

20: Tender and Invoice Monitoring System (E-Tendering)

Introduction

The term e-Procurement refers to the use of electronic systems to handle any or all steps of public procurement process. According to the World Bank (2003b), e-Procurement is defined as: "the use of information technology (especially the internet) by governments in conducting their procurement relationships with suppliers for the procurement of works, goods, and consultancy services required by the public sector." The process is further categorized in three sections:

- i. Publication of tender documents through a web portal (e-publication);
- ii. Electronic submission of bid documents by suppliers (e-tendering);
- iii. Vendor selection and transaction processing based on electronic catalogs (e-catalogs).

Government agencies tend to use ICT to handle one or more procurement steps initially, and then roll out the application of ICT to include additional steps in a phased manner over time. With time, the functional coverage of e-procurement tends to expand toward end-to-end coverage.

There are issues in the current procurement practices in DISCOs that consequently results in the delay of provision of material/equipment (new connections) which ultimately delays the provision of services to the electricity consumers. As a result of decision taken by the cabinet during meeting held on 27-04-2021, a project for early supply of equipment to consumers is being planned:

1. Issues with the current procurement of material/equipment practices in DISCOs

Current procurement processes have following potential issues.

- a. The material/equipment procurement is delayed until registered demand quantities does not surpass threshold quantities to ensure economically viability of tendering process as per PPRA rules.
- b. The DISCOs prequalify vendors to reduce the tendering process (single stage single envelope, single stage two envelope, two stage two envelop, limited inquiry) as per PPRA and book of financial powers o DISCOs; however, as the process is completely manual causing unnecessary delays.
- c. In case of imported material/equipment, USD fluctuations impact the tendering process as either vendor's participation is restricted or quoted prices (quoted prices are in PKR inclusive of taxes) are higher which result in scarping the tender.
- d. As per commercial procedures, the material/equipment, which is installed in the field (new connections), require obligatory compliance with DDS technical

standards, issued by design and standards section of NTDC. The compliance process a.k.a. prototyping may take up to 6 months or even more due to non-availability of testing lab facilities which are at present used from different scientific testing facilities e.g. PCSIR, AWC etc.

- e. Moreover, prototyping certificate for the material/equipment is issued which is valid for two years only. The vendors are required to carry out fresh prototyping every two years. The cost of prototyping charged by the NTDC D&S is 0.5% of the total tender value, which is passed on to the consumers in the quoted prices by the vendors.
- f. The MM sections does not use material/equipment demand forecast for procurement planning despite the fact that four SAP and Oracle ERP MM modules are implemented and being implemented in 7 DISCOs (MEPCO, LESCO, FESCO, IESCO, GEPCO, SEPCO, PESCO).

2. Delayed service due to current procurement practices

Due to the above-mentioned issues in current procurement strategies, the availability of material/ equipment in store is delayed. The consumers even after having paid the DN does not get the services (new connections: domestic, commercial, industrial, electrification of new societies) and this causes not only customer dissatisfaction but also the revenue opportunity lost for DISCOs.

3. History of earlier experimented system

The seven DISCOs (MEPCO, LESCO, FESCO, IESCO, GEPCO, SEPCO, PESCO) have implemented or in phase of implementing the SAP/Oracle Material Management ERP modules. These systems are fully capable of generating the demand forecasting based on historical demand data taking into account seasonal trends. However, due to prevailing procurement commercial procedures where procurement process is initiated based on the threshold of hard demand received and cumulated, the process takes time and consequent, service to the consumer is delayed as well as a revenue opportunity loss for DISCOs. If the DISCOs use the demand forecasts generated through SAP or Oracle based MM modules in present ERP implementations for procurement planning, significant time gain in service delivery to consumers and revenue opportunity for DISCOs may be capitalized.

4. Objectives of e-Tendering Process

The Objective of e-Tendering system for DISCOs is to achieve economies of scale, transparency, economy, quality and efficiency in public procurements.

E-Tendering is the purchase of goods, works and services electronically a.k.a. automation of the manual procurement system. The focus is on automating procurement while providing integration with the ERP/SCM system in compliance with PPRA rules. This will benefit by reducing the cost of placing a purchase order and wider competition, transparency, economy and efficiency in public procurements.

E-Tendering system span following services:

i. Suppliers registration/pre-qualification/Tender advertisement

A unique user name and password will be assigned to each supplier upon request. The supplier will bid against a specific tender after logging into the system. The suppliers will be categorized into goods, works and services (including consulting services). Considering the history, background, financial condition and relevant registration with an appropriate forum / body, the suppliers will be further prequalified for bidding against the tenders. The supplier may be added to the category of black listed suppliers if a supplier fails to meet quality or found in litigation. This will save a lot of time of the procuring agencies thereby making the procurement process hassle free and effective.

- * Suppliers will register with the DISCOs
- * Pre-Qualification
- * Online advertisement of Tenders

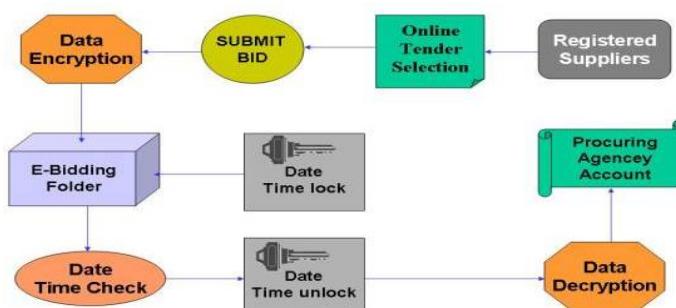
ii. Document downloads, SBDs / Contract Forms

All SROs, manuals, PPRA rules, e-Forms etc. document will be provided on website for all stakeholders to ensure transparency along with online query system for suppliers and PPRA.

iii. E-Procurement

Suppliers will submit bids online thereafter they will be uploaded and Encrypted using advance security system (security services can be hired from a third party) the same will be decrypted after bid maturity i.e. date of bid opening. The technical bids evaluation will be done electronically through workflow; however, financial Bid will be opened in the presence of bidders and it will be uploaded through online workflow. The technically unsuccessfully bidders will be notified

- * Online technical bid submission
- * Security / Encryption/ Decryption
- * Bid upload through online workflow
- * Bid evaluation through online workflow
- * Automated notifications to the bidders with financial opening invitations
- * Financial bid opening and uploading through online workflow
- * Financial evaluation results will be uploaded through online workflow
- * Award of purchase order will be automated



iv. E-Tendering Integration with ERP/CRM

The DISCOs will make sure that e-Tendering system will be integrated with ERP/CRM system.

**Note PPRA has an approved e-procurement process that is available at <https://www.ppra.org.pk/epro.asp>*