**Moldova - Policy advice and support in legislative drafting for eProcurement reform**

**TERMS OF REFERENCE**

**Audit of the MTender Pilot Phase 2 – Consultant**

# Background

The implementation of digital processes in the field of public procurement ensures improvement of the transparency and efficiency of procurement of goods, works and services and benefits all stakeholders of public procurement processes: the Government, business community and citizens who use public services.

The introduction of a comprehensive planning-to-payment electronic public procurement enables digital standardized procurement processes, a decrease in time of the selling-buying cycle and encourages participation in public tenders by suppliers, service providers and contractors as well as helps to create a transparent relationship between the Government and the local business community, in particular small and medium-sized enterprises.

In July 2018 the Government of Moldova adopted technical concept of the planning-to-payment electronic procurement system (MTender) and is presently undertaking a pilot of MTender. MTender is a multi‑platform digital procurement service it, comprising a cloud-based government‑operated OCDS Open Data central database unit and a web porta, networking with several commercial electronic procurement platforms certified to support electronic tendering for public sector and commercial clients. In October 2018 Phase 2 of the pilot has been initiated and it supports digital procurement process, from procurement planning to public contract registration in the public contract register and the Treasury of the Republic of Moldova for four basic procurement methods - request for quotation, request for proposals, electronic reverse auction and negotiated procedures without publication. It also provides for electronic contracts services for any awarded public contract regardless its type or value.

# Public procurement reforms in Moldova

On 14 December 2016, the government of Moldova approved the Strategy on Development of a Public Procurement System in Moldova covering the years 2016-2020. The objective of this reform is to align national legislation with the European Union Procurement Directive (EUPD 2014), reorganising the Public Procurement Agency and setting up the National Complaint Settlement Agency. Moreover, the strategy promotes the introduction of an eProcurement system and strengthens the capacities of contracting authorities and civil servants involved in the public procurement process.

The public procurement reforms are being undertaken within international commitments the Republic of Moldova under the Association Agreement (AA) between the Republic of Moldova and the European Union and the World Trade Organization’s Agreement on Government Procurement (2012 GPA), which entered into force on 14 July 2016. New primary law on public procurement entered into force in May 2016 and further amendments were adopted in July, September and October 2016 and July and December 2018. With further legislative changes scheduled, Moldova is required to implement the GPA mandatory requirements and the 2014 EU public procurement directives (EUPD 2014) by January 2020. Regulatory changes introduced in 2018 relate to introduction of mandatory use of electronic public procurement.

Work on implementation on electronic public procurement began in 2016, and a memorandum between the Government of Moldova, civil society, and private sector on developing a networking digital procurement system was signed on 30 November 2016. In April 2017, a pilot of the MTender was launched, covering electronic bidding for low value procurement. Supported by the EBRD, the MTender pilot attracted public and commercial buyers and successfully tested brand new concept of cooperative public service delivery based on Open Government values of transparency, accountability and engagement with stakeholders. In March 2018 online contracts and contract register were introduced. From October 2018, new types of electronic procurement procedures are becoming available on the MTender, to suit different types of contracts and serve different public and commercial buyers, including state‑owned enterprises.

# Objectives of the assignment

The primary objective of the Consultant is to undertake an audit of Mtender pilot implementation against requirements formulated in the terms of reference for MTender and technical concept for MTender adopted in July 2018.

# Scope of Work

The audit should include a review of business processes implementation and an IT audit of functionalities as enabled by Phase 2 of the pilot implementation of the MTender, including the OCDS open data requirements for the contract register (Advanced OCDS Plus).

More specifically, the following will be covered under the audit:

a) system alignment to the established functional and technical requirements of MTender, including key reporting requirements and data lineage;

b) system security; and

c) operational model (based on the collaboration between the government-appointed MTender Operator and Networking Electronic Procurement Platforms (the NEPPs), in respect to roles and responsibilities of key MTender partners), including continuous monitoring.

The Consultant will be responsible for conducting a review of the following areas:

* Assess Business Requirements documentation to ensure that each requirement is uniquely identified, and cross referenced in the System Specification, if applicable and the Acceptance Test Plan.
* Analyse the Technical documentation of the MTender system and ensure it reflects the complete development and operation of the system. This includes technical architecture, system specifications, integration requirements Test Plan Strategy, Test Scripts, Database Dictionary, Acceptance Test Sign Off, Issue Logs, etc.
* Review IT system security policy, including 1) IT security function, 2) Network and remote access of the IT system control, 3) Cryptographic key management, 4) Authorization of IT functions (i.e. developers, system administrators etc.), 5) Password policy, 6) Applying malicious code protection and 7) Logical Access Control, etc.
* Identify application-level risks, including:
  + System availability risks relating to the lack of systems operational capability;
  + System security risks relating to unauthorised access to systems and/or data;
  + System integrity risks relating to the incomplete, inaccurate, untimely, or unauthorised processing of data;
  + System maintainability risks relating to the inability to update the system when required in a manner that continues to provide for system availability, security, and integrity;
  + Data risks relating to its completeness, integrity, confidentiality, privacy and accuracy.
* Review MTender operational processes, including:
  + Disaster Recovery and Business Continuity
  + Service providers’ relations management
  + Equipment suppliers’ relations management
  + Configuration management
  + Incidents management
  + Business Process Evaluation and Risk Management
* Assess the adequacy of data conversion, the integration of new systems and the ongoing system maintenance process.
* Understand the applicability of the various development methodologies and tools e.g. SDLC, Waterfall, Agile etc.
* Review of the application development and implementation process for appropriate use of:
  + Application design and architecture based on the associated risks and controls inherent with each approach;
  + Application change control both during the development and in the post implementation phase;
  + Segregating of duties;
  + Input and output controls;
  + Quality assurance and testing techniques;
  + Protection of source code and data during development and testing;
  + Documenting business process flows, entity relationships, database structures and modelling techniques;
  + Built in controls using file structures, interface design and reporting;
* Review programming and testing processes at a higher level for adequacy of approach and applied controls.
* Assess build versus buy decision making and the related vendor evaluation and contract negotiations, if applicable. Review application development methodologies and practices to improve subsequent system developments, in respect to:
  + Disaster Recovery and Business Continuity
  + Service providers’ relations management
  + Equipment suppliers’ relations management
  + Configuration management
  + Incidents management
  + Business Process Evaluation and Risk Management

# Outputs

Upon completion of the above Scope of Work, the Consultant should issue the EBRD a Draft Audit Report detailing key findings, risks, practical recommendations and conclusions for mitigating risks, improving controls, quality, security and architectural issues of MTender. The Consultant should also review the MTender system documentation, as appropriate for distributed architecture system and identify missing key points and provide recommendations for its improvement.

A Draft Audit Report will be presented to the MTender pilot partners (Ministry of Finance of Moldova, NEPPs and the MTender Operator) for review and comments to be provided within 14 calendar days.

Upon receiving the feedback, the Consultant will prepare a Final Audit Report and submit it to the EBRD and the MTender pilot partners.

# Institutional arrangements

The Consultant will work under the direct supervision of the e-Government Agency of Moldova and together with representatives of the Ministry of Finance, the MTender Operator and the EBRD TC project team responsible for the MTender pilot.

# Resources

The Consultant will use his or her own resources regarding working space, office equipment and communication facilities (including access to the Internet), since this is an off-site position.

When the Consultant is required to travel, the EBRD will cover the travel and accommodation expenses. When work within the premises of the MTender Operator is requested, resources will be provided by the Ministry of Finance of Moldova.

# Qualification requirements and evaluation criteria

* The Consultant shall be an independent professional, with no prior involvement in piloting of the MTender nor any other eProcurement or OCDS implementation in Moldova and bearing no conflict of interest for the performance of the audit.
* A good understanding of IT Governance requirements including some experience of performing other similar audit assignments that have involved the use ‘best practice’ i.e. ISACA, COBIT;
* A good understanding of open data and open government concepts and their bearing for design and development of digital government services;
* University degree in areas such as computer sciences, engineering, telecommunications or related;
* Demonstrated experience in the audit of complex IT systems and applications (10 years)
* Extensive knowledge of automated software testing tools (ACL) and the Software Testing Life Cycle (STLC)
* Demonstrated experience in the implementation of ICT systems (10 years);
* Familiarity with software development lifecycle, enterprise architecture, cloud computing and SOA concepts;
* Experience with development organizations and public-sector reform in an international context would be an asset;
* Excellent communication skills, written and spoken in English;
* Excellent time-, team-, meeting- and conflict- management skills;
* Strong self-organization and planning skills;
* Autonomy and ability to work with minimum supervision;