDP) for government major projects and programs (GMPP):** Institutionalised by the Infrastructure and Projects Authority (IPA), the EDP includes projects that could potentially join the GMPP in the future. The inclusion of nationally significant projects in the EDP enables the IPA to provide close support to line agencies at the project initiation stage itself.
- **The Project Initiation Routemap (PIR):** PIR is a best practice guideline prescribed by the IPA, which provides a structured approach to identifying and conceptualising projects through a collaborative approach with line agencies. From 2018, all major projects are assessed for the need and suitability of applying the routemap to guide conceptualisation.
- **Stage 0 of the Five Case Model:** The Five Case Model is a thinking framework recommended by the Her Majesty's Treasury (HMT), which defines a structured approach to developing business cases. Stage 0 of the Five Case Model outlines a method to help identify projects that verify the strategic necessity of the project or program.

Project feasibility and structuring.

- **Five Case Model:** All line agencies must prepare business cases for their spending proposals. These cases are prepared according to a model which views proposals from five interdependent dimensions, prescribed by the Green Book of HMT – known as the Five Case

Model. These dimensions are: strategic, economic, commercial, financial and management. For projects, a strategic outline case is prepared at the conceptualisation stage, thereafter an outline business case (OBC) is prepared at the pre-feasibility stage, which is followed by a comprehensive full business case and its updates prior to implementation. Although individual government departments and local governments are not bound by project preparation guidelines provided by HMT, most departments have designed internal project processes in line with processes followed for major projects.

Project approvals and quality assurance.

HMT recommends the following guidelines for independent review:

- **OGC Gateway Review™:** The Office of Government Commerce (OGC) Gateway Review™ process was introduced in 2000 after several project failures in the UK and the re-evaluation of the government's effectiveness in projects and program delivery.
- **Major Projects Review Group (MPRG):** The MPRG is an independent group of experts from the government and private sector which challenges projects on deliverability, affordability and value for money at key points in the approvals process.
- **IPA Quality Reviews:** In addition, the IPA has enhanced the quality review process with a range of different independent assurance reviews. Depending on the project cost and the department's track record of executing projects of a similar complexity, these reviews range from formal gateways to more bespoke 'critical friend' reviews.

D. An aligned cascading of policies across the national and sub-national levels is important.

In most countries, the responsibility for infrastructure development is distributed across not just different line departments and GCAs, but also among several sub-national governments. Sub-national governments, in many cases, also have independent jurisdiction to legislate for infrastructure provision. It is therefore critical for countries to ensure that policies governing infrastructure project preparation are aligned across different GCAs and among sub-national governments as well, and not just at the level of national governments.

In such cases, even where the national government may not have direct jurisdiction over sub-national governments, it would be efficient to have nationally aligned policies that sub-national governments may apply while framing local regulations.

ALIGNMENT AT THE SUB-NATIONAL LEVEL: Australia and India

State infrastructure units, Australia: In Australia, infrastructure project preparation follows the country's federal system, with each state having its own institutional framework to support project development. Typically, this comprises: (i) the state treasury department, to provide quality assurance, approve projects and prepare annual budgets for government expenditure; (ii) a state level PPP unit that establishes good practice guidelines for project preparation; and (iii) a state level planning agency, which sets the long-term vision and strategic priorities for the development of the state. Some states have also established specialised institutions to support project development. For instance, PPP projects in the state of Victoria are supported by the Office of Projects Victoria. The office provides guidance on technical scope, engineering design, project cost, and financial and contractual risks during project evaluation. In the state of New South Wales, the state treasury department has set up the Infrastructure and Structured Finance Unit, which specialises in providing commercial and financial advice to the state government on infrastructure projects with a cost of over US \$70 million (AU \$100 million).

Sub-national infrastructure development and PPP legislation and policies, India: India's project preparation framework is steered by its line ministries and sub-national governments, who have adopted a streamlined, systematic approach to project development. The states in India are critical for infrastructure development. While at the national level, there is a focus on developing key infrastructure sectors like national highways, telecommunications, power, railways and airports, the responsibility for the development of other sectors, like water and sanitation, health, and education, is shared with the state governments. Project preparation activities in India are decentralised and are largely driven by contracting authorities. Line ministries, state and local governments at the sub-national level are responsible for their own project preparation. To streamline project preparation at the state level, most states have enacted state-specific legislation for PPPs, and instituted central agencies for project planning and development. These central agencies also provide financing support for project preparation. A number of states including Gujarat, Punjab, Bihar, and Andhra Pradesh have already developed specific legal frameworks to enable private partnerships in infrastructure. Other states, including Karnataka, Odisha Maharashtra, and Assam, have specific policy frameworks. States like Tamil Nadu and Gujarat have followed up their state level infrastructure legislation with the creation of Infrastructure Development Boards and formulated detailed attendant regulations and guidelines to implement policy.

E. Sector-specific legislation or policies may also be necessary to drive infrastructure project preparation in addition to cross-cutting policies.

Similarly, cross-cutting initiatives on the overall policy and legal framework for facilitating infrastructure investment may need to be complemented with changes to sector-level policies and legislation. Given that most infrastructure sectors have typically been the domain of governments and managed by GCAs, initiatives to restructure these sectors and introduce private sector participation will frequently require amendments to existing government policy.

Therefore, as countries seek to scale-up their infrastructure investments, they will often need to review sector-specific policies and legislation and make necessary changes to these. For instance, India has seen several transformative policy shifts since the mid-1990s, as it sought to open up various infrastructure sectors. For example, the country's telecom sector was opened up under its National Telecom Policy 1994, which has since been updated multiple times and has paved the way for a near complete transition from a sector entirely managed by the public sector to one where the public sector also plays a role. Similarly, the Electricity Act 2003 provided an enabling framework to delicense generation and paved the way for private investment in power generation.

**COMPLEMENTARY SECTORAL POLICIES:
Energy policy changes behind South Africa's
renewable success**

South Africa's very successful Renewable Energy IPP Procurement (REIPPP) Programme is the product of a firm vision for the country and its power sector, reflected in a multi-year planning framework, backed by a strong political will to achieve the vision's objectives. The consistent and coordinated policy actions to initiate regulatory and institutional reforms and operationalise the recommendations of the Integrated Energy Plan, the Integrated Resource Plan, and the White Paper on Energy and Renewables remain the foundation of the project's success. The successful program was preceded by critical sectoral reforms including the following:

- **A multi-year capital investment planning framework that is consistent with development priorities.** The sectoral planning documents (the Integrated Energy Plan 2003 and the Integrated Resource Plan 2010) were aligned with the nation's commitment to reducing its carbon footprint. The initial impetus to the program was provided in the White Paper on Energy Policy in 1998 (which promoted a greater role for the private sector and diversification of energy sources), and the White Paper on Renewables in 2003 (which envisaged 10,000 MW of energy from renewables).
- **The Electricity Regulation Act [No.4 of 2006]** provided for the establishment of an energy regulator (Section 3); the licensing of activities (Section 7); the ability of the regulator to estimate new generation capacity requirements, establish tendering procedures, and promote private sector participation (Section 34); and regulations on new generation capacity (Section 35). Specifically, Sections 34 and 35 of the Act set the framework for the REIPPP Programme.

F. Adapting and replicating contextually relevant policies from global experience can accelerate capacity creation for infrastructure development.

As countries seek to formulate policies and conducive enabling environments for scaling up infrastructure investment, they would do well to adapt and replicate effective policies that have worked elsewhere.

Replicating contextually relevant and appropriate policy frameworks and lessons from experience can help governments expedite the elimination of at least

some of the barriers to infrastructure investment and help create building blocks for a conducive investment environment for infrastructure development. This is particularly important for EMDEs, which are often disadvantaged by weak institutional capacity and baseline infrastructure stock to start with. A concerted effort to benchmark and incorporate best practices in policy formulation from across the globe can be particularly useful.

REPLICATION OF BEST PRACTICES: Experiences of Australia and the Netherlands in adapting the UK's Gateway Review Process

AUSTRALIA - Adoption of the UK's Gateway Review Process

Review Process: Australian state governments have adopted the United Kingdom's Office of Government Commerce (OGC) Gateway Review Process for quality assurance, adding modifications to enhance the outcomes and make it contextually relevant. The Department of Finance within the Government of Australia recommends a staged escalation within the review process called 'Enhanced Notification', which defines escalation actions based on triggers in project assurance. The Government of Victoria has added additional project assurances for high-value or high-risk projects. Typically, all projects undergo a gateway review process at the state level, based on the UK's Gateway Review Process, that consists of a series of structured reviews to examine procurement at key decision points in the project cycle. These reviews are used to improve on-time and on-budget project delivery and are conducted by dedicated teams housed within the treasury departments of state governments.

THE NETHERLANDS - Dutch Gateway Review Method

Method: Based on the UK's Gateway Program and housed in the Gateway Bureau in the Ministry of Interior and Kingdom Relations, the Dutch Government has reviewed over 50 high-risk projects since 2007, with very positive results. Independent confidential assessments under this initiative have contributed to improved project management and delivery of high-risk projects. Typical project level gateway reviews include:

- Gateway 1 - Purpose and justification is performed at the start of a project to confirm its rationale.
- Gateway 2 - Preparation and procurement are executed once the project approach is firm and when the project's rationale and the intended results are demonstrable and desirable.
- Gateway 3 - Realisation is executed as soon as suppliers are formally approached and seeks to verify if the intended approach will be successful in this realisation phase.
- Gateway 4 - Readiness for implementation is performed before the project team transfers the result to the line organisation(s) or just before the implementation phase.

2.3. PUBLIC INSTITUTIONAL CAPACITY

2.3.1. Summary

The capacity of public institutions to plan, prepare and deliver infrastructure projects is central to effective infrastructure development. Even where infrastructure projects are executed with private sector participation through PPP arrangements, the role of the public sector institutions is crucial.

Within the applicable constitutional boundaries, this will also call for different institutional models for various facets of project preparation, either in a *centralised* manner (namely the creation of a central agency mandated to catalyse project preparation), or in a *decentralised* manner, where the capacity creation efforts aimed at improving project preparation are directed by the government contracting agencies (GCAs).

Broadly, public sector institutions are required to play different roles. The country-lens review done as part of the preparation of this reference tool provides evidence of three types of roles (as explained below) that public institutions play in the context of infrastructure project preparation. Also refer to *Exhibit 2.2*.

1. CENTRAL AGENCY - Infrastructure plans and projects pipeline

e.g. The Philippines – National Economic Development Agency (NEDA), the UK – Infrastructure and Projects Authority (IPA), Indonesia – National Development Planning Agency (BAPPENAS)

Governments are called upon to undertake medium- to long-term infrastructure plans, and the aggregation of these plans and presentation of a consolidated national infrastructure plan is often a critical requirement in the project preparation value chain. Apart from preparing the country-level infrastructure plan, there is also a need to translate this multi-year infrastructure plan into a pipeline of projects, which are then prioritised for development. Typically, the task of preparing such multi-year plans is done by an infrastructure authority in the national government. Some of these agencies are also entrusted with the role of translating the multi-year infrastructure plan into a pipeline of projects. In some countries, the task of preparing multi-year plans is handled by respective line departments or GCAs responsible for sector-level planning and implementation.

2. CENTRAL AGENCY or PPP UNIT - Project preparation

e.g. Indonesia - PPP Unit, Kenya – PPP Unit, Republic of Korea – PIMAC

In most countries, GCAs are called upon to play the role of project preparation and procurement (starting with project concept definition, feasibility, and procurement), especially where projects are implemented by public authorities themselves. However, wherever projects are implemented using the PPP model, governments have typically created central agencies or PPP units that handle project preparation responsibilities.

The central agencies or PPP units typically created under the national PPP legislation or policy are responsible for issuing and developing guidelines and processes to implement the policy or legislation, and in many cases, are also vested with an overall responsibility for project preparation and project preparation financing, typically as a custodian of a dedicated Project Development Fund (PDF). In some cases, development institutions set up to provide infrastructure financing also play the role of supporting GCAs in project preparation, primarily to set standards and guidelines for project preparation and reviews. In some cases, like PT SMI in Indonesia and FONADIN in Mexico, infrastructure financing institutions also play a role in supporting GCAs with project preparation.

3. GOVERNMENT CONTRACTING AGENCIES (GCAs)

In most countries, a large part of the project preparation mandate resides with GCAs. In the early stages of a country's infrastructure scale-up, the capacity of GCAs to prepare and implement complex infrastructure projects is often weak, especially when it comes to structuring and managing PPP projects. A scale-up of infrastructure will require a commensurate scale-up of the capacity of GCAs, notwithstanding the presence of apex institutions that may have been set up to bridge this gap with close support early on. It is important that the capacity of public institutions is commensurately strengthened, not just at the national level but also at the level of sub-national governments.

Exhibit 2.2 Institutions at the national level involved in infrastructure project preparation

Country	PROJECT PREPARATION ACTIVITIES					Other support institutions
	Long-term strategic planning	Setting policies and guidelines	Project identification, screening and prioritisation	Quality assurance and approvals	Project preparation financing	
AUSTRALIA	Infrastructure Australia	Department of Finance, Government of Australia	Line ministries and sub-national government departments, Infrastructure Australia	Department of Finance, Commonwealth Government	Line ministries and sub-national government departments	National PPP Working Group – Jurisdictional cooperation and process improvements for PPPs
BRAZIL	Ministry of Planning, Budget and Management	Ministry of Planning, Budget and Management	Line ministries and sub-national government departments	Ministry of Planning, Budget and Management	Line ministries and sub-national government departments	Secretariat of Investment Partnership Program (SPPi) involved in long-term strategic planning, setting policies and guidelines, project screening, quality assurance and project preparation financing for national priority projects <i>(The Ministry of Planning, Budget and Management will be integrated with the Ministry of Finance after 1 January 2019. The new ministry will be called the Ministry of Economy).</i>
CANADA	Infrastructure Canada	Treasury Board Secretariat, Government of Canada	Line ministries and sub-national government departments	Treasury Board Secretariat, Government of Canada	Line ministries and sub-national government departments	Canada Infrastructure Bank – Procuring authority, investment and centre of expertise for PPPs Canada Environmental Assessment Agency – Environmental impact assessment appraisals and policy development
CHILE	Ministry of Public Works (Sectoral long-term plans)	National Investment System (administered by the Ministry of Social Development and Ministry of Finance)	National Investment System (administered by the Ministry of Social Development and Ministry of Finance)	National Investment System (administered by the Ministry of Social Development and Ministry of Finance)	Line ministries and sub-national government departments	The National Regional Development Fund (FNDR) may be accessed for Socially Recommended (RS) projects

Country	PROJECT PREPARATION ACTIVITIES					Other support institutions
	Long-term strategic planning	Setting policies and guidelines	Project identification, screening and prioritisation	Quality assurance and approvals	Project preparation financing	
CHINA	National Development and Reform Commission	Ministry of Finance China PPP Center	Line ministries and sub-national government departments	National Development and Reform Commission	Line ministries and sub-national government departments	
KENYA	National Treasury	National Treasury, PPP Unit for PPP projects	Line ministries, PPP unit assists in screening and prioritisation	National Treasury for public projects, PPP committee for PPP projects	Line ministries and sub-national government departments MDB-supported project development funds	
INDIA	National Institute for Transforming India	Ministry of Finance	Line ministries and sub-national government departments	Ministry of Finance	Line ministries and sub-national government departments	Project Monitoring Group – To fast-track priority projects
INDONESIA	BAPPENAS	BAPPENAS, Ministry of Finance	BAPPENAS, line ministries and sub-national government departments	Ministry of Finance	PT SMI, Ministry of Finance	KPPIP – Debottlenecking efforts for priority projects IIGF – Provides guarantees for government actions/inactions PPP Joint Office – Coordination for PPPs LMAN – Land acquisition support and financing
MEXICO	Secretariat of Finance and Public Credit (SHCP)	SHCP	Line ministries and sub-national government departments	SHCP	Fondo Nacional de Infraestructura (FONADIN), individual line ministries and sub-national government departments	
NETHERLANDS	Ministry of Infrastructure and Water Management (MIWM)	MIWM	Rijkswaterstaat, sub-national government departments	MIWM	Line ministries and government departments	

Country	PROJECT PREPARATION ACTIVITIES					Other support institutions
	Long-term strategic planning	Setting policies and guidelines	Project identification, screening and prioritisation	Quality assurance and approvals	Project preparation financing	
PHILIPPINES	National Economic and Development Authority (NEDA)	PPP Center	Line ministries and sub-national government departments, NEDA	NEDA	Line ministries and sub-national government departments	
REPUBLIC OF KOREA	Ministry of Economy and Finance (MOEF)	Public and Private Infrastructure Investment Management Center (PIMAC)	PIMAC	PIMAC – Quality assurance MOEF – Approval	Individual line ministries and sub-national government departments	
RWANDA	Ministry of Finance and Economic Planning (MINECOFIN)	MINECOFIN	Line ministries	Public Investment Committee - MINECOFIN	MINECOFIN	MINECOFIN
SOUTH AFRICA	National Treasury (NT)	NT	Line ministries and sub-national government departments	Government Technical Advisory Centre (GTAC, within National Treasury) performs quality assurance; Approval by NT	Line ministries and sub-national government departments, MDB-supported project development funds	Presidential Infrastructure Coordinating Commission (PICC) prepares the National Infrastructure Plan (national priority projects) Project Development Account (by GTAC) facility for project preparatory financing of PPP projects
UNITED KINGDOM	National Infrastructure Commission	Infrastructure and Projects Authority (IPA)	Line ministries and government departments	HM Treasury	Line ministries and government departments	National Infrastructure Commission (NIC), which provides independent, strategic thinking, analysis and advice to address the UK's long-term infrastructure needs.

2.3.2. Guidance

Key elements of the guidance framework under public institutional capacity are summarised below:

- A. Empowered central agencies can institutionalise project preparation capacity and standards.
- B. Sector-specific agencies may be needed when investment and/or transformation needs are significantly large.
- C. When central agencies are vested with multiple roles, capacity and conflicts need to be handled carefully.
- D. Distinct governance structures may be necessary to prepare and implement large complex projects.
- E. Building complementary capacity in GCAs is crucial for project preparation effectiveness.

A. Empowered central agencies can help institutionalise project preparation capacity and standards.

In the last few decades, as governments have increasingly looked to the private sector not just for infrastructure construction but also its management and service delivery through PPP arrangements, GCAs have been found wanting on many of the skills necessary to handle such arrangements. Further, in EMDEs with severe infrastructure gaps, GCAs typically do not have the institutional and financial capacities necessary to implement some of the larger infrastructure projects which are deemed necessary for development.

Therefore, as governments embark on large-scale infrastructure projects to correct this historical lag, the responsibility and capacity to drive this effort is often vested in a central agency as a means to provide focus for project preparation and implementation, as well as to build necessary capacity and institutional empowerment. The central agency, in some cases, is empowered by the specific PPP legislation.

Such an institutional intervention helps expedite the creation of standards, build institutional capacity to support GCAs in project preparation, and ensure a threshold level of quality project preparation. Such agencies are also often vested with driving the PPP agenda and attracting private sector investment through a focused development of capacity, both within themselves and within the GCAs they work with.

Central agencies, therefore, are often called upon to play a variety of roles, in putting into place institutional enablers for PPPs, including setting up and managing Project Development Funds (PDFs); enacting processes for engaging consultants and transaction advisors; supporting GCAs in project preparation and transaction advisory activities; managing the overall PPP program under the direction of the government; and capacity building of other public institutions. When equipped with commensurate capacity and empowerment through the delegation of powers, central agencies and PPP units can play a vital role in expediting infrastructure creation.

CENTRAL AGENCY MODELS: The Infrastructure and Projects Authority (IPA) in the United Kingdom and the Public and Private Infrastructure Investment Management Center (PIMAC) in Korea

The Infrastructure and Projects Authority (IPA), UK

Established in 2015, through the merger of Infrastructure UK (IUK) and the Major Projects Authority (MPA), the IPA has a long history of managing and delivering major infrastructure projects through its founding institutions. The merged IPA combines expertise in delivery, assurance and financing, helping to manage major infrastructure projects within one government entity, defined as the "UK government's centre of expertise for infrastructure and major projects." The IPA establishes the overarching framework for project preparation in the United Kingdom and formulates guidance that serves as standards for UK GCAs to prepare and implement projects. The IPA also undertakes quality assurance reviews for major projects, and supports capacity development and delivery support. It reports to Her Majesty's Treasury (HMT) and the Cabinet Office, and oversees general policy on project delivery and quality assurance of specific business case proposals.

The IPA does not implement projects but focuses on the overall project delivery system, which includes the projects, people and processes that together create the right environment for successful delivery. It is part of a wider institutional framework for infrastructure planning and delivery. HMT and IPA provide a variety of support tools to guide project preparation in the UK. While these are binding only on major projects that require HMT approval or projects that also solicit an independent review from IPA, most line agencies have aligned their project preparation activities with the best practice guidelines prescribed by HMT and IPA. The contributions of IPA and its predecessor entities include the following:

- **Setting project standards and good practice guidance.** This includes documentation related to all major aspects of project preparation and project evaluation, such as project initiation routemaps, independent assurance methodology and other technical guidance documents and templates.
- **Infrastructure delivery support:** The IPA has a team of commercial specialists that provide direction to the government and GCAs on all aspects of infrastructure delivery. The specialists can be deployed alongside project teams to strengthen client capability. The IPA also provides HMT and the Cabinet Office with commercial advice on business case approvals for specific projects.
- **Training and leadership development:** The IPA has partnered with Oxford Saïd Business School to create the Major Projects Leadership Academy (MPLA). MPLA aims to improve the ability of senior civil servants to lead major projects and is regarded as the gold standard for project leadership training. Over 400 professionals have enrolled in the MPLA, and 250 have graduated to date. In addition, the IPA has launched other project leadership training, apprenticeship and future leaders' programs.
- **Project leadership development:** In 2017, the IPA launched the Project Delivery Capability Framework (PDCF), which outlines a common language for the profession and defined career paths to help manage their careers. This framework is now being used by all major departments to help drive professionalism. In addition, the Government Online Skills Tool (GOST) supports the roll-out of PDCF by allowing individuals to assess their skills and competencies against any project role, and to identify development options. It is being used by over 4,000 project professionals and this number will grow following full roll-out.
- **Independent quality assurance:** The IPA uses independent experts for peer review and quality assurance of projects at critical stages, against a clear set of project standards. During 2017-2018, the IPA conducted 230 independent assurance reviews on the Government Major Projects Portfolio (GMPP) projects. The IPA has created an assurance review pool of over 1,600 independent assurance reviewers from across government and industry.
- **Performance review:** The IPA undertakes the Infrastructure Performance Review to identify ways the government, working with industry, can improve the quality, cost and performance of UK infrastructure, building on the Infrastructure Cost Review 2010–2014. The IPA supports the preparation of the National Infrastructure Development Plan, which brings together all of the government's infrastructure delivery priorities over the next five years, and the National Infrastructure Construction Pipeline, which is a forward-looking pipeline of planned projects and programs in economic and social infrastructure and housing.

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Public and Private Infrastructure Investment Management Center (PIMAC), the Republic of Korea

The role of the Public and Private Infrastructure Investment Management Center (PIMAC) in the project preparation process presents a case of continuous learning and adaptation. Created to enable the comprehensive and systematic management of both traditional public investment projects and PPPs, PIMAC is organised along three divisions, namely (i) the public investment division; (ii) the public-private partnerships division; and (iii) the policy and research division.

- The public investment division conducts and manages Pre-Feasibility Studies (PFS), supports policy research on public investment management and undertakes program evaluation and performance management of public investment projects.
- The PPP investment division formulates PPP Annual Plans and develops PPP guidelines, conducts evaluation of PPP projects, undertakes research on PPPs, supports financing and refinancing of PPPs, and undertakes capacity building and training.
- The policy and research division supports research on project evaluation methodology and project appraisal, and manages the Reassessment Study of Feasibility (RSF).

It has spearheaded multiple policy and process interventions to improve the quality of project preparation including the following:

- **Independent review process for project approval:** The PIMAC provides an independent review for project preparation by conducting various studies and evaluations including the PFS, RSF, Reassessment of Demand Forecasts (RDF) and Value for Money (VfM) analysis (for PPP projects). While the PFS provides an initial filter for project selection, the RSF and RDF reformulate and independently check outcomes of feasibility studies and demand forecasts. PIMAC assembles a multi-disciplinary expert team along with its in-house staff for these evaluations. The review leverages PIMAC's multi-sectoral internal know-how and brings in expertise from external stakeholders, including from KDI (project management), university professors (transportation demand analysis), and private engineering firms (cost estimation).

- **Stakeholder engagement in project development:** PIMAC's PFS studies are guided by a transparent stakeholder engagement process and follow a 'five meeting rule'. The five meeting rule includes i) Progress check meeting; ii) KDI 1st Check meeting; iii) MOEF 1st Check meeting; iv) KDI 2nd Check meeting; and v) MOEF 2nd Check meeting. The review covers MOEF, line ministries, PIMAC and field specialists from private and public sectors.
- **Mapping guidelines for preparatory activities:** PIMAC has formulated guidelines for all major project appraisal and approval processes, including the Basic PPP Plan, VfM test guidelines, RfP preparation, tender evaluation, Build-Transfer-Lease (BTL) project management, etc. In a bid to standardise output quality, PIMAC has also prepared standard output specifications by facility (schools, military housing, and integrated school facilities) and standard guidelines for PFS in general, road and railway sectors.
- **Risk distribution frameworks and cost management:** PIMAC has evolved revised risk-sharing mechanisms, including, for instance, incorporating lessons from the former Minimum Revenue Guarantee scheme, to enhance private interest while rationalising government support. PIMAC also undertakes resource (cost and time) reviews for large projects at each stage of the project lifecycle under its Total Project Cost Management (TPCM) framework.
- **Capacity building program:** PIMAC offers periodic capacity building programs for elected officials and technical staff. This includes domestic programs sponsored by PIMAC and MOEF or international programs by multilaterals or donor agencies. The objective is to inculcate learnings from PPP processes globally.

B. Sector-specific agencies may be needed when investment and/or transformation needs are significantly large.

While central specialised agencies can help create wider harmonisation of project preparation practices and guidelines, in many cases, sector-specific entities may need to be created or empowered, especially when large ambitious sector-wide programs need to be rolled out.

Sector-specific entities are particularly crucial when investment commitments are large, and where such investments are being managed as a multi-year long-term program. While such entities are typically vested with a project implementation role, strengthening their capacity to build rigour in project preparation becomes particularly crucial for consistently bringing high-quality projects to market.

SECTOR-SPECIFIC AGENCIES – EPL BRAZIL AND NHAI INDIA

EPL Brazil's role in project preparation for multi-modal transportation

While Brazil's national planning process resulted in alignment in project selection, project preparation was constrained by unclear criteria for project appraisal and independent reviews. To address this gap, the Brazilian Planning and Logistics Company (EPL), a public company, was set up in 2012, to support project planning and preparation for multimodal transportation. EPL works in coordination with the Ministry of Transportation and the Ministry of Planning and its key areas of support include:

- **Preparation of the National Logistics Plan and multi-modal plans** – EPL prepared a multi-year *National Integrated Logistics Plan 2035 (PNL)* identifying a portfolio of projects and a priority list of actions to debottleneck the sector. The PNL is prepared based on global best practices and simulates scenarios based on a dynamic four-step model, a tool that estimates inter-zonal traffic flows considering trip generation and distribution, modal choice and flow allocation.
- **Preparation of support studies for transportation projects** – EPL provides support to line departments in undertaking technical and financial studies for projects. EPL may hire external transaction advisors for the studies and ensures monitoring and quality review of these studies.

- **Driving innovation and quality assurance** – EPL has also brought in methodological and technological innovations to project studies, including the use of an updated transport matrix for viability assessment. EPL is developing an independent business case model for transport projects with technical assistance from the Government of the UK and the IPA. It has long-term arrangements with the International Finance Corporation (IFC) for technical and financial support.
- **Transparency in project preparation** – EPL mandates that detailed project information and project documents prepared by the entity shall be uploaded in the project portal. Further, every project is required to go through a public hearing process and make disclosures with respect to the changes in the project studies post public hearing. The cost of project studies for EPL may be reimbursed by the winning bidder in the case of PPP projects.

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NHAI India – Scaling up India’s national highways in a bankable and programmatic manner

The National Highways Authority of India (NHAI) was established in 1988 to develop, maintain and manage national highways in India. It came to prominence after it was mandated to develop 50,000 km under the National Highways Development Project (NHDP) and more recently an additional 75,000 km under the Bharatmala program. The NHAI has been instrumental in mobilising private funding for the development of highways and has pioneered a transition in infrastructure financing from traditional public procurement to PPPs within a very short period.

In the mid-nineties, PPPs in the highways sector received a lukewarm response from the private sector, owing to poor project preparation and a lack of standardised contractual frameworks. NHAI was among the first to introduce model concession agreements (MCAs) for national highways, under the Build-Operate-Transfer (BOT) model. Subsequently, NHAI has standardised MCAs for different modes of project execution, thus improving efficiency and transparency of risk-sharing.

Concurrently, NHAI has also developed and maintained a standardised set of procedures to be followed while undertaking project preparation activities.

NHAI also routinely hires external consultants or experts to prepare project preparation documents. To enable quality assurance, NHAI undertakes independent reviews of project feasibility studies, through a specialised team within NHAI or through the empanelment of peer consultants. As the apex agency for national highways projects in India, NHAI also routinely undertakes market consultation exercises, to glean feedback from developers, investors and bankers on the challenges faced by national highway projects and redressal mechanisms to be explored. As of 2018, NHAI has awarded more than 610 projects, of which approximately 300 projects were undertaken as PPPs.

C. When central agencies are vested with multiple roles, capacity and conflicts need to be handled carefully.

Central agencies often handle multiple roles, and this can create potential capacity and conflict of interest challenges.

The sheer size of the infrastructure challenge alone in most countries can overwhelm infrastructure agencies. Many of the agencies are vested with a multi-sectoral role and to deliver on their mandate, they have to deal with multiple GCAs, government departments and other stakeholders, often across different sectors and geographies. Second, in terms of their functional roles, these agencies are required to handle a variety of functions, including the formulation of guidelines and standards, procurement of consultants, planning for project preparation, oversight of feasibility evaluations and, in many cases, supporting GCAs through time-consuming PPP transactions. Therefore, there is a real possibility that the agency’s role can become diffused. With a diverse mandate, it can very quickly become overwhelmed, in terms of the sheer expectations and workload relative to its capacity.

Similarly, the possibility of conflicts of interest arising within such agencies is very real, given that they may often be called upon to play a role in identifying and preparing projects, while also being asked to provide inputs into the project reviews and approval process. Effectively, there could be a situation where the agency is asked to develop a project while also evaluating its feasibility. Conflicts may also arise when they have some form of public-private arrangement and where success fees are paid for closing transactions. Handling such situations becomes particularly challenging in the early stages, when capacity constraints may limit their ability to create safeguards in the form of separation across functions⁸.

To address these challenges, governments need to ensure that appropriate measures are put in place in respect of the creation and management of these central agencies.

1. **Clear mandate and business plan:** Central agencies should prepare annual and multi-year business plans to clarify the scope of their operations and activities under different categories of activities, for instance, under project preparation, and support to GCAs in transaction advisory.

⁸ http://web.worldbank.org/archive/website01021/WEB/IMAGES/311DUTZ_PDF

2. **Clear ring-fenced revenue streams:** The agency should be provided with clear and ring-fenced revenue streams commensurate with the scope of their mandate and operations.
3. **Transparent governance:** The agency should ideally have a corporatised structure and be governed by an independent board.
4. **Organisation and staffing:** Organisational structure and staffing should be commensurate, in terms of number and quality of staff, complemented with external experts as appropriate.
5. **Conflict management:** A well-formulated policy should be implemented to identify and address potential areas of conflict, including through clear functional separation and, wherever possible, avoidance of conflict by assigning the conflicting function to a different agency. Also, any policy-making roles that conflict with the nature of work done by the central agency should be ideally housed outside the agency, for instance, in the Ministry of Finance.

MANAGING CONFLICTS AND CAPACITY CHALLENGES

The Netherlands – separation of policy and project preparation roles

In the Netherlands, the policy and implementation functions are housed under separate distinct entities. While the Ministry of Infrastructure and Water Management (MIWM) oversees the drafting of policies for infrastructure development, project preparation and procurement is undertaken by Rijkswaterstaat, the implementing agency of MIWM. Rijkswaterstaat is responsible for the construction and maintenance of the main roads network, the waterway network and major water systems.

D. Distinct governance structures may be necessary to prepare and implement large complex projects.

The more complex a project, the more necessary it becomes to create an enabling structure operating outside of the government's bureaucratic framework. This helps with the compartmentalisation of efforts and financing, culminating in effective project delivery. In some cases, special agencies are set up for implementing such large complex projects, under which project preparation capacity is also undertaken.

DISTINCT 'PROJECT LEVEL' STRUCTURES

South Africa – REIPPP Programme

The Department of Energy (DoE) and the National Treasury's PPP Unit established the DoE IPP Unit to implement South Africa's ambitious Renewable Energy IPP Procurement (REIPPP) Programme. This unit functioned outside of the departmental structure and was staffed with cross-functional experts from both departments.

United Kingdom – Crossrail Ltd.

In the UK, major projects are often implemented through special agencies with their own budgets. For example, Transport for London (TfL), the local government transport body for Greater London, set up Crossrail Ltd. to implement new railway lines in London. Once completed, these lines will be transferred to TfL for operations.

India – Delhi Metro Rail Corporation Ltd. (DMRC)

The Delhi Metro Rail Corporation Limited (DMRC) was set up as a joint venture between the Government of India and the Government of the National Capital Territory of Delhi (GNCTD) in 1995 to construct a metro rail network for Delhi and the National Capital Region. This special agency was responsible for preparing and implementing projects to provide the city of Delhi and adjoining areas with metro rail connectivity. Phase I of the Delhi Metro covered 65 km and was constructed at a cost of US \$2.1 billion. The network of Delhi metro has since been expanded to over 350 km.

E. Building complementary capacity in GCAs is crucial for project preparation effectiveness.

Traditionally, the responsibility for infrastructure project preparation and implementation has been vested with the respective line departments and GCAs. However, even GCAs with relatively strong organisational and technical capacity have often relied on traditional public procurement processes and are often short on capacity and know-how to undertake PPP transactions.

As a result, a number of countries have created PPP units to address these gaps and to create a centre of excellence wherein such capacities are nurtured and housed. However, unless such capacities are widely created, a large-scale expansion of infrastructure could be severely constrained.

This is also evident in how countries like the United Kingdom and Korea, which were relatively early movers in creating central agencies (Infrastructure UK and its successor IPA in the United Kingdom, and PIMAC in Korea), continued paying considerable attention to strengthening capacity across a range of GCAs in different sectors. In both these countries, the agencies were not only responsible for individual project feasibility reviews, but for creating standards, guidelines and tools that were eventually adopted by other GCAs, including at the level of sub-national governments, leading to a harmonised replication of leading practices.

To sum up, a robust policy framework that provides stability, certainty and consistency of government commitment to infrastructure creation, coupled with an empowered and well-governed institutional framework that is able to effectively translate policy goals into bankable and implementation-worthy projects, forms the backbone of infrastructure project preparation. Nurturing an enabling environment for infrastructure project preparation starts here. The following chapter looks at another crucial enabler, the sustained and diversified availability of financing for project preparation.