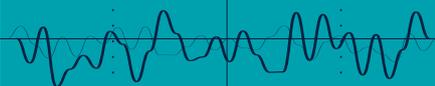


/06

Resilient PPP Procurement, Monitoring, and Contract Management



Following the structuring of a PPP, resilience can be further promoted in the procurement process and through monitoring, oversight, and contract management. Governments can establish DRM-oriented principles of project selection and award, design incentives for promoting resilience via bid terms and selection guidelines, and enforce resilience standards by regulatory oversight.

The procurement, monitoring, and payment systems are vehicles to incentivize DRM measures using performance requirements, resilience-oriented evaluation criteria for bid proposals, payment mechanisms that reward risk mitigation and management, and the imposition of penalties when operators fail to meet operational performance requirements or disaster readiness standards. Government can also ensure that the terms of designed contract adjustments (triggers, authority, and decision process for renegotiation) are met for parties to respond to disaster events and deliver assistance after a disaster event.

Output-based contracts can help encourage private entities to develop innovative ways to achieve required service performance, including in the area of DRM. If Requests for Proposals (RfPs) specify outputs, operators may be selected according to their capacities to effectively assess and manage project risks and determine appropriate responses to maintain the cost-performance balance of the PPP projects. Since there may be many options for inputs associated with targeted outputs, governments employing this approach must establish measurable indicators to assess whether outputs satisfy required standards. In Kenya, for example, the draft PPP manual recommends that PPP project specifications be designed on an output basis, and PPP procurement regulations stipulate that payments be linked to specific indicators.

Efforts that incentivize DRM through procurement, monitoring, and oversight mechanisms and penalty and reward systems, in combination, create stronger incentives for private developers to efficiently and effectively incorporate DRM principles and disaster readiness into project planning.

Key recommendations for policy makers are as follows:

- **Encourage private developers to formulate and implement DRM measures:**
 - Disclose disaster risks during the procurement process.
 - During the procurement process, encourage private developers to propose DRM measures as an additional basis of selection.
 - During the RfP stage, set qualitative or quantitative disaster resilience standards for private developers.
 - Consider output-based contracts to incentivize DRM innovation and reinforce resilience standards.
 - Facilitate competitive dialogue between public and private parties before and during contract negotiation to establish standards and the definition of force majeure.

- **Ensure resilience planning and design and effective contract management with independent professional assurance and technical support:**
 - Bidders may be encouraged or required to engage technical insurance specialists to guide bidding companies in procuring adequate disaster coverage, particularly since some disaster insurance products are complex.
 - Components of project proposals should be assessed and verified by an independent engineer (IE) after commercial close, during detailed engineering design, and throughout project implementation.
 - Engage the support of an IE in the event of a disaster to verify material impacts and assess claims for contract adjustment or relief and estimated recovery time.
 - If contract adjustments are deemed necessary or contractual mechanisms such as force majeure or relief are invoked, contracting authorities should engage experienced legal and technical advisors for appropriate advice and representation.
- **Design the regulatory oversight system, including penalties, rewards, and monitoring and audit, to facilitate DRM measures:**
 - Set the required engineering design standards and O&M standards such as key performance indicators (KPIs) on resilience in tender specifications to balance capital and operational expenditures over the asset lifecycle.
 - Enforce compliance with DRM requirements and contracted risk allocation arrangements by establishing an effective monitoring and audit system.
 - Monitor compliance with requirements for preparedness, insurance, and emergency response.
 - Design rewards for attainment of key DRM goals and standards.
 - Consider introducing penalties for noncompliance.

Useful Tools and Resources



Incorporating Climate Adaptation Risks to Performance Based Contracting

<http://blogs.worldbank.org/transport/addressing-risks-climate-change-performance-based-contracts>

BOX
2

Role of IE in Assessing Damage Loss Responsibility: Samakhiali-Gandhidham Toll Road in India

At the start of operations in 2015, the Samakhiali-Gandhidham Toll Road Project in India suffered revenue losses worth US\$68,000 and toll plaza damages worth US\$400,000. The damages were due to severe rainfall and flooding at the project site that led to closure of the toll plaza for more than 24 hours, thereby preventing toll collection.

Although the concessionaire invoked the force majeure clause, the IE reviewed the incident and determined that the damages and losses associated with the disaster resulted from the concessionaire's operational inefficiency. Specifically, the concessionaire had failed to follow the IE's earlier suggestion to upgrade facilities before the start of the monsoon season. Therefore, the authority did not provide a contract period extension, and the private developer bore the revenue losses.

Source: World Bank. 2018. Resilient Infrastructure PPPs – the India Country Brief.

BOX
3

Linking Payments to Disaster Risk Planning and Response in Japan

In Japan, contracting authorities have incentivized resilience building through a contracted system of payments to operators. For example, the project agreement for an education PPP in Sendai City, the School Meal Supply Center, specifies payment terms linked to recovery of services following a disruption, based on a points system. If a school meal supply service is maintained or quickly restored following a force majeure event because of the ingenuity and efforts of the operator, points that reduce the operator's compensation amount are decreased. When the Great East Japan Earthquake struck the area in 2011, the School Meal Supply Center restored service two months earlier than other affected facilities, mainly due to independent operator actions. While municipal staff had to deal with budgetary and administrative restrictions when restoring services to other affected buildings, the operator was not restricted by government budget procedures and could also leverage flexibilities in its supplier network. Because the private operator also had an economic motivation, namely the potential reduction of payment, it responded quickly to restore the facility and maintain the contracted revenue stream.

Source: World Bank. 2017. Resilient Infrastructure PPPs – the Case of Japan.