CHAPTER-II

Subject Specific Compliance Audit on "e-Procurement in Finance Department, Public Works Department and Public Health Engineering Department"

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FINANCE DEPARTMENT, PUBLIC WORKS DEPARTMENT AND PUBLIC HEALTH ENGINEERING DEPARTMENT

Subject Specific Compliance Audit on "*e-Procurement in Finance Department, Public Works Department and Public Health Engineering Department*"

2.1 Introduction

Electronic procurement (e-Procurement) refers to the use of information technology by the procuring entity for conducting the procurement process to acquire goods, works and services. Use of information technology promotes the objectives of an open, non-discriminatory and efficient public procurement system through transparent procedures.

E-Procurement was a Mission Mode Project (MMP) approved by the Ministry of Commerce, Government of India (GoI), under the National e-Governance Plan (NeGP). The Government e-Procurement System developed by the National Informatics Centre (GePNIC) was envisioned to help State Government buyers as well as suppliers to reduce time taken, avoid unnecessary paperwork and enhance transparency. The e-Procurement system is a web-based solution intended to be used by State Government Departments, Local Bodies, Autonomous Bodies and Public Sector Undertakings (PSUs) under the administrative control of the State Governments.

GePNIC was developed by NIC in 2007 using Open-Source tools[8]. The System was built by using the following components: (i) Operating System: Linux (ii) Web Server: Apache Tomcat (iii) Data base: PostgreSQL (iv) Front End: Java/ J2EE.

Government of West Bengal (GoWB) made e-Procurement through the GePNIC portal (http://wbtenders.gov.in) mandatory from 25 June 2012, for tenders valued at ₹ 50 lakh and above.

As on 31 March 2023, 9,75,996 tenders with a total tender value of ₹ 5,23,297.19 crore[9] had been floated through the e-Procurement portal in the State. In addition, 36,449 officials were registered as Departmental Users and 1,72,303 bidders were registered as Bidders on the portal as of March, 2023. Out of 54 Departments of the State, 52 Departments (except for Parliamentary Affairs and Law) had floated tenders using the portal.

As per guidelines of the MMP, a 'State Level Core Committee' (SLCC) was constituted (July 2012) by Government of West Bengal for monitoring the tendering related activities through the e-Procurement portal.

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8 *Open-source tools are software tools that are freely available without a commercial license.*

9 *except test tenders and Notices Inviting Quotation.*

2.2 System workflow

As per Para 2.4 of System Requirement Specification (SRS) developed for the e-Procurement portal by NIC, the workflow of GePNIC was to consist of the following processes:

(a) Registration of users *i.e.*, (i) procuring entities and (ii) bidders/suppliers/contactors.

(b) Creation and Publication of e-tenders by procuring entities.

(c) Submission of bids by bidders/suppliers/contactors.

(d) Opening of technical bids by the authorised bid openers of the procuring entities.

(e) Evaluation of technical bids by the Technical Evaluation Committees.

(f) Opening of financial bids by the authorised bid openers of the procuring entities.

(g) Evaluation of financial bids by the Financial Evaluation Committees.

(h) Award of contract (AoC).

(i) Retendering: The system was to facilitate the option of retendering, through Corrigendum.

(j) Reporting: The system was to generate reports[10] to cater to various requirements.

All the data available in the e-Tendering system including that of West Bengal was stored centrally in the National Data Centre, New Delhi (NDCSP) and to deal with unprecedented adverse events, another back-up data centre was maintained at the National Data Centre, Hyderabad.

2.3 Audit Objectives

A Subject Specific Compliance Audit (SSCA) on e-Procurement in two Departments of the State[11], Public Works Department (PWD) and Public Health Engineering Department (PHED) was taken up to assess whether: –

- *the e-Procurement system had been effectively implemented and efficiently utilised to achieve the objectives of promoting competition, transparency and accountability.*
- *applicable business rules had been correctly mapped into the system.*
- *completeness, integrity and reliability of data in the system had been ensured through implementation of controls in the system.*

2.4 Scope of Audit

The SSCA covered implementation and utilisation of e-Procurement by the PWD and PHED under the GoWB, during the period 2018-19 to 2022-23. Analysis of the database provided by the Finance Department and data/information uploaded onto the portal by departmental offices and bidders was also conducted by Audit during June to October 2023. Data, wherever required, was verified through field audit in the respective departmental offices to substantiate audit findings.

[10] *User Management Reports, Tender Management Reports, Bid Management Reports and Statistical Reports.*

[11] *These are the two major departments where huge number of tenders were floated through e-tendering portal.*

During the audit period of 2018-19 to 2022-23, total of 6,91,670 tenders with value of ₹ 3,47,963.33 crore were published by various Departments of GoWB. This includes 37,144 published tenders of PWD of tender value of ₹ 45,807.91 crore and 53,784 published tenders of PHED of tender value of ₹ 54,475.20 crore.

2.5 Audit Sample

Out of the above, 90,928 tenders (13.15 *per cent* of the total number of e-tenders published in the audit period) valued at ₹ 1,00,283.11 crore belonging to the two selected Departments *i.e.,* PWD and PHED were included in the scope of Audit.

There were total of 496 Tender Inviting Authorities (TIAs) including 418 in PWD and 78 in PHED. Of these, 10 TIAs of PHED and Seven of PWD were selected for detailed Audit, based on risk assessment and stratified random sampling.

These 17 offices had issued 4,809 tenders with a tender value of ₹ 4,081.73 crore between 2018-19 and 2022-23. Out of which, based on risk assessment from data analysis, Audit selected 341 tenders with tender value of ₹ 304.60 crore, for detailed verification.

2.6 Sources of Audit Criteria

Audit criteria applicable for the SSCA were drawn from the following sources:

- West Bengal Financial Rules
- Applicable Rules/Regulations/Orders/Notifications issued by the Finance Department, PWD and PHED of the Government of West Bengal, from time to time
- Compendium of General Circulars/Instructions issued by the Finance Department, Government of West Bengal
- Public Works Department Code
- IT Act 2000, as amended from time to time
- e-Procurement general guidelines of GePNIC and Guidelines for Compliance to Quality Requirements of e-Procurement System
- Central Vigilance Commission Circulars and Guidelines

2.7 Audit Methodology

Audit methodology involved:

- Entry Conference that was held on 30 June 2023 with the Finance Department, PWD, PHED and NIC to share with them, the audit objectives, criteria, scope and methodology of audit.
- Analysis by using Computer-Assisted Audit Techniques (CAATs) like IDEA[12], PostgreSQL[13] of the data dump of GePNIC obtained from the Finance Department for PWD and PHED.
- Field audit involving scrutiny of records/ files, collection of documentary and electronic evidence based on review of sampled tenders in respect of selected 17 offices (***Appendix-2.1***).

[12] *Interactive Data Extraction and Analysis application.*

[13] *It is an open-source relational database management system.*

Audit findings, conclusion and recommendations were discussed in an Exit Conference with the Finance Department, PWD, PHED and NIC on 19 February 2024 and replies received from the Departments have been suitably incorporated in the report.

Audit Findings

2.8 Project Management and Execution

2.8.1 Absence of MoU & Service Level Agreement between Government of West Bengal and National Informatics Services

Para 3 of Guidelines (August 2011) issued by Standardization Testing and Quality Control (STQC) Directorate of the Ministry of Electronics and Information Technology (MeITY), GoI prescribes that a Memorandum of Understanding (MoU) should be entered into by the purchase organisation and the service provider, for implementing the e-Procurement system.

Further, as per para 2.10.6 of guidance note of MeITY, a Service Level Agreement (SLA) is an essential part of any outsourcing project. It defines the boundaries of the project in terms of functions and services that the service provider will give to its client, the volume of work that will be accepted and delivered, acceptance criteria for responsiveness and quality of deliverables. A well-defined SLA correctly sets expectations & provides targets for accurately measuring performance against stated objectives.

Besides, as per para 2.10 of the said guidelines, SLAs define the quality and timeliness of service delivery during the Operations and Maintenance (O&M) phase of a project along with outlining penalties applicable for failures in service delivery.

Audit noticed that as of March 2023, neither an MoU nor SLA were entered into by Government of West Bengal (GoWB) with NIC, for the implementation of the e-Procurement system. The absence of the MoU and SLA resulted in avoidable risks associated with lack of clarity of roles and responsibilities, timelines and deliverables for both the parties, and inability on the part of the State Government to fix responsibility for any delays in implementation or incomplete/ incorrect implementation of the e-Procurement system.

On being pointed out, Finance Department replied (July 2023) that the copy of the SLA was not available.

2.8.2 Non-utilization of e-Procurement system by all State Government Departments, PSUs and Autonomous Bodies

As per Para 2.4.1 of the System Requirement Specification (SRS) for e-Procurement, the stakeholders of the system such as the TIAs and bidders had to register themselves with the e-Procurement system, to participate in procurement activities.

As of 31 March 2023, 87[14] entities (State Government Departments, their sub-ordinate offices, Autonomous Bodies, Local Bodies, PSUs *etc.*) had registered

[14] *Excluding (i) NIC and (ii) Admin.*

themselves with the e-Procurement portal. The dates of the first e-tenders created by these entities are listed in ***Appendix-2.2***.

Audit noticed that out of all the State Government Departments, the Parliamentary Affairs Department[15] had not registered with the e-Procurement portal and that the Law Department had not published any e-tenders, as of 31 March 2023. At the level of PSUs and Autonomous Bodies, 18 PSUs and 68 Autonomous bodies had not registered with the e-Procurement portal, as depicted in ***Appendix-2.3***.

The non-utilisation of the e-Procurement system by these Government Departments, PSUs and Autonomous Bodies indicated that the benefits from the use of the application had not yet uniformly accrued to all applicable entities within the State Government.

2.8.3 Irregularities in MoU between GoWB and ICICI Bank

As per the Mission Mode Project (MMP) implementation guidelines (July 2011), two banks *viz* State Bank of India (SBI) and Axis Bank were integrated with the e-Procurement portal, for online payment of Earnest Money Deposit (EMD). The guidelines further specified that the Government may include any other bank for online payment for which it would have to enter into an MoU with the concerned bank. Initially, the payment gateway of SBI was integrated with the e-Procurement system, to enable online payments. Subsequently, on the recommendation of the State Level Core Committee (SLCC), the e-Procurement portal was integrated (July 2016) with the payment gateway of ICICI for deposit and refund of EMD of the bidders participating in e-Procurement.

As per clause **'A'** of the MoU between the State Government and ICICI Bank, the MoU was valid for two years from the date of signing of the agreement (July 2016). The MoU was to be renewed subsequently by mutual consent of both the parties. However, Audit observed that the MoU, which was due to be renewed in July 2018 and every two years thereafter, had not been renewed (as of February 2024), despite the fact that the payment gateway of ICICI was still being utilized on the portal. This raises the risk that in case of any disputes in the payment process of the e-Procurement portal, the Government would be unable to fix any responsibility, in the absence of an MoU with its attendant terms and conditions.

During the Exit Conference (February 2024), Government stated that the MoU would be renewed.

2.8.4. Non-implementation of functionalities for evaluation of bids and award of contract through the e-Procurement system

As per SRS, the processes of evaluation of bids (technical and financial) and award of contract were to be implemented through the e-Procurement system as shown in **Chart-2.1**.

[15] *Enlisted Department of West Bengal as per official website 'Egiye Bangla' https://wb.gov.in*

Chart 2.1: Bidding systems as per SRS

Audit observed that in practice, the procuring entities were utilising the e-Procurement system for tender creation, tender publication, corrigendum, bid submission and opening of bids through the system.

However, the processes of evaluation of tenders and award of contract were being carried out outside the system, with manual processing by all entities because the functionality of evaluation of bids had not been built in the system. The evaluation of bids was carried out in offline mode by the Evaluation Committees and only the scanned copy of the summary sheet of evaluation was being uploaded into the e-Procurement system. The contract was awarded to the selected bidder in offline mode by the competent authority and only the scanned copy of the contract awarded was being uploaded into the e-Procurement system.

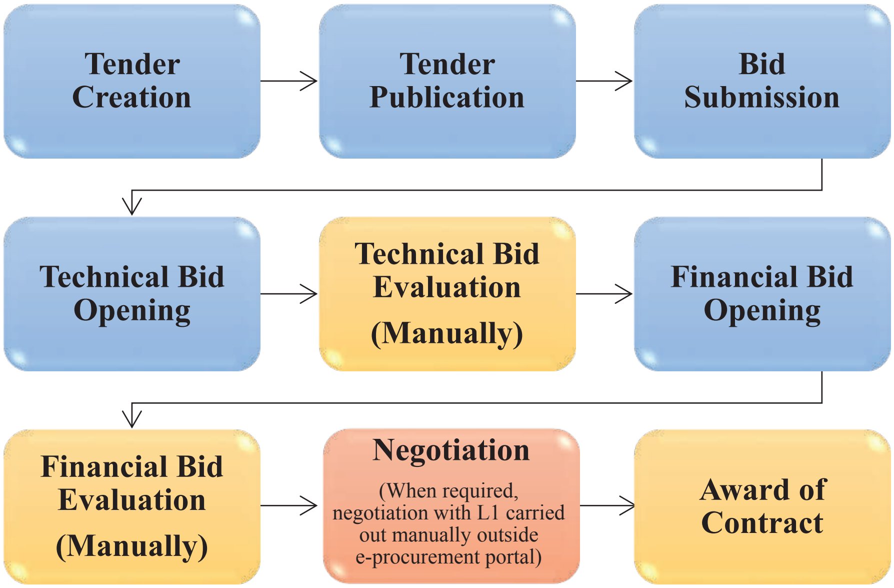
The non-implementation of functionality of evaluation of bids and award of contract in the e-Procurement system resulted in control deficiencies, since the application controls in the system were intended to enforce the applicable business rules for these crucial processes. Without introducing the e-Procurement system for these processes, the material risks of error/ deliberate extension of undue benefits to favoured bidders during the procurement process remained. In these circumstances, the responsibility of ensuring compliance with the Rules remained on individual users instead of shifting it to the system and hence, this primary objective of implementing the e-Procurement system had not yet been achieved.

Audit noticed that the evaluation of bids outside the system had resulted in deficiencies, as discussed in ***Para 2.12.3***. The absence of mandatory generation of Award of Contract (AoC) (as specified in the SRS) through the system had resulted in deficiencies, as discussed in ***Para 2.13***.

2.8.5 Absence of functionality for 'Negotiation' in the e-Procurement system

Central Vigilance Commission Circular (January 2010) allows negotiation with L1 Bidder. Subsequently, Public Works Department issued notification (March 2017) with the concurrence of Finance Department, GoWB, whereby post-tender negotiation was allowed under exceptional circumstances with L1 bidder only. Further, as per SRS and workflow chart of e-Tendering, for the two-cover system, 'Award' of contract was to be carried out after 'Financial Bid Evaluation' as shown in **Chart 2.2** below:

Chart 2.2: Workflow of e-Tendering Process



However, Audit observed that sub-module under e-Tendering for 'Negotiation' had not been implemented in the State despite being provided in SRS (Chart 2.2) and hence, had to be carried out in offline mode. As a result, there was no trail maintained in the e-Procurement system about the details of the negotiation process and the entirety of the process, from floating of tender to award, was not being captured in the system. Audit noticed that records pertaining to cases[16] where negotiations had been carried out in the test checked divisions had been maintained outside the system and were not part of the e-Procurement database.

PHED admitted (June 2024) that as system enabled negotiation was not available in the e-Procurement module, negotiations with L1 bidders were made offline by the TIAs and the resulting decreased tender values were entered into the system subsequently as part of the uploaded scanned copy of the awarded contract.

2.8.6 Splitting of works to avoid e-Tendering

As per GoWB Notification (August 2013), the threshold for mandatory e-Tendering through the centralised e-Tender Portal was revised and reduced from ₹ 50 lakh to ₹ 5 lakh. The Notification of July 2022 further reduced this limit from ₹ 5 lakh to ₹ 1 lakh. As per Memorandum (July 2018) of the GoWB,

[16] *cases in PHED*

splitting of works/tenders was allowed, under exceptional circumstances, after taking approval of the Administrative Department, in cases where the primary consideration of splitting was expediting the execution of work.

Test check of records in 17 Divisions of PWD showed that in two Divisions, there were 34 tenders[17] which were floated offline by splitting 14 works to avoid the threshold limit (*i.e.*, ₹ 5.00 lakh upto July 2022 and ₹ 1.00 lakh thereafter) of mandatory e-tendering. Consecutive number of tender IDs were allotted to the same agency in numerous cases[18] in manual mode. Further, scrutiny of records of the above tenders did not indicate that the splitting had been done to expedite the said works and that administrative approval of the concerned department had been obtained. Thus, by splitting the above works, mandatory online tendering was circumvented, which resulted in violation of the objective of e-Tendering and created avoidable risks related to potential extension of undue benefits to favored contractors.

In reply, both the Sub-Divisions of PWD accepted (July 2023) the observation and stated that this would be taken into consideration to avoid such incidents in future.

During the Exit Conference (February 2024), Government opined that splitting was necessary but the reasons for splitting should be properly documented and it should not be done to avoid e-tendering.

2.8.7 Deficiencies in monitoring by the State Level Core Committee

Department of Commerce, GoI is the central body which monitors implementation of e-Procurement as a Mission Mode Project (MMP) under National e-Governance Plan in States/ UTs. The implementation phase of MMP was from 2011-12 to 2015-2016 (5 years). As per the MMP, a State Level Core Committee (SLCC) headed by Secretary/ Special Secretary, Finance Department was to be set up by the implementing States to take swift decisions relating to implementation of e-Procurement. Accordingly, an SLCC was constituted in July 2012 by GoWB and reconstituted in January 2014 for implementation of the e-Procurement system. However, scrutiny of records at the Finance Department indicated that the SLCC had not been functional between 2019-20 and 2023-24, indicating poor oversight and monitoring at the State level.

Recommendations:

Government should:

1. ***ensure execution of MoU/ Service Level Agreement with the agency for implementing the remaining functionalities of the system, and for operations and maintenance functions.***
2. ***ensure that all departments, PSUs and autonomous bodies are on-boarded into the system and use of the portal for tenders valued above the threshold value is made mandatory.***
3. ***develop functionalities for negotiation and mandate the use of the system for the critical processes of Bid Evaluation module and Award of Contract.***

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[17] *16 tenders in O/o the AE, Raiganj Sub-Division-I (PWD) and 18 tenders in O/o the AE, Raiganj Sub-Division-III (PWD).*

[18] *12 contractors in Assistant Engineer I & II, Raigunj Subdivisions, PWD.*

2.9 User Management

The stakeholders of the system such as the Tender Inviting Authorities and the bidders must get themselves registered in the system to carry out their procurement activities. Every user is first identified by a unique user ID and a password is sent to his email, which is followed by registration of his Digital Signature Certificate (DSC)[19] for subsequent authentication, every time the user logs in to upload tenders, required documents *etc.*

2.9.1 Irregular Publishing of e-Tender

Finance Department issued Memoranda from time to time[20] defining the financial power of Chief Engineers, Superintending Engineers, Executive engineers etc. for 'technical sanction' and 'tender acceptance' in case of Work Execution Departments. Offices of the TIAs were mapped in the eprocurement portal for inviting tenders and ensuring fair competition amongst prospective bidders. Unique organisation IDs were also mapped for each TIA office (Actualorgid) into the system.

The designated TIA of a Division office is the Executive Engineer. Analysis of data showed that in four Divisions[21] of the PHED, during 2018-19 to 2022-23, tenders relating to a particular Division were published by other than the designated TIA *i.e.*, Executive Engineer as detailed in ***Appendix-2.4***. Summarised details are below:

Table 2.1: Presence of tenders which were invited by Superintending Engineer and Assistant Engineers in Division offices

Name of the offices of PHED	Designated Tender Inviting Authority	Total Tenders Published during 2018-23	Break up of tenders by Tender Inviting Authority		
			Superintending Engineer (non-TIA)	Executive Engineer	Assistant Engineer (Non-TIA)
Eastern Mech.Division (Under Mechanical Circle - III) (Actualorgid=864)	Executive Engineer	775	-	700	75 (21 tenders were related to BMSD, PHED sub-division under Bankura Mechanical Division)
Bankura Division (Under WESTERN CIRCLE) (Actualorgid=827)	Executive Engineer	34	4	30	-
Electrical Division (Under Mechanical Circle – I) (Actualorgid=859)	Executive Engineer	741	-	687 (2 tenders were of another Division, *i.e.*, SMD, PHED) (Non-TIA)	54 (50 tenders were related to HMSD, PHED sub-division under Electrical Division, PHED)

[19] *A Digital Signature Certificate is an electronic signature that can be used to authenticate the identity of the sender of a message or the signer of a document, and possibly to ensure that the original content of the message or document that was sent is unchanged. Digital signatures are easily transportable, cannot be imitated by someone else, and can be automatically time-stamped.*

[20] *5458 f(Y) dated 27.06.2012, 30 F(Y) dated 05.01.2021, 2320 f(Y) dated 07.06.2022.*

[21] *(i) Eastern Mechanical Division (ii)Bankura Division (iii) Electrical Division and (iv) Bankura W/S Division.*

Name of the offices of PHED	Designated Tender Inviting Authority	Total Tenders Published during 2018-23	Break up of tenders by Tender Inviting Authority		
			Superintending Engineer (non-TIA)	Executive Engineer	Assistant Engineer (Non-TIA)
Bankura W/S Division (Under Bankura W/S Circle) (Actualorgid=8194)	Executive Engineer	4	2 (2 tenders were related to Murshidabad Circle, PHED)	2	-
Total tenders published by non-TIAs			**6**	**4**	**129**

It is evident from the above that the unique organisation ID of a TIA (Executive Engineer) was incorrectly mapped with other TIAs (Superintending Engineer and Assistant Engineer) in these four Divisions. As a result, 139 tenders were issued by other than designated TIA in these four divisions. Further, despite having its own designated TIAs in the Division, TIAs from Circle and sub-division offices used the organisation ID of Division offices.

Therefore, tenders of Circle office (TIA- Superintending Engineer) and sub-Division offices (TIA- Assistant Engineer) were improperly published using the organisational ID of other Division offices. This represented a significant control deficiency.

PHED replied (June 2024) that the unique login credential of a TIA had been shared with other TIAs in cases where the Executive Engineer was transferred from one Division to another but was holding additional charge of the previous Division.

However, PHED did not comment on the tenders published by Assistant Engineers and the Superintending Engineers in the Division Offices.

2.9.2 Absence of application controls to prevent the use of expired DSCs

Digital Signature Certificates were mapped with individual user IDs and have a validity period specified by the Certifying Agencies. The system was required to have application controls to prevent expired DSCs from being used to digitally sign crucial documents in the e-tender process.

Audit examined the database and noticed that during the period 2018-19 to 2022-23, there were 67 instances where bid documents were uploaded using expired DSCs related to 11 documents in three divisions.

This indicated that this crucial application control had not been implemented in the e-Procurement system and created the avoidable risk of use of invalid DSCs.

2.9.3 Irregular issue of DSCs, in violation of delegation of powers

As per Guidelines (August 2011) issued by the MeITY, GoI, for compliance to Quality requirements of e-Procurement Systems, important electronic records of e-Procurement application like tender notice, corrigenda, tender documents, addenda, clarifications to tender documents, bids *etc*. were to be electronically signed. The guidelines further stipulated that there should be provision in the system to verify the electronic signature.

As per GoWB notification (May 2012), the DSC which was essential for e-Tendering, was to be obtained from NIC, which was also acting as the Certifying Authority.

Audit observed that DSC had been issued to Estimators and Junior Engineers in eight PHED offices[22] out of 10 selected offices of PHED. As the Estimators/ Junior Engineers were not eligible to be nominated as members of the evaluation committees for tenders or as TIAs, the issue of DSCs to them was irregular.

On this being pointed out, PHED stated (June 2024) that though Estimator/ Junior Engineer were not included either in the evaluation committee or in the tender inviting authority, they were only discharging duties for compilation of all information based on the uploaded documents by bidders for representing a consolidated technical summary before the bid Evaluation Committee. The accountability of the Estimator/ Junior engineer is warranted by using their DSC and recording their signature on the compilation sheet for further reference and other purpose.

The reply was not tenable, as the practice was non-compliant with the Government's executive instructions and resulted in allowing access to bid data for Government employees who were not authorized to access this data.

2.9.4 Irregular publication of corrigendum without using DSC

Only the Departmental users of the e-Procurement system who were in possession of login credentials and a valid DSC should have been permitted by the system to publish e-tenders and corrigendum.

However, Audit analysis of the data pertaining to 2018-19 to 2022-23 showed that 176 Corrigenda (out of 208) pertaining to 167 tenders of PWD and PHED had been published by the system, without using DSC. This was indicative of deficiencies in application controls to enforce non-repudiation[23] in the system. Also, it raises the risk of unauthorised access to the system for fraudulent purposes.

2.9.5 Deficiencies in mapping Departmental hierarchies into the system

Absence of mapping of Sub-Division Offices

The guidelines on e-Procurement[24], prescribe that details of the organisational hierarchy have to be provided by the Administrative Departments to NIC, to enable them to be mapped into the system.

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[22] *O/o the SE, Mechanical Circle-III (PHE Directorate.); O/o the EE, Eastern Mechanical Division (PWD); O/o the SE, North Bengal Circle-III (PHE Directorate.); O/o the EE, Electrical Division (PHE Directorate.); O/o the SE, RCFA Water Supply Circle (PHE Directorate.); O/o the EE, Jhargram Division (PHE Directorate.); O/o the EE, Durgapur Water Supply Division (PHE Directorate.); O/o the EE, Asansol Mechanical Division (PHE Directorate.);*

[23] ***Non-repudiation*** *is a security principle that ensures* ***a user cannot deny*** *having performed a specific action, like logging in, in a system.*

[24] *Sl. No. 9.3 of Para 5 of '****Implementation Guidelines for e-Procurement'*** *rollout in states as a mission mode project under national e-governance plan, released on 15 July 2011.*

Audit observed that in three test checked Divisions[25], Sub-Divisions under these Divisions, had not been mapped into the system. Due to the absence of such mapping, tenders published by these Sub-Divisions were incorrectly depicted as published by the Divisions themselves, resulting in erroneous MIS Reporting on the number of tenders published at the TIA level by the Divisions.

The Divisions confirmed the above fact and stated (September & October 2023) that the issue would be addressed through communications with the Department and NIC.

Duplication of mapping of departmental hierarchy for Circles/ Divisions

Audit test checked the IDs mapped to different Divisions in the system and noticed instances of the same Circle/ Division, being mapped to two IDs.

The two different organisational hierarchy chains pertaining to the Health Electrical Circle (PWD) in the system are depicted **Chart 2.3**:

Chart 2.3: Two different organisational hierarchy chains pertaining to the Health Electrical Circle

Organisation Chain 'A'	Organisation Chain 'B'
PUBLIC WORKS DEPARTMENT || PWD DIRECTORATE || PWD (SOUTH ZONE) || **ELECTRICAL HEALTH CIRCLE** || Three Divisions under the Circle (**North Kolkata Health Electrical**, South Kolkata Health Electrical, Central Kolkata Health Electrical)	PWD (Electrical) || **Electrical Health Circle** || Seven Divisions under the Circle (Central Kolkata, Electrical Construction-I, MS Sports Electrical, **North Kolkata Health**, South Kolkata Health-I&II, Sub-Urban Electrical)

It may be seen from the above, that one of the test checked divisions *i.e.*, **E.E, North Kolkata Health Electrical Division**, was mapped to two different organizational chains and was thus using both for publishing tenders during 2019-23.Summary of tenders published by EE, North Kolkata Health Electrical Division using two organisation chains by the same TIA is as detailed in **Table 2.2.**

Table 2.2: Summary of tenders published by EE, North Kolkata Health Electrical Division using two organization chains by the same TIA

Year	Tender Published using Organisation Chain 'A'	Tender Published using Organisation Chain 'B'
2019-20	14	104
2020-21	42	7
2021-22	67	34
2022-23	38	62

[25] *O/o the EE, Eastern Mechanical Division (PHE Directorate.); O/o the EE, Electrical Division (PHE Directorate.); O/o the EE, Jhargram Division (PHE Directorate.)*

This deficiency resulted in erroneous MIS Reporting by the system due to incomplete or duplicate data for related Circles/ Divisions.

PHED replied (June 2024) that henceforth, all Circles/ Divisions would be instructed to correctly map the organisational units under their control. NIC stated (July 2024) that they had directed (May and July 2024) PWD to issue a Circular/GO to all concerned regarding discontinuation of outdated organisational hierarchy chains, to prevent such duplication.

2.9.6 Deficiencies in application controls during Bidder registration

As per SRS, the online forms should clearly indicate which are the mandatory fields and the system should have validation controls to ensure that all mandatory fields are filled in by the user. A bidder can register himself/herself by accessing the "Online bidders enrolment" page of the e-Procurement system, by entering data into mandatory fields such as email ID, mobile number, PAN number *etc*.

(i) Absence of application controls to prevent entry of duplicate/ invalid PAN

Permanent Account Number (PAN) is a unique number issued by the Income Tax Department, GoI to various entities. The fourth character of PAN represents the status of the PAN holder. "P" stands for Individual, "C" stands for Company, "H" stands for Hindu Undivided Family (HUF), "A" stands for Association of Persons (AOP), "B" stands for Body of Individuals (BOI), "G" stands for Government Agency, "J" stands for Artificial Juridical Person, "L" stands for Local Authority, "F" stands for Firm/ Limited Liability Partnership and "T" stands for Trust.

Audit analysed the database and noticed that as of March 2023

- A total of 32,735 bidder IDs had been mapped with 12,201 PANs indicating multiple registrations with the same PAN.
- On test check of 1,71,431 bidders registered, it was noted that there were 525 invalid PANs IDs which did not conform to the valid format of a PAN.

Audit further noticed that there was no provision in the system for mandatory upload of supporting document (scanned PAN Card) into the system at the time of registration. Thus, departmental users could not verify the PAN entered or match it with the details of the PAN card copy if uploaded. The system should have had inbuilt application controls to prevent the entry of PAN which had been previously mapped with an existing bidder ID in the system. The system should also have provisioned for inbuilt validation controls to prevent multiple registrations with same PAN.

During the Exit Conference (February 2024), the Government instructed NIC to ensure that necessary application controls were implemented in the system.

(ii) Absence of application controls to alert Departmental users about participation of bidders in the same tender with the same PAN

According to Notification (June 2012) of the GoWB, selection of an agency for procurement should be made on the basis of submission of at least three tenders. Further, if the number of tenderers/bidders qualifying in the technical bid was less than three, fresh tenders should be invited.

Audit observed that out of 90,928 tenders published between 2018-19 and 2022-23 in PWD and PHED, in case of 137 tenders the same PAN was reflected against two bidders. Further, out of these 137 tenders, there were 46 tenders where only three bids were received, with two bids having the same PAN. This effectively reduced the number of bidders to two, thereby vitiating the process of open tendering.

NIC stated (July 2024) that this had to be resolved at the TIA end as provision exists at bidders' end to enter their PAN correctly. The response was not tenable, as the system should have inbuilt controls to reject such registrations with the same PAN.

(iii) Absence of validation controls to prevent registration of bidders with invalid ages

Audit analysed the database and noticed that 20 users who were apparently minors as per the data were entered in the system while registering as bidders, with their ages ranging from 1 day to 17 years 7 months. This reflected the absence of application controls to regulate the valid entry of date of birth and age in the system.

(iv) Absence of application controls to prevent the mapping of the same mobile number with multiple bidders

As per user manual and e-tender portal, Mobile numbers of bidders were required mandatorily during the registration process in the e-Procurement system, to enable timely communication of notifications (publication of tenders, corrigenda, tender opening *etc*.) to all registered bidders.

Audit analysed the database and noticed that

- In 4,045 tenders out of 90,928 tenders of PWD and PHED published between 2018-19 and 2022-23, the same mobile number was mapped with multiple bidder IDs in 4600 instances, as detailed in **Table 2.3** below:

Table 2.3: Multiple bidders with same mobile number in same tender

No of Bidder ID with same mobile number in the same tender	No. of instances
2 bidders	4,304
3 bidders	275
4 bidders	20
5 bidders	1
Total	**4,600**

(Source: e-Procurement database)

- Further, there were 1,530 tenders having three or less than three bids, with the same mobile number having been mapped with two bidders in each of these tenders. To substantiate this irregularity, Audit also test-checked 341 tenders, in the selected units, and noticed that there were 29 tenders where the same mobile number was mapped with multiple bidders in the same tender.

This indicated the material risk of potential collusion amongst bidders and that the system did not have necessary application controls to prevent such mapping. NIC stated (July 2024) that this had to be resolved at the TIA's end as provision existed at the bidders' end to enter their phone numbers correctly. The response was not tenable, as the system should have had inbuilt controls to prevent such mapping of mobile numbers with multiple bidder IDs at the time of registration and bidding.

(v) Absence of application controls to prevent the mapping of the same email ID with multiple bidders

As per the e-tender portal, for online enrolment of bidders, Email IDs of bidders were required to be mandatorily entered during the registration process in the system, to enable timely communication of notifications to all registered bidders.

Audit analysed the database and noticed that

- In 1245 tenders out of 90,928 tenders of PWD and PHED published between 2018-19 and 2022-23, the same email ID was mapped with multiple Bidder IDs in 1,265 instances, as detailed in **Table 2.4** below:

Table 2.4: Multiple bidders with same email ID in same tender

No of bidders with same email ID in same tender	No. of instances
2 bidders	1,167
3 bidders	83
4 bidders	15
Total	**1,265**

(Source: e-Procurement database)

- To substantiate this irregularity, Audit also examined 341 tenders test checked in the selected units and noticed that there were 12 tenders where the same email ID was mapped with multiple bidders in the same tender. This indicated the material risk of potential collusion among the bidders and that the system did not have necessary application controls to prevent such collusion.

During the Exit Conference (February 2024), Additional Chief Secretary Finance Department instructed that precise guidelines to TIAs should be issued to check potential cartelization keeping in view instances where duplication of mobile numbers and email IDs had been noticed in tenders.

Recommendations:

Government should:

4. ***ensure that user access credentials and DSCs are issued in compliance with executive instructions to authorised Departmental users.***
5. ***ensure correct mapping of the updated hierarchy of the departmental offices as well as TIAs.***
6. ***ensure implementation of appropriate application controls during registration of bidders, to guarantee uniqueness and validity of PANs, mobile numbers and e-mail IDs***

2.10 Tender Creation, Publication and opening by the Tender Inviting Authorities

Each tender requires a set of documents like the NIT, Standard Bidding Document, Price Bid Details *etc*. to be published, as per predefined templates. Other documents like Terms & Conditions, Instructions to Bidders, annexure, checklist *etc*. may also be published as part of the tender. The authorised officials from the TIA were to create the tender documents. Each document uploaded in the system was to be digitally signed using tender creator's DSC. Once the tender is created as per requirement, an official with the role of tender publisher, was to log into the system and verify all the details before publishing the tender. Once published, any registered bidder could see the tender and download the tender documents from the website. After the tenders were published, the system was required to have a functionality for publishing various types of Corrigenda before the bid opening, pertaining to events such as extension of bid submission dates, changes in terms and conditions, change in technical specifications *etc*. However, once the bid was opened, only the Corrigendum for retendering, cancellation *etc*. was to be permitted for publication.

2.10.1 Absence of application controls to enforce minimum time for bid submission

Government of West Bengal's notification (June 2012) prescribes that a minimum period should be allowed for submission of bids from the final date of publication of tenders as follows:

- 7 days where supply of articles or stores or for execution of works and services with estimated value not exceeding ₹ 10 lakh,
- 14 days where supply of articles or stores or for execution of works and services with estimated value exceeding ₹ 10 lakh upto ₹ 1.00 crore; and
- 21 days where supply of articles or stores or for execution of works and services with estimated value exceeding ₹ 1.00 crore.

Audit analysed the database and noticed that in 4,012 tenders out of 90,928[26] tenders of PWD and PHED published between 2018-19 and 2022-23, the minimum bid submission time, as stipulated, had not been enforced by the system.

To substantiate this finding, Audit test checked 341 tenders in selected units and noticed that there were 19 tenders where the minimum bid submission period had not been enforced by the system.

Thus, business rules regarding minimum bid submission time had not been mapped into the system in the form of application controls to enforce the bid submission time as per executive instructions. This deficiency in the application controls had resulted in allowing fewer days to bidders for submission of bids. Thus, due to lack of time interested parties could not participate in such tenders.

During the Exit Conference (February 2024), ACS Finance Department stated that the system does not have a provision for issue of tenders for short duration and advised the representatives of the NIC and Department to introduce such a provision for such tenders, along with facility for necessary disclosure.

The lack of this application control raises the risk of prospective bidders being deprived from participation in the tendering process due to lack of adequate

[26] *1,009 tenders out of 41,784 tenders value less than ₹ 10 lakh, 2,689 tenders out of 36,022 tenders value above ₹ 10 lakhs but below ₹ 1.00 crore and 314 tenders out of 13,122 tenders value above ₹ 1.00 crore.*

time and the possibility of TIAs favoring certain selected bidders. The lack of compliance with the minimum prescribed time period for submission of bids adversely impacted the objectives of transparency and fairness in the procurement process and hence, was a major control failure in the system.

2.10.2 Absence of application controls to auto-compute tender value based on BoQ

Bill of Quantities (BoQ) is the list of quantities of individual items required for execution of any project along with unit rate for each item of work. Hence, the total value of BoQ should be computed by the system as the estimated value of the tender.

Audit analysed the database and noticed that in 33,614 tenders published (2018-19 to 2022-23), including 7,137 tenders of PWD & PHED, there was a difference between the tender value recorded in the system and the total value of the related BoQ for the tender. Out of 341 tenders test checked in selected units, there were seven tenders with such difference.

Audit observed that this discrepancy had arisen due to absence of application controls in the system to auto-compute the tender value based on BoQ entered by the TIA. Instead of auto-computation by the system, the TIA was required to manually enter the tender value into the system, leading to discrepancies.

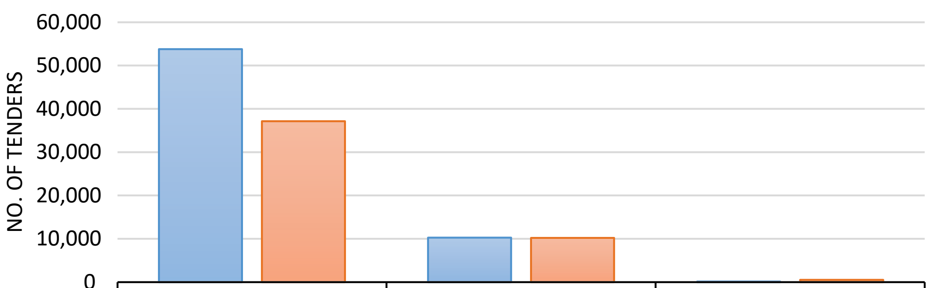
On this being pointed out by Audit, NIC stated (July 2024) that this was being taken up and would be addressed in later versions of e-Procurement system.

Thus, the responsibility for ensuring compliance remained on the individual users instead of shifting to the system through the implementation of necessary controls.

2.10.3 Absence of application controls to link original cancelled tenders with subsequent re-tender calls

Due to various reasons[27] there were instances of tenders being cancelled and fresh tenders being invited for the same work, through the e-portal. **Chart 2.4** indicates the number of published tenders, cancelled tenders and re-tenders during the period 2018-19 to 2022-23.

Chart 2.4: Number of Published tenders, Cancelled Tenders and Re-Tenders during 2018-19 to 2022-23 of PHED & PWD



	Published	Cancelled	Retendered
PHED	53,784	10,267	136
PWD	37,144	10,207	525

[27] *E.g., No Bids received, Mismatch with NIeT, Minimum Bids Not Received, administrative reasons/issues, all bids rejected in technical evaluation (D w/s D).*

Audit noticed that there was no link between the tenders cancelled earlier and the subsequent re-tenders invited in 2nd or subsequent calls. As a result, the trail between the original cancelled tenders and the subsequent tenders called for could not be monitored by higher authorities.

On this being pointed out, ten offices[28] accepted (July 2023 and October 2023) that there were no application controls to link the cancelled/rejected tenders and subsequent re-tenders. PHED accepted (June 2024) that this modification is necessary in the e-Procurement system.

2.10.4 Absence of application controls to enforce the 'Two-bid system' in cases where tender value exceeded the threshold limit

GoWB Notification (June 2012) prescribes, that for high value purchases exceeding ₹ 10 lakh or for purchasing plant, machinery *etc*. of complex and technical nature, bids should be invited in two parts under the two-bid system as under:

(a) The technical bid consisting of all technical details along with commercial terms and conditions;

(b) Financial bid indicating item-wise price for the items mentioned in the technical bid.

Audit analysed the database and noticed that in 1,247 tenders of GoWB for the period 2018-19 to 2022-23 with tender value more than ₹ 10 lakh, the provision of two-bid system had not been enforced by the system. In the selected PHE Divisions, Audit observed that in case of 51 tenders[29] of three Divisions where tender value exceeded ₹ 10 lakh, the two-bid system had not been enforced by the system.

Thus, the business rules for following the two-bid system for tenders valued at more than ₹ 10 lakh, had not been mapped as an application control in the e- Procurement system. The workflow permitted the Departmental user to opt for single cover process even when the tender value was more than ₹ 10 lakh.

Recommendations:

Government should:

7. ***ensure implementation of application controls to enforce the applicable minimum bid submission period.***
8. ***ensure implementation of application controls to link previously cancelled tenders with subsequent re-tender calls, to facilitate monitoring.***
9. ***ensure mapping of business rules for mandatory adoption of two-bids for tenders with value exceeding ₹ 10 lakh.***

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[28] *(i) EE, Diamond Harbour Highway Division-PWD, (ii) EE, Electrical Division, -PHED, (iii) SE, RCFA w/s circle-PHED, (iv) EE, Asansol Mechanical Division-PHED (v) EE Bankura Division, PHED, (vi) EE Jhargram Division PHED, (vii)EE Asansol Division Social Sector, PWD (viii) EE Durgapur W/s Division, PHED (ix) EE Bankura W/s Division, PHED (x) AE Siliguri Sub-Division, PWD.*

[29] *(i) (PHE) Mechanical Circle – II, (PHE) Midnapur Mech. Division (Office Code 860), (ii) (PHE) Mechanical Circle – II, (PHE) Resource Division (Office Code 863), and (iii) (PHE) North Bengal Circle – I, (PHE) Alipurduar Division (Office Code 9273).*

2.11 Bid creation and submission

Bidders, after registration into the system, were to be provided a functionality to enter bid data against individual tenders and upload required documents into the system. Once the bid was submitted, after digital signature, the same was to be encrypted using the designated bid opener's key. Further, the bidder was required to have a provision to resubmit bids within the scheduled bid submission time period and also to withdraw the bid, if tender conditions permitted the same.

2.11.1 Lack of assurance on maintenance of data integrity of bids

As per the SRS, bids were required to be collected in pre-defined standard formats and only such standard formats could be uploaded by TIAs as well as the bidders. The bid formats were to be accompanied by documents in other formats such as PDFs and images. Specifically, the BoQs filled in by the bidders in MS Excel, were required to be encrypted until the bids were opened. The encrypted files would have a hash value[30] recorded in the system, which would enable maintenance of a trail to establish that the bids submitted by the bidders had not been modified by Departmental users at the time of bid evaluation. The recording of the hash value was therefore a major application control to derive assurance on data integrity of the bids.

Audit analysed the database and noticed that there were 19,74,862 documents uploaded by bidders, between 2008-09 and 2022-23. Out of this, 7,39,516 documents were in MS Excel format (BoQ). Audit noticed that out of 7,39,516, the hash value had been recorded as 'null' in 1,85,928 documents (25 *per cent*). Further, for the period 2018-19 to 2022-23, Audit noticed that out of 5,33,081 BoQ documents, hash value had been recorded as 'null' in 2,061 documents (3 *per cent*), as tabulated below:

Table 2.5: Number of BoQs of GoWB with "NULL" Hash value with document type

Document MIME type		Number of cases since inception	Number of cases from 2018-19 to 2022-23
xls	xls	1,85,912	2,051
	Xls	9	9
	XLS	7	1
Total		**1,85,928**	**2,061**

(Source: e-Procurement database)

There were no explanations in the system documentation as to why such cases of hash values being 'null' were being generated. Since there was no workflow

[30] *Hash values can be thought of as fingerprints for files. The contents of a file are processed through a cryptographic algorithm, and a unique numerical value – the hash value - is produced that identifies the contents of the file. If the contents are modified in any way, the value of the hash will also change significantly.*

or functionality at the front end of the system for any user to make changes to the hash values recorded in the database through the encryption process, the presence of 'null' values indicated the very material risk of changes made to the data through the back end of the system.

In the absence of hash values for the BoQ files, Audit was unable to derive assurance that the data integrity of the bids submitted had been maintained in the system, during the bid evaluation process. This represented a major application control failure of the system.

Finance Department replied (January 2024) that the hash values were 'null' for BoQs published for tenders before the introduction of the functionality of recording the hash values.

The response was not tenable, since the Government in its reply did not specify the date from when this functionality had been introduced. Besides, Audit noticed instances of hash values being recorded as 'null' up to 31 March 2023 *i.e.*, the date up to which data had been furnished.

2.11.2 Absence of application controls to prevent submission of bids after the specified closing time and date

As per the SRS, the system was to allow bid submission only upto the timeline specified in the tender document and prevent any bids from being submitted after the closing time and date specified in the tender.

Audit analysed the database and noticed that during the period from 2018-19 to 2022-23, there were nine cases where the bids had been submitted by bidders after the specified closing time and date. The presence of such irregular acceptance of bids indicated that application controls to prevent submission beyond the specified closing time and date had not been implemented.

NIC stated (July 2024) that the system does not permit submission of bids after the specified closing time and date.

The reply was not tenable since it did not offer an explanation for the cases pointed out by Audit.

2.12 Bid Opening and Evaluation

As per the SRS, the bids were required to be opened by the designated bid opener users. Any two, three or four Departmental users could be designated as the bid openers by the TIAs. The bid openers were to be permitted to open the technical bids only after the specified bid opening time and date. The encrypted technical bid documents were required to be decrypted and opened, for onward submission to the Technical Evaluation Committee. The technical bid evaluation was, however, carried out in an offline mode. The results of technical bid evaluation were to be uploaded into the system as a scanned file, along with the time and date for opening of financial bids. The designated bid openers were permitted to open financial bids for only the technically qualified bidders, and only after the specified bid opening time and date. The encrypted financial bids were required to be opened and the system was required to generate a comparative statement (as L1, L2 *etc*.) of the financial bids, for onward submission to the Financial Evaluation Committee. The financial bid evaluation was also carried out in an offline mode. The results of the financial bid evaluation in the form of recommendations of the Evaluation Committee were to be uploaded into the system as a scanned file. The concerned bidders were required to receive system generated intimation by email and SMS on the recommendations made.

Audit analysed the database tables pertaining to the tenders opened and the decryption of bids, and noticed the following irregularities.

2.12.1 Irregular opening of financial bid, without any record of decryption of the technical bid

As per the SRS, e-Procurement system was required to ensure that in case of two-stage bidding process, the technical bid is opened first and only in case the technical bid had been evaluated as qualified, the financial bid for that bidder would be opened.

Audit analysed the e-Procurement database and noticed that during 2018-19 to 2022-23, in a total of 16 tenders, the system had permitted 32 bid openers to decrypt and open financial bids submitted by the bidders, without any record of decryption of their technical bids.

This was a crucial application control failure, since opening of financial bids without having record of technical bid decryption was highly irregular and resulted in non-compliance with the extant Rules. The absence of application controls to prevent such occurrences was fraught with the risk of extension of undue favours by Departmental users to selected bidders. Reply has not been received from the Department.

2.12.2 Inconsistency in recording bid decrypted date as 'NULL' in cases where Award of Contract had been completed

Bid decryption was an automatic process and every bid of a particular tender was required to be decrypted, before any downstream actions such as Award of Contract.

Audit analysed the database and noticed that during the period from 2018-19 to 2022-23, there were 17 tenders where the bid decryption date field was recorded as 'NULL', despite Award of Contract details being recorded. Though as per e-Procurement Portal the bid packets (covers) were decrypted and evaluated, details of bid decryption against none of the bids (Bid ID) of the above mentioned 17 tenders were available in the Bid decrypted table. This inconsistency occurred due to the issue of Award of Contract after revocation of tenders in the system. It also reflected lack of application controls to prevent downstream workflows from being completed, when formal actions to complete the technical and financial bid evaluation had not been finalized. Reply has not been received from the Department.

2.12.3 Absence of application controls to prevent bidders from being technically qualified despite non-submission of non-statutory documents

Technical bids were required to be submitted in two covers (Folders) Statutory Cover[31] and Non-Statutory Cover[32], containing scanned and digitally signed mandatory documents. On failure of submission of any of the documents, as prescribed in Notice Inviting e-Tender (NIeT), the tender was liable to be summarily rejected. Moreover, financial bids of only those bidders were to be opened, whose technical bids had been evaluated as qualified.

Audit examined the requisite documents uploaded by the bidders/tenderers pertaining to Statutory and Non-Statutory Covers and the technical evaluation summary reports prepared by their respective Tender Evaluation Committees and noticed that in test check of 120 tenders out of 249 tenders in nine (09) selected Sub-Division/Divisions/Circles[33] Offices of PWD and PHED, bidders had not uploaded the non-statutory documents specified as mandatory in the respective NIeTs, as tabulated in **Table 2.6**.

Table 2.6: Non-submission of documents in support of technical bid in selected offices of PWD and PHED

Sl. No.	Name of the documents to be submitted	Number of tenders with shortfall in technical documents	Number of bidders in those tenders without required technical documents
1	Tools, Plant & Machineries (Own machineries or Leasehold agreement)	31	63
2	Income Tax Acknowledgement	14	22
3	Affidavit of 1st Class Magistrate	10	16
4	Registered/Notary Partnership Deed	08	08
5	Insufficient credential of previous work	08	10
6	Power of Attorney	45	59

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31 *Statutory cover contains (i) Application duly signed in letter head pad (Format as per Section-B, Form-I); (ii) Declaration of the Tenderer in letter Head Pad with duly signed by the Applicant (Format as per Section-A); (iii) NIeT along with Corrigendum (if any) and (iv) Tender W.B. Form No. 2911(ii) along with special terms and conditions, Specifications, Drawings (if any).*

32 *(i) P Tax receipts/ valid payments certificate, PAN Card, ITR receipts, valid Trade license; (ii) GST Registration Certificate and Return Certificate; (iii) Registered/notarised deed for Partnership firm, Company registration certificate for companies/ltd./Pvt. Limited; (iv) Completion certificate/Credentials (v) Registration papers for Registered unemployed engineers co-operative society and registered labour cooperative society; (vi) Registered Power of Attorney for Partnership firms, companies, LTD, Pvt. LTD, Registered Cooperative Societies etc.; (vii) An Affidavit executed before a 1st Class Magistrate for owner/ proprietorship firms; (viii) P/L and Balance Sheet and Tax Audit Report.*

33 *12 tenders of O/o the AE, Siliguri Sub-Division, PWD; 38 tenders of O/o the EE, Diamond Harbour Highway Division, PW(Roads) Directorate.; 30 tenders of O/o the EE, Electrical Division, PHE; 32 tenders of O/o the EE, Kalimpong Division, PWD;, 27 tenders of O/o the SE, Mechanical Circle-III, PHE; 29 tenders of O/o the EE, Eastern Mechanical Division, PHE; 23 tenders of O/o the EE, Asansol Division Social Sector, PWD; 31 tenders of O/o the EE, Asansol Highway Division, PW (Roads) Directorate. and 27 tenders in O/o the EE, Durgapur Water Supply Division, PHE Directorate.*

Sl. No.	Name of the documents to be submitted	Number of tenders with shortfall in technical documents	Number of bidders in those tenders without required technical documents
7	Tax Audited Report (3CB/3CD)	16	32
8	Pre-qualification Form-II (Structure and Organisation)	16	25
9	Pre-qualification Form-III (Experience Profile)	02	02
10	P. Tax Certificate/ Receipts-challans	08	08
11	Trade License	09	10
12	Application and Declaration not in Letter Head Pad	02	12
13	Affidavit of pre-site visit	29	72
	Total	**198**	**339**

Audit noticed that the system did not have a provision to upload such documents mandatorily. Due to lack of the above application controls and workflows, Audit observed that even in cases where the bidders had submitted irrelevant/ incomplete set of documents, the technical bid evaluation committee had irregularly accepted such bids and opened the corresponding financial bids. Moreover, no workflow was provided in the system to allow departmental users to verify and confirm the accuracy of the uploaded documents of the bidders.

Audit further observed that in respect of 93 tenders, where Award of Contract was issued, there was deficient/ incomplete documentation in case of the bidders who had been evaluated as L1. Record of offline correspondence with these bidders from the TIAs, seeking missing/ deficient records were also not available in the concerned files.

The above circumstances indicated the very material risk of undue benefits being extended to those bidders who had submitted incomplete documents.

In response, eight Sub-Divisional/ Divisional/ Circle offices stated that due to exigencies of work and time constraints, proper checking of documents could not be done. They further added that efforts would be made to ensure compliance in future. The remaining Office[34] stated that the deficient documents had been obtained from the concerned bidders before proceeding with technical bid evaluation.

PHED stated (June 2024) that all the TIAs will be instructed to carefully verify all statutory and non-statutory documents uploaded by tenderers.

The responses indicated that the objective of full mapping of business rules to ensure that the burden of compliance shifts from the individual users to the e-Procurement system, had not yet been achieved.

Recommendations:

Government should:

10. ***implement application controls to enforce robust encryption of bids submitted and maintain a clear system trail to derive assurance that data confidentiality and integrity is preserved.***

[34] *SE, Mechanical Circle-III, PHED.*

2.13 Award of Contract

As per SRS, the TIA, based on the recommendations of the financial evaluation committee, and after getting approval, was required to prepare the contract manually and upload the same into the system. The bidders were to be informed by email about the award of the contract. In addition, the bidders were to be provided the option of viewing the contract awarded on the system.

As described above, critical functions such as technical evaluation, financial evaluation and award of contract were still being carried out manually, outside the e-Procurement system. Due to the continuation of manual processes for these critical functions and the absence of online processing of technical and financial evaluation and award of contract through the system with the required application controls, Audit noticed irregularities in the manual process of Award of Contract, which are detailed below.

2.13.1 Absence of application controls to prevent contract value exceeding the L1 bid amount

As per Rule 177 of WBFR the amount of the contract awarded should not be higher than the amount of the L1 bid.

Audit analysed the database and noticed that out of 90,928 tenders of PWD and PHED published during the period from 2018-19 to 2022-23, the amount of the awarded contract was higher than the L1 bid in 1,291 tenders. Out of 341 tenders test checked in selected units, Audit noticed two instances with this irregularity.

Due to the continuation of manual process for award of contract and the absence of online processing of award of contract through the system, there was avoidable risk of error of commission / deliberate irregularity on the part of the TIA when carrying out this process manually.

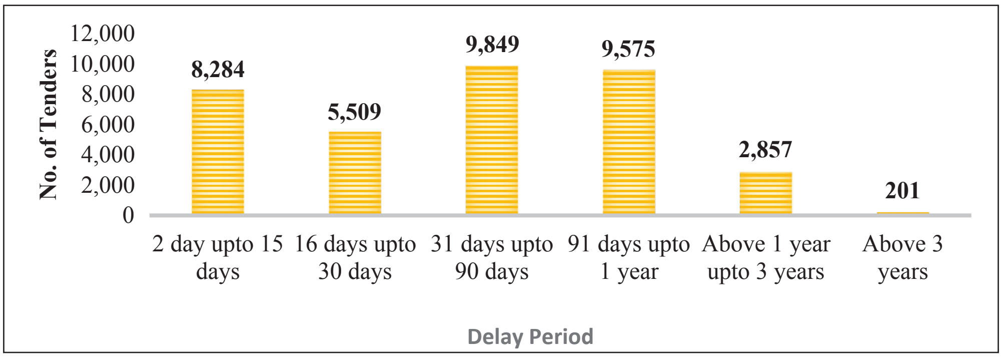
The absence of application controls to prevent such occurrences was fraught with the risk of extension of undue favours by Departmental users to selected bidders. Reply in this regard has not yet been received from the Department.

2.13.2 Non-updation of AoC status resulted in incorrect MIS reports and pending EMD refunds.

After Award of Contract (AoC) through the manual process outside the system, details of the same are to be entered by the TIA into the system, so that EMD may be refunded to the unsuccessful bidders. The completion of this workflow is essential for correct updation of the status of the tender in the system, and for correct generation of the related MIS Report.

Audit analysed the database and noticed that there were significant delays between the date of opening of financial bids and the date of uploading of AoC in the e-Procurement system. It was noticed that in 1,89,361 tenders pertaining to the period 2018-19 to 2022-23, there were delays in uploading AoC, ranging between 2 days to 1769 days. Out of these, in 36,275 tenders of PWD and PHED, the delays ranged between 2 to 1769 days as detailed in **Chart 2.5** below:

Chart 2.5: Range of delay in uploading of AoC after opening of financial bids for the period 2018-19 to 2022-23 i.r.o. PWD and PHED



The delay in uploading of AoC on the e-Procurement portal not only resulted in incorrect MIS Reports but also delayed the refund of EMD to unsuccessful bidders and the deposit of EMD of the successful bidders to Government Account.

During the Exit Conference (February 2024), Government stated that there were numerous cases where tender had been finalised, however, AoC was yet to be issued. Government accepted that due to such instances, significant amounts remained in the EMD pooling account without being refunded to bidders.

Recommendations:

Government should:

11. ***implement the required functionalities and application controls to fully map all the relevant business rules to ensure that award of contract is carried out through the system in compliance with executive instructions.***

12. ***issue necessary instructions to mandate the issue of AoC only through the e-Procurement system and dispense with the manual award of contract, to minimise the risks of error/ deliberate irregularities by users.***

2.14 Timestamp Management and Application Security

2.14.1 Broken chronology in creation and updating of records in key tables

Audit analysed the database and noticed that upto 31 March 2023, there were clear instances[35] where the timestamp[36] recorded for the creation of a record in the database tables was later than the timestamp recorded for updating the same record. This indicated that the system control to enforce chronological sequencing in the recording of transactions in the database had significant deficiencies, or material risk that modifications had been made at the back end of the system.

[35] *59 out of 22,30,619 cases for the period 2018-19 to 2022-23.*

[36] *e-Procurement system should make use of the date and time service of the external timestamping server. All activities in the system should be timestamped with the server time.*

Audit noticed such instances of broken chronology in the creation and updating of records in six crucial database tables. Number of cases of broken chronology in those tables are as follows:

a. **gep_tender_basic_details**[37]**:** 78,099 cases

b. **gep_tender_work_items**[38]**:** 37,080 cases

c. **gep_user**[39]**:** 9 Cases

d. **gep_bids**[40]**:** 2,56,617 cases

e. **gep_bid_aoc**[41]**:** 473 cases

f. **gep_user_certificates**[42]**:** 16 cases

Out of the above, of particular concern was the gep_bids table, which was supposed to record the details of the bids which had been submitted by bidders. As a result of this significant irregularity, Audit was unable to derive assurance on the security of the database and the use of interventions at the back end of the system could not be ruled out.

2.14.2 Gaps in the auto-generated sequence numbers in key tables

The transaction ID column was designed to be auto generated in each database table, and cannot be modified through any user actions at the front end of the system. This ID is necessary to maintain uniqueness of records in each database table. Audit test checked sixteen key tables in the database and noticed that there were gaps in the auto-generated sequence numbers for IDs of the records in the tables, as detailed in **Table 2.7** below:

Table 2.7: Summary of gaps in the sequence number in tables of GePNIC

Sl. No.	Name of table	No. of gaps	No. of IDs
1.	gep_secratariat_Department	3	3
2.	gep_tender_basic_details	7,465	9,013
3.	gep_corporate_tenderer	37	246
4.	gep_tender_work_items	27,310	30,488
5.	gep_user	34	233
6.	gep_orgchain_master	277	589
7.	gep_tender_critical_dates	24,021	26,695
8.	gep_bids	105	312
9.	gep_bid_AOC	1,038	1,725
10.	gep_bid_decrypted	54,885	67,135

[37] *the table facilitates the creation and maintenance of tender basic details like tender ref. no., tender id, resubmission allowed etc.*

[38] *the table facilitates the creation and maintenance of work item details like tender title, work description, tender value etc.*

[39] *the table facilitates the creation of user data such as login id, password, user type, DSC status etc.*

[40] *this table facilitates the creation and maintenance of submitted bid details like bid id, EMD exemption details etc.*

[41] *this table facilitates the creation and maintenance of Award of Contract details.*

[42] *this table facilitates the creation and maintenance of DSC information.*

Sl. No.	Name of table	No. of gaps	No. of IDs
11.	gep_packet_decrypted	21,472	23,410
12.	gep_bid_open_summary	9,988	10,635
13.	gep_tender_bid_openers	1,81,761	6,66,905
14.	gep_tender_opened	10,799	11,440
15.	gep_tenderer	103	115
16.	gep_user_certificates	2,745	4,804

(Source: e-Procurement database)

On this being pointed out, the Finance Department admitted (January 2024) that some of the records had been deleted due to non-responsiveness of the portal at the front end of the system, and that some of the records had been missed during data migration.

Audit noticed that there were gaps in the IDs for key tables such as gep_bids (for storing bid data), gep_bid_decrypted (for storing data of bids decrypted), gep_tender_bid_openers (for storing data on bid openers). While the explanation from the Finance Department was noted by Audit, the existence of such gaps also indicated the material risk that the data in these tables had been modified at the back end of the system, bypassing the intended controls to maintain confidentiality and integrity of bids submitted by bidders. In view of this control deficiency, Audit was unable to derive assurance on the security of the database.

Recommendations:

13. Government should implement application controls to enforce chronological and logical sequencing of actions in the system, and minimise interventions at the back end of the system.

2.15 Other Issues

2.15.1 Non-recovery of interest from ICICI due to delay in deposit and refund of EMD

A Memorandum of Understanding (MoU) was signed (July 2016) between the Finance Department, GoWB and ICICI Bank, Kolkata for online collection of tender amounts. As per the provisions of the MoU:

- The Bank was required to deposit the EMD received from successful bidders on T+1 (next date of transaction) to Government Account. The transfer of EMD of successful bidders was to be routed through a pool Bank Account in ICICI Bank. The failure to deposit the amount on time would result in payment of interest by ICICI Bank.
- The Bank was further required to refund the EMD of the rejected bidders in their respective bank account within T+2 day from the date on which rejection of bid was uploaded to the e-Procurement portal.
- The Memorandum of PWD (March 2018) stipulated that all the unsuccessful bids (L2 onward) shall be rejected citing the reason that the bid is not

L1 (lowest one) and the EMD for unsuccessful bidders shall be released instantly.

On analysis of data of PWD and PHED, Audit noticed that during 2018-19 to 2022-23, there were 1,631 cases[43] of successful bidders where TIA had issued AoC, and there were 10,760 cases of unsuccessful bidders where bids had been rejected, but the timelines prescribed for deposit/refund of EMD, had not been followed by the designated bank. The delays in deposit to Government Account (in case of successful bidders) and refund to bidders (in case of unsuccessful bidders) ranged between 1 to 31 days and 1 to 42 days respectively.

Audit also analysed the entire e-Procurement database (all registered Departments/ entities) from 2018-19 to 2022-23 and noticed that the delays in deposit to Government Account (in case of 11,266 successful bidders) and refund to bidders (in case 54,801 of unsuccessful bidders) ranged between 1 to 97 days and 1 to 42 days respectively.

The delay in depositing the amounts to Government Account had resulted in deferred deposit of ₹ 55.90 crore (in 11,266 cases), on which penal interest could not be recovered from ICICI Bank due to non-renewal of MoU.

During the Exit Conference (February 2024), on the issue of delayed refunds and deposits of EMD, Government stated that a mechanism to monitor the status of pending deposits and refunds would be adopted.

The response had to be seen in light of the fact that the system should have had application controls for generation of exception reports for amounts collected as various fees but not yet refunded to registered suppliers, with communication of system generated alerts on the status of pending refunds (with age analysis) and pending deposits to Government Account to the competent authority by email/ SMS.

2.15.2 Deficiencies in Change Management process

The e-Procurement data of GePNIC was obtained[44] from the Finance Department, GoWB, containing data of the State up to 31 March 2023. From the data (‘*gep_ version_control_details’* table), Audit observed that changes had been carried out in the e-Procurement software from time to time. Changes in software were made 15 times from version ‘v1.09.03’ dated 17.04.2015 to version ‘v1.09.15’ dated 02 August 2022. The software version presently operational was ‘1.09.19’ from 19 July 2023.

However, details of the changes carried out in each version in the software since 2015 were not recorded/available in the database provided to Audit.

Finance Department replied (January 2024) that GePNIC is a generic software and the requirements and enhancements come from various stake holders. These requests are discussed to ensure compliance with rules and regulations and analysed for technical viability and incorporated in the subsequent versions. The software development team ensures that testing is done to confirm the customisations are at par with requirements. The customised software is

[43] *PWD -789 and PHED-842.*

[44] *through State NIC, on 18 April 2023.*

deployed in demo for user feedback before being deployed in the production. Errors are submitted to development team for rectification of the same on being reported by the users.

The response was not tenable, since a clearly documented trail for change management should have been maintained and reported at periodic intervals to the competent authority. Further, User Acceptance Tests should have been conducted before introducing any changes to the production environment but the same was not done. This indicated the presence of material risks associated with lack of accountability in case any errors were inadvertently introduced into the system.

2.16 Conclusion

The absence of MoU and Service Level Agreement between the State Government and NIC resulted in avoidable risks associated with lack of clarity of roles and responsibilities. In the e-Tendering Module, the full mapping of business rules into appropriate application controls had not been completed. This had resulted in the absence of enforcement of minimum period for submission of bids and absence of enforcement of two-cover process based on tender value. These missing business rules had contributed to instances of incorrect selection of bidders, incorrect computation of tender fees and award of contract at amounts higher than bid amounts during the continued manual processes for bid evaluation and award of contract.

There were deficiencies in the validation controls to verify inputs submitted during the bidder registration process, with discrepancies such as mapping of incorrect Digital Signature Certificates, Permanent Account Numbers and mobile numbers. There were deficiencies in the processing controls for computation of total tender value and lacunae in application controls to enforce chronological and logical sequencing of user actions in the system.

There was a material risk of access to and modification of data, including decrypted bid data, at the back end of the system without maintaining Database Administrator logs to record user actions, which was highly irregular. The responsibility for ensuring compliance with executive instructions related to procurement continued to remain on individual users, instead of this being shifted to the e-Procurement system. Hence, the objectives of implementing the e-Procurement system have not yet been fully achieved.

During the Exit Conference (February 2024), Government acknowledged that certain technical issues still remain in e-tendering which need to be addressed to enhance fairness and transparency in the system The Government also stated that based on the Audit observations, guidelines would be prepared and circulated among the Tender Inviting Authorities of various Departments to ensure compliance in future.