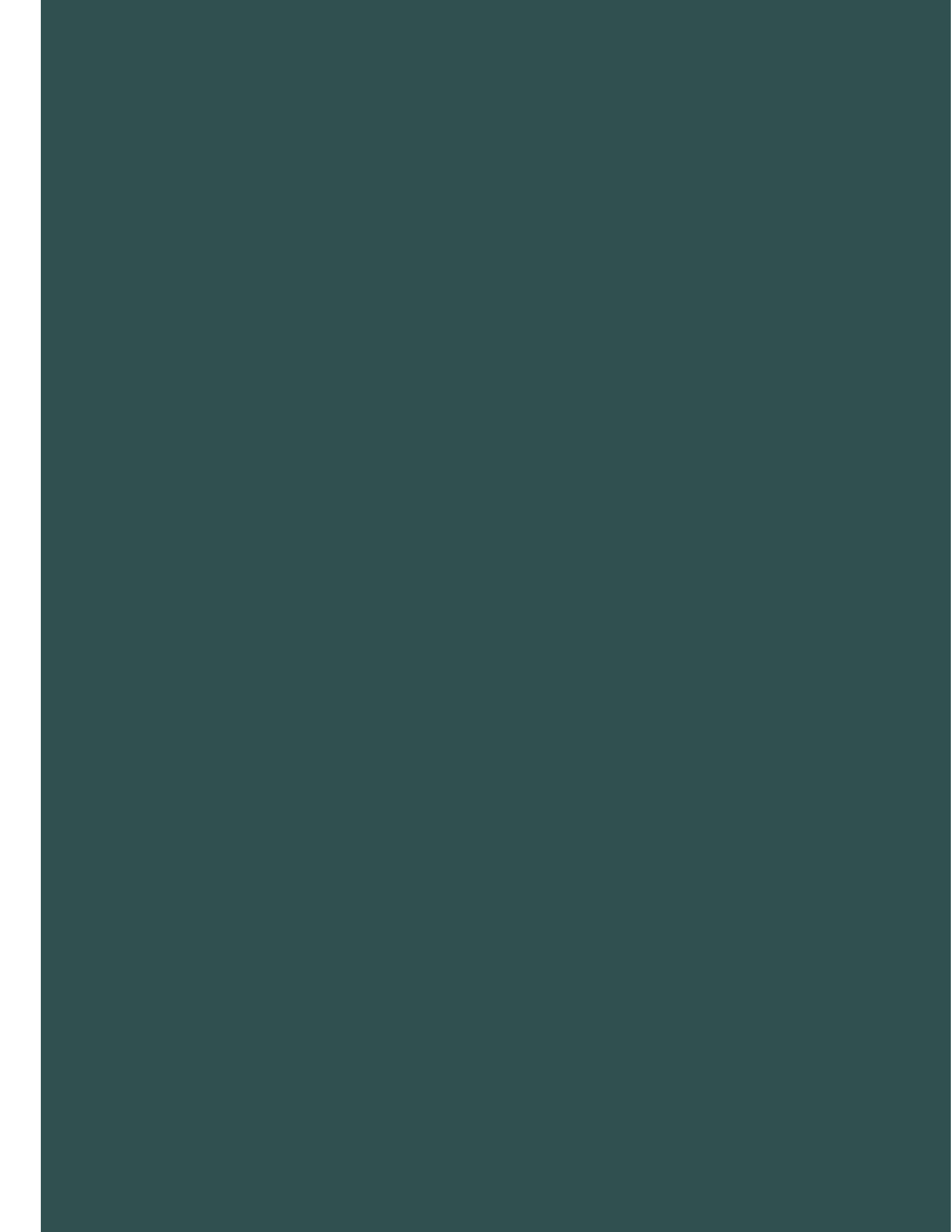


CHAPTER I

INTRODUCTION



CHAPTER I

INTRODUCTION

1.1 Introduction

The Department of Finance (DoF), Government of Tamil Nadu (GoTN), with a view to implement e-tendering process in a phased manner, issued orders¹ for e-submission of tenders exceeding ₹10 lakh in value from October 2007 on a pilot basis in major infrastructure departments². On successful completion of the pilot phase, it was extended to all the procuring entities under the Tamil Nadu/Transparency in Tenders (TNTIT) Act, 1998 from January 2008³ onwards in a designated eProcurement portal.

Government eProcurement system of National Informatics Centre (GePNIC), the designated eProcurement portal was developed by National Informatics Centre (NIC) as a product in consultation with the Department of Expenditure, Ministry of Finance, Government of India (GoI) for facilitating electronic procurement in Government. The GePNIC portal was modified as per the requirement of GoTN and was implemented from the financial year 2008-2009. The eProcurement portal was provided to GoTN by NIC free of cost.

Subsequently, the TNTIT Rules, 2000 was amended incorporating changes in the relevant sub-rules on publication of tenders on the website, electronic submission of tenders, opening of e-submitted tenders and authentication of documents by digital signature.

As on December 2022, 2.97 lakh tenders amounting to ₹2,92,050 crore were published on this eProcurement portal (<https://tntenders.gov.in>.) from the date of inception.

1.2 Objectives of eProcurement system

The following are the benefits envisaged from the eProcurement system.

- Expanding the accessibility of Tender Notices/Advertisement.
- Non-discrimination amongst bidders and promoting competition.
- Enhanced transparency.

Abbreviations used in this report are listed in the Glossary at Page 69.

¹ Vide G.O. Ms. No. 471 Finance (Salaries) Department dated 30-09-2007.

² Public Works, Highways, Rural Development, Municipal Administration, Tamil Nadu Electricity Board, Tamil Nadu Water Supply and Drainage Board, Chennai Metro Water Supply and Sewerage Board and Tamil Nadu Medical Services Corporation.

³ Vide G.O. Ms. No. 599 Finance (Salaries) Department dated 28-12-2007.

- Compliance with Government regulations and guidelines like General Financial Rules 2017, Central Vigilance Commission, World Bank, Asian Development Bank etc.
- Secure Bid Submission using Public Key Infrastructure Technology.
- Accountability of all activities.

1.3 System description

The eProcurement portal was developed by NIC using Java/JEE technology working on Linux OS with Open-Source PostgreSQL database. Currently, the size of the database for TN Tenders site is about 14 TB including the associated documents storage. NIC at the National Data Centre at Shastri Park, New Delhi is the Primary site of the eProcurement portal and as per the NIC-Business Continuity Plan, if the Primary site is completely down, the same will be made available from the Disaster Recovery site at the National Data Centre, Hyderabad.

1.4 Modules of GePNIC

The following eight modules are available in GePNIC:

- **Registration Module:** Registration/Enrolment of Government officials & bidders with Digital Signature Certificate (only these users are authenticated to login to the system and participate in the tender process) and without DSC (to view MIS Reports).
- **Publishing of tender:** Tender creation and publishing, publishing of corrigendum, publishing of pre-bid meeting documents, clarification on the tenders published.
- **Bid submission:** Online bid submission/re-submission as many times as required (the latest bid before closing of bid submission will be the final bid), freezing of bids, facility for online payment collection through bank payment gateway, encryption of bids submitted by the bidder, facility for single/multiple cover bid system.
- **Tender opening:** The bids submitted for a tender, are opened online by the authorised bid openers, who have been configured at the time of tender creation.
- **Technical evaluation:** Downloading of documents submitted by the bidder through eProcurement portal and manual evaluation thereof. The results on selection of bidders and date of financial bid opening to be uploaded in the system.
- **Financial bid opening:** Only the technically qualified bids of the bidders for the tender, are opened online again by the authorised bid openers configured in the system during tender creation.

- **Financial evaluation:** Evaluation of the financial bid through automatic comparison of Bill of Quantity (BoQ) and selection of L1 bidder. The financial evaluation committee goes through the price bids and the comparative chart. The results are updated into the system along with the selection of the bidders, the member details, and the report of the recommendation.
- **Award of Contract (AoC):** Letter of Acceptance (LoA) issued to a successful bidder (L1). The Tender Inviting Authority (TIA), based on the recommendations of the financial evaluation committee, and after getting approval, prepares the order manually and then updates the order, along with the contract details.

1.5 Workflow of the eProcurement system

The workflow of the GePNIC software is depicted in **Exhibit 1.1**.

Exhibit 1.1: Workflow of the GePNIC software



1.6 Audit objectives

The objectives of audit are to assess:

- Whether the eProcurement system has been effectively implemented and efficiently utilised to achieve its objectives of promoting competition, transparency and accountability.
- Whether the business rules have been adequately mapped into the system.
- The completeness, integrity and reliability of data in the system and to evaluate whether adequate controls have been built into the system.

1.7 Audit criteria

The criteria adopted to arrive at the audit conclusion are:

- Tamil Nadu Transparency in Tenders (TNTIT) Act 1998.
- Tamil Nadu Transparency in Tenders Rules 2000.
- Government orders, circulars and guidelines issued by the State Government relating to procurement.
- eProcurement guidelines issued by Standardisation Testing and Quality Certification (STQC) Directorate, Department of Information Technology, Government of India.
- Guidelines issued by Central Vigilance Commission (CVC), Government of India on e-tendering solutions.

1.8 Audit scope and methodology

The Information Technology (IT) Audit was conducted from June 2022 to November 2022 covering the period 2016-2022 with focus on functioning of the GePNIC modules based on the data furnished by NIC. The Audit methodology included -

- Analysis of documents uploaded in the eProcurement portal, as well as the manual documents related to tender processing in the sampled units.
- Analysis of Application controls.
- Analysis of data from the GePNIC database.

The Audit plan, including audit objectives, audit criteria and audit coverage was shared with GoTN through an Entry Conference held on 26 July 2022. The field work included scrutiny of related files, collection of documentary and electronic evidence. An Exit Conference to discuss the audit findings with the Government was held on 15 February 2023.

As on date, 53 Departments/Organisations (procuring entities) under the GoTN have published tenders in the eProcurement portal during the last six years. The entire data dump covering the period 2016-17 to 2021-22 involving 1.78 lakh tenders relating to all procuring entities under GoTN which had implemented eProcurement were analysed with reference to the Audit Objectives for checking adequacy of validation controls with reference to provisions of the TNTIT Rules, tender conditions of the user departments and to bring out the bidding patterns to check bid rigging and cartelisation, if any. Further, field visit was done in respect of selected tenders (sampling explained below) to corroborate the results of data analysis with available manual documents and to understand the field level issues in use of the eProcurement portal.

Sampling was done in three stages:

(i) Sampling of procuring entities: Fourteen procuring entities were selected (**Appendix 1.1**) based on the number of tenders published *viz.*, seven from procuring entities which published more than or equal to 500 tenders and seven procuring entities which published less than 500 tenders, by random sampling method. The 53 procuring entities using the eProcurement portal had published 1.78 lakh tenders online (Total tender value: ₹2,15,060 crore) as of December 2022. Based on this, the selected 14 procuring entities represent 76 *per cent* (1.32 lakh tenders) of the published tenders and 71 *per cent* of the total tender value (₹1.52 lakh crore).

(ii) Sampling of tenders: Twelve risk parameters were considered and were grouped into three categories and weightage assigned based on (a) bids received; (b) IP address and (c) financial parameters. The risk score for each risk parameter is given in **Appendix 1.2**. Tenders falling under the above risk parameters were identified using a set of PostgreSQL queries and 25 *per cent* of the tenders published (subject to a maximum of 100 tenders) by each of the sampled 14 procuring entities *viz.*, 1,183 tenders⁴ were selected.

(iii) Sampling of districts: Seven districts *viz.*, Chennai, Coimbatore, Salem, Thanjavur (Top 4) and Karur, Krishnagiri and Perambalur (Bottom 3) based on the volume of district-wise transactions of the procuring entities, were selected for field visit by random sampling method.

1.9 Acknowledgement

Audit acknowledges the overall cooperation extended by Government of Tamil Nadu, DoF, NIC and the sampled field units in conducting the IS Audit.

1.10 Report Structure

The audit findings are grouped under the following Chapters:

- Chapter II : Portal implementation
- Chapter III : Deficiencies in the application software
- Chapter IV : Tender processing
- Chapter V : Collusive bidding and cartelisation in tendering

⁴ A total of 1,260 tenders were verified during field visit which included 1,183 sampled tenders and 77 tenders related to the sampled tenders.