Executive Summary

The State Government implemented online tendering during the year 2008 by using Government e-Procurement System developed by NIC (GePNIC). The audit of this application was conducted to assess whether the e-procurement system has been effectively implemented and utilised to achieve the objectives of promoting competition, transparency and accountability. Further, Audit also assessed whether business rules have been adequately mapped onto the system; completeness, integrity, and reliability of data in the system was being maintained and adequate controls have been built into the system.

The major Audit findings are as under:

- 1. Government has not signed any service level agreement with NIC for development and implementation of the GePNIC. NIC could not complete the implementation of modules such as Vendor Management, Indent Management, Contract Management and Catalogue Management. In the absence of any agreement, no action could be intiated to reap the intended benefits of the system.
- 2. Significant business processes such as tender evaluation (both technical and financial), negotiation with vendors, and award of contract are still being carried out manually, instead of through the e-Procurement system. As a result, the objective of eliminating human interface for these key processes has not been achieved. In the absence of application controls for these processes carried out manually, Audit noticed instances where Tender Inviting Authorities (TIAs) had manually increased the bid amounts submitted by bidders after downloading the financial bid (Bill of Quantities) from e-Procurement portal and excluded the L1 bidder from consideration at the time of award of contract.
- 3. Business rules have not been fully mapped into the e-Procurement application. Provisions for enforcing the prescribed minimum period for submission of bids from the time of publication of tender, defining threshold limits for two-cover tendering system, preventing and detecting splitting of works by TIAs have not been implemented in the system.
- 4. There are deficiencies in key application controls implemented in the e-Procurement system. These deficiencies have resulted in instances where bids are being submitted after closing time, bids being decrypted by users other than those designated for the purpose, violation of chronological and logical sequencing of timestamps for creation and updating data in the system, BoQ awarded not matching the BoQ specified in the tender, and contract value awarded being higher than the L1 bid amount.
- 5. There are significant lapses in user access management at the front end and in the maintenance of logs to record user actions at the back end of the application due to which, Audit was unable to rule out unauthorised

modification of data and derive assurance on the completeness and correctness of the data in the system.

The objective of the e-Procurement system was to eliminate human interface; bring transparency in the functioning of tendering activities; facilitate faster dissemination and easy access to information related to tenders; and provide a fair, competitive platform that would safeguard authenticity and enhance efficiency in procurement. Owing to the deficiencies as pointed out by Audit, in this Report, there was a material risk of commission of errors, deliberate irregularities like irregular increase in value of work by exclusion of eligible L-1 bidder and accepting higher bids by the Tender Inviting Authorities and Tender Evaluation Committees when carrying out these processes manually. Deficiencies in input controls in the system resulted in registration of bidders with invalid/incorrect PAN and Digital Signature Certificates (DSCs). During the course of audit, instances of mapping of multiple user IDs with same PAN/DSCs were also noticed making the system prone to manipulations by submission of multiple bids by same bidder. Lack of sufficient system security resulted in submission of bids after expiry of tender closing dates. Deficient system security exposed it to the risk of manual intervention in modification of bid data and change in bid openers, and defeated the very purpose of implementation of e-Procurement System.

Recommendations

Considering the audit observations, it is recommended that:

Government may

- Ensure execution of Agreement/ MoU with NIC, to ensure clarity on timelines, deliverables and service levels.
- Implement the remaining Modules of the e-Procurement system and fully map all the relevant business rules into the system, to ensure that technical and financial evaluation and award of contract is only carried out through the system.
- Integrate WAMIS and CDMS with e-Procurement system, to minimise the risk of manual errors/ deliberate irregularities.
- Adopt the revised threshold value of ₹1 lakh for mandatory e-Procurement as prescribed by Department of Commerce, Government of India.

Government may implement appropriate validation controls for user access management during the registration of bidders, to ensure that

- Valid DSCs, PAN, dates *etc.*, are entered into the system in compliance with executive instructions.
- The essential attribute of non-repudiation is upheld in the system.

Government may consider to

- Implement mapping of business rules for minimum period for submission of bids, mandatory two-cover process for tenders with value more than ₹50 lakh and computation of tender fees based on tender value;
- Implement validation controls to ensure correct recording of bids in the BoQ template and processing controls for correct computation of tender value based on BoQ in the system;

- Enforce application controls to prevent submission of bids after tender closing time;
- Implement validation controls to enforce chronological and logical sequencing of user actions in the system;
- Implement application controls to prevent mapping of the same mobile numbers to multiple users in the system, and enquire into cases where the same mobile numbers had been mapped to Departmental users and bidders:
- Minimise manual interventions at the back end of the system, by adopting formal change management process to implement required functionality for users at the front end of the application;
- Ensure mandatory maintenance of application and DBA logs to record all user actions at the front and back end of the system;
- Adopt standard operating procedures for patch management, version control and documentation of scripts used in the system;
- Enquire into the reasons for the gaps in the sequence of IDs in the major tables of the database;
- Implement appropriate application controls to enforce chronological and logical sequencing for user actions in the system;
- Ensure maintenance of web, application and DBA logs for the system;
- Adopt relevant standards specified by Ministry of Electornics and Information Technology, Government of India from time to time.

Government should

• Map the full business requirements for bid evaluation and award of contract into the system, through implementation of appropriate application controls to ensure compliance and minimise errors/irregularities.