

A Long-Term Procurement Framework For Repeated Public Utility Services: A Model for Timely, Competitive and Quality-Oriented Procurement

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Abstract- *Public services and essential utilities require continuous maintenance, repairs, upgrades and service support. These requirements frequently involve repeated procurement of similar materials, components, equipment and services. In public procurement, each requirement must comply with applicable procurement rules and principles such as transparency, equal opportunity, clarity of specifications and fair competition. Repeated tendering, however, can consume significant time and may delay delivery of essential works and services. This paper discusses a fixed long-term procurement framework for routine and repeated requirements, while remaining within the applicable government procurement framework. The proposed approach focuses on long-term procurement, availability of multiple vendors, cost competitiveness, just-in-time delivery and quality of materials and executed works. A vendor-material rate matrix is proposed as a practical mechanism for obtaining comparative quotations for individual work instances under an approved framework. An indicative SOP is given for operation of term contract placed through the frame work. References mentioned clarifies the GFR*

Keywords - *Public procurement; long-term procurement framework; repeated works; utilities; vendor empanelment; rate matrix; comparative statement; just-in-time delivery; cost competitiveness; quality.*

I. INTRODUCTION

In an organization or a community, public services play a major role in ensuring effective maintenance, uninterrupted service availability and productivity of the system. Essential utilities and services require renovation, repair, upgradation and support for new user requirements on a frequent basis.

Such recurring requirements create a need for repeated procurement of similar consumable components, equipment and services. In some situations, the requirement may also arise on an emergent basis. Public procurement is required to follow applicable

guidelines and principles relating to transparency, equal opportunity, clarity in specifications and fair competition.

The procurement cycle may require several stages, including estimation, technical and administrative approval, tendering and purchase-order release. Even where similar requirements recur, these stages can take several weeks. Consequently, the time required for procurement may affect the delivery schedule and service requirements.

Delays in procurement can affect service-level requirements and, in some cases, may contribute to cost escalation, equipment downtime, breakdowns or loss of productivity. Therefore, for timely procurement and service deliverability in public services, there is a need to examine a long-term procurement framework that supports Product, Quality, Cost, Delivery and Service (PQCDS).

II. NEED FOR A LONG-TERM PROCUREMENT FRAMEWORK

Frequent procurement is particularly relevant to essential utility areas such as electrical systems, water systems, security services and medical services. The recurring nature of such requirements creates a need for a procurement mechanism that can address predictable categories of work while retaining competition and compliance with applicable rules.

The principal constraints identified in this paper are:

- Repeated small requirements for works and materials.
- Difficulty in repeatedly tendering the same or substantially similar BOQ, particularly where repeated tendering could be viewed as

fragmentation of requirements or as an attempt to avoid the applicable approval chain.

- Time consumed by individual tender processes and the resulting delay in fulfilling user requirements.
- Potential material and labor cost escalation caused by procurement delays.
- Repeated use of official/staff time and organizational resources for substantially similar procurement procedures.

III. OBJECTIVE AND SCOPE

This paper discusses a suitable fixed long-term procurement framework for routine and repeated requirements. The framework is intended to be defined within the limitations of, and optimized in accordance with, applicable government procurement regulations and institutional requirements, including the General Financial Rules (GFR), Central Vigilance Commission (CVC/CVO-related requirements as applicable), procurement manuals and GeM provisions, wherever applicable.

The proposed scope includes:

- Long-term fixed contracts for expected or repeated works and services.
- Preparation of a vendor and material rate matrix for high-volume or frequently required works, providing availability of multiple sources for execution.
- Tendering/procurement of the proposed recurring work content through the applicable public procurement process.

IV. PROCUREMENT AS A SERVICE-DELIVERY MECHANISM

Procurement or tendering is not merely a process or a document. Its purpose is to ensure delivery of quality services at an optimum cost while maintaining fair competition and equal opportunity. Clearly defined scope, specifications, terms and conditions are therefore essential.

The purpose of the proposed discussion is to develop a suitable model that can reduce the need for multiple tendering instances for similar works arising within a

defined period, particularly where the exact volume or timing of individual requirements cannot be predicted in advance. The model is intended to address this recurring uncertainty without compromising the principles governing public procurement.

V. KEY QUESTIONS FOR THE PROPOSED FRAMEWORK

1. How should the services and the actual need be understood and defined?
2. Which materials and services are recurring in nature?
3. Are the intervals of user demand fixed or variable?
4. When is individual tendering required?
5. Why are multiple tenders being processed for similar works?
6. Can similar requirements be bundled, and what complications may arise?
7. Can a fixed-term contract be adopted for the recurring requirements?
8. How many vendors should be empaneled or made available?
9. How should an individual vendor be selected from the empaneled vendors for each instance?
10. Which applicable rules and regulations support the proposed model, and which provisions may require further examination?
11. How should price escalation be considered—annually or in accordance with market fluctuation?
12. How should extension of vendor/service agreements and review of vendor performance history be handled?

VI. BASIC IDEA AND REGULATORY PLATFORM

The basic idea is to establish a fixed long-term procurement framework for identified recurring requirements, with suitable terms and conditions, defined service/material categories, vendor participation and a mechanism for obtaining competitive rates for each individual requirement.

The source draft identifies Rule 144 of the General Financial Rules (GFR) as the basic platform on which the proposed model is to be examined along with the provisions of manual for procurements

REF: PUBLIC PROCUREMENT & CONTRACT MANAGEMENT

Framework Mapping: GFR, MPNCS 2025 & Works Manual 2025

6.1. Fundamental Procurement Principles & Governance

- GFR Rule 144 (Fundamental Principles of Public Procurement): Mandates that all public procurement must ensure Economy (cost-effectiveness), Efficiency (timely delivery), Transparency (open procedures), Fair Competition (equal opportunity for all eligible bidders), and Proper Specifications (clear, generic specifications without favoring specific brand names).
- GFR Rule 225 (General Principles for Contracts): Requires Precise Contractual Terms and Appropriate Contract Conditions to avoid ambiguity, minimize legal disputes, protect public interest, and clearly define risk allocations, payment terms, and obligations.

6.2. Contract Types & Pricing Models (MPNCS 2025)

- MPNCS 2025 Para 4.2.2 (Time-based / Unit-rate Contract & Schedule of Rates): Utilized when the exact quantity of work or services cannot be defined in advance. Payments are made based on actual quantified units delivered against pre-agreed Schedule of Rates (SoR).
- MPNCS 2025 Para 4.2.3 (Indefinite-Delivery / On-Call Requirements): Used for recurring or on-demand service needs. Establishes a framework agreement

with agreed unit rates so orders can be placed as and when requirements arise during the contract period.

6.3. Tender Design & Execution Framework (MPNCS 2025)

MPNCS 2025 Para 5.1 (Framing Tender & Criteria): Establishes guidelines for framing tender documents, setting objective eligibility criteria, defining enforceable performance standards, and structuring clear contract periods.

- MPNCS 2025 Para 5.1.8 (Performance Standards / KPIs / SLAs): Requires clear definition of Performance Standards, Key Performance Indicators (KPIs), and Service Level Agreements (SLAs) with directly linked financial deductions/penalties for non-performance.
- MPNCS 2025 Para 9.4.1 (Contract Period & Extension Options): Defines the primary Contract Period along with stipulated extension options, including required performance benchmarks and conditions for exercising extensions.

6.4. Mixed Procurements: Electrical Works vs. Services

When a procurement involves a combination of Goods, Works, and Services (e.g., electrical installations, supply-and-erection, or turnkey projects), the Predominant Activity Rule determines the categorization, standard bidding document, and applicable manual.

Aspect / Provision	Predominant Activity: Electrical Works (Works Manual 2025)	Predominant Activity: Non-Consultancy Services (MPNCS 2025)
Primary Criterion	Core value, scope, and labor involve physical construction, heavy wiring/cabbling, panel assembly, installation, or structural integration.	Core scope involves routine maintenance, operations, facility management, testing/inspection, or manpower provision.
Governing Manual	Works Manual 2025	MPNCS 2025

Aspect / Provision	Predominant Activity: Electrical Works (Works Manual 2025)	Predominant Activity: Non-Consultancy Services (MPNCS 2025)
Bidding Document Used	Standard Bidding Document (SBD) for Civil/Electrical Works.	Standard Bidding Document (SBD) for Non-Consultancy Services.
Measurement & Payment	Measured Bill of Quantities (BoQ) / Item Rate / Lump-sum based on physical installation completion milestones.	Monthly/Quarterly service fees, Unit-rate per SLA performance, or time-based invoices.
Performance Evaluation	Work completion certificates, site handover, deflection/load/insulation tests, and Defect Liability Period (DLP).	Key Performance Indicators (KPIs), Service Level Agreements (SLAs), and penalty/deduction matrices.
Defect Liability / Warranty	Mandates a standard Defect Liability Period (DLP) (e.g., 12–36 months) with Performance Security retention.	Governed by continuous SLA adherence; warranty covers routine replacement under service scope.
Tender Categorization	Categorized as Works Procurement, even if minor equipment supply (Goods) or AMC/Services are bundled.	Categorized as Service Procurement, even if minor electrical spare parts (Goods) are supplied during service.

Table 1. Regulatory platform and relevance to the proposed model

VII. TARGET CONDITION The proposed framework seeks to achieve the following target conditions: • Long-term procurement. • Availability of multiple vendors. • Cost competitiveness. • Just-in-time delivery. • Quality of materials and executed works.	• Define the agreement period and the review mechanism for extension. • Consider stability, licensing and other applicable eligibility requirements for the participating vendors.
VIII. DETAILS REQUIRED FOR MODELLING THE PROCUREMENT FRAMEWORK • Identify the services and works that require repeated execution. • Create suitable terms and conditions according to the organization's specific requirements. • Decide the minimum and maximum number of vendors to be available, including whether a single-vendor arrangement is appropriate for any specific category.	IX. PROPOSED VENDOR–MATERIAL RATE MATRIX MODEL The proposed model is to maintain a structured matrix for each identified service or work category. The matrix can contain the material/work description and the rates quoted by the participating vendors. For each individual requirement or work instance, a separate BOQ can be prepared based on the actual requirement and the relevant line items can be used to create a comparative statement. A representative structure is given below:

Table 2. Representative vendor–material rate matrix

S. No.	Material / Work Description	Vendor 1	Vendor 2	Vendor 3	Vendor 4	Vendor 5	Vendor 6
1	Item / service description	Quoted rate	Quoted rate	Quoted rate	Quoted rate	Quoted rate	Quoted rate
2	Item / service description	Quoted rate	Quoted rate	Quoted rate	Quoted rate	Quoted rate	Quoted rate
3	Item / service description	Quoted rate	Quoted rate	Quoted rate	Quoted rate	Quoted rate	Quoted rate
4	Item / service description	Quoted rate	Quoted rate	Quoted rate	Quoted rate	Quoted rate	Quoted rate
5	Item / service description	Quoted rate	Quoted rate	Quoted rate	Quoted rate	Quoted rate	Quoted rate
6	Item / service description	Quoted rate	Quoted rate	Quoted rate	Quoted rate	Quoted rate	Quoted rate
7	Item / service description	Quoted rate	Quoted rate	Quoted rate	Quoted rate	Quoted rate	Quoted rate

For each work or procurement instance, a separate BOQ may be prepared and the relevant line items may be used for preparation of the comparative statement. Based on the applicable procurement procedure and approved evaluation criteria, the competitive quotation can then be identified.

An SOP shall be derived as per organization specific policy.

X. IMPLEMENTATION CONSIDERATIONS

Implementation of the proposed framework would require clear identification of recurring requirements, suitable technical specifications, appropriate terms and conditions, a transparent vendor-selection mechanism, defined agreement periods and an appropriate review mechanism. The framework should also provide for price considerations, vendor performance review and extension of agreements in accordance with the applicable rules.

Entire processing of the model finalization and vendor–material matrix must be processed through public procurement platforms (CPPP, Gem, newspaper etc.)

The number of vendors and the method of selecting a vendor for each individual requirement are important design elements. The process should preserve competition and provide a clear audit trail for each procurement instance. The framework should also distinguish between requirements that can reasonably be covered by a long-term arrangement and requirements that need separate procurement because of their nature, uncertainty or value. A duly approved SOP by competent authority must be kept ready for reference and audit for the proposed model.

XI. EXPECTED BENEFITS

- Reduction in repetitive procurement effort for recurring requirements.
- Improved responsiveness to user requirements.
- Potential reduction in procurement-related delays.
- Availability of multiple sources for execution.
- Better visibility of applicable rates for recurring items.
- Support for quality, cost, delivery and service objectives.
- More efficient use of official/staff time for repeated procurement activities.

XII. CASE STUDY:

A case study demonstrating the application of the Standard Operating Procedure (SOP) for electrical systems can provide a clear understanding of the proposed procurement framework and its practical implementation

STANDARD OPERATING PROCEDURE (SOP) for Electrical Renovation & Repair Works – 415 V Low-Voltage Systems

Vendor Selection, Work Order, Execution, Safety, Quality Assurance, Measurement and Billing

Table 3. SOP identification and control information

SOP No.	Revision	Effective Date	Department
EMD/EL/415V/01	00	_____	Electrical Maintenance

12.1. Purpose

To establish a controlled and auditable procedure for recurring 415 V electrical renovation and repair works, from identification of requirement and selection of an approved vendor through work-order issue, electrical safety, material approval, execution, testing, measurement, running/final billing and closure. The procedure supports timely delivery while maintaining safety, quality, cost control and traceability.

12.2. Scope

This SOP covers renovation, repair, replacement, modification and minor upgradation works on 415 V LV installations covered by the approved long-term procurement/rate-matrix framework. Typical works include distribution boards/panels, feeders, cables, isolators, MCCBs/MCBs, contactors, starters, switches, sockets, lighting circuits, earthing-related works, cable termination and allied LV items.

Works involving higher-voltage systems, major capacity augmentation, protection redesign or specialist statutory approvals shall be processed through the applicable separate procedure.

12.3. Responsibilities

- User/Section: raises requirement, provides location and operational need, and coordinates access.
- Engineer-in-Charge: verifies site condition, prepares/approves BOQ, identifies matrix items, supervises execution, verifies materials, measurements, testing and bills.

- Procurement/Contract Section: maintains the approved vendor/rate matrix, prepares comparative statement, processes L1 selection and issues the work order after required approvals.
- Vendor/Contractor: provides competent personnel, tools, PPE and materials and executes the approved scope and safety requirements.
- Safety/Authorized Electrical Person: controls isolation, permit/LOTO requirements and safe restoration under the organisation's electrical safety procedure.

12.4. Requirement Identification & BOQ

- Inspect the affected installation and identify the existing equipment, rating, fault/condition and proposed corrective/renovation work.
- Prepare BOQ with item description, specification, quantity, approved make/equivalent where applicable and expected completion period.
- Check availability of items in the approved 415 V rate/vendor matrix.
- Obtain required technical, administrative and financial approvals.

12.5. Vendor Selection through Rate Matrix

- Obtain rates from eligible vendors covered by the approved framework, following its prescribed method.
- Prepare the comparative statement on the complete BOQ or item/package basis specified in the contract.

- Determine L1 strictly according to the approved evaluation method; no informal vendor rotation.
- Verify agreement validity, eligibility, applicable rates, capacity and relevant performance conditions.
- Record the basis of selection and obtain competent approval.

12.6. Work Order & Pre-Start Controls

- Issue a work order defining scope, BOQ, rates, completion period, material specifications, testing, safety, measurement, billing, security deposit/performance security and contract conditions.
- Conduct site briefing and establish work area, access, shutdown requirement and work sequence.
- Prepare an electrical shutdown/isolation plan where the work affects an electrical installation.
- No work shall commence on equipment requiring isolation until authorised isolation and safety controls are established.

12.7. Electrical Safety – 415 V

- Work shall be carried out only by competent/authorised personnel under the organisation's electrical safety system.
- Where isolation is required: identify the correct source, isolate, prevent inadvertent re-energisation, verify absence of voltage with an appropriate tester and establish prescribed safety/earthing arrangements before work starts.
- Use required PPE, insulated tools, barriers/signage and safe access.
- Live work shall not be undertaken unless specifically authorised under the approved electrical safety procedure and applicable rules.
- After completion, remove tools/materials, confirm personnel are clear, restore supply in a controlled manner and verify normal operation.

12.8. Material Approval & Inspection

- Vendor shall submit make/model, datasheet, test certificate, sample or compliance documents wherever specified.

- Verify rating, breaking capacity, cable size/type, insulation class, enclosure/IP requirements and other specified characteristics before acceptance.
- Only approved materials shall be incorporated. Non-conforming material shall be rejected/replaced as per contract.
- Retain material receipt and inspection records with the work-order file.

12.9. Execution & Supervision

- Execute only against approved BOQ, drawings/specifications and site instructions.
- Maintain identification of circuits, cables and equipment during renovation.
- Ensure cable routing, termination, gland/lug selection, torquing, dressing, segregation and enclosure arrangements meet approved technical requirements.
- Record deviations/additional requirements before execution; unauthorised additional work shall not be admitted for payment.
- Engineer shall monitor progress, workmanship, safety and restoration of affected services.

12.10. Testing & Quality Assurance

- Carry out applicable pre-commissioning and functional checks before energisation.
- Depending on the work, verify continuity, insulation resistance, polarity/phase sequence, protective-device operation, earthing continuity and functional operation.
- For panels/DBs and major replacements, verify identification, termination, protection settings where applicable and enclosure condition.
- Record test results and rectify defects before final acceptance.
- Tests and acceptance criteria shall be those specified in the work order/technical specification and applicable organisational standards.

12.11. Measurement & Running Bill

- Record actual quantities in the prescribed Measurement Book/e-MB or equivalent approved record.
- Running bills, where permitted, shall be based only on measured and certified work.

- Engineer shall verify quantities, approved rates, material compliance, quality records and applicable deductions before certification.
- Payment shall follow the applicable financial and contract procedure.

12.12. Completion, Final Bill & Security Deposit

- Conduct final inspection and testing and rectify recorded deficiencies.
- Record final measurements and reconcile final quantities with the work order.
- Issue completion/acceptance certification after satisfactory performance.
- Process final bill after verification of measurements, testing, quality and documentation.
- Retain/release security deposit or performance security strictly according to contract conditions, including defect-liability/warranty requirements where applicable.
- Close the work order only after final documentation and vendor-performance records are updated.

12.13. Records / Audit Trail

Requirement → BOQ/Approval → Rate Matrix → Comparative Statement → L1 Selection → Work Order → Safety/Isolation Record → Material Approval → Site Supervision → Test Reports → Measurement → RA Bill → Final Inspection → Final Bill → Security Deposit → Vendor Performance → Closure.

12.14. Key Control Principle

Every 415 V repair/renovation work shall have a traceable link between the approved requirement, selected vendor, approved material, safe execution, measured quantity, quality/test evidence and payment. The rate matrix simplifies recurring procurement; it does not remove work-specific technical verification, safety control, measurement, certification or applicable approvals.

12.15 SOP FLOW CHART – 415 V ELECTRICAL RENOVATION & REPAIR

End-to-end process from requirement identification to work-order closure

Table 4. SOP flow chart – 415 V electrical renovation & repair

	Requirement / Complaint / Indent	↓
1	Site Inspection & Fault / Condition Assessment	↓
2	BOQ + Technical Specification + Estimate	↓
3	Check Approved 415 V Vendor–Rate Matrix	↓
4	Obtain Applicable Vendor Rates	↓
5	Comparative Statement & L1 Determination	↓
6	Technical / Financial / Competent Approval	↓
7	Work Order + Security / Contract Formalities	↓
8	Site Briefing + Shutdown / Isolation / LOTO Controls	↓
9	Material Submission & Technical Approval	↓
10	Execution + Engineer Supervision + Quality Checks	↓
11	Testing / Inspection / Rectification	↓
12	Measurement & RA Bill Certification	↓
13	Final Inspection + Testing + Completion Certificate	↓

	Requirement / Complaint / Indent	↓
14	Final Measurement & Final Bill	↓
15	Defect Liability / Warranty Monitoring	↓
16	Security Deposit Release as per Contract	↓
17	Vendor Performance Review & Work-Order Closure	✓

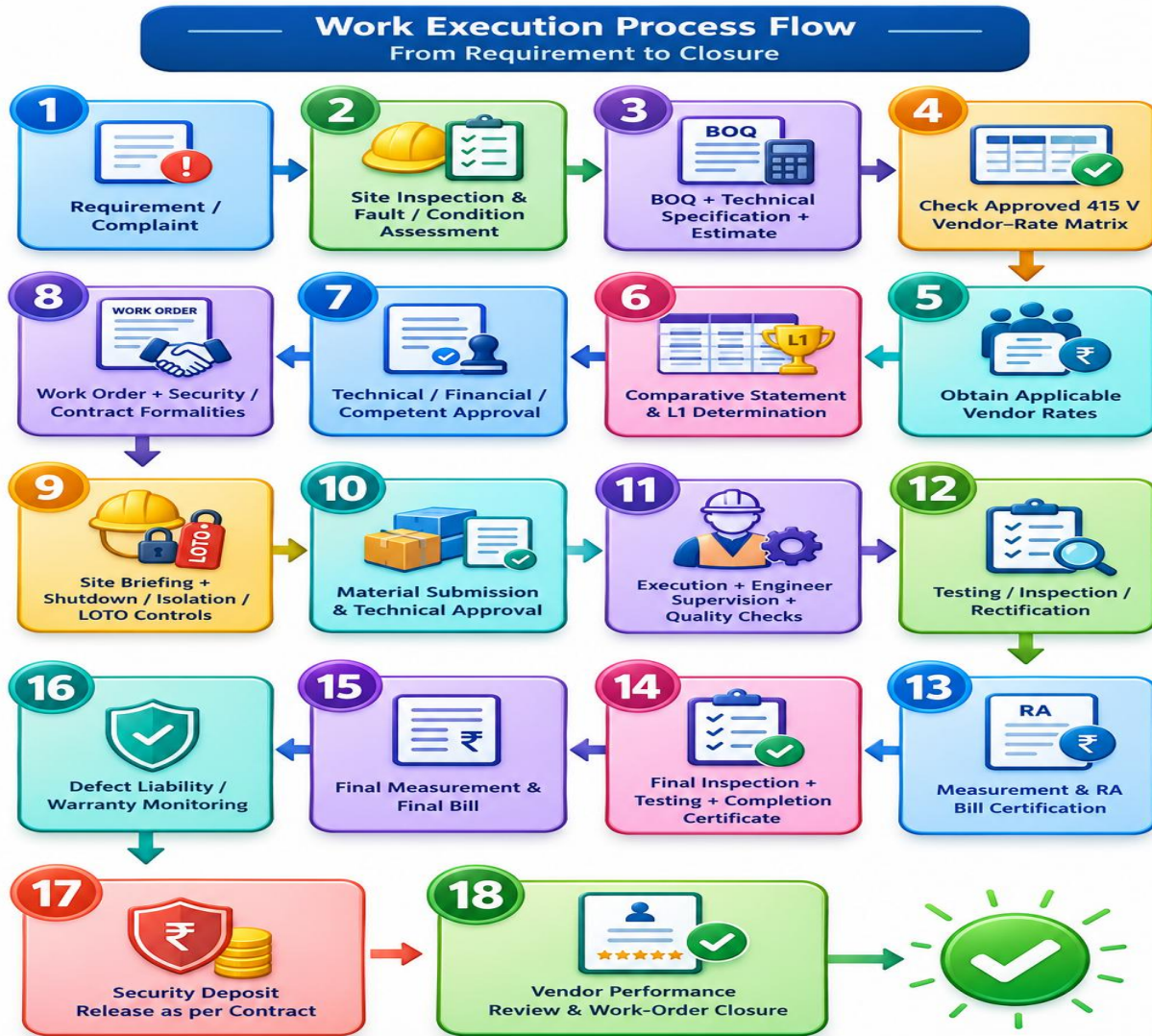


Figure 1. Work execution process flow – from requirement to closure

CRITICAL CONTROL GATES

Table 5. Critical control gates

Vendor Selection	Electrical Safety	Quality	Payment
Approved matrix → eligible vendors → prescribed evaluation → L1 → approval	Correct isolation → prevent re-energisation → verify dead → work → controlled restoration	Approved material → supervision → testing → rectification → acceptance	Measured quantity → certified work → RA/final bill → deductions → payment

XIII. CONCLUSION

Public utility services require continuous and timely support through procurement of recurring materials, works and services. Repetition of substantially similar procurement procedures can create avoidable administrative effort and may affect service delivery when requirements arise frequently or on an emergent basis.

A suitably designed fixed long-term procurement framework, established within the applicable government procurement rules, can provide a structured mechanism for recurring requirements. The proposed vendor–material rate matrix, supported by clearly defined specifications, terms and conditions, vendor participation, comparative evaluation and periodic review, provides a practical model for further examination through a suitable case study. Detailed implementation should be based on the current applicable GFR, procurement manuals, GeM provisions, vigilance requirements and the organisation's approved procurement procedures.

XIV. REFERENCE / REGULATORY FRAMEWORK FOR FURTHER EXAMINATION

The source material identifies the following regulatory references for examination of the proposed model:

- General Financial Rules (GFR).
- Applicable Central Vigilance Commission / vigilance requirements.
- Government procurement manuals and institutional procurement procedures.
- Government e-Marketplace (GeM), wherever applicable.

XV. CONCLUSION

The proposed long-term procurement framework provides a structured approach for managing recurring public utility requirements while maintaining competition, transparency, quality and accountability. The vendor–material rate matrix can reduce repetitive procurement effort and support timely execution of recurring works.

The 415 V electrical renovation and repair SOP demonstrates the practical application of the proposed framework, covering the complete process from requirement identification and vendor selection to execution, testing, measurement, billing and work-order closure. The framework can be further examined through similar case studies in other utility services and implemented subject to the applicable procurement rules and institutional procedures.