

# HOW CAN ePROCUREMENT SERVE PUBLIC-PRIVATE PARTNERSHIP PROJECTS, INCLUDING CONCESSIONS?





## **EXECUTIVE SUMMARY**

This article examines the feasibility of using electronic public procurement (eProcurement) tools to select a private party in public-private partnership (PPP) projects, including concessions. For the purpose of this article, PPP projects are discussed together with concessions (PPP projects/concessions). The challenges for governments mainly relate to (a) the relevance of international standards on procurement for PPP/ concession procurement, (b) identifying international standards for eProcurement applicable to PPP/concession projects and (c) applying international (and regional) standards on electronic commerce (electronic signatures, platforms and emerging technologies in and for trade, such as artificial intelligence, Internet of Things, big data analytics and distributed ledger technology) to PPP/concession projects.

# FEW OPERATIONAL DETAILS ARE KNOWN ABOUT USING ePROCUREMENT TO SELECT PRIVATE PARTIES IN PRACTICE. \*\*

Practical experience with eProcurement tools for PPPs, including concessions, is limited. As a result, few operational details are known about using eProcurement to select private parties in practice. Public procurement policy, concession governance and public-sector digitalisation standards, including the use of platforms, functional equivalence, technology neutrality or smart contracts, need to be revisited to explore the opportunities for eProcurement in PPP/ concession projects. For this reason, the Bank collaborates with the Sustainable Infrastructure Foundation, its SOURCE platform and interested governments in the EBRD regions to define a recipe for eProcurement for PPP/concession projects and inspire governments designing their PPP programmes to invest in digital governance tools for their PPP/concession projects.





1 ALEXEI ZVEREV<sup>1</sup> SENIOR COUNSEL, EBRD ZverevA@ebrd.com

### 2

ELIZA NIEWIADOMSKA SENIOR COUNSEL, EBRD NiewiadE@ebrd.com

1 The authors would like to thank Teresa Rodriguez de las Heras Ballell and Taras Boichuk for their contribution to this article.



## CHARACTERISTICS OF PPP TRANSACTIONS THAT AFFECT THE PROCUREMENT PROCESS

PPPs/concessions play a key role in government programmes designed to promote private-sector investment in infrastructure and delivery of public services. PPPs/concessions permit the mobilisation of private capital, expertise and know-how to complement state budgets and other public resources and attract direct private investment in public infrastructure and public services.

The United Nations Commission on International Trade Law (UNCITRAL) Model Legislative Provisions on Public-Private Partnerships defines PPP (Art. 2.a) as an agreement between a contracting authority and a private entity for the implementation of a project, against payments by the contracting authority or the users of the facility, including both those projects that entail a transfer of the demand risk to the private partner ("concession PPPs") and those other types of PPPs that do not entail such risk transfer ("nonconcession PPPs"). At the same time, the 2011 **UNCITRAL Model Law on Public Procurement** defines procurement as the acquisition of goods, construction or services by a procuring entity, and a procurement contract as a contract concluded between the procuring entity and a supplier (or suppliers) or a contractor (or contractors) at the end of the procurement proceedings.

Therefore, the main features of PPP/concession projects that distinguish them from regular public procurement contracts to purchase goods, services or works are their complexity; focus on delivery of workable public infrastructure or public services over a long-term contract; development (or significant upgrade or renovation) and management of a public asset (including potentially the management of a related public service) as well as the structure of the transaction. Furthermore, the private party bears substantial management responsibility and risks through the life of the contract and typically provides finance, which is at risk. Remuneration by definition is largely linked to performance and/or the demand for or use of the asset or service. The question remains how this contractual complexity, performance-based remuneration and longevity of PPP/concession public contracts affect the procurement process, which otherwise has all the features of standard procurement.

# <sup>66</sup> GIVEN THE LARGE SCALE OF MOST INFRASTRUCTURE PROJECTS, IT IS COMMON FOR MULTIPLE OPERATORS ORGANISED IN CONSORTIA TO TAKE PART IN CONCESSION PROCUREMENT PROCESSES. <sup>99</sup>

First, the pre-selection criteria must identify and describe the necessary professional, technical and environmental gualifications. professional and technical competence, personnel, experience and managerial capability to carry out all phases of the project. Second, the period to submit, prepare and revise proposals should be commensurate with the complexity of the project. Third, subsequent variations in the specifications or other requirements of the project cannot be excluded. Finally, awarding procedures must be appropriate. Unlike smallscale projects, complex infrastructure projects may require the use of consultation or dialogue mechanisms with potential bidders to help formulate specifications and evaluation criteria.

Given the large scale of most infrastructure projects, it is common for multiple operators organised in consortia to take part in concession procurement processes. Selection criteria, review and contract award rules should be adapted accordingly.

Several studies identify similarities in standard public procurement practices, but also important differences. In essence, a selection process of the private party in concessions/PPPs relies on similar legal instruments: qualification requirements (legal qualification, financial-economic capacity criteria, technical capacity or experience) and evaluation criteria (price only or price and quality) as standard public procurement contracts. Multi-criteria evaluation is strongly recommended, as the characteristics of concession projects developing, maintaining or operating public infrastructure or a facility and providing public services - require various criteria for a proper evaluation and comparison of proposals. Price is not the primary evaluation criterion, insofar as environmental sustainability, technical soundness, continuity requirements or social and economic development potential can be crucial policy goals in the procurement process. International standards as provided for by UNCITRAL instruments on public procurement differentiate evaluation criteria for the selection under PPP/concession projects from standard state budget-funded procurement.

Model Provision 19 of the UNCITRAL Model Legislative Provisions on PPP classifies evaluation criteria in those related to the technical elements of the proposals and those related to the financial and commercial ones. For the evaluation of the technical elements of the proposals, the following criteria shall at least be included: (a) technical soundness, (b) compliance with environmental standards, (c) operational feasibility and (d) quality of services and continuity-ensuring measures. For the evaluation of financial and commercial elements, relevant criteria should be considered, such as the value of the proposed tolls, unit prices and other charges or of the proposed direct payment by the contracting authority; the cost of the procured works; any financial support; proposed financial arrangements; social and economic development potential and even the extent of acceptance of the negotiable contractual terms recommended by the contracting authority in the request for proposals.

Also, user-pays PPP/concession projects require different procurement methods than governmentpays PPP/concession projects. In the case of user-pays PPP/concession projects, the procurement process gives more weight to the qualification and selection of interested participants (Figure 1 below shows key features of the tender for user-pays concessions) and open tendering with pre-qualification or selective tendering/restricted tender with pre-selection are recommended. For government-pays PPP/ concession projects, procurement focuses more on bid evaluation criteria, to facilitate better value for

Figure 1: Key features of procurement process for user-pays concession. Source: EBRD

PIN, NDA data room and market consultation	Marketing and market consultations module to promote the project with investors, contractors and lenders before tender launch	NDA data room for investors
Registration and long-listing (eligibility check, minimum qualification requirements, NDA)		
Pre-selection of EOI/application (shortlist)		
Bid submission (self-declaration for technical requirements with bid bond)	Pre-selection module to check (1) financial-economic capacity of potential bidders and their (2) technical capability	Automated eligibility check and NDA to ensure that applications are compliar with the requirements specifie in part 4 of Art. 12 of the Concession Law (legal
Multi-criteria online real-time bidding (technical proposal, commercial offer (financing offer) and financial offer (minimum investment and other criteria)		
Evaluation by tender committee	or experience	qualification)
<ul> <li>Bid bond verification</li> <li>Technical proposal evaluation (evidence for self-declaration for technical requirements)</li> <li>Financial bid evaluation</li> </ul>	Integration with online digital project preparation and management tools (SOURCE)	Multi-criteria online automated bidding for (1) price criteria to evaluate the technical bid. Should allow working with NPV
Award notice	Contrast management	
Contract clarification and signing	module to ensure that the private partner is meeting the performance standards and KPIs during the contract term	EOI: expression of interest
Contract registration, administration and performance management		KPI: key performance indicate
		NDA: non-disclosure agreeme
		NPV: net present value
		PIN: prior information notic

money and price-quality ratio of bids (Figure 2 shows key features of the tendering process for government-pays PPPs). As a result, open tendering with pre-qualification is more frequently used.

In addition to the fairly standard public procurement policy considerations listed above, a procurement process for PPP/concession projects emphasises (a) defining qualification requirements and evaluation criteria in extensive communication with the market, (b) testing, marketing and communicating the project to the market well before the project launch and (c) allowing only qualified participants of the selection process invited to submit a bid to access certain financially sensitive project information. These are instruments known and described in international legal instruments for public procurement, but not widely used for typical public procurement contracts. However, another feature of PPP/concession projects – final negotiation of the technical, legal and financial aspects of the bid and so-called financial closure of the deal – is heavily restricted or expressly forbidden under public procurement rules for standard state-funded procurement.

#### Figure 2: Key features of procurement process for government-pays PPP. Source: EBRD



NDA: non-disclosure agreement

PIN: prior information notice

## WHY ePROCUREMENT?

eProcurement systems/platforms are designed to perform functions of the public procurement process with the assistance of digital technologies. eProcurement solutions vary from simple information-providing electronic websites to last-generation digital platforms supporting sophisticated procurement processes and using automation, robotics, artificial intelligence and other emerging technologies. Simple eProcurement systems supplement the manual public procurement process with online communication or online workflows for selected stages or tasks of process stakeholders to reduce some transaction costs without substantially altering the procedure. The latest generation of digital eProcurement tools represents a reshaping of the national procurement system and its transition to the digital economy. Digital eProcurement systems are designed, deployed and implemented as an end-to-end electronic process entrusted with the performance of all steps of the procurement process online.

On the global level, eProcurement is promoted by the regulatory standards of the 2011 UNCITRAL Model Law on Public Procurement and the 2012 text of the World Trade Organization's Agreement on Government Procurement, while the Organisation for Economic Co-operation and Development recommended eProcurement to its members in 2015. The European Union (EU) mandated a certain level of eProcurement for member states in the 2014 directives on public procurement and promotes these policies externally by incorporating eProcurement requirements in relevant EU bilateral trade and association agreements. Although global rules on eProcurement are incorporated in regulatory frameworks for public procurement, eProcurement tools are not advanced enough everywhere to support all types of procurement methods. The Covid-19 pandemic accelerated development and implementation of eProcurement tools imposing remote working, less printing and paperwork in general and generalisation of online signature of contracts.

# <sup>66</sup> ePROCUREMENT IS ALSO A RESULT OF GROWING DEMAND FOR MORE TRANSPARENCY IN PUBLIC PROCUREMENT, NECESSARY TO FIGHT CORRUPTION. <sup>99</sup>

eProcurement is also a result of growing demand for more transparency in public procurement, necessary to fight corruption. Concerns about corruption, arbitrariness in awarding public contracts and/or lack of professional procurement capacities among public-sector officials guide the policy decision on accelerating the digital transformation of public procurement. Digital eProcurement tools, automation in the evaluation process and accessibility of public procurement open data throughout the entire procurement process are effective corruption-mitigating tools.

## ePROCUREMENT FOR PPPS, INCLUDING CONCESSIONS: SUITABILITY, BENEFITS AND CHALLENGES

Despite some potential advantages of eProcurement for PPP/concession projects, namely in terms of lower transaction costs, process efficiency and fighting corruption, progress has been slow.

The use of electronic communication in the procurement process for PPP/concession projects does not cause any specific difficulty and can be delivered under very simple eProcurement solutions. The problem starts with prequalification and qualification, where more comprehensive and advanced eProcurement digital tools are required for PPP/concession projects. In practice, the use of eProcurement (including automatic selection of the private partner/concessionaire) has been very limited worldwide.

However, the recent rapid development of digital eProcurement tools incorporating emerging technologies has enabled eProcurement to reach PPP/concession projects. This is because modern digital eProcurement systems can deliver online sophisticated, multi-stage procurement processes and effectively support online prequalification and pre-selection as well as multicriteria evaluation methodologies. Key features of the procurement process for user-pays and government-pays PPP/concession projects, as described in Figures 1 and 2, are becoming available as default offerings of last-generation digital eProcurement systems.

New-generation eProcurement tools enable multi-attribute qualification and selection as well as evaluation with multiple non-price values required by public infrastructure projects. The selection stage is based on an assessment of the performance of the competing providers against a predetermined list of evaluation criteria, on the basis of a predefined framework of the weight, relevance and priority of such criteria. Such a selection process in public procurement may greatly benefit from data-driven electronic decision-making. Digital technologies, particularly robotics and automation, accelerate the processing of large amounts of data and information provided by selection participants. Multi-attribute auctions and multi/bilateral negotiations are possible models for

concessions/PPPs. New technology means multi-criteria auction engines perform well with complex projects and it can handle high numbers of bidders. At the same time, the synchronous multi-criteria online bidding characteristic for auction models is driving economic value (cost savings and profit gains) and makes it possible to include non-financial and social aspects in the evaluation methodologies.

Finally, EU policies on digitalisation of public procurement have a significant impact on the procurement of PPP/concession projects, especially for the procurement process of nonconcession PPP projects. EU policy does not distinguish between non-concession PPPs and standard public procurement of works and services, and except for concessions as precisely defined in the 23/2014/EU Concession Directive, all types of work or service contracts are to be considered as public procurement as far as the procurement process and contract award are concerned. Non-concession PPPs in EU member states (and associated countries) are therefore subject to national public procurement laws and have to follow the digitisation trend of the public procurement markets as prescribed by the 2014 EU directives on public procurement. Also, some EU member states and candidate countries (Estonia, North Macedonia, Slovakia) decided to directly apply the standard public procurement rules to all PPP/concession projects.





## A RECIPE FOR ePROCUREMENT FOR CONCESSIONS/PPPs

eProcurement for PPP/concession projects explores, leverages and selectively applies the widespread, entrenched and market-tested solutions for electronic procurement in the platform economy: electronic marketplaces, electronic trading systems, aggregators and comparators, smart contracts, recommender systems, ranking, rating and scoring.

Specific international legal standards on communications, attribution of legal effects, authentication, transfer of rights, negotiations or liability are available in UNCITRAL MLEC, MLES, MLETR and CEC<sup>2</sup> and guide most practical steps in the design and operation of eProcurement for PPP/concession projects.

In addition, in-force and ongoing regional proposals on digital service providers, hosting services, online platforms and specific rating or recommender systems enable the future of eProcurement systems for PPPs as well as concessions as sophisticated digital ecosystems fed by data, driven by algorithm and artificial intelligence solutions and that are adaptative, reliable, dynamic and properly monitored. In essence, developments in policy and emerging technologies teach us that the complete digitisation of procurement process for the PPP/concession projects is possible and it can be facilitated.

The Sustainable Infrastructure Foundation and its SOURCE platform promote one of the recently explored approaches. The SOURCE system is a multilateral platform for sustainable infrastructure led and funded by multilateral development banks. The SOURCE system supports the development of well-prepared projects to bridge the infrastructure gap and government digitalisation agendas. It provides a comprehensive map of all aspects of the preparation of sustainable infrastructure, for both standard procurement and PPPs, covering governance, technical, economic, legal, financial, environmental and social issues. It uses sectorspecific templates covering the stages of the project cycle, spanning from project definition to

UNCITRAL Model Law on Electronic Commerce 1996 with Guide to Enactment (MLEC), UNCITRAL Model Law on Electronic Signatures 2001 (MLES), UNCITRAL Model Law on Electronic Transferable Records (MLETR), United Nations Convention on the Use of Electronic Communications in International Commerce (CEC) approved by General Assembly Resolution 60/21, of 23 November 2005 (https://uncitral.un.org/en/texts/ecommerce).

operation and maintenance as well as allowing the definition of specific targets to fulfil the Sustainable Development Goals and the Paris Agreement.

Why may the SOURCE system facilitate the use of eProcurement in PPP/concession projects? Because the platform provides tools for procurement process instruments that are typically non-standard for eProcurement platforms designed to support public procurement procedures, but essential for procurement of PPP/concession projects.

In particular, the SOURCE system provides data repositories and tools for defining qualification requirements and evaluation criteria in communication with the market, guides testing, marketing and communicating the project to the market before the project launch and, when required, provides virtual non-disclosure



Figure 3: End-to-end digital project cycle, from project definition, through eProcurement to digitised contract management for operation and maintenance of assets. *Source: EBRD* 



agreement data rooms to control access to sensitive project information. Therefore, a simple and far-reaching solution to introduce eProcurement to PPP/concession projects is to integrate a national-level eProcurement platform (or platforms) with the SOURCE system.

With this integration, as described in Figure 3, the SOURCE system serves non-standard parts of the procurement process for PPP/concession projects (project appraisal, non-disclosure agreement data room, market consultations, preparation of the tender), while a national eProcurement platform (or platforms) supports standard procurement processes of single-stage or two-stage tenders. Courtesy of cloud-based applications, the entire process is seamlessly integrated into a single window for all end-users/ process stakeholders.

This is possible in practice when a national eProcurement system (or systems) belongs to the latest generation of digital eProcurement tools, is cloud-based and uses the same data standard as the SOURCE system – an open data standard for public procurement – Open Contracting Data Standard or OCDS.

The second condition for this rapid implementation of eProcurement in the procurement processes for PPP/concession

projects is the availability of multi-attribute gualification, selection and evaluation among the functionalities of the national eProcurement platform(s). This too is facilitated by governance guidance embedded in the SOURCE system and it helps the project team access relevant standards for tender preparation and formulation of wellprepared gualification and evaluation methodologies. In the future, the SOURCE system may consider development of more eProcurement add-ins to provide not only support to project definition, tender preparation and contract management, but also a specialised standardised qualification and evaluation tools for the procurement process for concessions/PPP projects. This way, it enables integration with literally any national eProcurement platform.

The integration idea based on the interoperability data standard has great practical potential, and several governments in the EBRD region have expressed interest in collaborating with the Bank and the Sustainable Infrastructure Foundation to try the approach. The Legal Transition Programme, together with the EBRD Sustainable Infrastructure, is working on a conceptual design of eProcurement policies enabling a pilot of eProcurement for the concession/PPP procurement process by integrating a national-level eProcurement system with the SOURCE platform.

