2024

**KARNATAKA POWER TRANSMSSION CORPORATION
LIMITED (KPTCL)**

(A Govt. Of Karnataka Undertaking)

Request for Proposal (RFP)

for

*"Implementation and Support for Enterprise
Application, Automation
and Analytics Platform (EAAAP) System at KPTCL"*

Office of SEE(IT), Corporate Office, KPTCL, Kaveri Bhavan, Bangalore - 560001,
Karnataka, India

Disclaimer

This Request for Proposal (**RFP**) is for the work of Implementation and Support for Enterprise Application, Automation and Analytics Platform (EAAAP) System at Karnataka Power Transmission Corporation Limited (KPTCL). Whilst the information in this RFP has been prepared in good faith, it is not and does not purport to be comprehensive or to have been independently verified. Neither KPTCL, nor any of its officers or employees, nor any of their advisers nor consultants accept any liability or responsibility for the accuracy, reasonableness or completeness of the information contained in the RFP, or for any errors, omissions or misstatements, negligent or otherwise, relating to the proposed project, or makes any representation or warranty, express or implied, with respect to the information contained in this RFP or on which this RFP is based or with respect to any written or oral information made or to be made available to any of the recipients or their professional advisers and, so far as permitted by law and except in the case of fraudulent misrepresentation by the party concerned, and liability therefore is hereby expressly disclaimed.

The information contained in this RFP is selective and is subject to updating, expansion, revision and amendment at the sole discretion of KPTCL. It does not, and does not purport to, contain all the information that a recipient may require for the purposes for making a decision for participation in this process. Each Party must conduct its own analysis of the information contained in this RFP, to correct any inaccuracies therein and is advised to carry out its own investigation into the proposed project, the regulatory regime which applies thereto and by and all matters pertinent to this project and to seek its own professional advice on the legal, financial and regulatory consequences of entering into any agreement or arrangement relating to this project. KPTCL shall not be responsible for any direct or indirect loss or damage arising out of or for use of any content of the RFP in any manner whatsoever.

This RFP includes certain statements, projections, targets and forecasts with respect to the Project. Such statements, projections, targets and forecasts reflect various assumptions made by the management, officers, employees, consultants, and experts of KPTCL, which (the assumptions and the base information on which they are made) may or may not prove to be correct. No representation or warranty is given as to the reasonableness of forecasts or the assumptions on which they may be based and nothing in this RFP is, or should be relied on as, a promise, representation or warranty.

The scope of work provided in this Request for Proposal (RFP) is intended to serve as a preliminary guide for bidders. The detailed scope, requirements, and specifications will be provided during the requirement gathering phase. The successful bidder will be expected to work closely with KPTCL teams during the requirement gathering phase to finalize the detailed scope and deliverables.

KPTCL shall be the sole and final authority with respect to qualifying a bidder through this RFP. The decision of KPTCL in selecting the Implementation Agency who qualifies through this RFP shall be final and KPTCL reserves the right to reject any or all the bids without assigning any reason thereof. KPTCL may terminate the RFP process at any time without assigning any reason and upon such termination KPTCL shall not be

responsible for any direct or indirect loss or damage arising out of such a termination.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Proposal including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by the KPTCL or any other costs incurred in connection with or relating to its Proposal (Bid). All such costs and expenses will remain with the Bidder and the KPTCL shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by an Bidder in preparation or submission of the Proposal (Bid) regardless of the conduct or outcome of the selection process.

Abbreviations

Acronym	Definition
ABT	Availability Based Tariff
ACR	Annual Confidential Report
AMC	Annual Maintenance Contract
ARR	Annual Revenue Requirement
ATS	Annual Technical Support
AMS	Annual Maintenance Support
ABT	Availability Based Tariff
ACR	Annual Confidential Report
B.Tech./B.E.	Bachelor of Technology/Bachelor of Engineering
BBP	Business Blueprint
BC	Banker's Cheque
BCP	Business Continuity Plan
BDS	Bid Data Sheet
BOM	Bill of Materials (includes Bill of Quantities)
BSDD	Business Solution Design Document
CA	Chartered Accountant
CERT-In	Indian Computer Emergency Response Team
CIF	Carriage, Insurance & Freight
CIP	Carriage Insurance Paid to
CMMi	Capability Maturity Model Integration
CPWD	Central Public Works Department
CPG	Contract Performance Guarantee
CRA	Commercial and Regulatory Affairs
CST	Central Sales Tax
CV	Curriculum Vitae
CWIP	Capital Work in Progress
CIP	Carriage Insurance Paid to
DD	Demand Draft
Deptt.	Department
DGS&D	Directorate General of Supplies & Disposals
DMS	Document Management System
DNS	Domain Name Service
DD	Demand Draft
DRR	Daily Receipt Register
EAAAP	Enterprise Application, Automation and Analytics Platform (EAAAP) System
ECC	Excise Control Code
EMD	Earnest Money Deposit
EMS	Enterprise Monitoring System
EULA	End User License Agreement
EXW	Ex-Works
FMS	Facility Management Service
FRS	Functional Requirement Specifications
FY	Financial Year (from April to March)
GIS	Geographical Information System
GPF	General Provident Fund
GST	Goods & Services Tax
GUI	Graphical User Interface
HLD	High Level Design
HRMS	Human Resource Management System

HTTP	Hypertext Transfer Protocol
HTTPS	Hypertext Transfer Protocol Secure
ICC	International Chamber of Commerce
ICT	Information and Communication Technology
IFRS	International Financial Reporting Standards
IP	Implementation Partner
IPR	Intellectual Property Rights
ISO	International Organization for Standardization
ISP	Internet Service Provider
IST	Indian Standard Time
IT	Information Technology
ITB	Instructions to Bidder
ITIL	IT Infrastructure Library
LAN	Local Area Network
LoA	Letter of Award
LTC	Leave Travel Concession
LLD	Low Level Design
MIS	Management Information System
MOU	Memorandum of Understanding
MTR	Motor Transport Receipt
NCB	National Competitive Bidding
NIT	Notice Inviting Tender
NMS	Network Monitoring System
NOC	Network Operating Centre
NPV	Net Present Value
OEM	Original Equipment Manufacturer
OFC	Optical Fiber Cable
ORAS	Occurrence Reporting & Analysis System
OS	Operating System
PAN	Permanent Account Number
PAT	Profit After Tax
PBG	Performance Bank Guarantee
PDA	Personal Digital Assistant
PF	Provident Fund
PIS	Personnel Information System
PMI	Project Management Institute

Acronym	Definition
PMU	Project Management Unit
PPM	Project Planning & Management
PSU	Public Sector Undertaking
PV	Present Value
RAID	Redundant Array of Independent Disks
RDBMS	Relational Database Management System
RFID	Radio Frequency Identification
RFP	Request for Proposal
SAMAST	Scheduling, Accounting, Metering & Settlement of Transactions
SAN	Storage Area Network
SCADA	Supervisory Control and Data Acquisition
SCC	Special Conditions of Contract

SI	Implementing Agency
SLA	Service Level Agreement
SLDC	State Load Dispatch Centre
SMTP	Simple Mail Transfer Protocol
SOP	Standard Operation Procedure
SOR	Schedule of Rates
SMS	Short Messaging Service
STAAD	Structural Analysis and Design (Software)
TAN	Tax deduction & collection Account Number
TBT	Terminal Benefit Trust
TCO	Total Cost of Ownership
TCP	Transmission Control Protocol
TIN	Tax Information Network
TRS	Technical Requirement Specification
UAT	User Acceptance Test
USB	Universal Serial Bus
SD-WAN	Software Defined - Wide Area Network
VAT	Value Added Tax
VPN	Virtual Private Network
VRS	Voluntary Retirement Scheme
WAN	Wide Area Network
WMS	Workflow Management System

Table of Contents

Letter of Invitation to Bidders

Tender no.	KPTCL/SEE(IT)/EE(IT-1)/56108/2/2024-25
Name of the Organization	Karnataka Power Transmission Corporation Limited. (KPTCL)
Title of Services	Implementation and Support for Enterprise Application, Automation and Analytics Platform (EAAAP) System at KPTCL

Dear Sir/Madam,

1. KPTCL (hereinafter called "Employer") for execution of Implementation and Support for Enterprise Application, Automation and Analytics Platform (EAAAP) System at KPTCL.

2. The employer requires Bidder for Implementation and Support for Enterprise Application, Automation and Analytics Platform (EAAAP) System at KPTCL. More details on the services are provided in the Terms of Reference in this RFP document.

3. You are invited to submit your proposal as per the attached RFP document.

Yours sincerely,

sd/-
SEE(IT) KPTCL

NOTICE FOR INVITING TENDER

On behalf of KARNATAKA POWER TRANSMISSION CORPORATION LIMITED (KPTCL), Superintending Engineer (Elec), IT, KPTCL invites tender under two part tender (two cover) document system through Karnataka Public Procurement Portal (KPPP) from the reputed Companies/Firms under competitive bidding.

Bidders can download tender document from Karnataka Public Procurement Portal on the date and time indicated in the portal till the last date and time of submission of the tender document. Any amendment/correction in the tender will be done through Karnataka Public Procurement Portal only. Prospective Bidders are requested to regularly check the Karnataka Public Procurement Portal.

The last date of receipt of bid by KPTCL is as mentioned in the Karnataka Public Procurement Portal. The technical bid shall be opened on the date and time mentioned in the Karnataka Public Procurement Portal at the office of Superintending Engineer (Elec), IT, KPTCL. The financial bids of the Bidders whose technical bid found responsive and conform to the eligibility criteria, shall be opened later. Any tender received after the above-mentioned scheduled date and time will not be considered. Conditional tenders will not be accepted. Incomplete bids shall be summarily rejected. The competent authority of the Company reserves the right to accept and / or to reject any or all bids without assigning any reason.

Sd/-
SEE(IT) KPTCL

KEY EVENTS AND DATES

1	Tender Inviting Authority	SEE(IT), KPTCL
2	Job Requirement	RFP for Implementation and Support for Enterprise Application, Automation and Analytics Platform (EAAAP) System at KPTCL.
3	Date of Publication of RFP	As per e-Procurement portal
4	Last date of Receiving Queries/ Clarification	As per e-Procurement portal
5	Time, Date and venue of Pre - bid meeting	As per e-Procurement portal
6	Last Date of Submission of bids	As per e-Procurement portal
7	Bid Processing Fee Payable	As per e-Procurement portal
8	Earnest Money Deposit Payable	As per e-Procurement portal
9	Date, Time and Venue of Opening of bid Proposals	As per e-Procurement portal
10	Name of the contact person for any clarifications	SE (IT), KPTCL Email: seeitkptcl@gmail.com EE(IT), KPTCL Email: seeitkptcl@gmail.com
11	Date till which the bid submitted in response to RFP is valid	180 days from the last date of submission of bids.

1. Section I: Invitation for Bids (IFB)

Enquiry No.: KPTCL/SEE(IT)/EE(IT-1)/56108/2/2024-25

The Superintending Engineer (Ele), (Information Technology) Karnataka Power Transmission Corporation Limited, Third Floor, 'B' Block, Kaveri Bhavan, Bangalore - 560009 invites Electronic Bids through e-procurement from eligible Bidder for the work mentioned below, under Local Competitive Bidding on Turnkey basis against enquiry number KPTCL/SEE(IT)/EE(IT-1)/56108/2/2024-25, Request for Proposal (RFP) for Implementation and Support for Enterprise Application, Automation and Analytics Platform (EAAAP) System at KPTCL.

1.1 Project Description
This Project envisages for Selection of Implementing Agency for Implementation and Support for Enterprise Application, Automation and Analytics Platform (EAAAP) System at KPTCL.

1.2 Scope of Work
The Scope of Work for the Implementing Agency includes the Implementation, Facility Management services and Annual Technical Support for the Enterprise Application, Automation, and Analytics Platform (EAAAP) System, along with procurement of necessary servers and hardware for DC and assist in preparation of RFP for procurement of DRC, commissioning and maintenance at KPTCL. This covers all KPTCL geographical areas, including Administrative Offices, Zonal Offices, Circle Offices, MW Division Offices, TL&SS Accounting Units, and TL&SS Non-Accounting Units. The Implementing Agency must perform all tasks as detailed in the RFP Document.

The interested eligible Bidder may obtain further information from the Office of the Superintending Engineer (Ele), IT Section, Karnataka Power Transmission Corporation Limited, Third Floor, 'B' Block, Kaveri Bhavan, Bangalore - 560009

Bidding documents may be seen and downloaded from the e-Procurement portal (https://kppp.karnataka.gov.in).

1.3 Tender Processing Fee
Bidder shall pay Tender Processing Fee as mentioned in the e-Procurement portal through any of the following e-Payment modes whichever is applicable:

- Online

- Credit Card/ Debit card

- Net Banking

- NEFT / RTGS

- IMPS

NOTE: -

Payment at E-procurement portal is through ICICI bank. For further clarification, contact E-procurement portal.

Bids shall be uploaded on to e-procurement platform before the date and time notified in the e-procurement platform. The Bidder shall upload credentials in support of their Technical capacity, Financial Strength and Past Experience.

The Techno-Commercial Bids will be opened on the date and time as mentioned in the e-Procurement platform at the office of the Superintending Engineer, (Electy.,) IT Section, KPTCL, Kaveri Bhavan, Bangalore.

Bids shall be accompanied by Tender Processing Fee, for an amount as mentioned in the e-Procurement platform and EMD as detailed in E-Procurement Portal. Any other form of payment will not be accepted.

The Price Bids of those Bidder whose Techno-Commercial Bids are found Responsive will be opened at a later date under intimation to the Qualified Bidder.

KPTCL reserves the right to cancel/withdraw the invitation for bids without assigning any reasons for such decision. Further, KPTCL reserves the right to reject any or all the Bids without assigning any reasons thereof and shall bear no liability whatsoever consequent upon such a decision.

1.4 Qualifying Requirements:

Qualifying requirements shall be as detailed in RFP Document Section III - Eligibility and Evaluation Criteria.

The Bidder should provide detailed information on any litigation or arbitration arising out of its completed contracts or contract under execution during the last five years with KPTCL. A history of awards involving litigations against the Bidder or any part subcontract may result in rejection of bid. The Bidder should furnish the self-declaration stating the above and upload the same along with the other documents in the relevant field in the e-procurement portal, failing which the offer is liable to be rejected.

Karnataka Power Transmission Corporation Limited, takes no responsibility for delay, due to any cyber, Internet Connection or any other computer related problems while downloading the Electronic bid sheets or during submitting their offers.

The Bidder are required to ensure compatibility of browser installed the computer well in advance to the last date and time for receipt of tenders.

The department shall not be responsible for non-accessibility of e-procurement portal due to internet connectivity issues and technical glitches.

Bidder shall submit only one tender in the tendering process. In case, bidder submits two bids in the same tendering process then both or all such offers will be rejected.

If the information furnished by the Bidder is found to be false at any stage of tendering/execution, then the KPTCL, at its discretion may act against such Bidder. If false information is found at the Tendering stage KPTCL may forfeit the EMD paid, disqualify the offer of such Bidder, Black list the Firm etc., and if false information is found at execution stage then KPTCL may cancel the works awarded, forfeit the Bank Guarantee furnished against the performance of the contract, Black list the Firm, besides initiating action for recovery of excess money paid by KPTCL, if any after getting the works executed from other contractors, levy liquidated damages etc.

Notwithstanding anything stated above or elsewhere in the Tender specifications, the KPTCL reserves right to assess the capability/suitability of the Bidder to perform the overall contract should the circumstances warrant such assessment in the overall interest of KPTCL.

KPTCL reserves the right to vary or modify any of the tender condition for reasons to be recorded, in case it becomes necessary.

Sd/-

Superintending Engineer (Ele),

IT Section, KPTCL

Kaveri Bhavan, Bangalore - 09.

2. Section II: Instruction to Bidder (ITB)

2.1   About KPTCL

KPTCL – Karnataka Power Transmission Corporation Limited is a registered company under the Companies Act, 1956 was incorporated on 28-7-1999 and is a company wholly owned by the Government of Karnataka with an authorized share capital of Rs. 2182.32 Crores. KPTCL was formed on 01-08-1999 by carving out the Transmission and Distribution functions of the erstwhile Karnataka Electricity Board. KPTCL is headed by a Chairman and Managing Director at the corporate office. The Managing Director is assisted by functional Directors.

Karnataka Power Transmission Corporation Limited is mainly vested with the functions of Transmission of power in the entire State of Karnataka and also construction and maintenance of Stations & Transmission Lines. It operates under a license issued by The Karnataka Electricity Regulatory Commission.

KPTCL has 10 No. of 400 kV Stations, 142 No. of 220 kV Station, 523 No. of 110 kV Station and 735 No. of 66 kV Station. The Total Transmission Line in CKMs is 42991.479 as on 31.03.2024.

2.2   Objective of the RFP

2.2.1   The objective of this RFP is to avail the services of "Implementation and Support for Enterprise Application, Automation and Analytics Platform (EAAAP) System at KPTCL".

2.2.2   The Superintending Engineer (IT) Corporate Office, KPTCL on behalf of Karnataka Power Transmission Corporation Limited, invites tenders vide Enquiry Tender No: KPTCL/SEE(IT)/EE(IT-1)/56108/2/2024-25 in two parts (Techno Commercial Bid and Price Bid) through e-procurement portal (https://kppp.karnataka.gov.in) for availing services of "Implementation and Support for Enterprise Application, Automation and Analytics Platform (EAAAP) System at KPTCL" on QCBS basis.

2.3   Scope of the Proposal

1. The scope of the proposal shall completely cover the Implementation, Facility Management services and Annual Technical Support for the Enterprise Application, Automation, and Analytics Platform (EAAAP) System, along with procurement of necessary servers and hardware for On –Premise DC setup at KPTCL

Note: All supporting solution which may not be specifically mentioned in the specification, but which are necessary for the satisfactory operation of the EAAAP System, shall be deemed to be included in the specification and shall be furnished by the supplier without extra charges to KPTCL. The EAAAP System shall be complete in all details whether such details are mentioned in the specification or not, without any financial liability to the Purchaser under any circumstances.

2. Bids not covering the specified scope of the tender are treated as incomplete and liable for rejection.

2.4   Responsibility of Implementing Agency(IA):

The Implementing Agency shall be responsible for following:
a) Detailed AS IS Study to finalize the Functional requirement with all the Stakeholders. As Part of the AS IS Study, the bidder will have to
  - Study the existing network architecture and end user hardware existing in KPTCL offices and come up with detailed Bandwidth requirement as well as a BOM for end user infrastructure required.
  - Study various Applications in KPTCL and the Integrations required in detail.
  - Submit the AS IS Report and the Recommendations- TO BE report along with the GAP analysis.
b) Design, Development, Implementation, Testing, Training and Deployment of EAAAP Solution under Low-Code/No-Code Platform
c) To host EAAAP applications on both the On-Premise Data Center (DC) and the On-Premise Disaster Recovery Center (DRC) within KPTCL
d) Supply the hardware required to setup On-Premise Data Center for hosting EAAAP.
e) Data cleansing, Data Digitization formats and Data migration (including master and transaction data).
f) Integration with other existing Application Softwares in KPTCL.
g) Providing change management services.
h) Providing Helpdesk support and Annual technical support.
i) Providing FMS, ATS and Maintenance services Post implementations.
j) Providing Training to functional users, technical users and end users of KPTCL.
k) Implementation of Change Requests.
l) Setup On-Premise Data Center (DC) with necessary Hardware within KPTCL.
m) Assist in procuring and set up of On-Premise Disaster Recovery Center (DRC) in the location as identified by KPTCL.
n) Cyber Security Audit.

2.5 Detailed Scope of work

Detailed Scope of work has been specified in Sections VI (Scope of Work)

2.6 Interfacing and Integration with Existing applications

Various sections of KPTCL are currently using different applications which needs to be integrated with the proposed solution, the table below lists down the existing IT applications, however these applications doesn't cover all Offices under KPTCL. The Successful Bidder would be responsible for review of all such applications during business solution designing phase and define the integration points for data exchange/data migration/phasing-out requirements for each of these applications for making successfully run the EAAAP module's process. The Successful Bidder must ensure that all existing business functions remain undisturbed in the EAAAP environment.

The proposed solution shall facilitate seamless integration with current and upcoming applications in pipeline to be integrated by EAAAP, to be interfaced with EAAAP and to be continued in standalone mode. The indicative list is provided below and Bidder may provide a different and better plan for the interfacing and integrations as applicable.

Sr.no.	Applications Details	User Department
1	Geographical Information System (GIS)	IT section
2	Supervisory control and Data Acquisition (SCADA)	SLDC, KPTCL
3	Relay Testing & Research & Development (RT and R&D)	RT
4	Scheduling, Accounting, Metering and settlement of transactions (SAMAST)	SLDC
5	Energy Billing	SLDC

It may be noted that this list is only indicative. During the business process study, the successful bidder should study the existing systems of KPTCL and then finalize the applications to be interfaced integrated with EAAAP in consultation and with due approval from KPTCL.

The Implementing Agency will develop necessary interfaces between EAAAP and identified applications.

The interfaces could include bi-directional sharing of master or transaction data in EAAAP with non- EAAAP applications or interfacing of transactions from the non-EAAAP applications into EAAAP and vice versa.

Development of every interface must be documented in detail and ownership of the script should be passed on to KPTCL.

Successful bidders would submit the following during the project to KPTCL:

• Interface Architecture Diagram

• Interface Technology Used

• Details of Information Exchanged

2.7 Definitions

The following words and expression shall have the meaning/interpretations hereby assigned to them except where the context otherwise requires.

2.7.1 Appointing Authority for the purpose of adjudication shall be the Managing Director of KPTCL or any other person so designated by KPTCL

2.7.2 Applicable Law shall mean the laws and any other instruments having the force of law in the Government's country, as they may be issued and in force from time to time.

2.7.3 Authorized Signatory shall mean the person authorized by the Bidder through issue of Power of Attorney for the purpose of this Project and who can sign the Bid and related documents/ correspondences related to this Tender Document.

2.7.4 Bank shall mean refers to all scheduled Indian Banks as per RBI current list.

2.7.5 Bid/ Bid Document/Proposal shall mean a formal offer submitted by the Bidder, in response to this Tender Document, to fulfill the specified requirements of the Purchaser at quoted price.

2.7.6 Bidder shall mean EAAAP OEM or authorized EAAAP Implementation Partner who intends to submit and/or submits Bid in response to this Tender Document to execute this Project. For the purpose of clarification, the term "Bidder" shall include any company or organization which has purchased this Tender Document and/or which has sought clarifications on Tender Document from the Purchaser in writing and/or who has attended pre-bid conference in respect of this Tender

2.7.7 Contract shall mean the Agreement entered into between the Purchaser and the Implementing Agency, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.

2.7.8 Contract Period shall mean the time period during which the Contract Agreement governs the relations and obligations of the Purchaser and Implementing Agency.

2.7.9 Contract Price shall mean the price or prices as specified in the Contract Agreement.

2.7.10 Implementing Agency shall mean the EAAAP OEM or authorized EAAAP Implementation Partner or (including their legal representatives, successors and permitted assignees) whose Bid has been accepted by the Purchaser and to whom the Contract has been awarded by the Purchaser to execute this Project.

2.7.11 Core Implementation shall mean designing, testing and implementation of all functionalities, across agreed business locations, as per the final Business Solution Design Document approved by the Purchaser.

2.7.12 Day shall mean calendar day.

2.7.13 Delivery shall mean the transfer of the Goods and/or Services from the Supplier to the Purchaser in accordance with the terms and conditions set forth in the Contract.

2.7.14 EAAAP OEM shall mean the Vendor responsible for development and up gradation of proposed Enterprise Application, Automation and Analytics Platform(EAAAP) and has control over the entire life cycle of the same.

2.7.15 EAAAP Solution shall mean comprehensive EAAAP system comprising of EAAAP Software Application platform, Third Party tools & applications, databases, clustering tools and any other tools, accessories and services required to make entire system operational for the fulfillment of the objective of this Tender Document/ Contract.

2.7.16 Financial Year shall mean a period of twelve consecutive months beginning April to next March as is customary in the Purchaser's country.

2.7.17 Functional Expert/Lead/Consultant shall mean a person who understands and evaluates the functional (business) requirements for EAAAP Solution through discussions with the Purchaser's representatives and transforms the essence (logical and technical views) into an abstract and algorithmic business model.

2.7.18 Functional Requirements/ Functional Requirement Specifications shall mean the functional requirements mentioned in the Scope of Work or elsewhere in the Tender Document.

2.7.19 Go-live/ Commissioning shall mean the stage where EAAAP Solution is available to all the authorized users for executing live transactions to successfully carryout identified functions/processes.

2.7.20 Goods shall mean all hardware, software, networking equipment and/or other equipment accessories and materials that the Supplier is required to supply to the Purchaser under the Contract.

2.7.21 Installation shall mean the system or a sub-system(s) installed on the hardware and made available for testing/ commissioning.

2.7.22 Intellectual Property Rights shall mean any patent, copyright, trademark, trade name, service marks, brands, propriety information, whether arising before or after the execution of this Contract and the right to ownership and registration of these rights.

2.7.23 Letter of Intent (LoI) shall mean intimation through a letter to Bidder that his Bid has been accepted and successful in accordance with the provisions contained in the letter.

2.7.24 Month shall mean the calendar month of the Gregorian calendar.

2.7.25 Net worth shall mean the net worth of the company and shall be calculated as Equity share capital plus Reserves less (a) Revaluation Reserves, (b) Intangible Assets, (c) Miscellaneous expenditures to the extent not written-off, and (d) Carry forward losses.

2.7.26 Offices shall mean Corporate Office, Zone Offices, Circle Offices, Division Offices, Sub-Division Offices and Section.

2.7.27 Party/ Parties shall mean either the Purchaser or the Implementing agency or both.

2.7.28 Project Plan shall mean the document to be developed by the Implementing agency and approved by the Purchaser based on the requirements of the Contract Agreement and the Development & Implementation Plan included in the Implementing agency Bid. The Project Plan may be changed/ modified during the course of the Project however "Agreed Project Plan" shall mean the agreed latest version of the Project Plan which will be referred for the purpose of execution and monitoring of this Project. Should the Project Plan conflict with the Contract in any way, the relevant provisions of the Contract, including any amendments, shall prevail.

2.7.29 Request for Proposal (RFP) shall mean the written solicitation that conveys to the Bidder, requirements for products/services that the Purchaser intends to buy and/or implement and/or avail. Such written solicitation is the collection of documents, and subsequent amend thereof (if any), issued by the Purchaser to instruct and inform Bidders of the processes for bidding, selection of the successful Bid, Contracting as well as the Contractual conditions governing the relationship between the Purchaser and the Implementing agency.

2.7.30 Scheduled Bank shall mean those banks in India which have been included in the Second Schedule of Reserve Bank of India (RBI) Act, 1934. RBI in turn includes only those banks in this schedule which satisfy the criteria laid down vide section 42 (6) (a) of the Act.

2.7.31 Scope of Work shall mean the goods and services to be provided by the Bidder as specified under this Tender Document.

2.7.32 Sub-contractor shall mean any person or firm or company (other than the Implementing agency) to whom any part of the Scope of Work has been entrusted by the Implementing agency, with the approval/written consent of the Purchaser or representative and the legal representatives, successors and permitted assignee of such person, firm or company.

2.7.33 Successful Bidder shall mean the Bidder whose Bid has secured the highest Final Score as per the bid evaluation methodology defined in this Tender Document. The Bidders other than the Successful Bidder will be categories as "un-successful Bidders".

2.7.34 Implementing Agency shall mean a person or company that specializes in bringing together component sub-systems and ensuring that those sub-systems function together and hence provides an integrated Solution for fulfilling the specified objective.

2.7.35 Technical Requirements/ Technical Requirement Specifications shall mean the technical requirements mentioned in the Scope of Work or elsewhere in the Tender Document.

2.7.36 Tender/ Tender Document shall have the same meaning as that of "Request for Proposal".

2.7.37 User Acceptance shall mean the acceptance by the Purchaser that the EAAAP Solution (or any sub-system(s) where the Contract provides for acceptance of the System in parts) is capable of attaining the functional and performance requirements (relating to commissioning) as specified in the Tender Document and Agreed Project Plan.

2.7.38 Week shall mean seven consecutive calendar days, beginning the day of the week as is customary in the Purchaser's country

2.7.39 Working Day shall mean any day which is not declared to be holiday or rest day by the Purchaser.

2.7.40 Year shall mean a period of twelve consecutive months.

2.8 **Interpretations**

Following aspects shall have the meanings/ interpretations hereby assigned to them except where the context otherwise requires for the purpose of this Tender Document and subsequent activities pertaining to this Project.

a) **Amendment:** No amendment or other variation of the Contract shall be effective unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each Party hereto.

b) **Consortium:** Consortium not allowed

c) **Country of Origin:** The place where the goods, materials, equipment, software and other supplies for the EAAAP Solution are mined, grown, designed, developed, produced or manufactured, and from which the services are provided.

d) **Entire Agreement:** The Contract constitutes the entire agreement between the Purchaser and Implementing Agency with respect to the subject matter of Contract and supersedes all communications, negotiations and agreements (whether written or oral) of Parties with respect thereto made prior to the date of Contract.

e) **Headings:** The headings and marginal notes (if any) in the General Conditions of Contract are included for ease of reference, and shall neither constitute a part of the Contract nor affect its interpretation.

f) **Language:** Unless the Implementation agency is a national of the Purchaser's country and the Purchaser and the agree to use the local language, all documents related to this Project, all correspondence and communications to be given, and all other documentation to be prepared and supplied under the Contract shall be written in English, and the Contract shall be construed and interpreted in accordance with that language.

g) **Non-Waiver:** Subject to conditions mentioned in the paragraph below, no relaxation, forbearance, delay or indulgence by either Party in enforcing any of the terms & conditions of the Contract or the granting of time by either Party to the other shall prejudice, affect or restrict the rights of that Party under the Contract, nor shall any waiver by either Party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract. Any waiver of a Party's rights, powers or remedies under the Contract must be in writing, must be dated and signed by an authorized representative of the Party granting such waiver, and must specify the right and the extent to which it is being waived.

h) **Persons:** Words imparting persons or Parties shall include firm, company, organization or Consortium and government entities.

i) **Purchaser's country:** This shall mean India.

j) **Severability:** If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

2.9 Cost of Bidding

The Bidder shall bear all costs associated with the preparation and submission of the Bid and any subsequent events/activities related to this Tender. The Purchaser will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

2.10 Language of Bid

The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Purchaser, shall be in English. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in English, in which case, for purposes of interpretation of the Bid, such translation shall govern. Inaccurate translation if found shall be rejected.

2.11 Signature of Bids

The technical bid must contain the name, address of place of business of the persons or persons making the bid and the name of the authorized persons.

Bid by partnership enterprises must be furnished with full names of all partners

2.12 Deadline for Submission of Bids

The Bidder shall submit the bid through e-procurement portal only. The Bidder shall submit all the documentary evidences/supports in respect of qualifying requirements and other requirements through electronic mode only and no hardcopies will be accepted except the Bank guarantee towards earnest money deposit &power of attorney. Failure to furnish the documentary evidences/supports electronically would result in outright rejection of their offers.

The Bidder must ensure that the bids are received in e-procurement portal only by the date and time indicated in the invitation of bids. Bids submitted in any other form will not be accepted.

In case, KPTCL at its discretion, extends the deadline for the submission of bids, all right and obligations of KPTCL and the Bidder previously subject to the deadline shall thereafter be subject to the deadline (for submission of bids) as extended.

KPTCL reserves the right to reject any bid, which is not deposited according to the instruction, stipulated above.

2.13 Alternative Bids

Alternative Price bids shall be rejected.

2.14 Currencies of Bid

Bidders shall express their bid price in Indian Rupees only. Price Bid in any currency other than INR will be treated as non-responsive and hence will be rejected.

2.15 Bid Prices

i. Unless otherwise specified in the Scope of Work, Bidders shall quote for the entire Services on a Single Responsibility/ Turnkey basis such that the total Bid price covers

all the obligations of the Bidder mentioned in or to be reasonably inferred from the Tender Document in respect of providing the product/services. This includes all requirements under the Bidders responsibilities for successful completion of the EAAAP Implementation Project as per Scope of Work and, where so required by the Tender Document, the acquisition of all permits, approvals and licenses, etc. and such other items and services as may be specified in the Tender Document, all in accordance with the requirements of the General Conditions of Contract and Special Conditions of Contract.

ii.   Bidders are required to quote the price for the technical, commercial and contractual obligations outlined in the Tender Document.

iii. Bidders shall give a break-up of the prices in the manner and detail as asked for in the Price Bid form as Hard copy after opening of the Price bids on the mentioned date failing which the Purchaser shall reserve the right to assume/extrapolate the prices for the item/services for which the price has not been quoted and the same will be binding on the Bidders. Responsibility for including all applicable taxes, duties and levies in the Bid lie with the Bidder and the Purchaser shall not be responsible for any error/omission on the part of the Bidder.

iv.   The taxes, duties and levies shall be indicated by the Bidder in the Price Bid form.

v.   The prices/rates quoted by the Bidder shall remain firm (fixed) during the entire Contract Period and shall not be subject to any escalation/variation on any account, unless otherwise explicitly provided. A Bid submitted with an adjustable/variable price quotation will be treated as non-responsive and hence will be rejected.

2.16   Performance Bank Guarantee

i.   The successful Bidder shall furnish the Bid security by form of e-Bank Guarantee (e-BG) from the Banks which are NeSL integrated. The First PBG shall be submitted within 20 days from the date of issue of LOI.

ii.   The First Contract Performance Bank Guarantee (PBG) shall be 5% of the total cost quoted by the bidder for the Implementation, Go-Live and Stabilization including Hardware cost of the Enterprise Application, Automation, and Analytics Platform, excluding all the three FMS cost, ATS cost and GST.
This guarantee ensures faithful performance of the contract in line with the specified terms and conditions and shall remain valid throughout the entire implementation and stabilization period, which is 18 months. Additionally, the PBG must be valid for 90 days beyond the end of the Go-Live and Stabilization Period. No interest will be paid by the Purchaser on the Bid Security deposited by the Bidder.

iii.   Failure of the successful Bidder to comply with the requirement shall constitute sufficient grounds for the annulment of the award and forfeiture of the EMD, in which event KPTCL may blacklist the successful bidder and award the contract to the next best value bidder or call for new proposals from the interested bidders. KPTCL shall have full discretion to cancel the acceptance communicated to the said bidder.

iv.   As a Contract Performance Guarantee, the successful Bidder on whom the Letter of Intent is placed shall be required to furnish a Performance Guarantee from a Public Sector Indian Bank/ Scheduled commercial Bank (in the second schedule of the RBI Act 1934) and the Bank should be covered under the jurisdiction of Indian Laws.

v.   The First Contract Performance Bank Guarantee amount equal to 5% in due fulfilment to be paid as follows:
   i)   Guarantee amount shall be paid mandatorily only in the form of electronic Bank Guarantee (e-BG) which shall be valid for a period of 90 days after end of the Go-Live and Stabilization Period.

vi.   The letter of Intent will be issued by KPTCL to the techno commercial successful bidder after the completion of evaluation of Price bid.

vii.   The Second Contract Performance Bank Guarantee towards FMS and ATS shall be equal to 5% of the total cost quoted by the bidder for FMS and ATS for 3 years excluding GST and it shall guarantee faithful performance of the contract in accordance with the terms & conditions specified in this documents and specifications and shall be valid for a period up to 90 days after the end of the contract period.

viii.   The Second Contract Performance Bank Guarantee amount equal to 5% in due fulfilment to be paid mandatorily in the form of electronic Bank Guarantee (e-BG) only which shall be valid for a period of 90 days after expiry of 3 years of FMS and ATS period.

ix.   In the event of the contractor failing to deposit Second Contract Performance Bank Guarantee within 30 days before the date of commencement of FMS and ATS period, the contract will be cancelled/terminated.

x.   The First Contract Performance Bank Guarantee amount is refundable after 30 days of successful completion of Implementation, Support and after supply of required hardware for Enterprise Application, Automation and Analytics Platform excluding FMS,ATS period and GST.

xi.   The Second Contract Performance Bank Guarantee amount is refundable after 30 days of successful completion of 3 years FMS and ATS Period.

xii.   The contract agreement as per the format attached as annexure in e-procurement portal shall be executed after receiving First Contract Performance Bank Guarantee and after receiving the Letter of Acceptance from the successful bidder.

xiii.   As a Contract Performance Guarantee, the successful Bidder on whom the Letter of Intent is placed shall be required to furnish a Performance Guarantee mandatorily only in the form of electronic Bank Guarantee (e-BG) from the Banks which are integrated with NeSL.

NOTE:

1. It is mandatory to submit the Contract Performance Bank Guarantee only in the form of e-Bank Guarantee (e-BG) from the Banks integrated with NeSL, any other mode of Performance Bank Guarantee from such Banks will not be accepted. The details of Banks which are integrated with NeSL is listed at Annexure-I and Indicative Challan for obtaining e-BG from Bank is at Annexure-II.

2. The Tenderer will be blacklisted, if the performance bank guarantee turns out to be fake during confirmation from the bank regarding genuineness of BG submitted by the bidder.

3. The Performance Security shall be released by KPTCL and returned to the bidder no later than 90 days after successful completion of the work and contract/guarantee period which encompasses any warranty or guarantee commitments. KPTCL will not be liable to pay any interest on the Bank Guarantee issued.

4. In the event of any contract amendment, the bidder shall, within 21 days of receipt of such amendment, furnish the amendment to the Performance Security, rendering the same valid for the duration of the Contract as amended for 90 days after the completion of performance obligations including Warranty/guarantee obligations.

5. KPTCL shall be entitled, and it shall be lawful on its part,
   a) To deduct from the performance securities or to forfeit the said security in whole or in part in the event of;
      i) any default, or failure or neglect on the part of the bidder in the fulfillment or performance in all respect of the contract under reference or any other contract with the KPTCL or any part thereof.
      ii) for any loss or damage recoverable from the firm which KPTCL may suffer or be put to for reasons of or due to above defaults/failures/neglect.
      iii) for corrupt and fraudulent practices of the bidder.

b) And in either of the events aforesaid to call upon the bidder to maintain the said performance security at its original limit by making further deposits, provided further that KPTCL shall be entitled, and it shall be lawful on its part, to recover any such claim from any sum then due or which at any time after that may become due to the bidder for similar reasons.

2.17 Bid Validity

i. Bids submitted by Bidders shall remain valid for acceptance for one hundred and eighty (180) days from the next day of the last date of Bid submission. A Bid valid for a shorter period may be rejected by the Purchaser as being non-responsive.

ii. In exceptional circumstances, the Purchaser may solicit the Bidders' consent to an extension of the Bid validity period. The request and responses there to shall be made in writing. If a Bidder accepts to prolong the period of validity, the Bid Security shall also be suitably extended. A Bidder may refuse such request which will not lead to forfeiting its Bid Security. A Bidder granting the request will neither be required nor permitted to modify its Bid.

2.18 Consortium: Consortium Not Allowed.
2.19 Involvement of Sub-Contractor (s)

i. Where the Bidder expects to sub-contract a part of the specified Scope of Work, the same must be clearly stated in the Bid, describing the work to be sub-contracted, the reasons for sub-contracting and the details of the Sub-Implementing Agency, including previous work done by the Sub- Implementing Agency in similar area. If the Bidder had not envisaged involvement of any Sub-contractor while bidding, but desires to do so during project execution, the Bidder must first get this approved by the Purchaser in writing, giving necessary details.

ii. The Overall responsibility lies with the Bidder and the bidder shall submit an undertaking on behalf of Sub-contractor for the fulfillment of the services for the entire contract period.
   a. Except as provided, the selected Bidder shall not be permitted to sub-contract any part of its obligations under the Contract.
   b. The selected Bidder can sub-contract the roles to facilitate Training & Capacity building and FMS services.
   c. If the successful Bidder selects the sub-contractors, the names and roles of the same shall be clearly mentioned in the proposal/bid.
   d. The selected Bidder shall ensure that the sub contractor appointed has sufficient capacity to undertake the execution of the tasks they will perform under this Contract.
   e. The selected Bidder indemnifies and shall keep indemnified Purchaser against any losses, damages, claims or such other implications arising from or out of the acts and omissions of such subcontractor. The selected Bidder shall be responsible for making all payments to the subcontractor as may be necessary, in respect of any Services performed or task executed, and the Purchaser shall

not be responsible for any part or full payment which is to due to such subcontractor.

f. All rights of use of any process, product, service or facility developed or any other task performed by the subcontractor for the selected Bidder, under this contract would lie exclusively with the Purchaser in perpetuity free from all liens, encumbrances and other third party rights and the selected Bidder shall, wherever required, take all steps that may be necessary to ensure the transfer of such ownership in favor of the Purchaser.

g. Nothing in the clause of the RFP shall relieve the selected Bidder from any of its liabilities or obligations under this Contract. The Purchaser reserves the right to hold selected Bidder liable for any act/omission of any subcontractor.

h. Where the Purchaser deems necessary, it shall have the right to require replacement of any subcontractor with another subcontractor and the selected Bidder shall in such case terminate forthwith all agreements/contracts other arrangements with such subcontractor and find suitable replacement for such subcontractor to the satisfaction of the Purchaser at no additional charge. Failure to terminate all agreements/contracts with such sub-contractors, shall amount to a breach of the terms hereof.

i. The selected Bidder shall be responsible for ensuring that the Subcontractor shall comply with all relevant and applicable provisions of the Contract. In default on the part of the sub-contractor to comply with the terms and conditions of the Contract wherever applicable, shall amount to breach on the part of the Implementing Agency, and the Purchaser in addition to all other rights, have the right to claim damages add recover from the Implementing Agency all losses/ or other damages that may have resulted from such failure.

2.20 Bid Prices and Discount

The prices quoted by the Bidder shall conform to the requirements specified below:

i. All items in the Schedule of Supply must be listed and priced separately in the Price Schedules. If an item listed in Price Schedule is not priced, their prices shall be assumed to be included by the bidder in the prices of other items.

ii. If an item is required but not listed in the Price Schedule, price for the same shall be assumed to be included by the bidder in the prices of other items. Same item, as and when required, Bidder will provide "free of cost" to the Purchaser.

iii. Prices quoted by the Bidder must be firm and final and shall remain constant throughout the period of the contract and shall not be subject to any upward revision.

iv. The bidders are advised not to indicate any separate discount. Discount, if any, should be accounted for in the quoted prices. Discount of any type, indicated separately will not be taken into account for evaluation purpose. However, in the event of such an offer, without considering the separate discount, is found to be the lowest, the Purchaser shall avail such discount at the time of award of contract.

v.   Bidders should note that any conditional discount will not be considered.

2.21   Contents of Tender Document

The product and services required, bidding procedures, contract terms, Technical Requirements and Functional Requirements are prescribed in the Tender Document. Bidders are expected to examine all instructions, terms & conditions, specifications, annexures, forms and other information in the Tender Document. Failure to furnish any or all information as required or submit a Bid not substantially responsive to the Tender Document in every respect will be at the Bidder's risk and may result in rejection of the Bid.

2.22   Bidder to obtain their own information

i.   The Bidder shall for all purposes deemed to have independently obtained all necessary information for the purpose of preparing the Bid. The correctness of the details given in the Tender Document is for guideline information only, to help the Bidder prepare the Bid. The Bidder shall be deemed to have visited the Site and familiarized themselves thoroughly with the site conditions before submitting the Bid. The cost of visiting the sites shall be borne by the Bidder. Non-familiarity with the site conditions will not be considered a reason either for extra claims or for not providing services in strict conformity with scope and special conditions of the contract.

iii.   The Bidder shall be deemed to have examined the Tender Document and to have obtained the own information in all matters whatsoever that might influence carrying out the proposal at the scheduled rates and satisfied to the sufficiency of Bid. Any error in description or quantity or omission there from shall not vitiate the Contract or release the Bidder from executing the Project comprised in the Contract according to the Scope of Work and specifications at scheduled rates. Bidder is deemed to know the scope, nature and magnitude of the work involved in the Project.

iv.   The Bidder shall be deemed to have visited the sites and offices, to have satisfied to the nature of all existing business processes and also as to the nature and the conditions of available facilities and communications and possible interruptions there to the access and egress from sites and to have made enquiries, examined satisfied with the sites in respect to requirements for executing the Project and to have made local independent enquiries on all matters affecting the Contract. Bidder is deemed to have acquainted for their liability for payment of statutory taxes, duties, levies, customs and other charges.

v.   Any neglect or failure on part of the Bidder in obtaining necessary and reliable information or issues or any other matters affecting the Contract shall not relieve from any risks or liabilities or the entire responsibility for executing the Contract at the scheduled rates and time in strict accordance with the Contract Agreement.

vi.   Any change in sites conditions or technological requirement shall be binding on the Bidder and no extra claim on this account shall be entertained.

vii.   The verbal agreement or inference from conversation with any employee of the Purchaser before, during or after the execution of the Contract Agreement shall not in any way affect or modify the terms and obligations herein contained.

2.23   Clarification on Tender Document

i.   Bidders requiring any clarification on the Tender Document may notify the Purchaser (through e-mail address given in Bid Data Sheet the date of pre-bid conference).

ii.   Except for responses to request for any clarifications on the Bid, the Bidder shall not contact the Purchaser by any means for any matter related to this Bid from the time of submission of the Bid until the Contract is awarded to and accepted by the Successful Bidder.

iii.   If deemed fit, Purchaser's response will be uploaded in e-procurement portal.

iv.   Reply by the Purchaser to the queries submitted online/offline by the bidder will be made available at the Karnataka e-Procurement website only.

2.24 Amendment of Bidding Document

i. At any time prior to the deadline for submission of the Bids, Purchaser may modify the Tender Document by issue of an addendum/corrigendum.

ii. In addition, Purchaser may issue addendum/corrigendum to the Tender Document to make/reflect amendment(s) in terms & conditions or Scope of Work specified in this Tender Document.

iii. Any such addendum/corrigendum will be made available at the Karnataka e-Procurement website. No separate other communication in this regard shall be made with any Bidder. It will be the responsibility of the Bidder to regularly visit the website to keep themselves updated on such changes.

iv. No clarification obtained through verbal communication by the Bidders from any officer, agent or employee of the Purchaser or any staff of the Program Management Consultant will be deemed as addendum/corrigendum to the Tender document.

v. The purchaser, at its discretion for any reason whether at its own initiative or in response to a clarification requested by a bidder may add, modify or remove any element of the Goods/services (including hardware, software, networking etc.), bandwidth or any component of Related Service entirely or any part thereof from the bid document till the deadline for submission of the Bids.

vi. In order to provide Bidders reasonable time to take the addendum/corrigendum into account in preparing their bids, the Purchaser may, at its own discretion, extend the last date of Bid submission. In such an event, Bidders shall not be entitled to any compensation, in any form whatsoever.

2.25 General Instruction for Bid Preparation

i. The Bidders are advised to upload their Bids complete in all respect in the e-procurement portal of Govt. of Karnataka. The Bidder shall upload a comprehensive list of attached forms/declarations/certificates etc. in response to Tender Document.

ii. The Bidders are advised to fill in the Annexure and Forms, in respect of each and every item by strictly following the instructions, footnotes etc., to facilitate the Purchaser in speedy evaluation of Bids. Failure to do so may prevent the Bid from being considered by the Purchaser.

iii. The Bidders in their own interest are advised to be very careful while mentioning quantity and rates in Price Bid. The quoted prices shall be inclusive of statutory taxes, duties and other levies.

iv. The Scope of Work specified in this Tender Document shall be executed strictly in accordance with the conditions specified in the General Conditions of Contract and other conditions specified in various sections of this Tender Document.

   a. If any of the aforesaid condition is not clear to a Bidder, clarification may be sought from the Purchaser as per the provisions of clause 3.12 (Clarification on Tender Document).

v. The Bidders must accept all the conditions specified in the Tender Document to facilitate early finalization of Bids. Separate set of commercial conditions (such as Bidder's standard printed conditions) enclosed with the offer and any reference there to may prevent the Bid from being considered by the Purchaser.

2.26 Preparation of Bid/Proposal

i. Bidder may only upload one Bid/Proposal. If Bidder uploads or participates in more than one Bid, such Bids shall be disqualified.

ii. The Bid/Proposal as well as all related correspondence exchanged by the Bidders and the Employer shall be written in English language, unless specified otherwise.

iii. In preparing their Bid/Proposal, Bidders are expected to examine in detail the documents comprising the RFP. Uploading of Insufficient documents requested may result in rejection of a Bid/Proposal.

iv. The Technical Bid/Proposal shall not include any financial information. A Technical Proposal containing financial information may be declared non- responsive.

2.27 Financial Bid/Proposals:

i. The Financial Proposal shall be directly entered in the e-procurement portal. It shall inclusive of all costs including the various deliverables costs and taxes. The financial proposal shall not include any conditions attached to it and any such conditional financial proposal shall be rejected summarily.

ii. Bidders are to Enter/Key-In the bid price directly in the e-Procurement portal of GoK, in the financial bid section. This is as per the GOK Circular: ಸುತ್ತೋಲೆ ಸಂಖ್ಯೆ :ಆಇ 165 ವೆಚ್ಚ-12/2017 dated 21/3/2017.As per the circular only the price entered/keyed-in the e-procurement portal is to be considered for bidding purpose and no document uploaded as financial bid is to be considered.

iii. **Bidders should not upload the Price bid form in the portal in technical or financial section (there is no provision for upload in financial section of e-procurement portal).** If bidder uploads financial bid in the technical section such bids will be summarily disqualified.

iv. The best and firm price should only be quoted (as per the format enclosed)

v. The bidder must quote in Indian Rupees (in INR) only. Bids in currencies other than INR would not be considered and the bid will be rejected forthwith.

vi. The prices offered shall be on a fixed price basis inclusive of all taxes and should not be linked to the foreign exchange or any other variable.

vii. The prices offered should be inclusive of all the deliverables mentioned in Section VI: Scope of work.

2.28 Procedure for submission of Bid

2.28.1 EMD, Tender Processing Fees

i. Bidder can download the tender document for free from the portal (https://kppp.karnataka.gov.in) till the due date and time for bid submission. Bidder shall pay the Earnest Money Deposit (specified in table of **Key Events and Dates**) and tender processing fees prescribed in the e-Procurement portal to participate in this tender. The tender processing fee has to be paid through any of the five e-payment options in the portal:
   a. Credit card
   b. Direct Debit
   c. National Electronic Funds Transfer (NEFT)
   d. Over the Counter (OTC) – designated ICICI bank branches located across the country
   e. Net banking

ii. Bidder, please note that payments submitted through cheque or demand draft shall not be accepted. Further details regarding e-Payment, please refer to e-Procurement portal at the above mentioned website or call e-procurement helpline 080-22485867. It will be in the interest of the bidders to familiarize themselves with the e-Procurement system to ensure smooth preparation and submission of the tender documents.

2.29 Modes of Submission

All interested bidders shall pay EMD and Tender Processing fee (as mentioned in e-Procurement Portal) and submit their Pre-qualification, Technical and Commercial RFP responses electronically using the unified e-Procurement platform of KPTCL. The e-Procurement (Karnataka) portal is available at: https://kppp.karnataka.gov.in. Bidder shall submit the tenders only through the unified e-Procurement system before the scheduled date and time for bid submission. Tenders cannot be submitted after the due date and time. Incomplete and draft bids shall not be considered. KPTCL will not be liable or responsible for any glitches such as unavailability of the portal, the internet link or any other technical issues. All required bid documents shall be

filled by the bidder and submitted along with other required documents. Incomplete and incorrect documents may lead to rejection of the bid.

2.30 Authentication of Bid

The response bid shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the Contract. A letter of authorization shall be supported by a power-of-attorney on stamp paper not less than Rs 500/- accompanying the bid. All pages of the bid, except for un-amended printed literature, shall be initialed and stamped by the person or persons signing the bid.

2.31 Validation of interlineations in Bid

The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such corrections shall be initiated by the person or persons signing the bid.

2.32 Clarification on Tender Document

A prospective Bidder requiring any clarification on the RFP Document may submit his queries, in writing, at the mailing address and as per schedule indicated in "Invitation for Bids/ Key events and dates". The queries must be submitted in the following format only to be considered for clarification.

Sr. no.	Section no./ Clause no.	Page no.	Description/ Reference/ Subject	Clarification Sought

The queries not adhering to the above mentioned format would not be responded. KPTCL will respond to any request for clarification to queries on the Tender Document, received not later than the dates prescribed in Invitation for Bids/ Key events and dates. The clarifications (including the query but without identifying the source of inquiry) will be uploaded on the Karnataka e-Procurement portal (https://kppp.karnataka.gov.in).

2.33 Corrupt Practice

The Purchaser requires bidders, and Implementing Agency to observe the highest standard of ethics during the execution of such contracts.

The following definitions apply:

  i.   Corrupt practice means the offering, giving receiving, or soliciting, directly or indirectly, of anything of value to influence the action of any party in the procurement process or the execution of a contract.

  ii. Fraudulent practice means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract.

iii. Collusive practices means a scheme or arrangement between two or more bidders, with or without the knowledge of the KPTCL, designed to influence the action of any party in a procurement process or the execution of a contract.

iv. Coercive practices means harming or threatening to harm, directly or indirectly, persons, or their property to influence their participation in a procurement process, or affect the execution of a contract;

v. The Purchaser will reject a proposal for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent collusive or coercive practices in competing for the Contract.

vi. The Purchaser will sanction a party or its successor, including declaring ineligible, either indefinitely or for a stated period of time, to participate in projects if it at any time determines that the Bidder has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for, or in executing, a KPTCL contract.

vii. Furthermore, Bidders shall be aware of the provision stated in clause 4.16 Termination of Contract of the General Conditions of Contract.

2.34 Conflict of Interest

i. Bidder shall hold KPTCL's interest paramount, without any consideration for future work and strictly avoid conflict with other assignment or their own corporate interest.

ii. Bidder should not be engaged in any such business (excluding any work assigned to them by KPTCL) which has conflict of interest with the project for which the bids are being submitted.

iii. KPTCL considers a conflict of interest to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations, and that such conflict of interest may contribute to or constitute a prohibited corrupt practice. A Bidder may be considered to be in a conflict of interest with one or more parties in this bidding process if, including but not limited to:

iv. Receive or have received any direct or indirect subsidy from any of them; or have common controlling shareholders, or Have the same legal representative for purposes of this Bid, or Have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder, or Influence the decisions of KPTCL regarding this bidding process, or Bidder participates in more than one bid in this bidding process. Participation in more than one Bid will result in the disqualification of all Bids in which it is involved.

v.   Bidder gets associated as a Consultant/Advisor/Third party independent evaluating agency with any of the agencies taking part in the bid process.

vi. Bidders have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of their Employer, or that may reasonably be perceived as having this effect. Any such disclosure shall be made as per the Standard forms of technical proposal provided herewith. If the Bidder fails to disclose said situations and if the Employer comes to know about any such situation at any time, it may lead to the disqualification of the Bidder during bidding process or the termination of its Contract during execution of assignment.

2.35 Unfair Advantage

If a Bidder could derive a competitive advantage from having provided IT Services related to the scope of work in question and which is not defined as conflict of interest as per clause 3.19 above, the purchaser shall make available to all Bidders together with this RFP all information that would in that respect give such Bidder any competitive advantage over competing Bidders.

2.36 Right of Purchaser to Accept or Reject Bids

i.   The Purchaser reserves the right to accept or reject any Bid, and to annul the bidding process and reject all Bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Purchaser's action.

ii. The right to accept the Bids in response to this Tender Document will rest with the Purchaser. The Purchaser further does not bind to accept the Bid with highest Final Score and reserves the authority to reject any or all the Bids received without assigning any reason whatsoever.

iii. The Purchaser reserves the right to accept Bids in respect of all items, any one item or part of an item, and the acceptance thereof shall be deemed as sufficient notice of the exercise of such right. The Bid shall thereafter be for the quantity so accepted which will form the Contract.

iv. Bid in which any of the particulars and prescribed information is missing or incomplete in any respect and/or prescribed conditions are not fulfilled are liable to be rejected. The decision of the Purchaser in respect of the above shall be final and binding on the Bidder.

v.   Canvassing in connection with Bid is strictly prohibited. The submitted Bid of the

Bidder who resorts to canvassing is liable to be rejected. Bid containing uncalled remarks or any additional conditions are liable to be rejected.

vi.   The Bid uploaded may be rejected in the following, but not limited to, circumstances:

      a. Any Bid received by the Purchaser after last date and time of Bid submission as stated in the Bid Datasheet (refer Annexure: 2), or

      b. Any Bid submitted by fax or e-mail, or

      c. Any Bid mentioning deviations from the Scope of Work and terms & conditions as mentioned in this Tender Document, or

      d. Any Bid which does not have necessary information strictly in a prescribed formats (Forms or Annexure provided in the Tender Document), or

      e. Any Bid quoting prices for any or all the items in the format not strictly as per Price Bid (merging of prices of various items into one is not permitted), or

      f. Any Bid quoting prices in the currency other than Indian Rupee, or

      g. Any Bid not accompanied by proper authorization from EAAAP Software platform OEM allowing Implementation Partner to quote in response to this Tender Document, or

      h. Any Bid containing credentials which were found to be misleading/false based on verification by the Purchaser, or

      i. Any Bidder fails to accept the correction of arithmetical errors (according to methodology as prescribed in this Tender Document) in its Price Bid, or

      j. Any Bidder who conceals any material information or makes a wrong statement or misrepresents facts or makes a misleading statement in the bid, in any manner whatsoever, in order to create circumstances for the acceptance of the bid, or

      k. Any Bidder found to have indulged in any corrupt or fraudulent practice or in any practice, which is not in conformity with the highest ethical standards.

Apart from above, the Purchaser reserves the right to reject any or all Bids without citing any reasons if deemed in the best interest of the Purchaser to do so.

2.37 Bid Opening

i.   The bids will be opened on the date as per E-Procurement Portal. The e-submitted bids must be readable through open standards interfaces. Unreadableland or partially submitted bid files (not complying the tender conditions) all beconsidered incomplete and rejected for further bid evaluation.

ii. The e-procurement system allows the Purchaser to download and open the e-submitted bid files from bidders only after the time for opening the bids.

iii. The e-submitted bids must be readable through open standards interfaces. Unreadable and or partially submitted bid files (not complying the ITB Clauses) all be considered incomplete and rejected for further bid evaluation.

2.38 Bid Evaluation

a) Confidentiality:
Information relating to the examination, evaluation, comparison, and post qualification of Bids, and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process.

   i.   Any attempt by a Bidder to influence the Purchaser in the examination, evaluation, comparison, and post qualification of the Bids or Contract award decisions may result in the rejection of its Bid.

b) Clarification of Bids:
During bid evaluation, KPTCL may, at its discretion and if so required, ask the bidders for any clarification in support of their compliance to stipulated Qualifying Requirements or any other matter related to its bid except to the extent in clause of ITB 3.23.2.2. The request for clarification required from the bidder there shall be through e-mail. Response will be through e-procurement portal.

   i. No change in the price or substance of the Bid shall be sought, offered or permitted except to confirm the correction of arithmetical errors discovered by the Purchaser in the evaluation of the Bids.

c) Determination of responsiveness

   i.   The Purchaser will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required securities have been furnished, whether power of attorney of signatory of the bid has been submitted, whether the documents have been properly signed and whether the bids are generally in order and substantially responsive to the requirements of the bidding documents.

   ii. Any material information/data/document required to be submitted by the

bidders as per provisions of bidding documents, if not submitted by the bidder, may render the bid to be non-responsive provided such information/data/documents is such that it may adversely affect the evaluation.

iii. The Purchaser may waive any minor infirmity, non-conformity or irregularity in a bid that does not constitute a material deviation, and that does not prejudice or affect the relative ranking of any bidder, as a result of the technical and commercial evaluation.

iv. If a bid is not substantially responsive to the requirements of the bidding documents, it may be rejected by KPTCL and the same cannot subsequently be made responsive by the bidder by correction.

d) Correction of arithmetical errors in price bid

i. Arithmetical errors will be corrected at the time of evaluation of Price bid and the corrected figure will be considered as evaluated bid price. The corrections in the bid price shall be done as per the provisions of this clause and shall be binding on the bidder. If the bidder does not accept the correction of errors as per the provisions of this clause, bid will be rejected and the bid security will be forfeited.

ii. If there is a discrepancy between the product of unit price and quantity and the total price, the product of unit price and quantity or the Total price whichever is lower will prevail and the total price will be corrected. If there is discrepancy between summation of sub totals and total price, the summation of sub total price shall prevail, and the total price shall be corrected. In case unit price or quantity or both are not filled in against any item, it will be treated as zero and will be assumed that the Bidder has absorbed the cost elsewhere in the Price Bid.

2.39 Process of Evaluation of Bids

a) Pre-qualification of the Bidders

i. Pre-qualification criteria are mandatory requirements to be met by the Bidder. The pre-qualification evaluation for Implementation agency will be done on the basis of information asked in Pre-qualification of the Bidders and Technical Evaluation of Bidders.

ii.   The Bidders will have to provide supporting document(s) sought for each of the criterion including, but not limited to, copies of customer order/purchase order, project completion certificate from customer (indicating name of the customer, duration of EAAAP implementation lifecycle, functions/modules implemented, number of transactional and other users etc.), client testimonials, details of EAAAP-legacy system integration solutions, India specific features (localization), documents containing details of EAAAP like date of first release, detail of version taken out, time taken to bring out the patches incorporating the Government Policy and Regulatory changes, details of 24x7 customer support, product catalogues/brochures etc.

b) Techno-commercial Evaluation of the Bidder.

i.   Only those Bidder who qualify the Pre-qualification criteria shall be considered for Techno-Commercial Evaluation of Bidder.

ii.   Techno-commercial Bid of the Bidder shall be evaluated for acceptability of techno-functional requirements and techno-commercial suitability. In case of no response by the Bidder to any of the requirements with regard to the contents of the Techno- commercial Bid, the Bidder shall not be assigned any marks for the same.

iii.   The Techno-commercial evaluation of the Bidder will be primarily done on the basis of information asked in Technical Qualification Criteria for Bidders.

iv.   The marks will be given against each of the criterion as per the methodology specified in RFP. The minimum technical score for qualifying this stage will be **210 marks** (out of a maximum of 300 marks). Price Bids will not be opened for those Bidders who scored less than this minimum technical score and such bids shall be rejected.

v.   The Purchaser shall confirm that the following documents and information have been provided in the Techno-Commercial Proposal. If any of these documents or information is missing, the offer shall be rejected.

c) Financial (Price Bid) Evaluation of the Bidders

i.   Only those Bidders who qualify the Techno-commercial evaluation shall be considered for Financial (Price Bid) evaluation. Price Bids will be opened for those Bidders only who cleared Techno-commercial evaluation.

ii.   The successful Bidder will be arrived using QCBS i.e Quality and Cost based Selection. The Weightage for Technical and Financial will be 70:30.

Formula for QCBS is as below:

Technical Bid: The bidder scoring the maximum marks in technical evaluation will be considered as T1. Each of the bidders scoring below it will be awarded a score as below:

A: (Marks scored by bidder being evaluated * 70)/ (Marks scored by T1)

Price Bid: Among the bids obtained, the bidder which has submitted the least price will be considered as L1. Each of the bidder submitting bids higher than (L1), will be awarded a score as below:

B: [L1 Amount * 30]/ [Bid Price of bidder being evaluated]

Then the composite score A+B is calculated for all bidders and the bidder with highest composite score ie., A+B score is selected as successful bidder (Q1).

Note: In the e-Procurement portal while creating the tender, although Purchaser has opted Least Cost Selection (LCS), Evaluation will be made based on QCBS by the Purchaser manually for selection of Q1 bidder

Negotiations:
KPTCL reserves the right to negotiate with the successful bidder based on the Techno Commercial Evaluation with highest composite score.

2.40 Award of Contract

a) Award Criteria

i. The Purchaser will award the Contract to the successful bidder whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid as per the evaluation methodology of this document provided further that the bidder is determined to be qualified to perform the Contract satisfactorily. The Purchaser shall be the sole judge in this regard.

ii. For the purpose of determining the capability and capacity of the bidder to perform the Contract, the Purchaser reserves the right to verify the authenticity of the documents submitted by the bidder for meeting the qualification requirements and may undertake verification of the manufacturing facilities available with the bidder.

b) Letter of Intent and Detailed Work Award.

i. After approval of bid evaluation by KPTCL, the successful bidder may be invited for pre-award discussions. After pre-award discussions and prior to the expiry of the period of bid validity, KPTCL will notify the successful bidder in writing by registered letter or by email that their bid has been accepted. This letter (hereinafter and in the Conditions of Contract called `Letter of Intent' or LoI) shall mention the total amount which KPTCL will pay to the successful bidder in consideration of the execution and completion of the scope of work by the successful bidder as prescribed under this tender document.

ii. Within fifteen (15) days of receipt of the LoI, the successful bidder shall sign and return one (1) copy of the same to KPTCL as acknowledgment of acceptance of the same.

iii. Within 20 Days of receipt of LoI the Successful Bidder shall submit the First E-Performance Bank Guarantee (5% of Contract Value) and the Contract Copy.
After the submission of the First E-BG and after signing the Contract Agreement, KPTCL will issue the Detailed Work Award (DWA) to the successful Bidder.

2.41 Misrepresentation by the Bidder

If the bidder conceals any material information or makes a wrong statement or misrepresents facts or makes a misleading statement in the bid, in any manner whatsoever, in order to create circumstances for the acceptance of the bid, the purchaser reserves the right to reject such bid and/or cancel the LoI, if issued.

2.42 Frustration of Contract

i. In the event of frustration of the contract because of supervening impossibility in terms of Section 56 of the Indian Contract Act, the parties shall be absolved of their responsibility to perform the balance portion of the contract, subject to provisions contained in sub-clause 2.42 Point No. iii below.

ii. In the event of non-availability or suspension of funds for any reasons whatsoever (except for reason of willful or flagrant breach by the Owner) and or Contractor then the work under the contract shall be suspended. Furthermore, if the Owner is unable to make satisfactory, alternative arrangements for financing to the Contractor in accordance with the terms of the contract within three months of the event, the parties hereto shall be relieved from carrying out further obligations under the contract treating it as frustration of the contract.

iii. In the events referred to in Sub-Clauses 2.42 Point No. i and ii above, the parties shall mutually discuss to arrive at reasonable settlement on all issues including amounts due to either party for the work already done on "Quantum Merit" basis that shall be determined by mutual agreement between the parties.

2.43 Risk Purchase Clause

In the event of selected bidder fails to execute the project as stipulated in the delivery schedule, or to the satisfaction of purchaser, purchaser reserves the right to procure similar services from the next eligible bidder or from other alternate sources at the risk, cost and responsibility of the selected bidder. Before taking such a decision, Authority shall serve a notice period of 3 days to the selected bidder. Total Liability of the selected bidder towards this Clause is limited to 100% of the contract value.

3. Section III - Eligibility and Evaluation Criteria –

1. The bidder must meet the Pre-Qualification Criteria. The experience and credentials will be considered only for company bidding and shall not be considered for Parent Company/Sister concern/Subsidiaries/ member firms/affiliates.
2. The bidder must submit the Power of Attorney (POA), as an evidence of authorization in the name of person signing the bid with necessary approval/signature by legally authorized signatories who are authorized by respective boards of bidder.
3. If the contract order or work order awarded to the Bidder is in any foreign language other than English which the bidder submits as part of its credential, then, it is the responsibility of the bidder to translate the same in English language and submit as part of their bid submission, without which it may lead to non-consideration of the submitted credential. If the translation found is incorrect, such bids will be rejected.
4. The value of Contract Orders uploaded as part of the bid submission by Bidder will be considered with conversion value to INR as on the Contract Order Date.
5. During evaluation of tender response, the Purchaser reserves right to contact/visit the location of clients for whom the Contract Orders are uploaded by Bidder as part of the bid submission.
6. Any bid not found to be in conformance with any of the pre-qualifying conditions will be summarily rejected and will not be considered for further evaluation.
7. Bidder shall submit only the relevant credentials against the Pre-Qualification and Technical Evaluation Criteria with experiences of projects along with a ready reckoner as part of their respective bids.
8. Experience of Enterprise Automation Application Platform implementation - Sublet by OEM to Bidder shall be considered, subject to fulfilment of relevant conditions mentioned in the evaluation criteria. Further, bidder shall provide supporting evidence & certificates including following:

a. Copy of Work Order/ Purchase Order and relevant completion certificate issued to OEM by Officer of Customer not below the Rank of Executive Engineer or Equivalent Client Authorized Signatory.
b. Copy of Work Order/ Purchase Order and relevant completion certificate issued to the Bidder by OEM.
c. Copy of Work Order/ Purchase Order and relevant completion certificate issued to OEM by the partner/IA and corresponding Work Order / Purchase Order and relevant completion certificate/Go-Live Certificate issued by the Officer of Customer not below the Rank of Executive Engineer or Equivalent Client Authorized Signatory to partner / IA.

9. Under the Bidder Experience, the projects of Upgrade shall not be considered.

10. Experience of the modules specified in this RFP which are implemented on the proposed solution for the internal use of the organization shall not be considered

3.1 Evaluation of Bids Methodology

The Purchaser will examine the bids in two phases. The examination process is mentioned below.

Phase 1 - Prequalification Evaluation & Technical Evaluation

Part 1: Pre-Qualification

1. The Purchaser will examine the bids to determine whether they are complete, whether the bid format confirms to the RFP requirements, whether required EMD and RFP/Tender document fees has been furnished, whether the Bid documents have been properly signed and stamped, whether the bids are in order and whether the bid meets the specified Qualification.

2. The Purchaser may waive any informality or non-conformity or irregularity in a bid, provided it does not constitute a material deviation/or deviation from Pre- qualification criteria. Provided that a Technical Proposal is responsive, the Purchaser may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify non-material, non-conformities or omissions in the Technical Proposal related to documentation requirements. Such omission shall not be related to any aspect of the Price Proposal of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.

3. When deemed necessary, during the tendering process, the Purchaser may seek clarifications or ask the Bidder to make Technical presentations on any aspect from any or all the Bidder. However, that

would not entitle the Bidder to change or cause any change in the substance of the RFP submitted or price quoted. The clarifications so provided shall become a part of the bid.

Part 2: Technical Evaluation

1. Only those Bidders who meets the pre-qualification criteria shall be considered for technical evaluation.
2. This shall be the part 2 of Phase -1 of the evaluation by the Purchaser. Only those Bidders who cross the threshold level of Technical Evaluation and adhere to the purchaser's technical requirements shall be considered for financial evaluation.
3. In case of no response/unsatisfactory response to any of the requirements regarding the contents of the Technical Bid, shall not be assigned any marks for the same.
4. Evaluation criteria proposed to be adopted will be **Quality cum Cost Based Selection (QCBS)** where Technical Bid Score will get a weightage of 70% and Financial Bid Score a weightage of 30%.
5. Technical bid of the Bidder shall be opened and evaluated for acceptability of Techno-functional requirements, deviations and technical suitability. Bidder shall respond to the requirements as explained for their evaluation regarding experience and qualification. Also, Bidder shall refer and respond to all technical requirements as mentioned in the RFP document. The evaluation process would also include a presentation/demo/PoC of technical proposal.
6. As part of the Technical Evaluation, the Fitment of the Technical Solution being offered by the Bidder will be compared with that of the requirements of KPTCL.
7. To qualify technically, a proposal must secure a minimum of 70% of total marks after summing up. Only those proposals which have a minimum score of 70% of total marks will be considered for opening of their Financial Bid and evaluation thereof.
8. The Technical Solution carries 100 marks. Bidder need to score a minimum score of **70 marks out of 100 marks in the same**; else the bid shall be termed as non-responsive and will not be evaluated further.
9. **Financial Evaluation** - The Financial Bid of those Bidders who have been found to be technically eligible will be opened. Financial bids of ineligible bidder will not be opened. The Financial Bids shall be opened in the presence of representatives of technically eligible Bidders, who may like to be present. The KPTCL shall inform the date, place and time for opening of the Financial Bid.
10. For Evaluation and Comparison of Bids 70% weightage will be awarded for Technical Evaluation and 30% weightage will be awarded for Financial Evaluation.

11. As per the technical evaluation, the Bidders will be assigned a Technical score (Ts) out of a maximum of 100 points. The commercial scores would be normalized on a scale of 100, with lowest score being normalized to 100 and the rest being awarded on a pro- rata basis. Such normalized scores would be considered for the purpose of QCBS based evaluation.

12. **Quality and Cost based selection (QCBS) Evaluation Criteria** - The individual Bidder's Financial Scores are normalized as per the formula below:

$$\mathbf{Fn} = \mathbf{Fmin/Fb} * 100 \text{ (rounded off to 2 decimal places)}$$

Where, **Fn =** Normalized Financial score for the Bidder under consideration
Fb = Absolute financial quote for the Bidder under consideration
Fmin = Minimum absolute financial quote

The final composite score will be worked out by adding the weighted marks on Technical score (Ts) and Normalized Financial score (Fn):

Composite Score (S) = Ts * 0.7 + Fn * 0.3

13. The Bidder with the highest Composite Score (S) would be called for negotiation and award of the contract.

3.2 Pre-Qualification Criteria

3.2.1 Pre-Qualification Criteria for Bidder – General Details

Sl. No.	Description	Documents to be uploaded
1.	Bidder shall be an OEM or Authorised partner of OEM	MAF from OEM or self certification by authorised signatory in case of OEM
2.	Bidder must be a Company incorporated in India under the Companies Act 1956/2013/Limited Liability Partnership Act 2008/ Partnership act 1932 with their registered offices in India.	Certificate of incorporation/ Memorandum of Association (MoA)/Partnership deed as applicable
3.	Bidder should be registered under, GST, PAN, TAN	Certificates of GST, PAN, TAN
4.	Bidder should have minimum annual turnover of at least INR **53 Crores** in minimum, 2 years out of previous 5 years (2018-19 to 2023-2024)	The audited balance sheet and Profit & loss statement for financial year (2018-19 to 2023-2024). If Final documents are not available for FY 2023-24, provisional certificate shall be submitted
5.	Bidder should have positive Net Worth for each of the last three (3) Financial Years ending 31st March 2024 (2021-22,2022-23 and 2023-2024).	The audited balance sheet and Profit & loss statement for financial year (2021-22,2022-23 and 2023-2024) are to be submitted along with CA certificate If Final documents are not available for FY 2023-24, provisional certificate shall be submitted
6.	Bidder should have valid CMM Level 3 certification and ISO 27001:2013& ISO 9001:2015 & ISO 20000-1:2018 as on bidding date	Certificate issued by authorized certification body.
7.	Bidder should have been neither terminated, blacklisted nor debarred by any institution of PSU/ Central/State government or any other entity controlled by them under any Central/State Govt. act/rule as on last date of bid submission. This shall be also applicable to the OEM, if the bidder is the Authorized implementation Partner of OEM	Self-Declaration on stamp paper not less than Rs 500, Signed by Authorized signatory

Sl. No.	Description	Documents to be uploaded
8.	Bidder should provide detailed information on any litigation or arbitration arising out of contracts completed or under execution by it over the last five years with any Govt/ corporation/PSU. A history of awards involving litigations against the bidder or if any sub contract may result in rejection of bid. Bidder should furnish the self – declaration stating the above and upload the same along with the other documents in the relevant field in the e- procurement portal, failing which the offer is liable to be rejected.	Self-Declaration on stamp paper not less than Rs 500 signed by Authorized signatory.
9.	Bidder must have a minimum of 200 employees on its payroll. Bidder or OEM shall have at least 100 full time resources with a minimum of 01-year experience in the proposed Enterprise Application, Automation and Analytics platform (s) in India.	• Company letter certified by HR of the company of the Bidder • In case of OEM, fulfilling the resources criteria, a certificate from the Authorized Signatory of the OEM declaring that their resources will be allocated for this project (as per resource requirement).
10.	• Bidder must have at least one office in Bangalore, India. • In case, Bidder is not having their office in Bangalore, Bidder must establish their office in Bangalore within 3 months of LOI. In this regard the bidder must furnish necessary undertaking as per the prescribed format.	• Necessary documentary evidence • Undertaking letter signed by Authorized signatory
11.	The Bidder shall ensure compliance to Mandatory Technical Specifications mentioned in clause 8.2 of Sec VIII, compliance for Hardware requirements asper section 6.6.1	Checklist of compliance sheets
12.	a) Bidder or OEM should have successfully	Relevant Work Order/ Purchase Order

Sl. No.	Description	Documents to be uploaded
	completed at least One (1) project implementation on the offered platform in State or Central Government/ PSU in India having more than 1000 active users. Scope including installation, configuration, customization, implementation and Roll Out of Software during the last Ten (10) Years. b) Such implementation should have covered at least one (1) module from Core modules and any 1 module from other modules out of the below listed modules in : **Core modules** i) Finance Management or ii) Procurement and Materials Management (Stores & Purchase) iii) Employee Payroll **Other modules** i) Asset Maintenance Management ii) Human Resource Management System (HRMS) and Self Services for Employees iii) Project Planning & Management iv) e-Office/File Automation/Business Process Management	and satisfactory completion of project issued by officer not below the Rank of Executive Engineer or Equivalent Client Authorized signatory.
13.	The offered OEM platform should have been used in PSU/ Central/ State Government organizations in India in at least Three (3) projects during the last Ten (10) financial years with at least 3000 users in each of the implementations.	Relevant Work Orders along with the certificates of proof confirming number of users.
14.	The offered OEM platform must be specific and latest version for India with statutory requirements incorporated and should have a localization support in terms of Income Tax, GST, auditing etc. specific to Indian requirements.	Self-Certifications by the authorized signatory of the OEM.
15.	The offered OEM must have at least one office in India and should have at least one (1) R&D center in India.	OEM to provide list of offices and R&D center in India with authorized signatory
16	The EAAAP software platform OEM must assure ability to support its application for a period up to five (5) years from the date of Final	Self-declaration from the OEM shall be provided

Sl. No.	Description	Documents to be uploaded
	Acceptance of EAAAP Solution.	

Pre-Qualification Criteria for Bidder – Enterprise Automation Application implementation

3.2.2 Technical Evaluation Criteria

a) Technical Evaluation Criteria

Sl No.	Criteria for Technical Evaluation	Maximum Marks
1	Turnover of Implementing Agency	10
2	Experience of SI or OEM	60
3	Understanding of KPTCL Requirements	50
4	Presentation of Technical Solution	75
5	Demonstration of Prototype using EAAAP framework	50
6	Proposed Human Resources	55
	Total Marks	**300**

b) Technical Evaluation – Matrix

Sl No.	Evaluation Criteria	Maximum Marks	Documentary Evidence
1	Annual turnover of the Bidder in any 2 years out of previous 5 years (2018-19 to 2023-2024) Marks would be awarded based as below (Maximum **10 marks**) 50 Cr – 100 Cr : 3 Marks 100 Cr – 300 Cr : 5 Marks 300 Cr to 500 Cr: 7 Marks >500 Cr : 10 Marks	10 Marks	The audited balance sheets and Profit & loss statement for financial year (2018-19 to 2023-24) are to be submitted along with CA certificate as documentary evidence *If Final documents are not available for FY 2023-24, provisional certificate shall be submitted
2	Bidder / OEM should have successfully completed Enterprise Automation Application project implementation in State or Central Government/PSU in India. Scope including installation, configuration, customization, implementation and Roll Out of Software in last Ten (10) Years. Marks would be awarded based as below: **Core modules (Max 20 Marks)** (1 module = 10 marks) (> 1 module = 20 marks) A) Finance Management B) Procurement and Materials Management (Stores & Purchase) C) Employee Payroll **Other modules (Max 20 Marks)** (1 module = 10 marks) (> 1 module = 20 marks)	40 Marks	Relevant Work Order/ Purchase Order and satisfactory completion of project of customer issued by officer not below the Rank of Executive Engineer or Equivalent Client Authorized signatory.

Sl No.	Evaluation Criteria	Maximum Marks	Documentary Evidence
	A) Asset Maintenance Management B) Human Resource Management System (HRMS) and Self Services for Employees C) Project Planning & Management D) e-Office/File Automation/Business Process Management		
3	The Offered OEM platform should have been used in PSU/ Central/ State Government organizations in India in at least Three (3) projects during the last Five (5) financial years with at least 3000 users in each of the implementations. • If no. of Users => 3000 and <4000 users: 5 marks. • No. of Users >=4000 and <5000 users : 10 marks • No. of Users =>5000: 20 marks	20 Marks	Relevant Work Orders/license certificate and Proof of Phase Completion/ /Completion Certificate
4	The Bidder(s) shall indicate in the checklist the compliance of the proposed System/Solution as per clause 8.2 Technical requirements	50 Marks	Checklist of Technical requirements compliance with the functionalities and features of the proposed solution
5	**For implementation of proposed Solution at KPTCL. The technical presentation by Bidder(s) should cover (not limited to the following)**	**Total Max Marks: (75 Marks)**	**Self- Declaration for Technical Presentation/ Demonstration**
5.1	Understanding of requirements, Approach & Methodology, Implementation Plan, Solution Architecture	20 Marks	
5.2	Project Management Plan, Change Management Plan, Proposed Team Structure Critical Success factor, Unique Value Proposition	20 marks	
5.3	Risk Mitigation, Operations & Maintenance, Technical Architecture with rationale and benefits, Approach for identifying Compute Platform, OS Platform, tools proposed for the managing the project requirements, such as SLA monitoring tools, Project Monitoring	20 marks	
5.4	Rational for BOM/BOQ quoted for successful operation of EAAAP Solution Stack, Solution Technical Design, Specifications, Configuration, Approach to meet the performance SLAs	15 marks	
6	The bidder shall be provided with a business scenario a few hours before the time of presentation. Bidder is expected to demonstrate the construction, customization and integration related aspects using proposed Enterprise Automation application platform. Marks shall be given as: • Business Forms and Validations: 5 Marks • Workflow and Business Rules: Max 5 Marks • Reporting, BI and analytics: Max 15 Marks • Rest API and Integration: Max 5 Marks • Environment Management: Max 5 Marks • NLP based Reports Generation: Max 5 Marks • Demonstration of any of the proposed EAAAP modules: Max 10 marks.	50 Marks	
7	**Proposed Human Resources From Implementing Agency /OEM**		

Sl No.	Evaluation Criteria	Maximum Marks	Documentary Evidence
7.1	**Project Director (PD)** shall be OEM certified resource and possess MCA/ BE or BTech in Computer Science/ BE or BTech in any branch with MTech or MCA in Computer Science/ BE or BTech in any branch with experience in more than 3 similar ICT projects as project manager. PD shall have at least 20 years of experience in System Integration and/or Application Software and/or Application Integration Projects. Marks would be awarded based as below **i.** Experience in designing, sizing, defining technical and functional specifications of all the following components in same project 1) Software Applications 2) Integration 3) Preparation of user requirement document / Preparation of response to user requirement 4) Hardware sizing **ii.** Experience in designing, sizing, defining technical and functional specifications of proposed solution platform of power transmission company **iii.** Experience in enterprise security	**8 Marks**	Company letter certified from HR/Director of respective companies
7.2	**Lead product engineer** shall be OEM certified resource and possess MCA/ BE or BTech in Computer Science/ BE or BTech in any branch with MTech or MCA in Computer Science/ BE or BTech in any branch with experience in more than 3 similar IT projects as product engineer. Lead product engineer shall have at least 10 years of experience in leading development of Enterprise Class software products The Lead Product Engineer should have deployed 2 products for more than 5 customers.	5 Marks	Company letter certified from HR/Director of respective companies
7.3	The **Project Manager** shall be OEM certified resource and possess B.Tech/B.E/MCA/MSC or higher qualification with at least 10 years of experience and minimum 7 years as Project Manager in implementation of at least 2 similar projects. Marks would be awarded based as below: **i.** Experience of managing similar implementation projects as a Project Manager. 1 mark for each project (Max 2 marks)	4 Marks	Company letter certified by HR/Director of respective companies

Sl No.	Evaluation Criteria	Maximum Marks	Documentary Evidence
	ii. Experience of managing similar implementation projects with PSU/ Central/State Govt. Organizations as a Project Manager in India. (2 Marks)		
7.4	The **Power Sector Specialist** shall possess B. Tech/B.E./MCA/MSC or higher qualification with at least 10 years of experience in working across functional areas of Power (Transmission/ Distribution) Sector in India. Marks would be awarded based as below: **i.** Experience of at least one (1) project in Power Transmission/ Distribution Utilities in India involving software driven automation.	2 Marks	Company letter certified by HR/Director of respective companies
7.5	The **Change Management Expert** should be B. Tech/B.E./MCA/MSC or higher qualification with minimum 7 years of experience conducting change management workshops, developing change management strategy for Implementation of IT Solutions /EAAAP Application Platform.	2 Marks	Company letter certified by HR/Director of respective companies
7.6	The **ICT Infrastructure Expert** shall possess B. Tech/B.E./MCA/MSC or higher qualification with at least 5 years of work experience in any of the IT areas such as Enterprise software System project for software Automation, Enterprise Architecture, IT Infrastructure, Cloud, Software Architecture Design, Business Analysis	2 Marks	Company letter certified by HR/Director of respective companies
7.7	The **Programmer** shall possess B. Tech/B.E./MCA/MSC or higher qualification with at least 5 years of experience years as a developer/programmer with expertise on utilities software solutions including Proposed EAAAP application platform.	2 Marks	Company letter certified by HR/Director of respective companies
7.8	The **Database/System Administrator** shall possess B. Tech/B.E./MCA/MSC or higher qualification with at least 5 years of work experience as System/Database administrator	2 Marks	Certified letter from HR/Director of respective companies
7.9	**Devops Expert s**hall possess B.Tech/B.E/MCA/MSc. Or higher qualification or its relevant equivalent. Should have minimum 5 years of experience as a Devops expert with expertise on one or more IT solution platforms	2 Marks	Certified letter from HR/Director of respective companies

Sl No.	Evaluation Criteria	Maximum Marks	Documentary Evidence
7.10	**Enterprise Architect/ Integration expert** shall possess B.Tech/B.E./MCA /MSC in Computer Science or its relevant equivalent with minimum 5 years of experience as an Enterprise Architect/ Integration expert for implementation of IT/Business Solution.	2 Marks	Certified letter from HR/Director of respective companies
7.11	**Solution Tester** shall possess B. Tech/B.E./MCA/MSC in Computer Science or its relevant equivalent. Shall have minimum 5 years of experience as a Software Solution tester. Shall have relevant certification on software solution testing.	2 Marks	Certified letter from HR/Director of respective companies
7.12	**Security Expert** shall possess B. Tech/B.E./MCA/ MSC or its relevant equivalent with minimum 5 years of relevant work experience as information security expert.	2 Marks	Certified letter from HR/Director of respective companies
7.13	**One Functional Specialist** for each of the following shall possess B. Tech/B.E./MCA/MSC/MBA or higher qualifications with at least 5 years of experience in working across functional areas in India. 1. **Finance Expert** 2. **Inventory Expert** 3. **HR/Payroll Expert** 4. **Business Process Management Expert.** 5. **Asset Management Expert**	20 Marks (4 marks each)	Certified letter from HR/Director of respective companies

4. Section IV: General Conditions of Contracts

4.1 Definitions and Interpretations

4.1.1   All definitions and interpretations shall be made and understood as per the provisions of clause 2.1 and clause 2.2 of this Tender Document.

4.2 Performance Security/Contract Performance Guarantee:

4.2.1 Within 15 **days** from the date of issue of the notification of contract award (LOI), the Supplier shall furnish Performance Security (e-BG) to the Purchaser for an amount of **5% of the total contract value**, which is valid up to 90 days after the date of completion of performance obligations including Warranty /guarantee obligations. In the event of the contractor failing to deposit such security within 15 days from the date of letter of intent, the Earnest Money Deposited with the tender shall be forfeited to the KPTCL who shall have full discretion to cancel the LOI communicated to the said bidder.

Note:
1. The successful bidder shall submit the performance bank guarantee through e-BG only.

2. The successful bidder will be blacklisted, if the performance bank guarantee turns out to be fake during confirmation from the bank regarding genuineness of e-BG submitted by the bidder.

4.2.2 The proceeds of the performance security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

4.2.3 The Performance Security shall be denominated in Indian Rupees and shall be in the following form:

As a Contract Performance Guarantee, the successful Bidder on whom the Letter of Intent is placed shall be required to furnish a Performance Guarantee mandatorily only in the form of electronic Bank Guarantee (e-BG) from the Banks which are integrated with NeSL.

NOTE:

It is mandatory to submit the Contract Performance Bank Guarantee only in the form of e-Bank Guarantee (e-BG) from the Banks integrated with NeSL, any other mode of Performance Bank Guarantee from such Banks will not be accepted. The details of Banks which are integrated with NeSL is listed at Annexure-I and Indicative Challan for obtaining e-BG from Bank is at Annexure-II of 'Section-XI'.

4.2.4 The Performance Security will be discharged by the Purchaser and returned to the Supplier not later than 90 days following the date of completion of the Supplier's performance obligations, including any Warranty/guarantee obligations, under the Contract.

4.2.5 In the event of any contract amendment, the Supplier shall, within 21 days of receipt of such amendment, furnish the amendment to the Performance Security, rendering the same valid for the duration of the Contract as amended for 90 days after the completion of performance obligations including Warranty/guarantee obligations.

4.2.6 The Purchaser shall be entitled, and it shall be lawful on their part,

a) to deduct from the performance securities or to forfeit the said security in whole or in part in the event of;

   i) any default, or failure or neglect on the part of the supplier in the fulfillment or performance in all respect of the contract under reference or any other contract with the Purchaser or any part thereof.

   ii) for any loss or damage recoverable from the supplier which the Purchaser may suffer or be put to for reasons of or due to above defaults/failures/neglect.

   iii) for corrupt and fraudulent practices of supplier.

b) And in either of the events aforesaid to call upon the supplier to maintain the said performance security at its original limit by making further deposits, provided further that the Purchaser shall be entitled, and it shall be lawful on his part, to recover any such claim from any sum then due or which at any time after that may become due to the supplier for similar reasons.

4.2.7 The Purchaser shall release the performance security subject to the sub-clause above without any interest to the supplier on completing all contractual obligations, including the warranty obligations, if any.

4.2.8 The Bank Guarantee furnished against security deposit shall be valid till the expiry of 90 days after the end of guarantee period.

4.3 Assigning work to Sub-contractor(s)

4.3.1 If the Implementing Agency had not envisaged involvement of any Sub-contractor while bidding, but desires to do so during project execution, the Implementing Agency must first get this approved by the Purchaser in writing, giving necessary details. The Implementing Agency shall not, without the prior written consent of the Purchaser, assign to any Sub- Implementing Agency the Contract or any part thereof, or any right, benefit, obligation, or interest therein or there under, except that the Implementing Agency shall be entitled to assign either absolutely or by way of charge any amount due and payable to it or that may become due and payable to it under the Contract.

4.3.2 The Implementing Agency shall ensure that the Sub-contractor appointed has sufficient capacity to undertake the execution of the tasks they will perform under this Contract. The Purchaser will have an absolute right to accept or reject any Sub-contractor without assigning any reason to the Sub-contractor or the Implementing Agency. Where the Implementing Agency is permitted or denied the engagement of a Sub-contractor(s) by the Purchaser, the Implementing Agency will continue to be responsible for the deliverables within the timelines agreed under the Contract. Failure to appoint/engage a Sub-contractor for whatever reason will not be allowed as a reason for making alterations to the Project Plan and/or the deliverables schedule.

4.3.3 The Purchaser will have no obligation whatsoever to the Sub-contractor and appointment of Sub-contractor will not grant any right to the Sub-contractor over the Purchaser. The Purchaser will continue to communicate with the Implementing Agency with respect to the work to be done by the Sub-contractor. The Implementing Agency will continue to be fully responsible for the work done by the Sub-contractor.

4.3.4 The Implementing Agency indemnifies and shall keep indemnified Purchaser against any losses, damages, claims or such other implications arising from or out of the acts and omissions of such Sub-contractor. The Implementing Agency shall be responsible for making all payments to the Sub-contractor as may be necessary, in respect of any services performed or task executed, and the Purchaser shall not be responsible for any part or full payment which is due to such Sub-contractor. The Purchaser reserves

the right to hold Implementing Agency liable for any act/omission of any Sub-contractor.

4.3.5 All rights of use of any process, product, service or facility developed or any other task performed by the Sub-contractor for the Implementing Agency, under this contract would lie exclusively with the Purchaser in perpetuity free from all liens, encumbrances and other Third Party rights and the Implementing Agency shall, wherever required, take all steps that may be necessary to ensure the transfer of such ownership in favor of the Purchaser.

4.3.6 Where the Purchaser deems necessary, it shall have the right to require replacement of any Sub-contractor with another Sub-contractor and the Implementing Agency shall in such case terminate forthwith all agreements/contracts other arrangements with such Sub- contractor and find suitable replacement for such Sub-contractor to the satisfaction of the Purchaser at no additional charge. Failure to terminate all agreements/contracts with such sub-contractors, shall amount to a breach of the terms hereof.

4.3.7 The Implementing Agency shall be responsible for ensuring that the Sub-contractor shall comply with all relevant and applicable provisions of the Contract. Any default on the part of the Sub-contractor to comply with the terms and conditions of the Contract wherever applicable, shall amount to breach on the part of the Implementing Agency, and the Purchaser in addition to all other rights, will have the right to claim damages and recover from the Implementing Agency all losses/or other damages that may have resulted from such default.

4.4 Purchaser's Responsibilities

4.4.1 The Purchaser shall ensure the accuracy of all information and/or data to be supplied by the Purchaser as described in this Tender Document, except when otherwise expressly stated in the Contract.

4.4.2 For the successful implementation of the Project, Purchaser shall provide feedback on all key deliverables and documents, when requested by the Implementing Agency

4.4.3 The Purchaser shall acquire and pay for all permits, approvals and/or licenses from all local, state or national government authorities or public service undertakings in the country where the Site is located, which such authorities or undertakings require the Purchaser to obtain them in the Purchaser's name, are necessary for the execution of the Contract (they include those required for the performance by both the Implementing Agency and the Purchaser of their respective obligations under the Contract), including those specified in the Contract Agreement.

4.4.4 No official or employee of the Purchaser shall in any way be personally bound or liable for the acts or obligations of the Purchaser under the Contract or answerable for any default or omission in the observance or performance of the acts, matters or things which are herein contained.

4.5 Project Inception and Time for Completion

4.5.1 The Successful Bidder shall mobilize adequate resources for inception of the Project within 30 days from the date of issue of DWA by the Purchaser. Request for revision of timeline after Bids are opened will not be considered.

4.5.2 If the Successful Bidder fails to start the Project within the time period mentioned in clause 4.5.1, Bid Security will be forfeited. However, during unavoidable circumstances, the time extension request may be considered by the purchaser.

4.5.3 The Time for Completion of EAAAP implementation shall be as per clause in the Scope of Work.

4.6 Extension of Time for Completion of Contract

4.6.1 If at any time during performance of the Contract, the Implementing agency or its Sub-contractors should encounter conditions impeding timely delivery of the services, the Implementing agency shall promptly notify the Purchaser in writing of the delay, it's likely duration, and its cause. As soon as practicable after receipt of the Implementing agency notice, the Purchaser shall evaluate the situation and may at its discretion extend the Implementing agency time for performance of the Contract, in which case the extension shall be ratified by the Purchaser and the Implementing agency by amendment of the Contract.

4.6.2 Except in case of Force Majeure, a delay by the Implementing agency in the performance of its delivery and completion obligations shall render the Implementing agency liable to the imposition of liquidated damages pursuant to clause 4.15, unless an extension of time is granted and agreed upon.

4.6.3 Causes for Extension of Time for Completion:

4.6.3.1 The Implementing agency may submit application for an extension of the time for completion if there is a delay in completing the Scope of Work by any of the following causes:

a) Additional work ordered in writing

b) Suspension of work ordered in writing by the Purchaser for no fault on the part of the Implementing agency

c) The delay in completion of Scope of Work caused for no fault on the part of the Implementing agency due to orders/instructions issued by the Purchaser or

d) Force Majeure as per clause 4.27.

4.6.3.2 The Implementing agency shall write to the Purchaser of intention to make a claim for an extension of time within fifteen (15) calendar days of the occurrence of any of the above cause(s). The notice shall be followed as soon as possible by the claim with full supporting details.

4.6.3.3 The Implementing agency shall demonstrate to the Purchaser's satisfaction that it has used its best endeavor to avoid or overcome such causes for delay and the Parties will mutually agree upon remedies to mitigate or overcome causes for such delays.

4.6.3.4 Notwithstanding the clause above, the Implementing agency shall not be entitled to an extension of time for completion, unless the Implementing agency, at the time of such circumstances arises, has immediately notified the Purchaser in writing that it may claim such extension as caused by circumstances pursuant to above and upon request of the Purchaser, the Implementing agency shall substantiate that the delay is due the circumstances referred to by the Implementing agency. The Purchaser on receipt of such notice/appeal may agree to extend the Contract delivery date/completion period as may be reasonable and mutually agreed but without prejudice to other terms & conditions of the Contract. However, there would not be any revision in the Contract Price due to delay for reasons attributable to conditions mentioned above.

4.7 Alterations/Variations in the Contract

4.7.1 The Purchaser may by Variation Order to the Implementing agency at any time before the Project is taken over, instruct the Implementing agency to alter, amend, omit, add to or otherwise vary any part of the Scope of Work. The Implementing agency shall not vary or alter any of the Scope of Work, except in accordance with a Variation Order from the Purchaser. The Implementing Agency may, however, at any time propose variations to the Scope of Work to the Purchaser.

4.7.2 Prior to any Variation Order under clause 4.7.1, the Purchaser shall notify the Implementing agency of the nature and form of such variation. As soon as possible after having received such notice, the Implementing agency shall submit to the Purchaser:

a) A description of works, if any, to be performed, its anticipated quantity, the proposed rate in case of a new item and total adjustment to the Contract Price. In case of items for which the rates are available in the Contract the extra quantities shall be executed by the Implementing Agency at the same rates up to the variation limit of twenty-five percent (25%).

b) The Implementing agency proposals for any necessary modifications to the work plan or to any of the Implementing agency obligations under the Contract.

c) The Implementing agency proposals for adjustment to the Contract Price.

d) Important Considerations

1)	Contract Value may increase/Decrease by 25%
2)	Annual data increment by 10%
3)	Annual IT User Increment by 5%

Note: The hardware sizing should be in consideration with the items 2 & 3 while deciding the overall specifications for year on year growth for the entire contract period. No extra cost shall be provided for non-factoring these.

4.7.3 Following the receipt of the Implementing agency submission, the Purchaser shall, after due consultation with the Implementing agency, decide as soon as possible whether or not the variation be carried out.

4.7.4 If the Purchaser decides that the variation shall be carried out, the purchaser shall issue a Variation Order clearly identified as such in accordance with the Implementing agency submission or as modified by agreement. If the Purchaser and the Implementing agency are unable to agree to the variation of the Contract Price, then the provisions of clause 4.7.5 shall apply.

4.7.5 If the Implementing Agency and the Purchaser are unable to agree on the variation of the Contract Price, the variation shall be determined in accordance with the rates specified in the Price Bid, wherever applicable. If the rates contained in the Price Bid are not directly applicable to the specific work in question, suitable rates shall be established by the Purchaser reflecting the level of pricing in the Price Bid.

4.7.6 On receipt of a Variation Order, the Implementing Agency shall forthwith proceed to carry out the variation and be bound to these conditions in doing so as if such variation was stated in the Contract. The Project shall not be delayed pending the granting of an extension of the Time for Completion or an variation to the Contract Price under clause 4.7.5.

4.7.7 In any case where the Implementing agency is instructed to proceed with a variation prior to the determination of the variation to the Contract Price, the Implementing agency shall keep the necessary records of the cost of undertaking the variation and of time expended thereon. Such records shall be open to inspection/verification by the Purchaser at all reasonable times.

4.7.8 The Purchaser, during execution of the Contract, reserves the right to increase or decrease the quantity of goods and services for the items included in the Contract with variation of the total Contract Price but without any change in unit price or other terms and conditions. The quantity of the individual items of goods and services may however vary up to any extent within the overall ceiling limit of the Contract Price.

4.8 Notice and Correspondences

4.8.1 Unless otherwise stated in the Contract, all notices to be given under the Contract shall be in writing, and shall be sent by personal delivery, speed post, courier, email to the address of the Purchaser or the Implementing agency, as the case may be, with the following provisions:

a) Any notice sent by speed post or courier shall be deemed (in the absence of evidence of earlier receipt) to have been delivered within Four (4) calendar days after dispatch except as otherwise specified in the Contract. In proving the fact of

dispatch, it shall be sufficient to show that the envelope containing such notice was properly addressed, stamped and conveyed to the postal authorities or courier service for transmission by speed post or courier.

a) Any notice delivered personally or sent by mail shall be deemed to have been delivered on date of its dispatch.

b) Either Party may change its postal, email for receipt of such notices by giving ten (10) calendar days' notice to the other Party in writing.

4.9 Designated Officer of the Purchaser

4.9.1 SEE(IT), KPTCL shall carry out the functions and obligations of the Purchaser under the Contract.

4.9.2 The SEE(IT), KPTCL shall represent and act for the Purchaser at all times during the currency of the Contract.

4.9.3 Any decision, instruction or approval given by the Purchaser to the Implementing Agency shall have the same effect as though it had been given by the Purchaser.

4.9.4 All notices, instructions, orders, certificates, approvals and all other communications under the Contract shall be given by the SEE(IT), KPTCL , except as herein otherwise provided. All notices, instructions, information and other communications given by the Implementing Agency to the Purchaser under the Contract shall be given to the SEE(IT),KPTCL, except as herein otherwise provided.

4.10   Designated Officer of the Implementing Agency

4.10.1 Within fifteen (15) calendar days of the issue of LOI, the Implementing agency shall appoint the Project manager as named in the Bid. The Project Manager shall represent and act for the Implementing agency at all times during the currency of the Contract and shall give to the SEE(IT), KPTCL all the Implementing agency notices, instructions, information and all other communications under the Contract.

4.10.2 Any instruction or notice which the Purchaser gives to the Project Manager shall be deemed to have been given to the Implementing Agency.

4.10.3 The Implementing agency shall not revoke the appointment of the Project Manager without the Purchaser's prior written consent, which shall not be unreasonably withheld. If the Purchaser consents thereto, the Implementing Agency shall appoint some other person as the Project Manager, pursuant to the procedure set out in clause 4.10.1.

The Implementing agency ideally shall not replace any resource allotted to the project. If any replacement is done should be done with prior approval of SEE(IT), with an equivalent replacement in terms of Experience and Qualification and a at

least a month of Knowledge transfer should be done with both working together.

4.10.4 The Project Manager may, subject to the approval of the Purchaser (which shall not be unreasonably withheld), at any time delegate to any person any of the powers, functions and authorities vested. Any such delegation may be revoked at any time. Any such delegation or revocation shall be subject to a prior notice signed by the Project Manager, and shall specify the powers, functions and authorities thereby delegated or revoked. No such delegation or revocation shall take effect unless and until a copy thereof has been delivered to the Purchaser and the SEE(IT),KPTCL. Any act or exercise by any person of powers, functions and authorities so delegated to in accordance with this clause shall be deemed to be an act or exercise by the Project Manager.

4.11 Inspection

4.11.1 Unless otherwise specified, inspection of all goods and services will be carried out at the Purchaser's premises by the Implementing Agency and the Purchaser. The Implementing Agency will then submit inspection reports to the Purchaser. The Purchaser's decision regarding acceptance or rejection of goods shall be final.

4.11.2 The Purchaser may reject any goods or services or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Implementing Agency shall either rectify or replace such rejected goods/services or parts thereof or make alterations necessary to meet the specifications at no cost to the Purchaser, and shall repeat the test and/or inspection, at no cost to the Purchaser, upon giving a notice.

4.11.3 The Implementing Agency shall arrange for a team of at least 3 members from the Purchaser to visit live implementations of the Enterprise Automation Application Software Platform, including both Data Center sites. All logistics, boarding, and lodging expenses will be covered by the Implementing Agency

4.12 Billing

4.12.1 The Implementing Agency shall submit the bill in approved proforma (one original and three copies) in accordance with the Contract Agreement and agreed billing schedule to the office of SEE(IT), KPTCL enclosing necessary supporting documents(the documents will be detailed in the DWA) within sixty (60) calendar days of having achieved the designated milestone activities as per the schedule specified in contract .

4.12.2 All the bills submitted by the Implementing Agency must be in Indian Rupee only. The figure with two decimals shall be rounded-off to the nearest Rupee (i.e. less than 50 paise shall be omitted and 50 paise or more shall be reckoned as one Rupee) while calculating the amount to be billed.

4.13 Payment

4.13.1 The price to be paid by the Purchaser to the Implementing Agency for execution of the Contract and performance of all the obligations undertaken by the Implementing Agency under the Contract Agreement shall be as per the rates and/or charges finalized and communicated and accepted in the Contract Agreement. The rate so ascertained shall (exception only as and to the extent expressly provided herein) constitute the sole and inclusive remuneration of the Implementing Agency under the Contract and no further payment whatsoever shall become due or payable to the Implementing Agency under the Contract.

4.13.2 The Office of SEE(IT), KPTCL shall verify the bills and supporting documents after receipt of bills from the Implementing Agency. The bills will be processed by Manager(IM) after duly being certified by the designated officers of KPTCL.

The Purchaser shall release the payment after deducting applicable taxes, penalties/liquidated damages and other recoverable. All the payments made by the Purchaser will be in Indian Rupee only. No payment made by the Purchaser herein shall be deemed to constitute acceptance by the Purchaser of the goods or services or any part(s) thereof.

4.13.3 If any excess payment has been made by the Purchaser due to difference in quoted price in proposal and Implementing Agency's invoice, the Purchaser may without prejudice to its rights recover such amounts by other means after notifying the Implementing Agency or deduct such excess payment from any payment subsequently falling due to Implementing Agency.

4.13.4 At its own discretion, the Purchaser shall make payments either through crossed bank cheque or electronic bank transfer.

4.13.5 Wherever applicable, tax deduction certificates shall be issued at the end of the month against deduction of statutory taxes.

4.14 Taxes, Duties & Levies

4.14.1 Except as otherwise specifically provided in the Contract, the Implementing Agency shall bear and pay all taxes, duties and levies assessed on the Implementing Agency, its Sub-contractors or their employees by all municipal, state or national government authorities in connection with the Project. The prices quoted by the Implementing Agency shall be inclusive of all taxes, duties and levies. The taxes, duties and levies (including abatement/taxable composition, if any) as applicable will be paid to the Implementing Agency against documentary evidence.

4.15 Liquidated Damages (LD)

The delivery dates, timetables, milestones and other requirements mentioned in the RFP and the work orders are binding on the Implementing Agency. In the event of delay or any gross negligence, for causes attributable to the Implementing Agency, in meeting the milestones and associated deliverables, milestones and time table KPTCL shall be entitled

to recover from the Bidder as agreed, liquidated damages as mentioned as part of the SLA's of this RFP.

The charges levied on the Implementing Agency on account of Liquidated Damages shall be capped at 10% of the total contract value.

During FMS phase, penalties which can be levied on Implementing Agency each year will be capped at 10% of the Project maintenance cost Per year.

4.16 Termination of Contract

4.16.1 The Purchaser, without prejudice to any other rights or remedies for breach of Contract it may possess under the Contract, give a notice in writing to the Implementing Agency in the following circumstances stating the nature of the default and requiring the Implementing Agency to remedy the same. If the Implementing Agency fails to remedy or to take steps to remedy the same within fifteen (15) calendar days of its receipt of such notice, then the Purchaser may terminate the Contract forthwith by giving a written notice of Sixty (60) calendar days to the Implementing Agency.

a) If the Implementing Agency fails to commence the Project in the manner described in the Contract Agreement, or

b) If the Implementing Agency fails to carry on the work in conformity with the Contract Agreement, or

c) If the Implementing Agency fails to carry on the work to the satisfaction of the SEE(IT),KPTCL.

d) If the Implementing Agency has abandoned or repudiated the Contract, or

e) If the Implementing Agency becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, if the Implementing Agency is a corporation, a resolution is passed or order is made for its winding up (whether compulsory or voluntary not being merely a voluntary liquidation for the purpose of amalgamation or reconstruction), a receiver is appointed over any part of its undertaking or assets, or if the Implementing Agency takes or suffers any other analogous action in consequence of debt, or

f) If the Implementing Agency assigns or transfers the Contract or any right or interest therein in violation of the provision of Contract Agreement, or

g) If the Implementing Agency, in the judgment of the Purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the Contract including, but not limited to, willful misrepresentation of facts concerning ownership of Intellectual Property Rights in, or proper authorization and/or licenses from the Purchaser to offer, the hardware, software, or materials provided under this Contract, or

h) If the Implementing Agency submits a false statement(s) which has a material effect on the rights, obligations or interests of the Purchaser, or

i) If the Implementing Agency accepts any trade commission, discounts or similar payments from any Third Party in discharging their duties and obligations under this Contract, or

j) If the Implementing Agency refuses or is unable to provide sufficient goods, materials

or services to execute and complete the EAAAP Solution in the manner specified in the Agreed Project Plan at rates of progress that give reasonable assurance to the Purchaser that the Implementing Agency can meet User Acceptance of the EAAAP solution by the time for achieving User Acceptance as extended; or

k) If the amount of Liquidates Damage (LD) exceeds the limit specified.

l) The Purchaser reserves the right to by way of a written notice of 60 Days terminate the contract without assigning any reasons whatsoever.

4.16.2 Upon receipt of the notice of termination, the Implementing Agency shall either as soon as reasonably practical or upon the date specified in the notice of termination cease all further work, except for such work as the Purchaser may specify in the notice of termination for the sole purpose of protecting that part of the EAAAP Solution already executed, or any work required to leave the Site in a clean and safe condition. In addition, the Implementing Agency shall:

a) Deliver to the Purchaser the parts of the executed work up to the date of termination,

b) To the extent legally possible, assign to the Purchaser all right, title, and benefit of the Implementing Agency to the EAAAP Solution, or sub-system(s), as at the date of termination, and, as may be required by the Purchaser,

c) Deliver to the Purchaser all non-proprietary drawings, specifications, and other documents prepared by the Implementing Agency as of the date of termination in connection with the EAAAP Solution,

4.16.3 The Purchaser may enter upon the Site, expel the Implementing Agency, and complete the EAAAP Solution itself or by employing any Third Party. Upon completion of the EAAAP Solution or at such earlier date as the Purchaser thinks appropriate, the Purchaser shall give notice to the Implementing Agency that such Implementing Agency's equipment will be returned to the Implementing Agency at or near the Site and shall return such Implementing Agency's equipment to the Implementing Agency in accordance with such notice. The Implementing Agency shall thereafter without delay and at its cost remove or arrange removal of the Implementing Agency's equipment from the Site.

4.16.4 Subject to the provisions of the Contract Agreement, the Implementing Agency shall be entitled to be paid the Contract Price attributable to the portion of the EAAAP Solution executed as at the date of termination and the costs, if any, incurred in protecting the EAAAP Solution and in leaving the Site in a clean and safe condition. Any sums due to the Purchaser from the Implementing Agency accruing prior to the date of termination shall be deducted from the amount to be paid to the Implementing Agency under this Contract.

4.16.5 If the Purchaser completes the EAAAP Solution, the cost of completing the EAAAP Solution by the Purchaser shall be determined. If the sum that the Implementing Agency is entitled to be paid, plus the reasonable costs incurred by the Purchaser in completing

the EAAAP Solution exceeds the Contract Price, the Implementing Agency shall be liable to pay for such excess amount. If such excess amount is greater than the sums due to the Implementing Agency, the Implementing Agency shall pay the balance amount to the Purchaser, and if such excess amount is less than the sums due to the Implementing Agency, the Purchaser shall pay the balance amount to the Implementing Agency. The Purchaser and the Implementing Agency shall agree, in writing, on the computation described above and the manner in which any sums shall be paid. The Purchaser shall pay to the Implementing Agency the Contract Price, properly attributable to the parts of the EAAAP Solution executed by the Implementing Agency as of the date of termination.

4.16.6 The Implementing Agency shall be liable to the Purchaser for any losses, excess costs for such/similar services, provided that the Implementing Agency should continue the performance of the Contract to the extent not terminated under the provisions of this clause. If in the opinion of the Purchaser, the Implementing Agency shall not be able to cure the fault even after notice, such notice shall not be necessary and the Purchaser may terminate the Contract at the liquid cost of the Implementing Agency.

4.16.7 Consequence of termination

4.16.7.1 Upon termination of the Contract, the Implementing Agency shall prepare and present a detailed exit plan within five (5) calendar days of termination notice receipt to the SEE(IT), KPTCL. The SEE(IT), KPTCL along with designated team will review the exit plan. If approved, Implementing Agency shall start working on the same immediately. If the plan is rejected, the Implementing Agency shall prepare alternate plan within three (3) calendar days. If the second plan is also rejected, SEE(IT), KPTCL (or the authorized person) will provide a plan for Implementing Agency and it should be adhered by in totality.

The Exit Plan should cover at least the following:

a) Execute all documents that may be necessary to effectively transfer the ownership and title, including Product warranties (if applicable),
b) Handover all developed codes, related documentation and other configurable items, (if any) in Implementing Agency possession,
c) Handover the list of all IT assets, passwords at all locations to the Purchaser.

4.16.7.2 The Implementing Agency and SEE(IT), KPTCL (or the authorized person) will sign a completion certificate at the end of successful completion (all points tracked to closure) of the exit plan.

4.17   Patent Rights & Royalties

4.17.1 The Implementing Agency shall indemnify the Purchaser against all claims of infringement of any patent, registered design, copyright, trade mark or trade name or

other intellectual property right in connections with execution of the Contract.

4.17.2 Royalties and fees for patents covering materials, articles, apparatus, devices, equipment or processes used in the Project shall be deemed to have been included in the value of Contract. The Implementing Agency shall satisfy all demands that may be made at any time for such Royalties or fees and shall alone be liable for any damages or claims for patent infringements and shall keep the Purchaser indemnified in that regard. The Implementing Agency shall, at own cost and expense, defend all suits or proceedings that may be instituted for alleged infringement of any patents involved in the Project, and in case of an award of damages, the Implementing Agency shall pay for such award.

4.17.3 In the event of any suit and other proceedings instituted against the Purchaser, the same shall be defended at the cost and expenses of the Implementing Agency who shall also satisfy/comply any decree, order or award made against the Purchaser. But it shall be understood that no such machine, materials, facilities or things has been used by the Purchaser for any purpose or any manner other than that for which they have been furnished and installed by the Implementing Agency and specified under these specifications, final payment to the Implementing Agency by the Purchaser will not be made while any such suit or claim remains unsettled.

4.17.4 In the event of any apparatus or equipment, or any part thereof furnished by the Implementing Agency is in such suit or proceedings held to constitute infringement, and its use is enjoined, the Implementing Agency shall, at option, and at own expense, either procure for the Purchaser, the right to continue the use of said apparatus, equipment or part thereof, replace it with non-infringing apparatus or equipment or modify it, so it becomes non- infringing apparatus or remove the equipment and refund the purchase price plus transportation and installation cost thereof.

4.17.5 The Implementing Agency shall indemnify and keep indemnified the Purchaser, successors or assignees for and against any and all claims, suits, damages, losses, actions, demands, costs, charges, royalties and expenses arising from or for infringement, real or claimed of patents, copy rights or other protected rights, if any, designs, device, machine, diagrams, drawings, or in respect of the goods and materials supplied by the Implementing Agency or any of the processes followed by the Implementing Agency are found to have infringed any such rights.

4.17.6 In the event of any claim being made or action being brought against the Purchaser in respect of any of the matters referred to above, the Implementing Agency shall promptly be notified and shall at own expenses, conduct all negotiations for the settlement of the same and any litigation that may arise there from.

4.18 Intellectual Property Rights

4.18.1 The copyright in all drawings, documents and other goods and materials containing data and information furnished to the Purchaser by the Implementing Agency herein shall remain vested in the Implementing Agency or, if they are furnished to the Purchaser directly or through the Implementing Agency by any Third Party, including Implementing Agency of materials, the copyright in such materials shall remain vested in such Third Party.

4.18.2 The Purchaser shall, however, be free to reproduce all drawings, documents, and other material furnished to the Purchaser for the purpose of the Contract including, if required, for operation and maintenance of EAAAP Solution.

4.18.3 Further, the copyright of all reports and software shall lie with the Purchaser. The developed Source-code of software shall be handed over to the Purchaser upon successful Go-live (within 7 (seven) calendar days, after Go-live of Phase-I). Any use of the same by the Implementing Agency shall only be allowed after written permission from the Purchaser.

4.19 Confidential Information

4.19.1 The Purchaser and the Implementing Agency shall keep confidential and shall not, without the written consent of the other Party here to, divulge to any Third Party any documents, data or other information furnished directly or indirectly by the other Party hereto in connection with the Contract, whether such information has been furnished prior to, during or following termination of the Contract. Notwithstanding the above, the Implementing Agency may furnish to its Sub-Implementing Agency(s) such documents, data and other information it receives from the Purchaser to the extent required for the Sub-Implementing Agency(s) to perform its work under the Contract, in which event the Implementing Agency shall obtain from such Sub-Implementing Agency(s) an undertaking of confidentiality similar to that imposed on the Implementing Agency under this clause.

4.19.2 The Purchaser shall not use such documents, data and other information received from the Implementing Agency for any purpose other than the operation and maintenance of the EAAAP Solution. Similarly, the Implementing Agency shall not use such documents, data and other information received from the Purchaser for any purpose other than the design, installation and implementation of EAAAP Solution or such other work and services as are required for the performance of the Contract.

4.19.3 The obligation of a Party under clauses defined above, however, shall not apply to that information which:

a) Now or hereafter enters the public domain through no fault of that Party, or

b) Can be proven to have been possessed by that Party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other Party hereto, or

c) Otherwise lawfully becomes available to that Party from a Third Party that has no obligation of confidentiality.

4.19.4 The above provisions shall not in any way modify any undertaking of confidentiality given by either of the Parties hereto prior to the date of the Contract in respect of the EAAAP Solution or any part thereof.

4.19.5 The provisions of this clause shall survive termination, for whatever reason, of the Contract.

4.19.6 The Implementing Agency shall execute a Non-Disclosure Agreement with the Purchaser.

4.20 Merger, acquisition or divestitures of the Implementing Agency

4.20.1 In case of merger, acquisition or divestiture of the Implementing Agency, the acquiring company shall be bound by the terms & conditions of this Contract for a period throughout the contract period of this Project, at no additional cost to the Purchaser. Additionally, the acquiring company shall continue to provide Annual Technical Support, Annual Maintenance Support and other related services during the time period as mentioned in the Contract.

4.20.2 When the Implementing Agency is a partnership firm, prior approval in writing from the Purchaser shall be obtained before any changes are made in the constitution of the firm. Such approval as aforesaid shall likewise be obtained before such Implementing Agency enters into any agreement with other Parties, where under the reconstituted firm would have the right to carry out the Project hereby undertaken by the Implementing Agency. In either case, if prior approval is not obtained, the Agreement shall be deemed to have been allotted in contravention of this Contract and the action and consequence shall ensure as provided.

4.21 Implementing Agency's staff and their conduct

4.21.1 The Implementing Agency on award of Project shall deploy qualified professionals as designated in the Scope of Work/Contract Agreement for executing this Project. At any time in the opinion of the SEE(IT), KPTCL, any additional, qualified, experienced professionals is considered necessary, they shall be deployed by the Implementing Agency without any additional charge. The Implementing Agency shall ensure competent and efficient supervision of the services to the satisfaction of the SEE(IT), KPTCL.

4.21.2 If any of the Implementing Agency's employees, in the opinion of the SEE(IT), KPTCL, found to be guilty of any misconduct or be incompetent or insufficiently qualified or negligent in the performance of their duties or that, in the opinion of the SEE(IT), KPTCL, undesirable for administrative or any other reasons, for such person(s) to be employed for providing designated services, then at the directions of the SEE(IT), KPTCL, the Implementing Agency shall at once remove such person(s) from this Project without written permission of the SEE(IT), KPTCL. Vacancy so created shall be immediately filled at the expense of the Implementing Agency by a qualified and competent substitute. Should the Implementing Agency be requested to repatriate any person or removed from this Contract, Implementing Agency shall do so and shall bear all costs in connection therewith.

4.21.3 The Implementing Agency shall be solely responsible for the proper behavior of their employees and staff employed by them/deputed by them to provide consultancy services. The Implementing Agency shall exercise proper degree of control over them and in particular without prejudice to the said generality the Implementing Agency shall be bound to prohibit/prevent any of their employees (as stipulated above) from

trespassing or acting in anyway detrimental or prejudicial to the interest of the community or the properties or occupiers of land or properties in the neighborhood. In the event of such trespassing, the Implementing Agency shall be responsible for all consequent claims or actions for damages or injury or any other grounds whatsoever. The decision of the SEE(IT), KPTCL upon any matter arising under this clause shall be final.

4.21.4 If and required by the Purchaser, all Implementing Agency's personnel entering upon the Purchaser's premises shall be properly identified by badges of a type acceptable to the Purchaser which must be worn at all times on the Purchaser's premises.

4.21.5 It is made clear that no relationship of Purchaser and employee is created between the Purchaser and the Implementing Agency's resident engineers, employees and no claim for employment of any such personnel shall be tenable or entertained.

4.22   Non-solicitation of staff

4.22.1 For the purpose of this Contract, both parties to this Contract agree, not to solicit either directly or indirectly with a view to provide or offer employment to, offer to contract with or entice a staff member of the other Party to leave without the consent of the other during the term of this Contract Agreement and for an additional period of one hundred and eighty (180) calendar days after termination.

4.23 Contract's Responsibility with other Agencies

4.23.1 Without repugnance to any other condition, it shall be the responsibility of the Implementing Agency providing services to submit to and take written approval from SEE(IT),KPTCL for any other service(s) required. The SEE(IT),KPTCL, before communicating approval to any such scheme, with any required modifications shall get the final agreements of all such agencies, which shall be binding. No claim shall be entertained on account of above.

4.23.2 The Implementing Agency shall conform in all respect with the provisions of any statutory regulations, laws, bylaws, rules or ordinances of any local or duly constituted authorities or public bodies which may be applicable from time to time to execute the Contract. The Implementing Agency shall keep the Purchaser indemnified against all penalties/liquidated damages and liabilities of every kind, arising out of non-adherence to such statutory regulations, laws, bylaws, rules or ordinances etc.

4.24 Insurance

4.24.1 The Implementing Agency shall at own expense carry and maintain insurance with reputed insurance companies as per the applicable law of India to the satisfaction of the Purchaser. Insurance shall be provided for all the Implementing Agency's employees engaged in the performance of this Contract.

4.24.2 The Implementing Agency shall also carry and maintain any and all other insurance which may be required under any law or regulation from time to time. The Implementing Agency shall also carry and maintain any other insurance, which may be required by the Purchaser.

4.24.3 The Purchaser shall not be liable, in any respect, for any damages or compensation payable under law in respect or in consequence of any accident or injury to any employee or other person deployed by the Implementing Agency or any Sub-Implementing Agency(s) for this Project except an accident or injury resulting from any act or default of the Purchaser or their agents. The Implementing Agency shall indemnify and keep indemnified the Purchaser against all such damages and compensation (save and except as aforesaid) and against all claims, demands, proceeding, costs, charges and expenses, whatsoever in respect or in relation thereto.

4.24.4 The Implementing Agency shall comply with all relevant and applicable statutory provisions in respect of the employees engaged at their cost and above stipulations are only indicative and not exhaustive.

4.25 Damage to Property or to any Person or any Third Party

4.25.1 Implementing Agency's Price Bid shall deem to include taking into account that they have to work in Purchaser's premises and shall take sufficient care in moving the goods and resources from one place to another so that they do not cause any damage to any person or to the property of the Purchaser or to a Third Party including overhead and underground cables and pipelines. In the event of such damages including eventual interruption of services in any plant or establishment as estimated by the Purchaser or ascertained or by the Third Party shall be borne by the Implementing Agency.

4.25.2 Implementing Agency shall also be responsible for making good to the satisfaction of the Purchaser any loss or damage to all structures and properties belonging to the Purchaser or being executed or procured or being procured by the Purchaser or by other agency within the premises of all the Sites of the Purchaser, if such loss or damages is due to fault and or negligence or willful acts or omission of the Implementing Agencies, their employees, agents, representatives or Sub-Implementing Agency(s).

4.25.3 The Implementing Agency shall indemnify and keep the Purchaser harmless of all claims and damages to property other than Purchaser's property arising under or by reason of this Contract if such claims result from the fault and/or negligence or willful acts or omission of the Implementing Agency, Sub-Implementing Agency(s), agents or representatives.

4.26 Safety & Security Code

4.26.1 General

4.26.1.1 Implementing Agency shall adhere to safe working practice and guard against hazardous and unsafe working conditions and shall comply with Purchaser's safety rule as set forth herein. Prior to start of the Project, Implementing Agency will be furnished copies of Purchaser's Safety Code for information and guidance, if it has been prepared.

4.26.2 Safety Regulations

4.26.2.1 In respect of all employees, directly or indirectly employed in the Project for the performance of Contract Agreements, the Implementing Agency shall at their own expense arrange for all the safety provisions as defined in regulations, rules, acts or orders applicable in India/ Karnataka State. The Implementing Agency shall observe and abide by all fire and safety regulations of the Purchaser. Before starting the Project, Implementing Agency shall consult SEE(IT),KPTCL and must make good to the satisfaction of the Purchaser any loss or damage due to fire to any portion of the work done under this Contact or to any of the Purchaser's existing property.

4.26.2.2 First Aid Facilities

4.26.2.2.1 Implementing Agency shall maintain first aid facilities for their employees and those of Sub-Implementing Agency(s).

4.26.2.3   Prohibition on Smoking/Alcohol/Cards/Movies
4.26.2.3.1 Smoking/Alcohol/Cards/Movies within any office of KPTCL and work premises is strictly prohibited. Violators of the "No smoking" rules as applicable in India shall be discharged immediately.

4.26.3 General Safety

4.26.3.1 All necessary personal safety equipment as considered adequate by the SEE(IT),KPTCL should be kept available for the use of the persons employed at the Site and maintained in condition suitable for immediate use, and the Implementing Agency should take adequate steps to ensure proper use of equipment by persons as relevant for the Project at Site/office.

4.26.3.2 When the work is done near any place where there is a risk of drowning, all necessary safety equipments shall be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of work.

4.26.3.3 These safety provisions should be brought to the notice of all concerned by displaying on a notice board at a prominent place at the Sites. The person responsible for compliance of the safety code shall be named therein by the Implementing Agency.

4.26.3.4 To ensure effective enforce of the rules and regulations relating to safety precautions, the arrangements made by the Implementing Agency shall be open to inspection by the SEE(IT),KPTCL or any other person nominated by the Purchaser.

4.26.3.5 Notwithstanding the above clauses, there is nothing in these to exempt the Implementing Agency from the operations of any other acts or rules in force in India. The works throughout, including any temporary works, shall be carried out in such a manner as not to interfere in any way whatsoever with the traffic on any roads or footpaths at the Site or in vicinity thereto or any existing works whether the property of the Purchaser or of a Third Party.

4.26.4.1 The Implementing Agency will have to use Fire Extinguishers at Sites as recommended by the SEE(IT),KPTCL. They will have to ensure all precautionary measures and exercise utmost care in handling the inflammable material and electronic equipments etc. as advised by the SEE(IT),KPTCL. Temporary combustible structures will not be built near or around the Site.

4.26.5 Security Code

4.26.5.1 Access to the Data Centre Sites and Purchaser's locations shall be strictly restricted. No access to any person except the essential personnel belonging to the Implementing Agency who are genuinely required for execution of the Project or for carrying out management/maintenance who have been explicitly authorized by the Purchaser shall be allowed entry to the Data Centre Sites and some Purchaser's locations. Even if allowed, access shall be restricted to the pertaining equipment of the Purchaser only. The Implementing Agency shall maintain a log of all activities carried out by each of its personnel.

4.26.5.2 The Implementing Agency and its personnel or any other person visiting the Purchaser's premises and offices shall comply with all safety and security procedures in force from time to time. All people visiting any Purchaser's premises shall be liable to security check including, but not limited to, frisking by security staff at the gate. Any person shall not carry any goods or materials to Purchaser's premise as not permitted by such security requirements.

4.26.5.3 The Implementing Agency and its personnel or any other person visiting the Purchaser's premises and offices shall comply with all confidentially requirements about Purchasers business and its activities and shall also provide in written a confidentiality undertaking in prescribed format required by the Purchaser.

4.27 Force Majeure

4.27.1 Force Majeure means any event or circumstance or combination of events and circumstances including those stated below that wholly or partly prevents or unavoidably delays the Purchaser or the Implementing Agency in the performance of their obligation under this Contract, but only if and to the extent that such events or circumstances are not within the reasonable control, directly or indirectly, of the affected Party and could not have been avoided if the affected Party had taken reasonable care or complied with prudent utility practices.

a) Act of God, including, but not limited to lightning, drought, fire and explosion (to the extent originating from a source external to the Site), earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, war embargo, or exceptionally adverse weather conditions which are in excess of the statistical measures for the last hundred (100) years, or
b) Any act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, or
c) Any event or circumstance of a nature analogous to any of the above.

4.27.2 Delay or non-performance by either Party here to caused by the occurrence of any event of Force Majeure shall not

a) Constitute a default or breach of the Contract, or
b) Give rise to any claim for damages or additional cost or expense occasioned thereby.

If and to the extent that such delay or non-performance is caused by the occurrence of an event of Force Majeure.

4.27.3 The Implementing Agency or Purchaser shall not be liable for delay in performing obligations resulting from any Force Majeure cause as referred above.

4.27.4 If either Party is prevented, hindered or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances there of within fifteen (15) calendar days after the occurrence of such event.

4.27.5 The Party who has given such notice shall be excused from the performance or punctual performance of its obligations under the Contract for so long as the relevant event of Force Majeure continues and to the extent that such Party's performance is prevented, hindered or delayed. The Time for Completion shall be extended in accordance with clause 4.6.

4.27.6 The Party or Parties affected by the event of Force Majeure shall use reasonable efforts to mitigate the effect there of upon its or their performance of the Contract and to fulfil its or their obligations under the Contract, but without prejudice to either Party's right to proceed as per the provisions under clause 4.27.7.

4.27.7 If the performance of the Contract is substantially prevented, hindered or delayed on account of one or more events of Force Majeure during the currency of the Contract, the Parties will attempt to develop a mutually satisfactory solution, failing which the dispute shall be resolved in accordance with clause 4.29.

4.28 Limitation of Liability

4.28.1 Except in cases of gross negligence or willful misconduct:

a) Neither Party shall be liable to the other Party for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Implementing Agency to pay liquidated damages to the Purchaser, and

b) The aggregate liability of the Implementing Agency to the Purchaser, whether under the Contract, in tort, or otherwise, shall not exceed the amount specified in the Contract Price. Provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the Implementing Agency to indemnify the Purchaser with respect to patent infringement.

4.29 Settlement of Disputes

4.29.1

KPTCL and the Implementing Agency shall make every effort to amicably settle all disputes or claims arising out of, under, in connection with or relating to this Agreement or the breach, interpretation, termination or validity thereof ("Dispute"). If within 30 (thirty) days from the commencement of such amicable settlement process, KPTCL and the Implementing Agency are unable to resolve amicably such dispute, the matter will be referred to Managing Director ,KPTCL and opinion shall be taken.

If the Implementing Agency doesn't agree with the opinion of the MD, KPTCL, the matter shall be referred by either Party for arbitration to a panel of three Arbitrators: one Arbitrator to be nominated by KPTCL, the other one to be nominated by the Implementing Agency and a third Arbitrator to be appointed by the two arbitrators jointly. If the Parties fail to appoint their respective arbitrators and/ or if the appointed arbitrators fail to appoint a third arbitrator within 30 days of the notice referring the Dispute for arbitration, then the appointment of the arbitrators shall be in accordance with the Arbitration and Conciliation Act, 1996. The award of the Arbitrators shall be final and binding on the parties. Proceedings under this clause shall be subject to

relevant provisions of the Arbitration and Conciliation Act, 1996. The arbitration proceedings shall be in the English language and the venue of such arbitration shall be Bangalore. Cost of arbitration and the fees of the third arbitrator shall be borne by equally by each Party. However, expenses incurred by each party in connection with the preparation and presentation of its case before the arbitral panel and the fees of its respective arbitrator shall be borne by the Party itself. The provisions of this clause shall survive termination of this Agreement.

4.30   Compliance with Laws and Regulations

4.30.1 The laws and regulations which are to apply to the Implementing Agency and under which the Contract is to be constructed shall be Indian Laws and Regulations.

4.30.2 The Implementing Agency shall, in all matters arising in the performance of the Contract, comply with in all respects, give all notices and pay all fees required by the provisions of any national or state statute, ordinance or other law or any regulation or bye-law of any duly constituted authority.

4.30.3 The Implementing Agency shall adhere to the statutory provisions under Payment of Minimum Wages Act, Contract Labor (Regulation & Abolition) Act, Employee's Provident Fund & Miscellaneous Provisions Act, Workmen's Compensation Act, Right to Information Act, and other relevant Statutes. Non-compliance of the statutory provisions i.e. Contract Labor engaged in the job may attract penal action against Implementing Agency from the Law Enforcing Authorities. All liabilities arising out of the non-compliance of the Law of the Land will have to be borne by the Implementing Agency and the Purchaser will not be responsible in any manner whatsoever for the same.

4.30.4 The Contract shall in all respect be construed and interpreted in accordance with the Laws in force in India, including any such Laws passed or made or coming into force during the period of the Contract.

4.31   Change in Laws and Regulations

4.31.1 Unless otherwise specified in the Contract if, after the date thirty (30) calendar days prior to the date of Bid submission, any law, bylaws, regulation, ordinance or order having the force of law is enacted, promulgated, abrogated or changed in India (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Project Plan and/or the Contract Price, then such Project Plan and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Implementing Agency has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same has already been accounted for in the price

adjustment provisions where applicable, in accordance with provisions of this Tender Document.

4.32 Joint Venture, Consortium or Association

4.32.1 Consortium/JV not allowed.

4.33 Advertising of the Project

4.33.1 Any advertising stating the subject of this Contract by the Implementing Agency in India or in other foreign countries shall be subject to approval of the Purchaser prior to the publication. Publication of approved articles, photographs and other similar materials shall carry acknowledgment to the Purchaser.

5. Section V: Special Conditions of Contracts

5.1 General

5.1.1 The Special Conditions of Contract should be read in conjunction with Instruction to Bidders, General Conditions of Contract, Scope of Work and other sections of this Tender Document. The Special Conditions of Contract mentioned in this section or anywhere else in the Tender Document shall prevail over the General Conditions of Contract in case there is conflict between the two.

5.1.2 The special conditions of contract shall supplement the Instruction to Bidders as contained in Section II and General Conditions of the contract as contained in Section IV and wherever there is a conflict, the provisions herein shall prevail over those in Section II and Section IV.

5.1.3 In case the date fixed for opening of bids is subsequently declared as holiday by the Government of Karnataka, the revised schedule will be notified. However, in absence of such notification, the bids will be opened on next working day, time and venue remaining unaltered.

5.1.4 KPTCL reserves the right to disqualify such bidders who have a record of not meeting contractual obligations against earlier contract entered into with KPTCL.

5.1.5 KPTCL reserves the right to blacklist a bidder for a suitable period in case he fails to honor his bid without sufficient ground.

5.1.6 No Consortium is permissible by KPTCL. The near relatives of all KPTCL employees either directly recruited or on deputation are prohibited from participation in this tender. The near relatives for this purpose are defined as:

a) Members of a Hindu Undivided Family,

b) They are husband and wife,

c) The one is related to the other in the manner as father, mother son(s),

and son's Wife (daughter-in-law), Daughter(s) & daughter's husband (son-

in-law), Brother (s) & brother's wife, sister(s) & sister's husband (brother- in-law).

5.1.7 The tenderer (s) should give a certificate (in form 28) to the effect that none of his / her such relative is working in KPTCL as defined above. The certificate will be given by all Partners of the Company. Any breach of these conditions by the company or firm or any other person, the tender/work will be cancelled and earnest money/security deposit will be forfeited at any stage whenever it is noticed.
KPTCL will not pay any damages to the company or firm or concerned person. The company or firm or the person will also be debarred for further participation in the concerned unit.
The certificate can be given by the all Partners of the Company or by the Authorized Signatory of the Company who has been authorized through valid Power of Attorney.

5.1.8 In case of any delay, penalties would be applicable.

5.1.9 The agency shall be required to undertake full responsibility of the safe custody and to maintain secrecy, confidentiality of documents handed over by hard as well as soft copy by KPTCL. Each document and data given by KPTCL shall be kept strictly confidential and   no   part   of   it   shall   be divulged to any person at any time without written authorization from the Company. In case of lapse, the agency will be fully responsible for the consequence. Appropriate Penalties as decided by KPTCL would be applicable.

5.1.10 KPTCL in its sole discretion and without incurring any obligation or liability reserves the right at any time to call for information from previous clients of the bidder and evaluate the previous completed projects regarding all submissions including litigations.

5.1.11 A bidder requiring any clarifications regarding Bidding documents may notify the SEE(IT), KPTCL in writing or by email before the last date stipulated for seeking clarifications in KPPP portal. The SEE(IT), KPTCL will respond to any request for clarification of the Bidding documents which are received not later than the deadline given.

5.1.12   The bidder is required to carefully examine the bid documents and be fully informed about as to all the conditions and matters which may in any way, affect services to be provided and/or the cost thereof. If the bidder finds any discrepancies or omissions documents or is in doubt as to the true meaning of any part, shall at once make a request for an interpretation/clarifications.

5.1.13 Verbal clarifications and information given by KPTCL or its officers or its representatives shall not in any way be binding on KPTCL.

5.2 Steering Committee and Project Management Unit

5.2.1 A Steering Committee (SC) will be formed by the Purchaser and any other person(s)/agency (ies) as proposed by The Purchaser's management. This SC will periodically review the progress of the project and guide the Project Management (PMU).

5.2.2 A Project Management Unit (PMU) will be formed by the Purchaser comprising senior officers of the Purchaser and any other person(s)/agency(ies) as proposed by the Purchaser's management. This PMU will co-ordinate with the Implementing Agency and any other stakeholders deemed necessary during project implementation.

5.3 Partial Work Order

5.3.1 The Purchaser, at its own discretion, may award the whole job (entire Scope of Work) or part of it as found suitable. The Purchaser may also award whole or part of any line item of the Price Bid as per the quoted rate. All line items mentioned in the Price Bid will be considered as separate parts for this purpose. For the Scope of Work related to Annual Technical Support (ATS) for EAAAP platform and Facility Management Services (FMS), each year will be treated as separate part. The Implementing Agency has to execute the whole or part of the Project at the rate quoted for the awarded Scope of Work through a Contract Agreement.

5.3.2 For such kind of partial order, the payment amount will be computed on pro-rata basis and in line with the payment terms as mentioned in this Tender Document. Decision of the Purchaser will be final in this regard.

5.4   Partial execution of Scope of Work

5.4.1   If any activity/item mentioned in the Price Bid is not being completed/supplied by the Implementing Agency or is dropped by the Purchaser from the original Scope of Work subsequent to award of Contract, the cost of that activity/item will be deducted from the total and the payment will be adjusted and made accordingly.

5.5   Penalty for mis-declaration / mis-representation

5.5.1   The Purchaser may impose a penalty on the Implementing Agency for mis-declaration / mis- representation of facts and figures, if detected at any point in time during bidding process or during currency of the Contract. The Purchaser shall recover from the Implementing Agency, a sum equivalent to 5% of the total project cost. The total penalty is Capped at 10% of Contract value. KPTCL reserves the right to terminate the contract if the penalty cap is breached.

5.6   Supportability

5.6.1   The EAAAP software platform OEM must assure ability to support its application for a period up to five (5) years from the date of Final Acceptance of EAAAP Solution.

(A self-declaration from the OEM shall be provided)

5.7 Schedule of Payments

5.7.1 The Purchaser shall pay to the Implementing Agency in the manner as set forth in Form: xx (Schedule of Payments).

5.8 Facilities to be provided by the Purchaser

5.8.1 For the execution of this Contract, the Purchaser shall provide office space with adequate furniture & fixtures for accommodating Consultants of the Implementing Agency in their different offices of KPTCL. Providing office space is for the smooth execution of Contract and non-provision of such space or delay in provision of such space does not bind the Purchaser and make the Purchaser liable to the Implementing Agency in any manner except as specifically provided in the Contract Agreement. Delay in providing such space shall not be cited as reason for delay in Project completion.

5.8.2 Any other office infrastructure & facilities (including Internet, printer, photocopier, fax-machine, scanner, computers, servers, networking devices, laptops, peripherals, stationary, consumables, etc.) and logistic support (including local conveyance, secretarial assistance, administrative support etc.) required by the Implementing Agency to successfully execute this Contract shall be arranged by the Implementing Agency itself at its own cost.

6. Section VI: Scope of Work

6.1 About the Project Objective

Karnataka Power Transmission Corporation Limited (KPTCL) intends to implement an Enterprise Application, Automation and Analytics Platform (EAAAP) solution for an integrated data collection, analysis and sharing platform to address the key business challenges and share the data across various functional areas which can make its business processes efficient, more robust and reliable to meet the present and future challenges.

KPTCL envisages to implement EAAAP System with the following objectives:

- Standardize business processes and adopt leading business practices.
- Achieve better financial management and faster financial reconciliation.
- Efficient Assets Management of the Transmission Network and Sub-Stations.
- Manage strengthening of Transmission Network through efficient Project Management.
- Manage the organization with optimum utilization of enterprise resources and productive deployment of human resource.
- Real time information availability across the organization.
- Enterprise wide seamless Integration
- Single repository of master data with easy data retrieval and reporting and "Bird Eye View" to the Top Management.

Figure 2: Objective of EAAAP at KPTCL

6.1.1 Bidders are required to critically review the purpose and requirements of implementation and shall ensure inclusion of all essential services (not mentioned specifically) for achieving the objective within the time frame for successful implementation. Bidders should note that the specifications mentioned in the RFP are only the minimum specification and the bidder should design and supply the solution appropriately keeping the business functional requirements, EAAAP requirements, SLA requirements and scalability in view.

The Purchaser intends to implement the EAAAP Solution within the timelines indicated in this Tender Document. The Purchaser expects the Implementing Agency to adhere to the approach described in this RFP with possible improvements thereto. The Purchaser has multiple business locations and users at these business locations will be using the EAAAP through LAN/WAN, therefore the proposed EAAAP application must be web-enabled.

6.2 Deliverables

6.2.1 The Implementing agency should refer **Section 6.11** (List of Deliverables) for the list of deliverables as part of the EAAAP implementation. The annexure gives a set of high-level activities and corresponding deliverables expected, which Purchaser envisions to be required as part of this Project. The Implementing agency should use this list only as guideline in terms of expected deliverables. The Implementing agency is required to furnish detailed information regarding each deliverables of every step of activities proposed during and after implementation of the Project by appropriately updating **Section 6.11** (List of Deliverables). The Implementing agency should submit at least three (3) hard copies (in form of neatly bound book) and three (3) soft copies of all the released versions of each and every deliverable agreed between the Implementing agency and the Purchaser.

6.2.2 **Contract period:**

The total contract period is 4 years 6 months as below:

a) 15 days from the date of DWA for Pilot development
b) 3 months for As-is study from DWA
c) 1 year for development & implementation after completion of AS-IS
d) 3 months for stabilization
e) 3 years for ATS & FMS

The contract period may be extended for another period of 3 years on mutual agreement basis

6.3 Brief Scope of Work

The Scope of work for Implementing Agency (IA) is to implement an integrated Enterprise Application, Automation and Analytics Platform (EAAAP) System across the Enterprise wide Geographical areas of KPTCL which include Administrative Offices, Zonal Office, Circle Office, MW Division Office, TL&SS Accounting units, MW Division Office Non-accounting, TL&SS Non- Accounting Units etc.. The scope of work includes Supply, installation, design, development, testing and commissioning of EAAAP Systems with necessary Facility Management Services(FMS).

Implementing Agency (IA) will be the Single Point of Contact (SPOC) relating to all responsibilities and issues pertaining to implementation of overall EAAAP System including on premise DC at KPTCL and assist in procurement of DRC IT Infrastructure. The Implementing Agency shall carryout the following functions:

6.3.1 Pilot Development:

The pilot development, as specified by KPTCL, must be fully completed, rigorously tested, and thoroughly documented in accordance with KPTCL's requirements. Subsequent module development will proceed only after the pilot has been successfully demonstrated to and approved by KPTCL.

6.3.2 Detailed As-Is Study and Designing of EAAAP System

a) As-Is Study for existing Enterprise Architecture, IT Applications & Solutions, Utility Business process, IT Infrastructure Solutions, End user's competency etc. along with requirement gathering workshops to identify the requirements and areas of improvements in current state of KPTCL. The Implementing Agency will take the necessary inputs and approval on the formulated As-Is status report from Stakeholders/Nodal Officers/Designated officers of KPTCL.

b) Identify and suggest on existing IT Applications & Solutions which needs to carry forward and sunset post implementation of the EAAAP System.

c) Formulate the SRS Document, Business & Process Design Documents, Technical Design Documents – HLD & LLD including Data Conversion and Migration Strategy based on the requirement gathering workshops inline to the Scope of project.

6.3.3 EAAAP System Scope

a) Detailed Functional Requirement study, System Requirements Study and Finalize Business Blueprint Design for EAAAP System

b) Supply, installation, implementation, configuration, design, development, integration and testing of Enterprise Application, Automation and Analytics Platform system together with relevant Operating System (OS), database licenses, BI and ETL, licenses.

6.3.4 Services for procurement of Infrastructure

The Implementing Agency shall assist in preparation of RFP, Procurement, Monitoring, SLA reporting for Disaster Recovery Centre

6.3.5 EAAAP Implementation Methodology

Follow Agile methodology for EAAAP Implementation

6.3.6 Data Digitization and Migration

Provide standard templates with necessary validation to carry out data digitization and migration activity (including master & transaction data) required for EAAAP System. No document scanning is required.

In the event of any gaps in data migration, the Implementing Agency shall discuss with KPTCL, document the findings and get it approved from KPTCL.

a) Run mock data migration tests to validate the conversion programs that have been written.
b) Collect, Cleanse and Validate the data before uploading the same to the EAAAP system.
c) Support in conducting the acceptance testing and verifying the completeness and accuracy of the data migrated from the legacy systems to the proposed solution.

6.3.5 Centralized Employee Database Management:
The proposed solution must provide the following:

i. **Centralized Repository**
   a. **Unified Database:** The system must store all employee records of KPTCL, all ESCOMs and deputed employees to and from other organizations in a single and centralized repository. This repository should be designed to support large volumes of data while ensuring high availability and performance.
   b. **Data Consistency:** The database must enforce data consistency across all employee records, ensuring that updates, transfers, and changes in employee status are accurately reflected across the system.
   c. **Data Security:** Implement robust security measures, including encryption, access controls, and audit trails, to protect sensitive employee data. The system should comply with applicable data protection regulations and organizational policies from time to time.

ii. **Access and Permissions**
   a. **Role-Based Access Control (RBAC):** The system must support role-based access control, allowing different levels of access for users based on their roles within KPTCL and the ESCOMs. Access permissions should be configurable to ensure that only authorized personnel can view or modify employee data.
   b. **Inter-Company Access:** Authorized users from each ESCOM must have access to the centralized database to facilitate the seamless movement and management of employees between KPTCL and the ESCOMs. The system should ensure that access is granted without compromising data security.
   c. **Audit Logs:** The system must maintain detailed logs of all access and changes to employee data, ensuring traceability and accountability.

iii. **Employee Recruitment, Transfer, Promotion and Deputation**
   a. **Seamless Movement:** The system must support the seamless transfer of employees between KPTCL and any of the ESCOMs including deputation to and from other

organisations. This includes updating the employee's records, department, reporting structure, and any other relevant data in real-time during Recruitment, Promotion, Transfer and Deputation etc.

b. **Notification and Approval Workflow:** Implement workflows to manage the transfer process, including notifications to relevant stakeholders and approval mechanisms to ensure proper authorization before any changes are made.

c. **Historical Data Tracking:** Maintain a historical record of employee movements, including details of transfers, promotions, and other status changes, ensuring that all data is traceable and auditable.

iv. Integration and Interoperability

  a. System Integration: The centralized database should integrate seamlessly with existing HR, payroll, and administrative systems used by KPTCL and the ESCOMs. This integration must support real-time data synchronization to avoid discrepancies between systems.

  b. Scalability: The solution must be scalable to accommodate future growth in employee numbers and additional functionalities that may be required by KPTCL and ESCOMs.

  c. Data Import and Export: Provide functionalities for importing and exporting employee data in various formats (e.g., Excel, CSV) to facilitate data exchange and reporting as needed.

v. Support and Maintenance

The Implementing agency shall:

  a) Provide ongoing support for the centralized database, including regular updates, bug fixes, and technical assistance.

  b) Offer comprehensive training sessions for administrators and end-users on how to effectively use the system, manage employee data, and handle inter-company movements.

  c) Understand the need for a centralized, secure, and integrated employee database that supports the specific needs of KPTCL and ESCOMs.

6.3.6 System Integration Services

The proposed EAAAP System shall be capable of providing integration facilities

  a) Integration through REST APIs with legacy and other IT/Business applications of KPTCL.

  b) Integration between modules connecting to single repository.

  c) Integration with 3rd party applications as per indicative list provided in this RFP

6.3.7 Reporting capabilities: The qualified bidder must provide robust reporting capabilities within the proposed solution. These capabilities must include the ability to generate Standard Reports, Dynamic Reports, and Ad-hoc Reports based on user-defined criteria

6.3.8 Audits and IT Security

  a) Implementing Agency will provide services of Quality assurance through OEM audits and ensuring compliance to the audit recommendations for EAAAP System. Implementing Agency shall also provide the necessary assistance for closure of other audits including IT/Cyber Security audit by Cert-IN empaneled agency

  b) Implementing Agency will have to establish all the necessary procedures/infrastructure/ technology/personnel to ensure that the EAAAP System Security is not compromised.

6.3.9 Internal Audit

The proposed EAAAP System shall facilitate the following

a) Comprehensive internal audit functions (Pre and Post Audit) being followed by KPTCL in different processes
b) The EAAAP System must include features for tracking and resolving audit issues, generating customizable reports
c) Enable follow-up actions, ensuring compliance with relevant regulations and internal standards

6.3.10 Change Management, Capacity Building and Training

a) Provide basic and specialized training on EAAAP System to the employees of KPTCL pertaining to their areas of work. This activity shall include Change Management, Handholding and Capacity Building sessions including training of users for effective use of the system.
b) Impart technical training to KPTCL staff to implement minor changes in the system.
c) Impart training to KPTCL employees and other key stakeholders on the usage and maintenance of the EAAAP system.
d) Provide a change management plan to KPTCL which addresses the various aspects of capacity building and training.

6.3.11 Conference Room Pilot (CRP)

The IA shall setup realistic testing environment that mirrors the actual business processes. This should involve setting up the software with real data and workflows that users will encounter in day-to-day operations to validate that the software meets all business requirements, works efficiently with current workflows, and provides feedback on any issues, gaps, or improvements needed. The CRP should also include provisions for documenting feedback, adjusting the system based on findings, and training users to ensure a smooth transition when the software is fully implemented.

6.3.12 User Acceptance Test (UAT)

The proposed solution shall facilitate UAT environment to mirror the live system, using actual business data and workflows. The Core Team will test the software by executing typical tasks and processes to validate its functionality, performance, and usability. Any issues, bugs, or inconsistencies must be documented, and adjustments should be made before Go-Live. The UAT sign-off indicates that the software is ready for final deployment, ensuring it meets user needs and business goals.

6.3.13   Active Directory

The IA shall facilitate the administration of user accounts, permissions, and access control, allowing IT administrators to organize, secure, and manage the proposed solution efficiently as per the requirements of KPTCL.

6.3.14   EAAAP System - Roll out, Stabilization and Go-Live

a) Big-Bang rollout of EAAAP System across all Geographical Areas of KPTCL.

b) Provide stabilization and handholding support for period of three (3) months after completion of EAAAP System rollout. Post successful completion of Stabilization period, the EAAAP System shall be declared Go-Live.

c) Depute requisite numbers of people who would be responsible for handholding, resolving end-user queries and problems on EAAAP System at KPTCL

6.3.15 Adherence to Implementation Plan and Governance Structure

a) Ensure implementation of EAAAP system, inline to the agreed implementation schedule and rollout plan.

b) Adhere to roles and responsibilities as defined in RFP but not limited with respect to design, development, implementation as well as operations and maintenance of EAAAP system across all project locations at KPTCL.

c) Conform to defined Governance Structure for project review and monitoring including risk management during the entire contractual period.

6.3.16 Facility Management Services (FMS)

a) Provide necessary manpower (minimum of 10 resources) and training during the handholding period to the manpower identified by KPTCL for FMS which include Help Desk (L1 – with a minimum of 10 resources) and L3 support.

b) Provide helpdesk with ticketing tool and IT support services as part of EAAAP System, DC, DRC during the project implementation phase and further during the Facility Management Services for 3 years.

6.3.17 Annual Technical Support (ATS)

a) Provide Annual Technical Support (ATS) which includes L1 and L2 support for EAAAP application platform including other supporting software products provided by the Implementing Agency for a period of 3 years after Successful Go-live.

b) Responsible for ATS for EAAAP System including other supporting software products during the implementation phase and throughout the contract period.

6.3.18 Exit Management and Knowledge Transfer

Provide necessary handholding and transition support including all information as may be necessary and reasonable required to effect as a seamless handover as practicable in the circumstances to KPTCL or designated staff or any other agency that is selected for maintenance of EAAAP system post completion of Contract with the Implementing Agency.

6.4 Section VI: Scope of Work - EAAAP System

6.4.1 EAAAP System Scope

KPTCL aims to implement an Enterprise Application, Automation and Analytics Platform (EAAAP) solution across its business functions - Finance and Accounts Management, Materials Management (Stores & Purchase), Human Resource Management, Project Planning & Management, Maintenance Management and Business Intelligence etc.

6.4.1 Functional Landscape

KPTCL has carried out a functional requirements analysis and detailed Functional Requirements Specifications (FRS) are attached in Section-VI of the RFP document for reference. The details (not exhaustive) of the functionality expected from EAAAP solution are given below:

Sl. No.	Name of Module	Sub – Modules
1	Finance and Accounts Management	a. General Ledger b. Accounts Receivable c. Accounts Payable d. Cash Management/ Treasury e. Costing f. Budgeting g. Assets accounting h. Taxation, duties and levies i. MIS, etc.
2	Materials Management (Stores & Purchase)	a. Material Planning & Budgeting b. Indenting c. Indent Screening & Clearance d. Sourcing (including Vendor Management) e. Procurement of Goods f. Procurement of Services g. Tendering h. Placement of Order (P.O.) i. Post Order Placement Activities j. Contract Management k. Inspection l. Stores function and Warehouse Management m. Inventory Management, Stock Reconciliation etc.

3	Human Resource Management (Including Payroll & Self Service for Employees)	a. Employee Management b. Maintenance of Service Register of employees c. Manpower planning d. Medical facilities e. Employee Self Service (ESS) f. Payroll processing and payment g. Accounting and payment of other allowances h. Accounting and payment of Employee re-imbursement claims i. Computation, Accounting and payment of Pension, Gratuity and other associated payments
4	Project Planning & Management	a. Project Planning b. Project Scheduling c. Project Execution d. Project Monitoring, etc.
5	Asset Maintenance Management	a. Asset Viewer b. Technical Objects c. Enterprise Services in Maintenance Module d. Information System e. Preventive Maintenance f. Maintenance Projects g. Service Management h. Work Clearance Management i. Maintenance Processing etc.
6	Reporting and Analytics	a. Dashboard functionality (including Business Analytics and BI tools) b. Management Information System (MIS) c. Cross matrix reporting
7	Document Management System	The EAAAP system should include an inbuilt or integrated Document Management System (DMS) that seamlessly manages and stores documents linked to various transactional processes. This DMS must facilitate the efficient tracking of submitted invoices/bills by contractors/vendors/employees, providing real-time status updates. It should enable users to easily access, organize, and link documents directly to relevant transactions within EAAAP, ensuring smooth and transparent management of all financial and procurement documentation
8	End to End Reconciliation facility in all modules	a. Inter unit/Branch transactions reconciliation b. Bank Account Reconciliation c. General Ledger Reconciliation d. Sub-Ledger/Schedules Reconciliation e. Employee, Vendor & Customer Reconciliation f. Asset Reconciliation

		g. Inventory/Stock Reconciliation h. Tax Reconciliation i. Ad-hoc Reconciliations

9	Mobile Applications	Exclusive Mobile App (APK/IOS etc) for following:
		   1. Employee self service
		   2. Approval process for all Business workflows

10	Low Code/No Code Software Development and Change Management	The EAAAP system is expected to undergo several changes over its life cycle. To effectively enhance its useful Lifecycle and the TCO, it is mandated that the EAAAP has built-in LCNC tools for
		   a. Forms
		   b. Reports
		   c. Dashboards
		   d. Business Rules
		   e. API/Integration
		   f. Task Automation
		   g. Workflow
		   h. CI/CD

Table 4: EAAAP System Module & Sub-Modules

The proposed system should have a highly efficient reporting capability, integrated dashboards, ad-hoc analysis, Extract-Transform-Load (ETL) and database. Implementing Agency shall develop and deliver the DW BI solution as per the specific requirements gathered from KPTCL during the requirement gathering phase.

Implementing Agency shall implement the EAAAP modules as per the detailed functional requirement specification (FRS) mentioned in Section VI of the RFP document. The Bidder are requested to respond to the requirements specified in the FRS in the vendor response column. The responses shall be used for technical evaluation as mentioned in the Section III – Eligibility and Evaluation Criterion of the RFP.

6.4.2 Supply of EAAAP System Licenses

Sl. No.	Particular	Units	Total
1.	Supply of EAAAP software platform perpetual Licenses with no limitation on number of users as per the specifications outlined in the Section VI of this document.	No.	1

Table 5: EAAAP System Licenses Requirement

6.4.3 Geographical Scope – EAAAP System

KPTCL intends to implement the EAAAP System at the following locations:

Sl. No.	Office Name	No. of office
1	Administrative Offices	10
2	Zonal Office	6
3	Circle Office	15
4	MW Division Office	15
5	TL&SS –Accounting units	36
6	MW Division Office- Non-accounting	11
7	TL&SS- Non-Acc Units	23
8	Sub Stations under TL&SS	1400
9	Stores	48
	TOTAL	1539*

Table 6: EAAAP Geographical Scope for Implementation

Note:

a) The scope of implementation for EAAAP System module include the entire geographical boundaries for KPTCL

b) *The mentioned count of Zonal, Circle Division, Accounting Units may have minor variation. The numbers are indicative and vary as per actuals.

6.4.4 Scope of Services

6.4.4.1 Project Initiation

6.4 Implementing Agency shall formulate a detailed project charter including the detailed project plan, indicating all activities along with the resources required their roles, responsibilities and time schedule of deliverables to be prepared at the start of project and submitted to KPTCL for approval.

6.5 The project charter should also contain detailed approach and methodology, project management templates, deliverables, project organization, project risks and mitigation plans, dependencies etc.

6.6 KPTCL shall constitute a project governance mechanism with adequate representation from all stakeholders to review the documents & deliverables of Implementing Agency and accord necessary approval.

6.7 Implementing Agency shall deploy a project team inline to the manpower requirement as mentioned in the RFP document.

6.4.4.2 Site Study

i) Implementing Agency shall carry out Enterprise wide As-Is Study for existing IT Initiatives, Applications, Business process and procedures, IT Infrastructure, End user's competency etc. along with requirement gathering workshops to identify the Requirements and areas of improvements in current state of KPTCL.

ii) The Implementing Agency may need to visit some of the business locations during various stages of implementation of EAAAP Solution like initial assessment, process study, training, change management, data digitization & migration etc. Also the Implementing agency has to conduct own site visits for 'As-Is' assessment of ICT infrastructure (including network connectivity) available with the Purchaser for developing ICT infrastructure for EAAAP Project. The Implementing agency shall include site visit details in the Project Plan and Project Charter.

iii) Identify and suggest on existing IT Applications & Solutions which needs to carry forward and sunset post implementation of the EAAAP System.

iv) Study the site locations to understand requirements for EAAAP System at KPTCL. Implementing Agency should understand the distribution of users, user's requirements & any other information as required for implementation and successful roll out of EAAAP systems at site's locations of utility.

v) Study sites to identify network connectivity requirements. (Keeping the future expansion in view.

vi) The study will include end user's system requirement, functional requirement, network bandwidth requirement, data migration requirements etc. after studying existing sites and systems.

vii) At the end of site visits, submit the detailed Software Requirements Specifications document.

viii) Take the necessary inputs and approval on the formulated As-Is Status report from Stakeholders/Nodal Officers of KPTCL

6.4.4.3 **Requirement Gathering**

a) KPTCL has carried out a high-level analysis of processes and identified the indicative functional requirements. These requirements will serve as a guideline to Implementing Agency to gauge KPTCL's requirements.

b) Implementing Agency shall conduct a detailed requirement gathering session to capture and document the FRS.

c) Implementing Agency must gather the Functional Requirements of the proposed EAAAP system and submit the detailed System Requirements Specifications (SRS) document for Sign-off.

d) Based on requirement gathering and analysis activities, conducted as part of this task, will result in the Final deliverable for —EAAAP - Functional Requirements & Software Requirement Specifications document, which shall detail the requirements of the complete solution up to the last possible detail. Implementing Agency shall ensure that all requirements are covered in the developed EAAAP system.

e) Implementing Agency should conduct a detailed requirement gathering exercise with stakeholders at KPTCL for all EAAAP modules.

f) Implementing Agency should also assess the user expertise level at each office location for various modules and suitably modify Training/ Handholding /Change management programs in consultation with the KPTCL.

6.4.4.4 Business Design

a) Perform a business study and prepare business design documents with required process re-engineering, process enhancements and requirement analysis to map all business requirement of KPTCL in EAAAP system.

b) Recommend and implement industry best practices by identifying and addressing inefficiencies and bottlenecks in KPTCL's existing processes to enhance productivity and efficiency

c) Implementing Agency is expected to conduct workshops, give detailed presentations on the Business Design, which will include the requirements analysis and specific recommendations for adoption of new improved business processes by KPTCL.

d) Implementing Agency shall design the IT Solution configuration in line with contemporary principles and ensure that it comprises various Latest IT Solutions including database, application, web servers etc.

e) Business design objective, approach and methodology should ensure the following four steps:

   i) **Simplification and Standardization of Processes**: The processes of all divisions need to be simplified into logical steps. All processes need to be depicted into simple flow diagrams with clear linkages. This will help in reviewing some of the old manual practices in view of the integrated system

scenario of the future. The Implementing Agency also needs to explore and recommend the standardization of processes across all lines of businesses/divisions.

ii) **Elimination of Redundant and Non-Value Adding Processes**: After simplifying the processes, all processes are to be reviewed to eliminate the redundant steps and practices. Non-availability of information across the departments results in repetitive and redundant activities in a manual work environment.

iii) **Value Addition**: After eliminating the redundant processes, the re- engineering of processes needs to be done keeping in view the standard best available processes/ practices available in the proposed EAAAP system software. The primary objective of this step is to enhance functional efficiency and process performance. This is the most important phase which will have a strong bearing on the overall performance of the final solution.

iv) **Configuration**: After finalizing the To-Be process map, configuration through standard EAAAP system to be done. Configuring the To-Be processes in the system should be able to address all the defined requirements. Implementing Agency to formulate a report on As-Is Status study including networking requirements for locations of KPTCL.

f) Implementing Agency must prepare detailed Organization chart for KPTCL and map it with role-based users for EAAAP System.

g) Implementing Agency shall ensure that the submitted deliverables are in line with list of documents & deliverables as mentioned in the RFP document.

h) Implementing Agency   shall submit a Business Design document covering   the complete requirements for necessary approval of KPTCL.

i) Implementing Agency would submit the reports on TO-Be Process Documents to the Nodal Officers of KPTCL

6.4.4.5 System Design

a) Implementing Agency shall prepare a comprehensive System Architecture and design documents after conducting a comprehensive analysis of the requirement for EAAAP System at KPTCL.

b) Implementing Agency should prepare and submit a deployment architecture of the system including High Level Design and Low-Level Design etc. (HLD & LLD Reports)

c) The architecture documents should give the complete architecture of the proposed EAAAP system. The documents including, but not limited to the following, shall be submitted for necessary approval:
   i. Application Functional architecture
   ii. Format of all input screens including data entry requirements
   iii. Format of all reports that would be generated by EAAAP system

d) Access control mechanisms, data security and audit trails to ensure that databases are not tampered with or modified by unauthorized users.

e) Implementing Agency must develop a comprehensive EAAAP System with audit trail of all transactions (for e.g. add, update and delete) using transaction log reports, so that errors in data, intentional or otherwise, can be traced and reversed.

Also, access controls must be provided to ensure that the databases are not tampered or modified by system operators.

f) To ensure data security, the Implementing Agency should factor necessary security parameters to be built in EAAAP System.

g) EAAAP system design must be such as to require the minimal installation, if at all, at the user's end, besides the Internet Browser. The EAAAP system should be able to support all latest common browsers (like Internet explorer, Mozilla, Chrome etc.).

h) Implementing Agency shall consider users' inputs when they are finalizing all design components including user interfaces, mode of data entry, storage and retrieval, output reports, queries and the application design.

i) Implementing Agency shall be responsible for making sure that all the above considerations are adequately met. Implementing Agency   shall submit an architecture document covering the above aspects.

j) Implementing Agency must ensure that granularity is built in the EAAAP application modules, sub modules and individual functionalities so that these functionalities can be enabled or disabled through the application administrator as per requirement.

k) The system must possess easy-to-use user interfaces, able to perform tasks with minimum of clicks, maximum select options and provide suitable short- cuts wherever possible and guided through screens.

l) Implementing Agency shall make necessary provisions for management reports, dashboards, business intelligence tools, and data migration in line with the expectations of users provided in the functional requirements.

m) Implementing Agency needs to address the above requirements according to site-assessment and the solution design.

6.4.4.6 **Application Development**

a) Implementing Agency shall carry out development of the EAAAP solution based on the signed SRS, Design Documents and Technical Specifications.

6.4.4.7 Solution Testing

a) Implementing Agency shall conduct all tests as a part of Standard Software Testing Life Cycle (STLC)

b) Implementing Agency shall provide Plans for Unit Testing (UT), System Integration Tests (SIT) and User Acceptance Tests (UAT) including Performance Tests (PT) to KPTCL and/or its designated Third-Party Agency (IT Consultant) and make the necessary changes to EAAAP configuration to optimize performance.

c) Implementing Agency shall facilitate KPTCL or its nominated agencies to conduct User Acceptance Testing, Application Security testing (vulnerability testing and penetration testing) etc.

d) Implementing Agency shall setup testing environment at the on premise IT Infrastructure for testing requirements

e) KPTCL shall nominate a team to carry out acceptance testing of the various Enterprise Application, Automation and Analytics Platform (EAAAP) modules supplied by Implementing Agency .

f) Implementing Agency shall provide training to the Testing team prior to the commencement of the acceptance testing of system.

g) Implementing Agency shall provide necessary tools for logging of defects and carrying out testing, if required.

h) Implementing Agency should provide detailed test scripts for carrying out the acceptance test of various supplied systems.

i) Implementing Agency shall resolve all the defects/issues identified by KPTCL's acceptance testing team during solution acceptance phase. The software would be re-tested to ensure closure of identified defects/issues.

j) Any level of development and fixes will be tested by level 2/3 support team of Implementing Agency in development environment and subsequently UAT will be carried out by end users in test environment before they are implemented in production environment.

k) Subsequently, the authorized representative nominated by KPTCL shall issue an acceptance certificate which should be produced by the Implementing Agency to go ahead with the enterprise wide rollout of EAAAP systems software.

6.4.4.8 Integration Services

Implementing Agency shall ensure that the EAAAP system is able to share data in industry acceptable protocols and formats. The proposed solution shall be based on an open architecture and supports various types of interoperability and integration methods including viz., RESTAPI, Messaging Queuing, , Flat file transfer, Server to Server (S2S) etc.

EAAAP System must maintain integration logs that confirm the success or otherwise of the integration interface. The integration with the EAAAP System is based on a consistent, real-time or batch processing data exchange methodology operating in an automatic manner without any manual intervention unless specifically required.

Implementing Agency needs to propose appropriate middleware solution for integration between EAAAP System and other supporting system including but not limited to the following:

a. All required data residing in existing legacy applications to be identified and transferred / integrated with EAAAP System.

b. All interfaces should do self-checking so that any exceptions or data validation errors are reported by the system.

c. The integration middleware should be based on Service Oriented Architecture (SOA) and other forms of Application Program Interfaces (API) and use publish / subscribe mechanism.

d. Any adapters, tools, scripts etc. required for integration shall be arranged by Bidder. The integration mechanism adopted must have minimal impact on the existing systems

e. The access to data will only be through business rules i.e. the applications

will not access data directly without going through APIs managed by business rules/validation/workflow.

f. The integration middleware/interface must validate the data to be integrated.

g. It must maintain integration logs that confirm the success or otherwise of the interface.

6.4 RPA (Robotic Process Automation) and AI (Artificial Intelligence):

This project aims for deployment of RPA and AI solutions with proposed EAAAP solution to enhance process automation and decision-making. The RPA bots should automate routine tasks such as data entry and report generation, while AI capabilities should be utilized for advanced data analysis, pattern recognition, and predictive insights. Both solutions must integrate seamlessly with existing systems, ensure data security, and provide user-friendly interfaces for management. Ongoing support and maintenance should be included to ensure optimal performance and adaptability to evolving needs of KPTCL.

6.5 IT Initiatives and Applications of KPTCL for Integration with proposed EAAAP solution:

KPTCL and its various departments are currently using different IT applications. The indicative list of existing IT applications required for integration are mentioned below. However, additional applications, apart from those listed, which are found essential during requirement gathering phase, are also required to be integrated with proposed solution at no extra cost to KPTCL.

1. **Supervisory Control and Data Acquisition (SCADA):**

   SCADA has been implemented for real time Energy Data Acquisition from all Interface points from all receiving stations ranging from 33kV to 400kV and from all Major KPCL Generating stations and IPPs.

2. **Geographic Information System (GIS):**

   This software has been developed to identify towers, lines and Sub-stations of KPTCL on the map. To achieve larger benefits to KPTCL and enhance decision making in network operations, Enterprise GIS software application having both static and dynamic components with Network analysis and related modules/features is being implemented.

3. **Scheduling, Accounting, Metering and Settlement of Transactions [SAMAST]:**

   This software is developed to ensure efficient dispatch and accounting activities carried out at SLDC for Scheduling, Accounting, Energy billing, collection & disbursement, Energy Auditing, Intra State ABT (ESCOMs, Generators) including accounting of state DSM, Deviation settlement of RE, Real time energy market, Open Access, Energy Auditing, Transmission outage, Load forecasting and scheduling, Meter data acquisition system, Information Storage & Retrieval-

Historian, Management information system for report Generation and Web based applications.

4. **Energy Billing Software:**

   Billing solution (for SLDC, TBC,ESCOMs & TLSS) Automation and integration of Total Revenue Management G2B activities like Energy Billing/Deviation Settlement, collection and MIS reports for IMPORT and EXPORT IPPS/CPPS/Generators etc under Open Access.

Note: The detailed information and technology used for the above applications will be provided to the successful bidder at the time of As- is Study due to security reasons.

6.5.1.1 Implementation & Rollout

Implementing Agency shall carry out the following activities:

   a. Installation, configuration, design, development, integration, testing and deployment of EAAAP system.
   b. EAAAP system shall be rolled out at all locations after required development and after successful completion of User Acceptance Testing (UAT).
   c. Preferably, necessary changes should be made to EAAAP modules. This is important to ensure that future upgrades, enhancements and bug fixes are not impacted. Every changes in development must be documented in detail and versioning should be properly annotated with comments.
   d. Development, configuration and implementation of all modules and third party bolt-on applications, development of interfaces whenever necessary.
   e. Ensure that the proposed EAAAP system provides adequate interfacing mechanisms (both at the application and data level) with a view to integrate future applications of KPTCL. Such interfaces shall follow industry standards such as Application Programming Interface (API's) and web services.
   f. Supply and install the application, database and related software, integration tools, along with the customized source code and requisite licenses for EAAAP. Implementing Agency shall also describe and document the process to be followed for installing and operating the same.
   g. Consider stakeholder inputs when they are finalizing all processes including user interfaces, mode of data entry, storage and retrieval, output reports, queries and application design.
   h. Ensure bilingual (English & Kannada) support to all versions of prevailing applications such as Nudi, Baraha etc. The proposed solution should facilitate users to view headers/generate reports in English, Kannada or a combination of both wherever necessary.
   i. Ensure that EAAAP system adhere to flexibility, interoperability, usability, availability, manageability, security and integration standards.

j. Adherence to all relevant standards as defined and notified by all compliances issued by all Statutory bodies of Government of India (GoI) and Government of Karnataka from time to time.

k. Incorporate all kind of amendments/orders/modifications/revisions/changes in terms rules, regulations, rates, slabs, polices and laws etc issued by internal organization and external statutory bodies including Income Tax, Goods and Service Tax, Karnataka Electricity Regulatory Commission (KERC), Central Electricity Regulatory Commission (CERC), Central Electricity Authority (CEA) etc wherever applicable in proposed EAAAP solution from time to time at no extra cost to KPTCL

6.5.1.2 Stabilization Support

a) Provide stabilization support for a period for three (3) months after completion of roll-out. Implementing Agency shall facilitate smooth functioning of central help desk for any queries/doubts/issues faced by the end users at KPTCL.
b) Initiate the Setup of Help Desk support during design & customization phase to provide necessary end user support during stabilization phase.
c) Depute requisite numbers of people(Minimum 10 resources) who would be responsible for resolving end-user queries and problems on EAAAP System and supporting software at KPTCL, Kaveri Bhawan, Bengaluru.
d) Carry out resolution of all EAAAP System related issues (Not limited to software application, DC hardware related also included).
e) Ensure Error free operations and running of all EAAAP System modules with real-time data
f) Ensure Stabilization of the EAAAP System at all the locations.
g) Formulate documentation of all issues/problems that come up during the stabilization support period and resolution methodology/solutions.

6.5.1.3 Facility Management Support

a) Design and develop Help Desk Management and Ticketing Tool to log and track tickets.
b) Conduct relevant training to the personnel duly interviewed and agreed by KPTCL for Help Desk and L3.The details of activities covered under the support and maintenance services and the expected service levels is mentioned in Section - Facility Management Services' of RFP document.

6.6   IT Infrastructure Scope

6.6.1 Scope of Work for supply of on-premise compute

Implementing Agency shall be responsible for supplying and installing the bill of quality for servers to run the production and non-production environments. All the environments shall be installed in a fault tolerant high availability mode. The servers, switches and rack shall be installed at KPTCL data center. Implementing Agency is free to decide the form factor of high-density servers based on the below mentioned available compute requirement. Accordingly, the Implementing Agency must provide the server rack and TOR switch with high availability and required throughput to meet SLA. It is expected that below mentioned configuration shall take the required load. However, to enhance the user experience if additional servers are required those shall be provided by KPTCL. Implementing Agency must note that if servers are added no additional software licenses will be provided during the contract period. Other data center infrastructure like cyber security appliances/ software, firewall, load balancer, Network Management System (NMS), PAM, SIEM, DC to DR replication/sync software, bandwidth, storage, backup software/ devices, spine switches shall be provided by KPTCL at its on-premise data center. Other services such as IVRS, SMS & Email Gateway (Notifications and OTP), will be provided by KPTCL. Active Directory for the employees, SSL Certificate and Payment Gateway (if any) will be provided by Implementing Agency. The Implementing Agency shall assist in procurement of infrastructure for disaster recovery

	Intended Use	Machine Roles	Configuration	No. of Machines
	Pre-Production Environment			
1	Development, Testing and Training Staging	Functional Modules	Intel® Xeon® Gold 6542Y 2.9G, 24C/48T, 20GT/s, 60MB Cache, Turbo, HT (185W) OR Equivalent AMD processor, 1024 GB RAM, 1TB SSD internal Storage (available compute)	02 physical machines or equivalent virtual machines. Along with software for VM management
		API Integration Gateway		
		Workflow, Process, Forms, Biz Rules		
		File and DMS flow		
		Analytics		
		Testing and certification		
		Staging datasets for Production		

	Intended Use	Machine Roles	Configuration	No. of Machines
2	Production Environment			
		Functional Modules	Intel® Xeon® Gold 6542Y 2.9G, 24C/48T, 20GT/s, 60MB Cache, Turbo, HT (185W) OR Equivalent AMD processor, 1024 GB RAM, 1TB SSD internal Storage (available compute)	4 physical machines or equivalent virtual machines. Along with software for VM management
		API Integration Gateway		
		Web and Cache		
		Mobile Cache		
		Workflow, Process, Forms, Biz Rules		
		File and DMS flow		
		Authentication & Access Control		
		Warehouse Role		
		full text indexer		
		db role		
		Workflow		
		Search engine		
		Dublin core and MARC21 / Metadata		
	Intended Use	**Machine Roles**	**Configuration**	**No. of Machines**

3	Reporting Servers and Datawarehouse	Module Specific reporting Servers (DB/ App). Datawarehouse software Minimum install requirement	Intel® Xeon® Gold 6542Y 2.9G, 24C/48T, 20GT/s, 60MB Cache, Turbo, HT (185W) OR Equivalent AMD processor, 1024 GB RAM, 1TB NVMe SSD internal Storage (available compute)	02 physical machines or equivalent virtual machines. Along with software for VM management

1. **Solution Management Services**

Implementing Agency shall carry out the administrative tasks of the supplied solution which shall include but not limited to the following:

Implementing Agency shall perform activities such as, server monitoring, provisioning, and management, of the on-premise data center solution. Implementing Agency shall also provide helpdesk support (L1, send periodic performance reports, and meet the required SLAs. The required NMS, SIEM and other tools will be provided by KPTCL.

The implementing agency shall carry out the following:

a. **Port monitoring:** Monitor HTTP/HTTPS, DNS, SMTP, POP3, FTP, TCP ports, etc ensure the seamless operation of the network and applications.

b. **Remote hands service**: Execute instructions on hosted servers such as server restart, service restart, minor configuration changes in OS, executing a script on the server, installation of software etc. Activities shall include service restarts in Windows Servers / Killing and restarting of processes on Unix/Linux Servers, rebooting of servers and clearing of log files.

c. **Manage Operating System:** This shall include support of Operating System, format and reinstallation of OS as requested by KPTCL, creation and maintenance of User Accounts, Start / Stop service, application of upgrades and patches provided by the OS vendor and approved by the customer, OS debugging and recovery, maintenance of server logs, management of server disk space, addition or removal of Resource or Software.

d. Implementing Agency shall perform periodic health check of the systems, troubleshoot problems, analyze and implement rectification measures.

e. On an ongoing basis, the Implementing Agency shall troubleshoot issues in the infrastructure, network and application of KPTCL to determine the areas where fixes are required and ensuring resolution of the same.

f. Implementing Agency shall manage the usernames, roles and passwords of all the relevant subsystems, including, but not limited to servers, applications, devices, etc. Implementing Agency shall be responsible for management of passwords for all relevant components and devices under his purview and implement a password change mechanism in accordance with the security policy of the KPTCL.

g. Shall provide the managed services for Configuration management of compute instances along with end to end monitoring services.

h. **Manage database system**: This shall include installation and configuration of database server, support of RDBMS, performance tuning and optimization, user access management by assigning access rights, start up and shutdown of database system as requested by the KPTCL, backup & restore, access control, maintenance of server logs and trace files, monitoring of Critical Database parameters, performing Import/Export of data, management of database space and database fragmentation, addition or removal of Software, configuration and maintenance of Client Connectivity like JDBC, SQL Net 8 etc., RDBMS version upgrades and migration. Ongoing support for the application vendors to deploy applications, application patches, trouble shooting, performance tuning etc.

i. **Application Performance Monitoring**: Implementing Agency shall implement APM solution, this shall help in enhancing system performance and reliability of the system to ensure improvement in the overall operational efficiency.

j. **Manage load balancing**: This shall include management of the load balancer, regular Health Check of the Servers using TCP or ICMP connections, limiting the number of connections per server for optimum performance, seamlessly adding servers as and when existing servers are over-utilized without disrupting services.

k. Implement and maintain standard operating procedures for maintenance of the infrastructure based on the policies of KPTCL and based on the industry best

practices /frameworks like ITIL. Create and maintain documentation / checklists for the same.

l. Implementing Agency shall be responsible for managing the usernames, roles and passwords (with multifactor authentication facility along with RSA tokens in specified cases) of all the relevant subsystems, including, but not limited to servers, applications, devices, etc. Implementing Agency shall be responsible for management of passwords for all relevant components and devices under his purview and implement a password change mechanism in accordance with the security policy of the KPTCL.

m. Shall provide the managed services for Configuration management of compute instances along with end to end monitoring services.

2. **User Administration**

    a. **Implement Identity and Access Management (IDAM)** as a service that properly separates users by their identified roles and responsibilities, thereby establishing least privilege and ensuring that users have only the permissions necessary to perform their assigned tasks.

    b. Required Active Directory for all the employees shall be implemented.

    c. Administration of users, identities and authorizations, properly managing the root account, as well as any Identity and Access Management (IDAM) users, groups and roles they associated with the user account.

    d. Offer fine-grained access controls including, conditions like time of the day, originating IP address, use of SSL certificates, or authentication with a OTP or Email based multi- factor authentication. Required SMS & E mail Gateway shall be provided by KPTCL. Active Directory, SSL Certificate, Payment Gateway (if any) will be provided by Implementing Agency.

    e. Provide a mechanism to test the effects of access control policies that are attached to users, groups, and roles before committing the policies into production. Support a policy validator to automatically examine non-compliant access control policies.

    f. Implement multi-factor authentication (MFA) for all the users including root account, as well as any privileged Identity and Access Management accounts associated with it.

    g. Ownership of root account of entire on-premise DC and DR management console shall be with KPTCL only.

    h. Implementing Agency will configure the role-based access required for operation and management. Provide services for management of server environment to maintain performance at optimum levels on a 24x7 basis.

n. The system administrators should regularly monitor and maintain a log of the performance monitoring of servers including but not limited to monitoring CPU, disk space, memory utilization, I/O utilization, etc. The Implementing Agency should also ensure that the bottlenecks in the infrastructure are identified and fine tuning is done for optimal performance

o. The system administrators should undertake regular analysis of events and logs generated in all the sub systems including but not limited to servers, operating systems, databases, applications, security devices, messaging, etc. The administrators should undertake actions in accordance with the results of the log analysis. The system administrators should also ensure that the logs are backed up and truncated at regular intervals.

p. The administrators should adopt a defined process for change and configuration management in the areas including, but not limited to, changes in parameter settings for application, servers, operating system, devices, etc., applying patches, etc.

q. The system administrators are responsible for managing the trouble tickets, diagnosis of the problems, reporting, managing escalation, and ensuring rectification of server problems as prescribed in SLA.

3. **Resource Management**

a. The Implementing Agency shall install and configure the required compute, memory, and storage resources, ensuring redundancy within the architecture (including storage) and implementing load balancing mechanisms to meet the specified service levels.

b. For auto-scaling of any major expected increase in the workloads, the Implementing Agency shall carry out the capacity planning in advance to identify & provision, where necessary, the additional capacity to meet the user growth and / or the peak load requirements to support the scalability and performance requirements of the solution

c. The scaling up / scaling down (beyond the auto-scaling limits or whenever the auto-scaling limits must be changed) must be carried out with prior approval by KPTCL. The Implementing Agency shall provide the necessary details including the sizing calculations, assumptions, current workloads & utilizations, expected growth / demand and any other details justifying the request to scale up or scale down.

4. **Database Backup**

a. Backup of operating system, database and application should be performed as per stipulated policies of KPTCL at the KPTCL Data Center. The storage and software for the backup shall be provided by KPTCL.

b. Implementing Agency shall formulate Backup & Archival policy and procedure in line to the requirements and necessary approval of KPTCL.

c. Implementing Agency shall perform backup as per the requirement of the KPTCL. This will include managing the regular backup and restore operations and assuring security of the media through appropriate access control. In addition, the Implementing Agency shall also manage scheduled data replication at DR.

d. As a minimum requirement Implementing Agency shall perform weekly backups for files.

e. For the databases, perform minimum twice weekly full database backup, with three times daily backup of database log files

f. Implementing Agency shall perform and store data and file backups consisting of an initial full back up with daily incremental backups for files;

g. Retain the backups for entire project period on system and thereafter on secondary media such as tapes which can to be restored when required.

h. Implementing Agency shall not delete any data at the end of the agreement without the approval of KPTCL.

i. Monitoring and enhancement of the performance of scheduled backups, schedule regular testing of backups and ensure adherence to related retention policies. Retention policies shall be decided after placing formal order to the selected Implementing Agency.

j. Ensure prompt execution of on-demand backups of volumes, files and database applications whenever required by the KPTCL or in case of upgrades and configuration changes to the system

k. Real-time monitoring, log maintenance and reporting of backup status on a regular basis. The Implementing Agency should ensure prompt problem resolution in case of failures in the backup processes.

l. Implementing Agency should also ensure that a 24 x 7 support for file, database and volume restoration requests is available at the Data Center.

m. Specific Snapshot – At request of KPTCL, the Implementing Agency shall create a full snapshot for the platform, content and related data, to be retrieved at the request of KPTCL

5. **Security**

a. Implementing Agency shall manage the software/ application level security of supplied software. Implementing Agency shall work with the existing security team at KPTCL data center to ensure systems are protected by the existing security softwares in place at KPTCL data center.

b. **Penetration testing**: Implementing Agency shall perform penetration testing to ensure the following: Create a hacker's view of the servers, in terms of the ways it can be hacked from outside. Identify security vulnerabilities and fix holes discovered. Implement emergency quick fix solutions and long-term solutions against successful exploits. Implementing Agency shall perform VAPT testing once in a year.

c. **Testing and application of patches**: Implementing Agency shall carry out testing and application of periodic patches released by software and OS vendors to plug vulnerabilities in the system.

d. Review the audit logs to identify any unauthorized access to KPTCL systems.

6. **Monitoring Performance and Service Levels**

a. Implementing Agency shall implement monitoring and performance management tools to proactively identify, resolve, and prevent operational issues and maintain optimal service levels for assigned applications, servers, storage, and network resources. The monitoring tool shall provide granular data, enabling the generation of comprehensive usage reports for daily, monthly, and quarterly periods

b. Implementing Agency shall provide reports for identifying any deviations from the agreed service levels.

c. Implementing Agency shall monitor service levels including availability, uptime, performance, application specific parameters for e.g. triggering elasticity, request rates, number of users connected to a service.

d. Implementing Agency shall Monitor performance, resource utilization and other events such as failure of service, degraded service, availability of the network, storage, database systems, operating Systems, applications, including API access within the service provider's boundary.

7. Support for audits and compliance

a. KPTCL may undertake technical audits on a periodic basis and the same may be conducted by a third-party technical auditor which may be appointed by KPTCL. Implementing Agency shall be required to provide necessary support for this and adequately address the audit findings in a timely manner. These audits may include:

- Information Security audits
- SLA compliance audits
- BCP readiness audit
- On-premise DC Infrastructure and On-premise DRC IT Infrastructure audit
- Policy compliance audit

- Cyber security audit etc.

b. Shall support for the third-party auditor / program management team / internal IT team with respect to third party audits and other requirements such as forensic investigations, SLA validation etc.

c. The Solution and services offerings shall comply with the audit requirements of STQC /MEITY guidelines as and when published.

8. **Operation and Maintenance Services**

a. Implementing Agency shall implement and maintain optimal operational practices, and ensure the overall reliability and responsiveness of the infrastructure through both proactive planning and rapid situational response.

b. Implementing Agency shall assume comprehensive responsibility for monitoring reports, raising and escalating incidents, and tracking their resolution to ensure the smooth operation of the IT infrastructure.

c. Implementing Agency shall develop a comprehensive HelpDesk and Support Management System for Facility Management Services (FMS) (for L3 support)plan for managing DC and DRC services, ensuring continuous alignment with evolving project requirements.

d. Implementing Agency shall create and maintain all necessary technical documentation, design documents, standard operating procedures (SOPs), and configurations to ensure the continued operation and maintenance of DR services.

9. **Privacy and Security Safeguards.**

a. For highly sensitive data, the Implementing Agency must implement encryption as part of a standardized security protocol for safeguarding sensitive information.

b. Implementing Agency shall promptly notify KPTCL of any security incidents, intrusions, or requests from foreign government agencies for data access, enabling KPTCL to proactively manage these events.

c. Implementing Agency shall immediately report in writing to KPTCL any information security breaches involving unauthorized access or interference with the Project's Data, facilities, or Confidential Information, regardless of whether the unauthorized individuals are employees of any party involved in the project.

d. Implementing Agency shall maintain the confidentiality of all information received under this Agreement, treating it as classified. The Implementing Agency shall not disclose, publish, or advertise such information to any person or organization without the prior written consent of KPTCL.

10. Confidentiality

The Implementing Agency shall enter into non-disclosure agreements with KPTCL for the protection of confidential information related to this Project. For clarity, the following information is not considered confidential:

- Information already publicly available.
- Information independently developed by Implementing Agency without using KPTCL's organizational data.
- Information obtained from a third party with the right to disclose it.
- Information which has been disclosed to the public pursuant to a court order.
- Implementing Agency will be permitted to obtain KPTCL data only to deliver the services and will be prohibited from using KPTCL data for any other purpose. Implementing Agency remains responsible for its sub-contractors' compliance with Implementing Agency obligations under the Project.

6.5.2 IT Audits and IT Security

6.5.2.1 Audits & Reporting

The audit and reporting activities will be carried out by any internal authority, Product OEM or any Third-party agency to ensure the compliance with quality and overall requirements captured in RFP for EAAAP System to achieve the goals and objectives as envisaged by KPTCL.

EAAAP System being deployed as a part of this project, will require an auditing and validation both initially as well as on an ongoing basis. The audit activities are mandatory and shall be carried out periodically inline to the timelines/frequency captured as per audit requirements of RFP. However, in case of any exception the audit and validation activities can be carried out in an ad-hoc basis, at the discretion of KPTCL. The Implementing Agency must understate to cooperate and support such audit or validation activities conducted by KPTCL or any of its appointed agency.

Implementing Agency will be responsible for facilitating and extending full cooperation for audits by any internal authority, Product OEM or any Third-party agency.

To carry out EAAAP System audit (OEM Audit), the cost for first 2 iteration shall be borne by The Implementing Agency including the cost to incorporate any post audit suggestions/recommendations.

However, for any other third-party audit, the cost will be borne by KPTCL. If in case, due to non-fulfilment of requirement due to Implementing Agency , multiple iterations (more than 1) are required to be carried out for any third-party audit, then the cost of further audits will be charged to Implementing Agency for any subsequent iterations or visits of third-party auditors.

The audit and validation activity will be carried out to identify, assess, evaluate and recommend on but is not limited to, the following:

   a. Performance
   b. Security
   c. Manageability
   d. Customized Source Code
   e. OEM Standard and Compliance
   f. Availability of Services
   g. Functional and Technical Specifications
   h. Policy and Procedure
   i. Service level requirement
   j. Software and supporting system
   k. Hardware and other components
   l. Project Documentation etc.

6.5.2.2 Auditing

The purpose of audit will be to assess, evaluate and assure to the management of KPTCL, that the implemented EAAAP System, process, policy and elements of systems are functioning properly and effectively to achieve the planned objectives. In case, any element of the solution is not functioning in line to the specific requirements and standards, then audit shall recommend the required corrections and corrective action.

The audit activity shall include verification, examination and evaluation of overall solution with an objective evidence to assess, that EAAAP System solution has been designed, developed, implemented and documented in accordance and in conjunction with specified requirements.

The audit and validation activities under this will include but is not limited to, the following mentioned activities:

6.5.2.3 Service Level Agreement (SLA) Audit:

The quarterly monitoring and performance review of Implementing Agency against the monthly formulated reports for SLA.

   a. A designated third party or personnel from KPTCL will review the performance of the Implementing Agency against the SLA.
   b. The SLA reports shall be formulated based on the system generated reports.

c. Implementing Agency shall submit the system generated monthly SLA report to the designated Nodal officer as per agreed frequency and timeline.

d. For requirement of SLA audit, the KPTCL may perform a visit either by internal department or by an external contractor at respective Data Center locations.

e. The review / audit report will form a basis of any action relating to imposing penalty on or breach of contract of the Implementing Agency .

6.5.2.4 EAAAP System- OEM Audit

This audit activity shall include the validation and assessment of entire EAAAP System including DC and DR Infrastructure and supporting systems through Original Equipment Manufacturers (OEMs). The required activity shall be performed on the entire implemented solution to certify that all necessary standards, precautions and guidelines has been adhered to achieve the optimal performance of the solution.

A. First Iteration of Audit – Blue Printing and Designing of EAAAP System

a. Review of AS-IS, TO-BE, Requirements analysis, Solution mapping document and Technical design document along with any other related document;

b. Prepare module wise detailed observations covering & including but not limited to process coverage, usage of EAAAP System functionalities, risks in customized processes (if any).

c. Data Migration and Digitization strategy with the proposed data conversion template and migration strategy for existing IT Solutions, if required.

d. Shall include recommendation on industry best practices for KPTCL as appropriate e.g., organization structure, codification etc.

e. Audit to ensure installation of proper versions and licenses EAAAP System including, but not limited to EAAAP System Software's licensing, integration middleware, supporting systems, any other layer of software etc.

f. Verification of standard EAAAP System functionalities including module, sub-module which can be used to meet KPTCL requirements;

g. Verification and review of the custom development approach and methodology as per standards recommended by EAAAP System OEM. Further, OEM will also identify risks for KPTCL in such developments;

h. Review of all custom developed components / objects / process etc. with risk assessment, if any;

i. If any standard EAAAP System functionality, module or sub-module is not used by Implementing Agency same needs to be informed to KPTCL.

j. EAAAP System OEM audit process will include review of solution documents and on-site discussions with Implementing Agency and KPTCL.

k. Implementing Agency will be required to comply with EAAAP System OEM observations;

l. After compliance by Implementing Agency , EAAAP System OEM will verify and confirm that all relevant observations/recommendations are incorporated by

and the solution provided by Implementing Agency is acceptable to EAAAP System OEM considering KPTCL requirements.

m. EAAAP System OEM will prepare a detailed audit report and submit the same to KPTCL. If required, EAAAP System OEM need to present audit findings to management of KPTCL.

B. Second Iteration of Audit – Posts Development, Configuration and Rollout of EAAAP System

EAAAP System OEM will verify the specification and configuration to confirm, but is not limited to, the following mentioned activities:

a. The OEM will verify and confirm before Go-live, the technical preparedness of the system is appropriate for Go-live;

b. The OEM will review technical & operational procedures, system performance, user support documents & structure is as per scope and OEM standards;

c. Shall verify that the implemented solution is in line with the standard practices;

d. The OEM will conduct audit to confirm that the solution is performing as per KPTCL SLAs. The audit report will be a pre-requisite to the completion of EAAAP System stabilization phase.

e. In case, if there is any variation, OEM will inform that implemented specifications /functionalities etc. will suffice the requirements of KPTCL;

f. If the specifications are not enough, OEM will inform and provide a detailed report containing risks and impact on the overall solution to KPTCL.

g. Implementing Agency will have to take corrective actions based on OEM recommendations. Post incorporation of the recommendations the EAAAP System OEM will verify the compliance of the same.

h. EAAAP System OEM will ensure closure of all audit observations to its satisfaction and provide final report to KPTCL.

The duration of OEM Audit shall be maximum 25 days including all audit activities and post audit compliance checks and validation.

The following will be the deliverables of such OEM engagements and the mechanisms for follow up actions.

a. **The mechanisms**: All the review by the EAAAP OEM will occur in collaboration with KPTCL and Implementing Agency team. Implementing Agency shall be required to participate in the Review program conducted by KPTCL and the EAAAP OEM. The Implementing Agency shall depute their competent persons to participate in the review programs. The Review program will look for best implementation practices while following a prescribed methodology. The extent and frequency of the review shall be determined by EAAAP OEM in consultation with KPTCL but shall be frequent enough to validate each of the major project milestones. While some of the review will be required to be done at the project site, some of the reviews of codes or documents can be carried out at the location convenient to the EAAAP OEM. The EAAAP OEM team will plan the activities in consultation with Implementing Agency and KPTCL and the

EAAAP OEM will report directly to KPTCL on all the matters related to their activities.

b. **The deliverables**: The deliverables of the activities of the EAAAP OEM will, at the minimum include recommendation reports, suggestions on specific action items, minutes of the meetings and approval certificates.

c. **The follow up actions**: The Implementing Agency is required to incorporate the recommendations arising out of the expert services provided by the EAAAP OEM. The EAAAP OEM also will be responsible for helping KPTCL to get its suggestions/recommendations implemented. The EAAAP OEM should validate the incorporation of the review findings on behalf of KPTCL. The efforts required for incorporation of the recommendations/suggestions/comments etc. arising out of the activities of the EAAAP OEM expert services, will be part of the normal implementation effort for the project and treated as rework for inadequate quality. KPTCL will not accept any change requests for these efforts.

1) User feedback and KPTCL

a. Implementing Agency is expected to build adequate mechanisms to get the feedback from different users of the EAAAP system during different stages of the project. The users/stake holders for providing their feedback will be identified by KPTCL.

b. Implementing Agency is expected to deploy in this project the expertise and experience of similar projects carried out by them earlier. It is expected that all the key deliverables will go through a review with these experts. Similarly, the Implementing Agency is expected to deploy all the quality assurance mechanisms as per international quality standards for this project.

c. Implementing Agency should clearly indicate up front what are the deliverables which will go through internal review, what type of expertise will be deployed for these reviews and what are the deliverables which will follow the quality assurance plans.

d. If any of the deliverables are not acceptable to KPTCL or its appointed experts, it will have the right to seek deployment of experts from the Implementing Agency to review the deliverables.

2) Mechanism to adopt feedback

There are three types of feedback for the deliverables – from the EAAAP OEM, from the users/stake holders and from the internal experts of Implementing Agency . The following is expected from Implementing Agency on the feedbacks.

a. All the feedback will be discussed with KPTCL and based on guidance from KPTCL, will be incorporated into the project

b. Since the feedback for any rework is by nature correcting the inadequacy of quality of the work produced in the first place, these modifications shall be carried out.

c. Implementing Agency should build adequate mechanisms to control the risks of time over runs possibly due to effort required to rework bad quality deliverables

d. Implementing Agency should indicate in the beginning and during the start of each phase how it plans to take feedback and the mechanisms to incorporate the feedback into the project plan and deliverables

Implementing Agency will report to KPTCL on how the feedback have been incorporated into the project deliverables and take a sign off from the designated authority of KPTCL.

6.5.2.5 IT /Cyber Security Audit

A yearly audit of IT security and Cyber security practices by CERT-IN certified Third-party agency to assess and evaluate the implementation of security policy and vulnerability assessment. The report shall include the parameters as per the agreement with KPTCL and rate the security implementation in three grades i.e. Satisfactory, Requires Improvement and Unsatisfactory.

a) Security Audit shall include but not limited to vulnerability assessment, penetration testing, application security assessment, application assessment for entire infrastructure.
b) Third party agency shall be responsible for implementation of information security controls and perform periodic assessment.
c) It shall propose ways to enhance the protection of EAAAP System & supporting IT Infrastructure.
d) Secure Configuration Review: Third Party Agency shall review the security configuration of EAAAP System and provide the detailed report that include the recommendations for remedial actions.
e) Implementing Agency shall provide the declaration of readiness for IT security and Cyber security Audit post successful Go-live of EAAAP System.

6.5.3 Follow-up Audit

Post completion of audit assessments (Internal or external) may have the findings that require corrections and corrective action. Since most of the corrective actions cannot be performed at the time of audit.

KPTCL may require a further follow-up audit to verify that corrections were made, and corrective actions were taken. The KPTCL may also conduct the follow-up audits to verify the preventive actions taken because of performance issues that may be reported as opportunities for improvement.

6.5.4 Reporting

Implementing Agency shall provide the necessary support and co-operation for overall monitoring of the EAAAP System. For purpose of monitoring the Implementing Agency shall provide the system generated reports with a provision of further detailed analysis, if required.

Implementing Agency shall formulate an exhaustive list of required reports and seek the concurrence of KPTCL. Implementing Agency should submit the reports on a regular basis in a mutually agreed format. Each report shall be circulated and submitted to the designated Nodal Officer of KPTCL in the format mutually agreed upon. An indicative list and frequency of such reports are as following:

1) **Weekly reports**
   a. Backup and restoration
   b. New Software Patches
   c. Resource utilization of critical components
   d. Data Migration Report
   e. Changes Made in Database
   f. Changes Made in Middleware
   g. DC and DR Replication Report
   h. DC and DR Access Reports etc.

2) **Monthly reports**
   a. Summary of resource utilization for all components in DC/DR
   b. Log of preventive / break-fix maintenance undertaken
   c. Summary of usage of storage media provisioned
   d. Summary of major and minor changes undertaken in DC/DR
   e. DC and DR Availability and Operations Report
   f. Database Growth Report
   g. Summary of Incidents reported
   h. Consolidated SLA / Non-conformance Report
   i. Integration Services
   j. Help Desk Services
   k. Project Management
   l. IMAC Services
   m. Resource Attendance
   n. Service Management Controls Report
   o. Change and Release Management
   p. System Maintenance Reports etc.

3) **Quarterly Reports**
   a. Asset database report and Asset audit report
   b. Feedback report from users for services rendered.

c. Inventory of spare parts in Data Center/ Disaster Recovery Center
d. Security Audit Report

4) **Incident Reporting (as and when it occurs)**
   a. Any system/component failure with root cause analysis
   b. Peaking of resource utilization on any component
   c. Bottlenecks observed in the system and possible solutions and workarounds.

5) **Security Incident Reporting (as and when it occurs)**
   a. Detection of security vulnerability with available solutions/workarounds for fixing.
   b. Hacker attacks, Virus attacks, unauthorized access, security threats, etc. — with root cause analysis and plan to fix the problems.
   c. Any hazards or events like Fire, environmental conditions, physical security, etc. at DC / DR.

6.5.5 Indicative Schedule for Audit

Sl. No.	Activity	Frequency	Audit Agency
1	SLA Audit	At discretion of KPTCL	Internal/Third Party
2	EAAAP System - OEM Audit	Twice: 1. Post Solution Design 2. Before EAAAP System Go-Live	EAAAP System OEM
3	IT/ Cyber security Audit/VAPT	Yearly	Internal/Third Party
4	BCP Audit	Yearly	Internal

Table 10: Schedule for Audit

6.5.6 Security during Development & Integration Phase:

Implementing Agency shall meet the security requirements listed below (including but not limited to) during the development and integration stage:

a. Implementing Agency shall address emerging cybersecurity vulnerabilities in their software coding under System Development Life Cycle (SDLC). This should be done by taking into consideration the SANS Top 25 Most Dangerous Programming Errors and the OWASP Top 10 Projects.

b. Implementing Agency shall propose a legacy data cleansing approach.

c. Implementing Agency shall propose a security mechanism to be used for API and adopt the best practices such as OWASP guidelines to ensure security.

d. Implementing Agency shall promptly notify KPTCL when vulnerabilities are found in their code.

e. Implementing Agency shall apply security related patches and updates.

f. Remote access by the Implementing Agency will only be performed using technology authorized by KPTCL.

g. Any data interfaces implemented or built by the Implementing Agency will be required to have encryption and authentication (strong authentication when possible.)

h. Files containing KPTCL information will be transferred using encrypted file transfer techniques agreed upon by both parties.

6.5.7 Security during Operations phase

6.5.7.1 Security Policy

Implementing Agency will adopt leading information security framework (such as ISO 27001, ISO 22301) to define, monitor and update security policies (including network, server, application and website/mobile app security).

6.5.7.2 Incident Response

Implementing Agency shall do the analysis of application and network incidents, do post-incident reporting and implement practices to ensure rapid response to attacks.

The Implementing Agency shall do a proactive review of incident response plan to improve incident response time and implement continuous improvement process to strengthen overall effectiveness of security.

6.5.7.3 User Authentication and Control

Implementing Agency shall define and implement highest level of access governance. The proposed of this solution is to have an enhanced user role security where access should be restricted to only authorized users with multi-factor or two-factor authentication.

The system should have access control features for controlling the access rights over

the system and over the various functions/features available for different types of users. Best practices from enterprise security including password strength, password aging, password history, reuse prevention etc. must be followed for access control.

Application user authentication and authorization related transactions should be encrypted and used a wide array of authentication schemes, standards or token types to ensure that only valid users and applications get access.

- Implementing Agency must ensure that end user access to server's is through SSL, VPN, provided by KPTCL.
- Implementing Agency must ensure built-in user-level controls and administrator logs for Transparency and audit control.
- Entire system shall have access control policy and ensure role level access control is employed with ability to manage roles & identity centrally.

6.5.7.4 Hardening

All unnecessary packages must be removed and/or disabled from the system. Additionally, all unused operating system services and unused networking ports must be disabled or blocked. Only secure maintenance access shall be permitted, and all known insecure protocols shall be disabled.

- Implementing Agency shall provide consolidated view of the availability, integrity and consistency of the Web/App/DB tiers at DC.
- Implementing Agency must ensure Database nodes (RDBMS) should be protected with higher security layer at DC.

6.5.7.5 Security Audit

Implementing Agency shall engage with the Cert-IN empaneled agency appointed by KPTCL and Implementing Agency will cooperate fully with the auditor. The auditors shall be responsible to conduct the following activities:

- Security Audit that include (but not limited to) vulnerability assessment, penetration testing, application security assessment API testing and Mobile application assessment biannually (once in six months) for entire infrastructure.
- Implementation of information security controls and perform periodic (once in a year) assessment.
- Propose ways to enhance the protection of EAAAP System & Supporting IT Infrastructure.
- Ensure the applications are free from OWASP Top 10/SANS and CERT-IN web/mobile application vulnerabilities as released from time to time.
- Implementing Agency is responsible for mitigating all security risks found   and   continuous   monitoring Activities. All   high-risk vulnerabilities must be mitigated   within   15 days from the date

vulnerabilities are formally identified.

- • **Source Code Review**: Third party agency shall review the source code of web and mobile applications for hidden vulnerabilities and design flaws. It shall also verify whether security controls are implemented appropriately.

- • **Secure Configuration Review:** Third Party Agency shall review the security configuration EAAAP System and provide the detailed report that include the recommendations for remedial actions and submit the results to KPTCL.

6.5.8 Security Requirements and Features

Implementing Agency will have to establish all the necessary procedures / infrastructure/ technology / personnel to ensure that the EAAAP System Security is not compromised.

Broad Security requirements are:
   a. Security features should be compliant with the e-Governance Security Guidelines (e Gov Security Standards Framework (www.egovstandards.gov.in), National Cyber Security Policy (NCSP 2013) and NCIIPC Guidelines. All systems should have integrated security features that are configurable by the system administrator to control access to the application, functional modules, transactions, and data. – Check and add other cyber security compliance
   b. Public key verification methods should be followed for verifying that the contents of a document have not been tampered with and allowing the receiver to confirm the identity of the sender.
   c. The applications should require the use of unique user IDs and passwords for authentication purposes and digital signatures, Bio Metric and other devices as applicable.
   d. The application should allow for the following:
      - • The enforcement of password standards
      - • The establishment of a specified period for password expiration, and
      - • The prohibition of recent password reuse
   e. System administrator should be able to define functional access rights and data access rights by assigned user ID, functional role, and owner organization.
   f. The systems should permit the system administrator to assign multiple levels of approval to a single user.
   g. System administrator should be able to restrict access to sensitive data elements by named user, groups of users, or functional role.

h. System should be auditable as per requirements from time to time.
i. System should have audit logging capability to record access activity, including the following:
   a) All log-in/log-out attempts by user and workstation;
   b) User-submitted transactions;
   c) Initiated processes;
   d) System override events; and direct additions, changes, or deletions to application-maintained data
j. System should provide the ability to query the audit log by type of access, date and time stamp range, user ID, IP address and terminal ID.
k. All the information assets (information and information systems) should be classified and security should be defined according to criticality of the information asset. All the data / information contained within systems or in hard copies related to this project, are owned by KPTCL. No information should be made public either directly or indirectly nor allowed to be accessed by unauthorized persons.

l. System audit should be enabled for all the information assets to establish detective controls. System should have evidences, like audit trails, logs, registers, proof of background checks, approvals from KPTCL or its designated agency, support for various decisions, support for accounts etc. for the purpose of third- party security audit.
m. System should have security incident management procedures. This incident management procedure should use Technical Support facilities and should be reported in the incident management System.
n. Should have system development and change control procedures including effective segregation of duties and environment.
o. Proper protection against malicious software should be ensured. This would include implementation of an effective anti-virus solution, scanning viruses at regular intervals or on certain triggers and updating the solution as and when new patch is received from the anti-virus solution provider.
p. Should have proper logical access security for all the information assets. Entire network including servers, communication links, database etc., should be logically segregated from rest of the networks.

Note:

In case any major external issue like —Security threat Or —Cyber Security Incident occurred due to failure or lack of necessary IT/Cyber Security measures, then it will be the responsibility of Implementing Agency to recover all the utility data and

systems without loss of any data and business operation. Such incidents of grave magnitude which may result in loss of data, utility business or public image may attract the penalty as per clause

6.6 Technical Architecture & Requirements

6.6.1 Technical features of Applications

a. Application solution must be web based, built on enterprise application platforms with enough flexibility for customization based on KPTCL needs.
b. Solution must use standard relational database management system.
c. **Language Support**: All functionality must provide bilingual support. All screens and templates should be in English and additionally the EAAAP application shall have capability to have Kannada language along with a facility of Unicode formats for text editing, file name, data storage.
d. **Dates:** All functionality MUST properly display, calculate, and transmit date data, in all available formats like DD/MM/YYYY.
e. **Numerical Format:** The application solution must support the Indian numbering system Like lakh, crore etc.
f. **Peripheral Support:** The application solution should support peripherals integration with devices like mobile devices, tablets etc.

6.6.2 Application and Other Standards

g. This section details the various Information Technology (IT) related standards that are to be considered while implementing the EAAAP system. The below mentioned components need to be taken care of while implementing the technology components for EAAAP:

Platform Flexibility

a. Web-centric, multi-tier architecture
b. Open Standards and Interoperability
c. JSON Based standard Compliance to SOA and Web-services

Interoperability

a. Usage of standard APIs
b. Support for multiple industry standard databases with Support for SQL based scripting

Usability

a. Applications should comply with Guidelines for Indian Government Websites (GIGW)

Figure 5: EAAAP System Indicative Architecture

6.6.3 Compliance with Industry Standards

EAAAP system shall be based on and compliant with Industry standards (their latest versions as on date) wherever applicable. This will apply to all the aspects of the system including but not limited to design, development, security, installation, and testing.. The indicative list of standards may include following:

Particular	Protocol
Information access/transfer protocols	Simple Object Access Protocol Rest HTTP/HTTPS
Interoperability	Web Services, Open standards
Scanned documents	TIFF (Minimum resolution of 300 dpi) for archiving JPEG and/or PDF for storage and dissemination
Document encryption	Password-based Encryption Standard (PKCS) Specifications

Information Security	System to be ISO27001 compliant
IT Infrastructure Management	ITIL / EITM specifications
Service Management	ISO 20000 specifications
Project Documentation	IEEE/ISO specifications for documentation
Internet Protocol	IPv6 ready equipment's

Table 12: Indicative list of Industry Standard

The system shall adhere to all the standards published by Department of Electronics Information Technology, Government of India. (http://deity.gov.in/)

6.6.4 Additional Requirement for EAAAP Implementation

Implementing Agency shall be responsible for including but not limited to the below mentioned requirement for EAAAP Implementation:

a. EAAAP solution should support multitier architectures.
b. System architecture should support standardization of IT infrastructure.
c. The solution should have capability to present all business process and data via familiar relevant office applications and should offer integration with all relevant Forms.

All KPTCL components must be maintained with an ease, such that corrective and preventive maintenance can be performed on the system without affecting the entire working of the system. The system should be designed without any single points of failure & ability to recover from failures and should provide clustering features, thus protecting against multiple component failures.

The system should have the ability to scale up as and when the new business applications and services are added without compromising the performance of the overall solution. The architecture should be scalable and capable of delivering high performance as and when the transaction volumes increase.

The system is required to cover critical business function and process modules and provide modularity that should support addition/removal of one or more modules as and when required. However, these modules should be seamlessly integrated in the core application system. The solution architecture should allow minimum modifications to preserve the upgrade path.

a. The system should support interfacing with Personal Digital Assistant (PDA), Smart Card readers, RF devices, data acquisition system, webcam, barcode reader, biometric system etc.
b. The system should support standard interfaces such as adapters, APIs to interface with standard application and legacy applications.
c. The system should support real-time data updates and interfaces with software from other vendors.
d. The application should have automatic way of migrating the data from existing database in case of data structure change and during transfer to new versions.
e. The system should support export and import of data possible from different legacy systems/other systems/databases in different file formats and on specified time intervals.
f. The EAAAP system should support SSL and digital certificates.
g. The system should be compatible to remote access integration.
h. The system should support the use of fault-tolerant multiprocessor architecture and cluster processing.
i. The system should support auto-switching failover to other available server in case of server failure.
j. The system should support distributed processing.
k. The system should support load balancing etc.

6.7   EAAAP System - Implementation

The EAAAP system implementation methodology adopted for deployed by Implementing Agency will have different work elements and activities. All these activities and work elements should coherently focus on achieving the following key results:

- Quality of the solution deployed.
- Customer satisfaction while deploying and during usage.
- Successful implementation in terms of completeness and timely accomplishment of the outcome.

While there are different techniques and tools available as part of the methodology, the following are expected to be part of the implementation methodology to be adopted by the Implementing Agency :
a. Workshops with different stakeholders for capturing business requirements, creating awareness of best practices, communicating the changes, building consensus on process design, for signing off the deliverables etc. These need to be organized at different intervals and in different places throughout the duration of the project as demanded.

b. Stakeholder consultation other than workshops, with those stakeholders who will be identified by KPTCL, for the purpose of critical inputs, review, suggestions, process description etc.
c. Review sessions with different stakeholders for signing off the deliverables, walking through the deliverables for facilitating quick understanding.
d. Reviews with experts from EAAAP system OEM.
e. Internal review mechanisms of Implementing Agency for ensuring the quality of solution and deliverables.
f. Adoption of the review comments - effective mechanisms to adopt the changes & suggestion.
g. Documentation of proceeding – recording the developments, discussions, deliverables, using standard methodology and native tools available with EAAAP system
h. Standards practices for documentation, configuration, testing etc.
i. Training different stake holders on a continuous basis.

6.7.1 Commissioning of Infrastructure

The Implementing Agency shall:

a. Responsible for providing a full range of services in implementation of EAAAP System including integration and supporting the operation of the proposed solution during implementation.
b. Design the overall EAAAP solution including necessary DC IT Infrastructure and Software solutions.
c. Assist in procurement, commissioning & necessary support for DRC IT Infrastructure.
d. Maintenance of DC & DRC infrastructure through out the contract period

6.7.2 Configuration/Design and Development

Implementing Agency shall be responsible for design and development of EAAAP software, database, tools, and any other component required for making the EAAAP system successfully operational as per the requirements of KPTCL. The activity will include the following:

1) **Configuration:** Based on the approved Business Design Document, the Implementing Agency will undertake the system development. After completion of development to the EAAAP system, Implementing Agency shall carry out a trial run. If needed or/and the result is not up to the expectation of KPTCL, further reconfiguration will be done by the Implementing Agency in order to close any gap.

2) **Development:** KPTCL intends to implement EAAAP functionalities and leading practices available in the offered solution, as far as possible. Implementing Agency is required to undertake development that may be needed in line with changed, improved or specific business processes requirement prepared during Business Design phase of the EAAAP implementation. However, the same must be tested, accepted and approved by KPTCL.

   All custom development should be carried out in a controlled and planned manner with adherence to EAAAP prescribed coding standards and naming conventions. Implementing Agency needs to provide configuration, customization and installation documents to KPTCL. Implementing Agency should follow disciplined approach for configuration and customization which should not restrict KPTCL for any future upgrades to its EAAAP system to this effect, the Implementing Agency should provide a certificate from OEM which certifies that Implementing Agency has followed disciplined approach for configuration and customization of EAAAP system and it will not stop KPTCL from future upgrades.

3) **Custom developments**: Implementing Agency should explore all options available in Standard EAAAP to meet the requirements, demonstrate standard options to KPTCL. If KPTCL concludes that no option meets the requirement and the requirement is critical for business, Implementing Agency shall submit the case for custom development to KPTCL or the agency appointed by KPTCL. The following details should be submitted:
   a. User Requirement Specifications
   b. Functional Specifications Document
   c. Complexity Classification under Simple/ Medium/ High, with justification

d. Any impact to Standard functionality/ features and future upgrade
e. Effort and Time-line Estimation

KPTCL reserves the right to seek customization to meet its unique requirements and validate the design or findings suggested as custom development by Implementing Agency. In case it is difficult to arrive at the reasonableness of these requirements on customization during the implementation, the same shall be resolved through discussions. In case the issue is not settled, the same shall be referred in the first place to Steering Committee.

The Steering Committee may at its discretion co-opt any subject expert internal/external of KPTCL who in its opinion may help in resolving the dispute. The decision of the Steering Committee and or the subject expert internal/external of KPTCL appointed by the Steering Committee is final.

KPTCL reserves the right to get the functional specifications and effort reviewed by an external consultant.

6.7.3 EAAAP System Testing

As part of testing, Implementing Agency shall cover all activities during the implementation process (configuration of business processes, development such as conversions, interfaces, reports) which prove that system settings are correct as per business requirement of KPTCL. In doing so, the Implementing Agency shall include test plans, tests cases, and testing report.

Implementing Agency shall create the test strategy document that defines the requirements and goals of EAAAP configuration, determines the tools and methods used to check that the system responds correctly, determines how and when the test will be performed and recommends how the approval process should occur.

The test strategy document shall guide the project team during implementation to ensure that planning and testing activities in the various phases of EAAAP implementation are conducted including the below mentioned activities:

6.7.4 Base Line Testing

The purpose of Baseline Scope testing activities is to plan and conduct testing to validate the Baseline configuration. Baseline Scope testing shall ensure that Baseline configuration is valid and supports the business

processes defined in the Blueprint.

Baseline Scope Testing shall include:
- **Unit Testing:** Testing of transactions and functions within modules
- **Scenario Testing**: Testing of business processes and scenarios

Baseline Scope testing shall be carried out in three steps:

1) **Define Baseline test cases:**
   a. Implementing Agency shall develop the baseline test plan with scenarios and test data to be used for testing based on the test templates.
   b. For simple transactions, testing (unit testing) shall be done straightforward during configuration and the results shall be recorded.
   c. For transactions that are very complex involving multiple screens, functions and variations to run, the transactions shall be documented and tested with a Business Process Procedure, maintaining the test section with test conditions and variations of the standard transaction, or with case procedures, maintaining the test section.
   d. Implementing Agency shall use the test scenario template entering every single step (transaction) with input and output data to document process flows.

2) **Create Baseline test plan**
   a. Implementing Agency shall organize and follow-up the unit and scenario testing at the function/module level during baseline scope testing.
   b. Implementing Agency shall assign timeframes and resources for testing.

3) **Test Baseline**
   a. Implementing Agency shall use the Baseline test plan and the test cases to test Baseline configuration.
   b. Implementing Agency shall update the Baseline worksheet with status and completion date information.

6.7.5 Testing of Customized development

After customization & configuration of the EAAAP system, the Implementing Agency shall conduct tests to demonstrate that the system meets all the requirements (functional and Non- Functional) specifications as brought out in this RFP and would be in accordance with the procedures detailed in the approved process document.

Based on these tests, a report would be submitted by Implementing Agency

for review and approval by KPTCL. The test results and response times should be demonstrated by Implementing Agency during the testing phases (System, integration & Stress and Load testing) at each KPTCL location in an environment/infrastructure as mutually agreed upon by KPTCL and Implementing Agency .

The development testing shall cover testing of:
   a. Unit testing of customer-specific development
   b. Conversions
   c. Enhancements (User-exits and other code enhancements)
   d. Reports

Development should be tested by KPTCL to make sure that the test results (output data) are correct and reflect the business processes defined in the Business Blueprint Design.

After development unit testing is completed, all customer-specific programs and forms shall be included in the Final Integration Test.

6.7.6   Integration and System Testing

The purpose of integration test shall be to plan and execute testing of the integrated components, including simulation of live operations, and analyze the results, important for functional verification of the production system.

Integration testing shall be accomplished through the execution of predefined business flows, or scenarios, that emulate how the system will run the processes of KPTCL. These business flows, using migrated data from the pre-existing systems, shall be performed in a testing environment comprising of EAAAP Systems, third-party software if any. The integration tests shall build the necessary level of confidence that the solution is complete and will perform the processes of KPTCL.

Integration testing shall focus on cross-functional integration points, as well as end- to-end business processes. The final integration test plan shall start with the testing of cross-functional integration points (touch points) and end with the end-to-end testing of critical business processes identified within the Business Blueprint.

Integration testing shall be done in two iterations.
   a. The first iteration (Integration Test) shall concentrate on testing all important business processes inside EAAAP system, starting with touch point scenarios and ending with end-to-end-scenarios. It will be done by Implementing Agency 's functional consultants. Customer specific development like user-exits and transactions and

authorizations and user roles would also be tested in Integration Test.

b. System Testing, as a second iteration, shall focus on the important cross- enterprise scenarios with touch points to external components, including testing of conversions, interfaces, reports, and the necessary authorizations. It will be conducted by KPTCL users with necessary guidance.

Integration and System tests need to be an evolutionary process that is driven from the previous testing efforts. The test cases and scenarios that were used for Baseline need to be reviewed by KPTCL and enhanced for integrated and System test.

These selected cases will be combined to represent a business process flow such as a revenue cycle or a material acquisition cycle. Problems encountered during these efforts also need to be tested under an integrated environment.

6.7.7 Load and Stress Testing

Load, scalability and stress testing would be conducted prior to Go-Live, once the System Integration testing of the configured and customized solution has been conducted successfully. Implementing Agency should use suitable simulation tools in accordance with the agreed test procedures keeping in view KPTCL's projected future load of transactional users as proposed by Implementing Agency and agreed by KPTCL. After successful testing and its clearance with KPTCL, the solution would then be considered as ready for commissioning. Implementing Agency shall perform this task as a onetime activity.

6.7.8 System Acceptance

Implementing Agency will develop acceptance test procedures and same will need to be approved by relevant stakeholders of KPTCL. The purpose of this acceptance is to ensure conformance to the required process operations response time, the integrity of the application after installation, and to eliminate any operational bugs.

This will include:
a. Fine tuning of the application, ensuring all required related component software are installed and any debugging required.
b. The acceptance tests will be carried out before Go-Live at site.

At the satisfactory conclusion of these acceptance tests to the satisfaction of KPTCL, the implementation of the application shall be complete. However, if any bug/error is reported by KPTCL, the Implementing Agency shall be responsible for taking the corrective action immediately.

6.7.9 Cutover and Go-Live

The scope of Cut over would be for each of core and support processes. The Cutover Strategy needs to detail the sequence of activities, tasks, data conversion required for sunset of exiting operational legacy application and upload of the necessary balances and open items into the EAAAP system before Go Live.

The key requirements for cut over are as following:
a. The Cut over plan should detail the strategy by which the data will be uploaded for the different legacy application and the nature and volume of backlog transactions. This shall include specified forms/formats/templates including digitalized data.
b. It should detail the strategy used for cut-over of existing Legacy application/data digitized and open item before go-live.
c. It should describe the various pre-requisites and assumptions used for

each of the data elements before uploading in the live system.

d. It should detail the various business decisions to be taken collaboratively by KPTCL and Implementing Agency for finalizing the cut over strategy for legacy applications and existing data of organization.

The EAAAP Go-Live will be complete after successful completion of stabilization period as defined in the RFP Document this shall include:

a. **User Adoption Support**: Implementing Agency shall provide User adoption support, by deputing technical and functional consultants at KPTCL site after implementation of EAAAP system at that site. During the Implementation period prior to ―Go Live‖, the Implementing Agency shall support KPTCL users in adoption of the system.

b. **EAAAP System - Go live**: The system will be declared Go-Live when the following tasks are accomplished:

Sl. No.	Project Activities	Compliance (Yes/No)
1.	EAAAP System Testing (Unit Testing etc.)	
	Design and Development of EAAAP system.	
3.	Execution of System Integration Testing	
4.	Execution of System Perform Test (Stress, Load, Disaster Recovery, Backup Tests etc.)	
5.	a) Commission of On premise DC b) Assist in procurement & commission of DR	
6.	EAAAP Software Provisioning & Installation on On-premise DC	
7.	EAAAP System Installation on DR Infrastructure	
8.	User Acceptance Testing (UAT)	
9.	Completion of Data Migration (At all Rollout locations) a) Master Data (Employee, Material, Vendor etc.) b) Transactional data (Stock Balances, Opening Balances, Contracts, Projects, Assets, Employee etc.)	
10.	End User Creation with defined roles & authorization	
11.	EAAAP System Accessibility to all End Users	
12.	Completion of advance EAAAP System Configuration	
13.	Finalize Cutover (Conversion) Plan	
14.	Successful Completion of End-User Training (Rollout locations)	
15.	Tuning of EAAAP System	

16.	Successful Completion of Stabilization period after EAAAP- System Rollout	
17.	Error free operations and running of all EAAAP modules with real-time data for a period three (3) months.	
18.	Documentation of the all issues/problems that come up during the stabilization period and resolution methodology / solutions	
19.	Operational Tools Readiness, ITSM & IT Operations	

Sl. No.	Project Activities	Compliance (Yes/No)
21	User Guide documents for all modules have been created	
22	Program Logic Control & Phone/Email for operation support (L1-L3) have been published	
23	Helpdesk flow has been finalized	
24	Periodic backup has been setup	
25	Master data for all modules uploaded and verified	
26	Open transaction items have been uploaded and verified	
27	Initial Balance (GL, Inventory, AR, AP) have been uploaded and verified	
28	Disaster Recovery plan is available	
29	Establish Service Level Agreements	
30	Go-Live Approval	

Note:

1. The above list is indicative and not exhaustive and shall be finalized during the EAAAP System - Enterprise wide roll out phase.
2. In case, any delay in completion of required work/deliverable is attributed to the limited support from KPTCL, the required delay/penalty may be waived off after necessary approval from KPTCL.
3. KPTCL reserves the right, at its sole discretion to waive any penalty/delay being imposed on the Implementing Agency due to failure to meet timelines/service level agreement. Any such waiver will be issued as an exception by KPTCL Officials.

6.7.10   Post Go-Live Support

As part of this activity, the Implementing Agency shall provide post Go-Live support,; by continuing the deployment of the same technical and functional consultants at site after implementation and Go-Live. During this period the Implementing Agency would help KPTCL users to correct any errors/bugs incurred while executing transactions, generating reports, handholding for one financial quarter closure. The Implementing Agency will update the user manuals and configuration manuals accordingly.

6.8   Minimum Resource Requirement

Implementing Agency   should ensure deployment of enough specialized and experienced manpower throughout the project to complete the successfully implementation & stabilization of the EAAAP System in time. At no stage, manpower (with requisite qualification and experience) shall be less than that committed in the bid. Such manpower shall be maintained from start of the project up to complete Go-Live stage and further during Facility Management Support phase. Implementing Agency must propose a team consisting of experienced and skilled professionals with relevant experience in the proposed areas. The minimum desired qualification for the key personnel has been indicated below:

Sl. No.	Position	Responsibility	Desired Qualification
1	Project Director	Program Director (PD) shall be part of steering committee and responsible for handling/ managing the project and take up the issues unresolved/ escalated by the deployed team. PD shall review the project progress once in a month or as and when desired by KPTCL. Review meeting may be done through conference call or in person at KPTCL's office at a mutually decided date and time	Project Director (PD) shall be OEM certified resource and possess MCA/ BE or BTech in Computer Science/ BE or BTech in any branch with MTech or MCA in Computer Science/ BE or BTech in any branch with experience in more than 3 similar ICT projects as project manager. PD shall have at least 20 years of experience in System Integration and/or Application Software and/or Application Integration Projects.

2	Lead Product Engineering (LPE)	Lead Product Engineering shall be part of project steering committee and responsible for handling/ managing product customization/ configuration / as per the requirement of KPTCL. LPE shall review the project progress once in a month or as and when desired by KPTCL. Review meeting may be done through conference call or in person at KPTCL's office at a mutually decided date and time.	Lead product engineer shall be OEM certified resource and possess MCA/ BE or BTech in Computer Science/ BE or BTech in any branch with MTech or MCA in Computer Science/ BE or BTech in any branch with experience in more than 3 similar IT projects as product engineer. Lead product engineer shall have at least 10 years of experience in leading development of Enterprise Class software products The Lead Product Engineer should have: Deployed 2 products for more than 5 customers.
3	Project Manager	The Project Manager will serve as Single Point of Contact (SPOC) and will be responsible for the overall coordination to ensure the satisfactory fulfilment of the requirements and Scope of work including supply, implementation, roll out, acceptance, change management and facility management services etc. for EAAAP System. Shall act as the representative of the Implementing Agency on all matters relating to the work and keep a close contact with KPTCL. The Project Manger will be responsible for the timely submission of deliverables as per define project plan.	The Project Manager shall be OEM certified resource and possess B.Tech/B.E/MCA/MSC or higher qualification with at least 10 years of experience and minimum 7 years as Project Manager in implementation of at least 2 similar projects.

2.	Power Sector Specialist	This resource would be the Transmission Core domain expert and would help the EAAAP team in understanding KPTCL's business processes and their pain areas. Suggest the leading practices and business process being followed in other transmission companies which can be leveraged under the Implementation at KPTCL.	The Power Sector Specialist shall possess B. Tech/B.E./MCA/MSC or higher qualification with at least 10 years of experience in working across functional areas of Power (Transmission/ Distribution) Sector in India.
3.	Change Management Expert	Change Management Expert shall be responsible for developing change management strategy, providing required training to the end users, conducting change management workshops for the proposed System including implementation, roll out, acceptance and handholding etc. by the end users. Conducting change management workshops, developing change management strategy and ensuring its implementation at KPTCL	The Change Management Expert should be B. Tech/B.E./MCA/MSC or higher qualification with minimum 7 years of experience conducting change management workshops, developing change management strategy for Implementation of IT Solutions /EAAAP Application Platform.

4.	ICT Infrastructure Lead	The ICT Infrastructure Lead shall be responsible for analyzing the existing and designing the upcoming business solutions, information technology systems, application, and technology architecture operating at a tactical level for resolution of utility business problems. Shall analyses the enterprise specific requirements, formulate solution framework, selection of technology, Overall IT solution development, solution prototype etc. Shall be responsible for planning and implementation of the proposed System in DC & DRC identified by KPTCL including installation and maintenance of EAAAP Solution, IT Infra, Other Software & Network, Development of business continuity plan, Evaluation of system performance and tracking of project deliverables & progress etc. with overall project management support.	The ICT Infrastructure Expert shall possess B. Tech/B.E./MCA/MSC or higher qualification with at least 5 years of work experience in any of the IT areas such as Enterprise software System project for software Automation, Enterprise Architecture, IT Infrastructure & Architecture Design, Business Analysis
5.	Devops Expert	The Devops expert shall be responsible for Studying, planning, designing functional/technical specification, quality assurance,	Shall possess B. Tech/B.E./MCA/MSC or higher qualification or its relevant

		implementation and validation of Devops systems for KPTCL. Shall assist in managing solution implementation and rollout and monitoring including technical change during enterprise wide implementation. Shall assist in acquiring and applying broad technical and business knowledge for DC & DRC solutions and its products, services and processes with expert inputs and suggestion to KPTCL for resolving issues and navigates obstacles to deliver DC/DRC solution.	equivalent. Should have minimum 5 years of experience as a Devops expert with expertise on one or more solution platforms
6.	Programmer	The Programmer shall have experience in successful design/ development/customization/ implementation with expertise on utilities software solutions including Proposed EAAAP Product. Shall be responsible for development, customization and resolution of technical issues pertaining to the Proposed Software Solution.	The Programmer shall possess B. Tech/B.E./MCA/MSC or higher qualification with at least 5 years of experience years as a developer/programmer with expertise on utilities software solutions including Proposed EAAP application platform.
7.	System/ Database Administrator	Shall be responsible for all the requisite System/ Database Administration & Facility Management work required for Central/Database Servers, User configuration, Account management, Network management, Management of software, security and network solutions on 24X7 basis. System/Database Experts shall have experience in Server/Database	The Database/System Administrator shall possess B. Tech/B.E./MCA/MSC or higher qualification with at least 5 years of work experience as System/Database administrator

| | | Solution like monitoring and maintenance of Servers, databases, installation of Server/database software patches/upgrades, monitoring of database backups, database replication techniques, standardization and implementation of Server/ databases to improve the management of production and test environments.

Shall support users by resolving problems with applications' databases with monitoring and allocate volumes, analysis of utilization and resources, performance tuning, monitor DB replication, archival, coordination of system upgrades or fixes. | |

| 8. | Development Leads /Functional Specialist (Total 5 - Resources one for each Module) | The Development expert shall be responsible for Understanding / Identification of Utility Business Requirements, Mapping of Existing Business Process, Alignment of Software Solution with Utility Business needs and Overall implementation/usability of the system and Other Associated Software Solutions.

Shall interact with KPTCL users and work towards analyzing user related, acceptance related, technical and functional issues of the proposed System and work towards closure of them. This will also involve identification of key functional/technical risks associated with the various modules and work with developers/Implementing Agency Team towards closure.

Shall assist KPTCL by coordinating for IT/OEM audit activity and closure of gaps and findings. | One Functional Specialist for each of the following shall possess B. Tech/B.E./MCA/MSC/MBA or higher qualifications with at least 5 years of experience in working across functional areas in India.
6. Finance Expert
7. Inventory Expert
8. HR/Payroll Expert
9. Business Process Management Expert |
| 9. | Enterprise Architect/ Integration expert | Shall be responsible for study existing solution and upcoming proposed System including different application system & integration & data flow amongst overall solutions. Shall support with Leading practices and methodologies for solution integration and Enterprise architecture.

Shall provide inputs on strategic technology standards, frameworks, principles and roadmaps to be used throughout the organization. Shall analyze the enterprise specific requirements with life cycle planning and formulation solution framework. | Shall possess B. Tech/B.E./MCA/MSC in Computer Science or its relevant equivalent with minimum 5 years of experience as an Enterprise Architect/ Integration expert for implementation of IT/Business Solution. |

10.	Solution Tester	The Solution Tester shall be responsible for requirement analysis, creation of test plans, writing & reviews of test scenarios/test plan/test case, identifying of test data requirements, test automation, test execution, defect logging/follow-up, formulation of test reports, summarizing the release with learnings from the project. Shall ensure that all testing related work is carried out as per the defined standards and procedures.	Shall possess B. Tech/B.E./MCA/MSC in Computer Science or its relevant equivalent. Shall have minimum 5 years of experience as a Software Solution tester. Shall have relevant certification on software solution testing.
12.	Security Expert	Security expert shall be responsible for Data security and data protection, OS hardening, Analysis of logs pertaining to network, storage, server devices to identify potential threats and weakness. Shall be responsible for planning, designing, maintenance, management of technical solutions with consideration of IT/Cyber security for overall solution stack.	Shall possess B. Tech/B.E./MCA/ MSC or its relevant equivalent with minimum 5 years of relevant work experience as information security expert.

6.9 Initial Composition, Full Time Obligation; Continuity of Personnel

a) Implementing Agency shall ensure that Key resources required for project execution and management devotes substantial working time to perform the services to which that person has been assigned.

b) Implementing Agency shall not make any changes to the composition of the Key Resources or request any member of the Key Resource to cease or reduce his or her involvement in the provision of the Services during the Term (or agree to any request other than from KPTCL that would have the same effect):

  ➢ unless that person resigns, is terminated for cause, dies, is long-term disabled, is on permitted mandatory leave under Applicable Law or retires; and

  ➢ Without KPTCL prior written consent. The clauses of non-disclosure agreement shall always operate in any such case.

c) Implementing Agency must provide the minimum number of resources at the locations as specified by the KPTCL. However, the number of resources and locations provided below are only indicative, the

Implementing Agency shall carry out an assessment and propose actual number of resources requirements with appropriate approval from KPTCL.

d) Implementing Agency will be responsible for deploying the manpower during the Project Implementation phase to meet the project timelines and during the Facility Management Service (FMS) phase to meet the SLA requirements. Therefore, for calculation of actual number of resources, the Implementing Agency shall factor the project implementation timelines and SLA's requirements after Go-Live of EAAAP system at KPTCL.

e) Bidder needs to submit detailed CV's of each of the resource and Project Manager of the proposed project team. The Project team provided by Implementing Agency must be on their regular roll and Implementing Agency shall certify the authenticity of their regular employment.

f) Implementing Agency shall deploy the minimum 10 resources for Facility Management Services and Help Desk support at the centralized help desk of KPTCL.

g) Implementing Agency shall provide the necessary handholding support during EAAAP System - Stabilization Support phase. During this activity minimum 1 resource should be deployed at zonal and circle offices for assistance in day to day transactions of EAAAP at KPTCL.

6.9.1 Before EAAAP System Go–Live

Implementing Agency shall deploy the Project Manager (Project In-charge) including Technical, Functional Experts and Other Support Staff at the identified project locations during the implementation and roll out of EAAAP System.

The Key project resources including Project Manager and Functional Expert shall be based at KPTCL headquarters. Also, the Implementing Agency shall deploy/depute requisite no. of IT/Subject matter resources before and during Go-Live of sites for coordination and user handholding. This is an important task as the end users may face many problems during EAAAP Roll Out and Go-Live declaration of individual sites.

The resources required before Go-Live is mentioned below.

Sl. No.	Position	Min No. of Resources Required (Before Go- Live)
1.	Project Manager	1
2.	EAAAP Module – Functional Leads (Total 5 - Resources one for each Module)	5
3.	Transmission/ Distribution Sector Specialist	1
4.	Change Management Expert	1
5.	ICT Infrastructure Lead	Implementing Agency shall provide the necessary resources to meet the project timelines to make EAAAP System Go-live. Implementing Agency shall ensure appropriate support from IT/Subject matter experts through deployment/deputation at sites to help the end users of individual sites before and during the time of Roll Outs and Go-Live declaration
6.	Devops expert	
7.	Programmer	
8.	System/Database Administrator	
9.	Enterprise Architect/ Integration Expert	
10.	Solution Tester	
1.	Security Expert	

Table 13: Manpower Requirement before Go-Live

6.9.2 Post EAAAP System Go-Live

Implementing Agency shall deploy the Project Manager (Project In-charge) including Technical, Functional Experts and Other Support Staff at the identified project locations during the post Go- live and Facility

Management support Phase.

The Key project resources including Project Manager and Functional Expert shall be based at KPTCL headquarters. Also, the Implementing Agency shall deploy adequate no. of IT/Subject matter resources for overall support post Go-Live and FMS phase of project which may be increase/decrease as per requirement. After EAAAP System Go-live, the Implementing Agency should provide necessary resources and support staff for KPTCL.

The minimum resource requirement post Go-Live is mentioned in table below:

Sl. No.	Position	Min No. of Resources Required (After Go- Live)
1.	Project Manager	1
2.	EAAAP Module – Functional Leads (Total 5 - Resources one for each Module)	5
3.	Devop expert	Implementing Agency should deploy adequate manpower as required to meet the service level agreements and performance requirement of this RFP. Implementing Agency shall ensure appropriate support from IT/Subject matter experts through deployment/deputation at sites to help the end users during FMS Phase.
4.	Programmer	
5.	System/Database Administrator	
6.	Enterprise Architect/Integration Expert	
7.	Solution Tester	
9.	Security Expert	

Table 13: Manpower Requirement After Go-Live

Note:

1. Under the submitted proposal, the bidder shall propose the necessary number of resources to meet the EAAAP project implementation timelines and SLA's requirements after Go-Live of system. Also, a detailed justification of proposed no. of resources shall be provided in technical presentation.
2. Bidder shall submit the resume of each proposed resource for each of the required position

i.e. total 17 positions which shall satisfy the eligibility criteria including minimum education qualification, experience and certification requirements as mentioned in the manpower requirement.

3. The total experience of all resources shall be clearly articulated with high level of expertise and skills in defined area of expertise as per RFP document is desirable.
4. The System Integration will share the total number of resources to be deployed at the start of Facility Management Services (FMS) phase with necessary approval of KPTCL. The total number of resources may added/removed to meet the service level agreements and performance requirement as mentioned in RFP document.

6.10 Project Timelines, Payment, Penalty & SLA

1. The Implementing Agency is expected to follow the schedule as mentioned below. Each of the project activity should be accompanied with a presentation on the deliverables by Implementing Agency .
2. The submission of deliverable will be considered complete only after the submission of hard/soft copy of the deliverables and presentation by Implementing Agency.
3. The Implementing Agency must submit a detailed project implementation schedule including but not limited to the below mentioned project activities and list of deliverables that would be delivered during the project implementation.
4. The table gives a set of high level of activities and corresponding expected timelines, which KPTCL envisions to be required as a part of this project. The Implementing Agency should use this list only as an indicative guideline expected in terms of activities. The Implementing Agency is required to furnish detailed information regarding each step of activities proposed during and after the implementation of the project.
5. Implementing Agency shall supply the EAAAP System as per the schedule suggested by Implementing Agency and accepted by KPTCL.
6. The project activities and timelines (In Months) as mentioned in the table below is the schedule by which the required project activities shall be completed with corresponding and required deliverables. (Where, T – Date of issue of DWA)

For details refer Excel attachment for Project Deliverables/Timelines refer Section 6.11

Note:

1. The timelines given by KPTCL shall remain unaltered, however, earlier timelines may be considered if KPTCL accepts.
2. Implementing Agency will bear cost of travel for its resources to any other location(s) including Travel, Boarding and Lodging expenses etc.

3. Initially, the Implementing Agency will provide draft schedule with respective deliverables to KPTCL for their review and feedback within stipulated timelines.
4. KPTCL will provide feedback within the agreed timelines to make necessary changes, corrections, if required. The Implementing Agency will be required to resubmit the revised schedule document.
5. Feedback and revision of documents and deliverables will be an iterative process.

6.10.1   Documentation and Deliverables

To ensure that the proposed EAAAP System & overall solution conforms to the requirements, specifications and delivery schedule, the Implementing Agency shall submit the documentation and deliverables for review and approval by KPTCL.

The Implementing Agency shall obtain the approval on the relevant deliverable at each stage of project before proceeding for solution purchase, provisioning, deployment, testing, roll out, training etc. at KPTCL.

As part of EAAAP implementation, the Implementing Agency shall submit all required deliverables as necessary for successful completion of project and required by the purchaser.

6.10.2   Deliverables Acceptance Procedure

The acceptance procedure of deliverables & overall solution for EAAAP system shall include:

- Initially, the Implementing Agency will provide draft deliverable for EAAAP system & Overall solution by considering the approved project timelines for review and feedback of KPTCL within stipulated timeframe.
- KPTCL will provide feedback within the agreed time frame to make necessary change corrections (if required).
- Implementing Agency shall be required to re-submit the revised documents/deliverables.

6.10.3   Key Deliverables

The indicative list of project deliverables which are required to be submitted by the Implementing Agency   shall include, but not limited to the deliverables mentioned in Section 6.11

Note:

1. The Project deliverables mentioned in Section 6.11 are indicative and shall be finalized based on discussion and agreement between Implementing Agency and KPTCL
2. Implementing Agency will provide respective deliverables as per the captured schedule for their review and feedback of KPTCL
3. KPTCL will provide feedback within the agreed timelines to make necessary changes, corrections, if required. Implementing Agency will be required to resubmit the revised deliverables.
4. Feedback and revision of documents and deliverables will be an iterative process.

6.10.4 Documentation Requirements
1. End-User Documents

Documentation will be supplied and maintained by Implementing Agency during the project. The ownership of all documents, supplied by Implementing Agency , will rest with KPTCL. The electronic copies shall be submitted along with all the paper documents and manuals, required for operating and configuring the system. The documents provided must include at least:

a) User Manual (both online and paper copies) providing detailed instructions on how to use the EAAAP. In addition, it describes how to access, submit inputs to, and interpret outputs from the application

b) System installation guide including the configuration of the supplied infrastructure.

c) Module wise - EAAAP Application Training Manuals

2. Technical Documents

Implementing Agency shall supply operation and maintenance manuals for all deliverables. These shall be in such details as to enable KPTCL to operate, maintain, adjust and fix the system etc.

Implementing Agency must ensure that the EAAAP system components being developed are thoroughly documented with comprehensive manuals and adhere to standard methodologies in software development as per ISO and/or CMMi models. The documents including but not limited to are:

d) Product installation and configuration steps;
e) Application access procedures;
f) User screen layout and content;
g) Transaction entry procedures;
h) Batch job setup, processing, and recovery/restart procedures;
i) Error codes with full descriptions and recovery steps;
j) Standard report layout and content;
k) Internal processing controls;
l) Application security;
m) Operating specifications and system flowcharts;
n) Database entity relationships, table formats, and data element descriptions; and Program module descriptions
o) Quality assurance plan documenting the planned and systematic pattern of all actions necessary to assure confidence that the software developed will conform to the KPTCL functional and technical requirements.
p) Interface Control Document - Documenting the interface characteristics of one or more IT systems and document the Integration & interface agreements between interface owners. It contains information on both physical and data element requirements that are necessary to make the transfer of information

between systems feasible.

q) Test Plan Containing information on the software test environment to be used for independent testing, the test cases to be performed, and the overall testing schedule. This includes methodology, schedule, resources, tools, procedures, environment definition, test cases, and software test results.

r) Systems Manual Detailing the data structure, table, forms and report structures.

s) Installation and maintenance manual for the servers and other hardware

t) Operations Manual providing instructions for installing the application, troubleshooting, interpreting message logs, and FAQs

u) Trouble Shooting Guide/ Handbook for Helpdesk which describes the various trouble shooting methods.

6.11 Payment Terms & Conditions

The payments shall be strictly made based on acceptance and quality of deliverables, performance and timelines of services delivered by Implementing Agency.

Implementing Agency should produce a completion/installation certificate indicating Ready-for-use status (i.e. delivery, installation, commissioning and successful operation of system) of respective deliverable/services for EAAAP system, duly signed as accepted by KPTCL.

Bidder should note that the payments for project components shall be made under the following Phase:

1. EAAAP System - Implementation Phase
2. EAAAP System - Facility Management Services (FMS) Phase

* Note:

1) If the Implementing Agency successfully carry out the design customization, data migration, rollout, stabilization and Go-live of EAAAP System within the Project Timelines i.e. 18 Months, then the penalty deducted due to delay in implementation of respective phase, shall be refunded post approval from competent authority.

2) Implementing Agency shall supply the EAAAP System as per the schedule suggested by Implementing Agency and accepted by KPTCL.

3) No interest shall be paid by KPTCL for refundable amount.

4) The verification/approval of the documents scan and data entry into the template shall be carried out by concern division/accounting unit office of relevant department at KPTCL.

5) The uploading of digitized data & files into EAAAP system & final work completion approval would deem to have verified only upon signoff by the head of division/accounting unit office.

Detailed List of Project Timelines, Deliverables, Payment and Penalty

Project Phase	SL No	Sub Group	Project Activity & Deliverables	Timeline	Payment on Total Project Cost including GST	Penalty
Pilot Phase	1		The pilot development, as specified by KPTCL, must be fully completed, rigorously tested, and documented in accordance with KPTCL's requirements, successfully demonstrated to and approved by KPTCL.	**T+15 days (T1)**		**Forfieture of BG submitted**
Project Initiation	2		Project Kick Off with presentation to Senior Management	**T1+1 Month (T2)**	**15%**	**Penalty for Delay 0.5% per week or part there of maximum up to 10% of the Project Initiation Phase Cost**
	3		Onsite Office Setup			
	4		Team Mobilization			
	5		**Project Charter**			
		a)	Detailed project plan with work breakdown structure along with dependencies			
		b)	Resource schedule & deployment plan			
		c)	List of complete deliverables			
		d)	Project Governance structure & escalation matrix			
		e)	Stakeholder communication matrix			
		f)	Project management templates such as Project reports, SLA monitoring, Attendance etc.			
		g)	Detailed survey to Identify End User Base			

Project Phase	SL No	Sub Group	Project Activity & Deliverables	Timeline	Payment on Total	Penalty
			requirement, Network Communication Feasibility study, Change readiness Assessment etc.			
		h)	Roles and Responsibilities			
	6		Training & Organization change management strategy & schedule.			
	7		SLA and Performance Monitoring Plan.			
	8		Data Conversion and Migration Strategy			
	9		Risk Assessment and Define Quality Assurance Plan			
	10		Project Methodologies, Tools and Project Governance Standards			
	11		As-Is Study report including existing business process, workflows, reporting requirement, process maps etc.			
	12		EAAAP System - Software licenses (supporting certificates/documents)			
	13		Software Requirements Specifications Report			
	14		Inspection of existing KPTCL On-premise DC and DR environment			
	15		Data migration Strategy			
	16		Project Initiation Phase Sign-off			
	17		Exit Management Plan			
Business Blueprinting	18		**Requirement gathering workshops with findings for updated requirement**	**T2+1.5 Months (T3)**	**20%**	**Penalty for Delay 0.5% per week or part**

Project Phase	SL No	Sub Group	Project Activity & Deliverables	Timeline	Payment on Total	Penalty
			specification.			**there of maximum up to 10% of the Business Blueprinting Phase**
	19		**Detailed To-Be report including:**			
		a)	Business blueprint/design documents. (High Level Design & Low-Level Design)			
		b)	Updated Bill of Material/Bill of Quantity			
		c)	Business Process Master List (BPML)			
		d)	Business Process Re-engineering			
		e)	Development Scope: Reporting, Interfaces, Conversions, Enhancements			
		f)	FRS & BPML mapping document			
		g)	Business Solution Design Document			
		h)	Updated Functional Requirement Specifications			
		i)	Updated Technical Requirement Specifications			
		j)	Requirements Traceability Matrix			
		k)	Non-functional Requirements Specifications Documentation			
		l)	EAAAP Module based Roles & Responsibilities (Authorization Matrix) etc.			
		m)	Mapped Organogram of KPTCL			
		n)	List of role-based End users of EAAAP system,			
	20		Finalized Development			

Project Phase	SL No	Sub Group	Project Activity & Deliverables	Timeline	Payment on Total	Penalty
			Scope			
	21		Business Continuity /Disaster Recovery Plan			
	22		Cyber Security Policy			
	23		Release Management and Change Management Strategy.			
	24		Training & Handholding			
	25		Refined Data Conversion and Migration Strategy.			
	26		Change Management Workshops.			
	27		Business Blueprint Phase Sign-off			
Design , Development , Testing & EAAAP System - Enterprise wide roll out	28		Setup of on-premise Test and Development environment including supply of required hardware for DC	**T3+12 Months (T4)**	**30%**	**Penalty for Delay 0.5% per week or part there of maximum up to 10% of Design , Development , Testing & EAAAP System - Enterprise wide roll out Phase *(If any specific line item listed under Sl. No. 28 is not completed, a 2% penalty of the total amount for the entire phase (i.e., Design, Development, Testing & EAAAP**
	29		Design and Development of EAAAP Solution			
	30		Baseline Configuration			
	31		Implementation of EAAAP Solution			
	32		Declaration of Readiness of EAAAP System for OEM audit (1st Iteration)			
	33		EAAAP System OEM audit (1st Iteration)			
	34		Configured EAAAP User Profiles and Roles			
	35		EAAAP Solution Testing			
	36		Develop and execute Integration Test Plan(s)			
	37		Setup and Install Quality Assurance (QA) Environment			
	38		Conference Room Pilot (CRP)			
	39		Approved End-User Training Strategy (along with End-User Training Curriculum,			

Project Phase	SL No	Sub Group	Project Activity & Deliverables	Timeline	Payment on Total	Penalty
			Manuals, and Schedule)			**System - Enterprise wide roll out Phase) will be imposed for each incomplete line item)**
	40		Train Core team members and Technical users			
	41		Strategy for EAAAP System implementation & rollout			
	42		User Acceptance Testing (UAT)			
	43		Documentation for Customization of RICEFW (Reports, Interface, Conversion, Enhancements, Forms and Workflow) Development Objects			
	44		Incorporation of UAT changes			
	45		Implementation Strategy, including Site Readiness Assessment and Change Process Improvement			
	46		Initiation of Help Desk Setup			
	47		Design & Development Phase Sign-Off			
	48		Set-up of On-premise Data Center Environment and Centralized Active Directory			
	49		EAAAP System Performance testing (Execute Stress, Volume, Backup and Recovery Tests)			
	50		Data Digitization and Migration for Enterprise wide roll out			
	51		EAAAP System - Enterprise wide roll out			
	52		Tuning of EAAAP System			
	53		Demonstration & Acceptance			
	54		Incorporation of			

Project Phase	SL No	Sub Group	Project Activity & Deliverables	Timeline	Payment on Total	Penalty
			Changes & Observations			
	55		**Devolopment of Mobile Apps and Integration with Legacy & other systems***			
		a)	**Devolopment of Mobile Apps**			
		i)	Android			
		ii)	IOS			
		b)	**EAAAP System Integration with Existing legacy & Other systems**			
		i)	SCADA			
		ii)	Energy Billing			
		iii)	GIS			
		iv)	SAMAST			
		v)	Email & SMS			
EAAAP System - Stabilization Support	56		Cut-over Communication Strategy	**T4+3 Months (T5)**	**20%**	**Penalty for Delay 0.5% per week or part there of maximum up to 10% of EAAAP System - Stabilization support phase**
	57		Stabilization Support			
	58		Declaration of Readiness of EAAAP System for OEM audit (2nd Iteration)			
	59		EAAAP System OEM audit (2nd Iteration)			
	60		Pre-Go-Live Assessment & Review			
	61		EAAAP System Acceptance - Enterprise wide roll out			
	62		EAAAP System Go-Live - Enterprise wide roll out & Sign-Off			
Facility Management Support & Annual Technical Support	63		System Performance Report (SLA compliance)	**T5+36 Months (T6)**	**5% for each year. Payment shall be made on quarterly basis.**	**Penalty for Delay 0.5% per week or part there of maximum up to 10% of FMS & ATS phase cost**
		a)	Monthly activities report (including Issue tracker, Helpdesk ticket analysis, Change Request status and Status of all service			

Project Phase	SL No	Sub Group	Project Activity & Deliverables	Timeline	Payment on Total	Penalty
			requests logged with Offered OEM Product etc.)			**applicable for the respective year**
		b)	Solution Usage Reports - Transactions and Users			
		c)	User Manual with necessary revision.			
		d)	Change Management & Release Management Reports			
		e)	Report submission for O&M ATS & FMS report			
		e)	Issue log and resolution report			
		f)	Exit Management Process			

Note:

The payment shall be made in the following manner:

1. Implementing Agency shall submit all the Key deliverables and services to KPTCL as per the contract agreement.
2. The Implementing Agency will submit the invoice in triplicate to the KPTCL. The invoices will be verified by EAAAP - Project Management Committee and subsequently payment will be arranged based on the certificate issued by Head of EAAAP – Project Management Committee of KPTCL.
3. The payment will be arranged by the Manager IM Section, KPTCL Corp office, Bengaluru after necessary approval & certification
4. The payment for that corresponding milestone shall be made after successful completion of each respective milestone.

Project Phase	Verifying & Certifying Authority
a) Project Initiation -	Verified and Certified by IT Section, KPTCL
b) Procurement of Hardware & setup required for on premise DC	Verified and Certified by IT Section, KPTCL
c) Business Blue Printing	Verified and Certified by Core Team of IT Section
d) Development and UAT	Verified and Certified by Core Team of IT Section
e) Rollout – All Locations	Verified and Certified by concerned Functional Heads
f) Stabilization & Go-live	Verified and Certified by Core Team of IT Section
g) ATS & FMS	Verified and Certified by IT Section, KPTCL

Subsequently, the payment will be made by the Manager IM Section, KPTCL, Corp Office based on the above certification

6.12 Project Governance

For success of any EAAAP System implementation project a structured project management approach is most crucial element. The executive management oversight to guide the program and project teams is essential for achieving the objectives in their true spirits. Also, the project governance structure is essential to ensure that project implementation stays on track and achieves its objectives and goals for EAAAP implementation at KPTCL.

6.13 Change Management – Training & Capacity Building

KPTCL considers implementation of EAAAP will have significant impact on its business processes and people. Effective change management activities will be required to ensure that KPTCL employees are aware about the EAAAP Project and change in work practices. The Implementing Agency will be required to carry out activities as part of change management initiatives by focusing on the change management and capacity building approach and plan so as to be able to tackle the issues that might arise due to new processes of the EAAAP system.

Training for EAAAP will allow multiple stakeholders to participate in the day to day management of the solution and ensure sustainable programs

to cover specific EAAAP programs in order to ensure adoption of the system at each level.

6.13.1   Organization Change Management

Introducing radical reforms must be necessarily accompanied by efforts to energize and orient the mindsets of the people – both within and outside the department. For instance, the KPTCL staff should be skilled to operate and work in a significantly newer and different way. A well-calculated and well-designed strategy must be followed for the people to be trained to work effectively in the new environment. It is necessary to formulate a change management plan with appropriate interventions for capacity building, training and stakeholder communications. A successful Change Management Program will ensure:

   a. A smooth transition to the new way of working
   b. The organization/people support the changes implemented
   c. Individuals know how the changes affect them and the role they have to play
   d. Stakeholders to understand the benefits of the changes and internalize it
   e. The new system and its underlying concepts are understood
   f. People are aware of how roles and responsibilities are changing
   g. Everyone is motivated and committed to the change program
   h. The success and progress of the program is monitored and measured

6.13.2   Key Change Management Implications

The implementation of a new EAAAP system, KPTCL will have several change implications emanating from the following changes:

   a. Process and procedural (necessary introduction of some new process and systems emanating from the need of changing core functional information flow in a few cases)
   b. Technical and technological (introduction of new technologies for enabling the new /unaddressed business requirements)
   c. Organizational (transformation of existing organizational structure and redefined roles and responsibilities)

6.13.3   Change Management Plan

Implementing Agency will formulate a comprehensive Change Management Strategy built on three key components as mentioned below:

6.13.3.1 Human Resource Plan

The Human resources Plan will focus on the people in the organization. It will have four main components as illustrated below:

Capacity Building Plan	Appraisal Workshop	Mentoring & Coaching Schemes	Feedback and Review
• Classify all the stakeholders based on roles, education and current skill set and then provide targeted trainings • Conduct orientation workshops to familiarize the staff with the revised processes and new technology	• To be conducted to gauge the current knowledge of the staff and the status of the service delivery system. • The senior management should interact with all the stakeholders to understand and address any issues	• Provide classroom training to the staff members such that each staff member is assigned a mentor who can be approached for help • Also, the shadow reverse shadow method of teaching will be adopted. The staff member will first observe the mentor at work and then the mentor would observe the staff member at work • Conduct Interactive quiz at the end of training session	• Feedback will be obtained through questionnaires prepared in an objective manner from the participants to measure the effectiveness of the change management program. • Based on the evaluation, suitable methodology will be designed to achieve the expected levels of awareness.

6.13.3.2   Operational Plan

The Operational Plan will focus on putting Change Management into action. It starts with a formal appointment of a Change Management Team and defines a Phased Implementation approach.

Appoint a Change Management Team		Phased Implementation Approach	
• Identify a team of best performers during the training and nominate them as Process and System Leaders. • Process Leaders shall gain complete understanding of the change implications and strategies relevant to the process of these services and help the staff members with any process related queries.	• System Leaders shall help the staff members with any technical or system related queries	**PHASE I** • Development of training & communication materials • Identification of creation of Change Management team **PHASE II** • Release of official Communication • Roll out of training and communication plan • Organize exposure visits	**PHASE III** • Monitoring & appraisal of Change Management Strategy • Organize Feedback Sessions

6.13.3.3   Communication Plan

The Project communication plan of Implementing Agency outlines the communication regarding the project. This includes reporting of status and

change control communications. In addition to providing information on the project status and progress – which will increase the sense of involvement for everybody, the Change Management Communication plan will include material on all other aspects of the program implementation, including technology, process, etc. A high-level sample communication plan is indicated below:

Type	Description / Purpose	Frequency
Project Status Meetings	Purpose – This reports the accomplishments and results of the project at selected milestones in the project. It also gives plans for the next week, status of activities and significant	Weekly

Type	Description / Purpose	Frequency
	issues for the project. This report provides insight into any delays in the schedule.	
Internal Project Meetings	Purpose – To discuss progress of projects and any issues/concerns Frequency – As required, and at least twice a week	As Require d
Change Control Meeting	Purpose – To review proposed changes to the project scope	As Require d

6.13.3.4   Feedback analysis and corrective action

Employee Involvement is an integral part of change management. Feedback from employees is very much essential. Analysis and corrective action based on this feedback helps in implementation of change management.

6.13.4   Responsibilities of Change Management Teams

The key responsibilities of Change Management Teams which include both Implementing Agency and KPTCL would be as follows:

a. Assessing and building staff capability to implement change quickly and effectively
b. Preparing key officers and their direct reports to meet the challenges and
c. opportunities they will encounter as they implement new processes
d. Implement and monitor training plans
e. Helping to increase individual skills, and knowledge
f. Developing and implementing change communication plans
g. Facilitation to concerned staff for transition to new roles

6.13.5 Change Management Phase Wise Deliverables

6.13.5.1 Project Preparation

a. Prepare a detailed change management & communication strategy along with plan covering the entire lifecycle of the project

b. Provide support to KPTCL in identifying change managers and change agents including preparation of key skill requirements

6.13.5.2 Business Blueprint

a. Prepare change management related materials
b. Conduct change management workshops at corporate office and agreed field locations

c. Identify process level changes and/or role level changes due to EAAAP implementation and support KPTCL in effectively conveying the same

d. Circulate the process level change videos and user manuals to create awareness to end users

e. Prepare Key Performance Indicators (KPIs)

6.13.5.2 Design and Customization

a) Management awareness workshop
b) Risk assessment and Business Impact Analysis
c) Continuous communication & measurement of communication effectiveness.

6.13.5.3 Pre-Go-Live

a) Train the Trainer on Change Management Activities
b) Measurement of training effectiveness
c) EAAAP readiness assessment
d) Continuous communication
e) Refresher Training, if any.

6.13.5.4 Go-Live

a) Cut-over Strategy
b) All transitional data from legacy & physical systems
c) Sunsetting of Operations on Legacy System to EAAAP System
d) Go-live communications;
e) Help Desk assessment

6.13.5.5 Training and Handholding

The primary objective of the training is to achieve 100% user adoption through technical and behavioral competencies covering all end users of KPTCL. Training shall be provided in both Kannada & English Language as required, mostly in Kannada to Field Staffs. The Implementing Agency shall propose a training plan (including training curriculum and calendar) so that there is a proper transfer of knowledge about the deployed EAAAP systems to utility staff.

The audience of the trainings shall vary for each type of training. The basic computer & IT Solution training will cover all Class-A, Class-B, Class-C, and Class-D [Technical & Non-Technical] employees of the KPTCL. The end user training for various EAAAP System Modules and Other associated systems shall be for the users of the respective modules of the system. The Implementing Agency shall provide training sessions to all employees from lower level to higher level of KPTCL

Training for Employees of KPTCL on EAAAP System shall be on below areas:

a. Professional Training (Implementation team) - This is the training for the core group of implementation team of the KPTCL. The Implementation/Core team will comprise of members from IT & Domain experts. Each member would be trained in the relevant function / module. This Training would be required to be given to assigned personnel for EAAAP System. It is the responsibility of the Implementing Agency to deliver this training.

b. End User Training - The Implementing Agency will provide training to all end users of EAAAP Systems. The End Users/Business Users team will comprise of members carrying out day to day operations and activities at KPTCL for EAAAP System. Each member of End User/Business user group would be trained in the relevant function / module. This Training would be required to be given to all end users for EAAAP System at KPTCL.

Train the trainer approach shall be adopted by the Implementing Agency for training & handholding.

The Certified Functional, Technical, System administration and Database management training for core teams of KPTCL should be arranged by the Implementing Agency directly from OEM/OEM Certified Resources.

The training must be conducted using assistance from official OEM course curriculum mapped with the Solution and Software Product's to be implemented in the KPTCL. The Training Curriculum along with Calendar need to be included as a part of technical proposal. The details of minimum training curriculum and important consideration for training is mentioned below:

Training Curriculum – EAAAP System Modules

Category	EAAAP Modules	Training for Utility						
		Training of Business users (End Users)	Administration Trainings (Core Team)			Application Development & Integration (Core Team)		Cyber/ IT Security (Core Team)
			Server	Database	Network	EAAAP Modules	Mobile Application	
Basic	Day to Day Business Operations on EAAAP Modules	√	√	√	√	√	√	√
IT Infrastructure	Hardware & Server Management	√	√		√		√	√
	Advance Hardware & Server Management		√					
Database Systems	Basic Database Management	√		√				
	Advance Database Administration & Management			√				
EAAAP System – Module Stack	Basic Trouble shooting & Operations	√				√		

Category	EAAAP Modules	Training of Business users (End Users)	Administration Trainings (Core Team)			Application Development & Integration (Core Team)		Cyber/IT Security (Core Team)
			Server	Database	Network	EAAAP Modules	Mobile Application	
Software's	Training							
	Advance Trouble shooting & Operation Training					√		
	System Source Code Development, Customization, Integration & other associated activity to develop in-house competency for maintenance & development of EAAAP System Modules					√		
EAAAP Modules Mobile – Software	Basic Mobile - Applications Operations	√					√	

Category	EAAAP Modules	Training of Business users (End Users)	Administration Trainings (Core Team)			Application Development & Integration (Core Team)		Cyber/ IT Security (Core Team)
			Server	Database	Network	EAAAP Modules	Mobile Application	
(IOS, Windows, android)	Basic Mobile - Applications development	√					√	
	Advance Mobile Applications Development						√	
Software Testing Training	Detailed software testing training must be imparted. The course can be finalized in discussion with KPTCL.	√	√	√	√	√	√	√
Train the Trainers (Super Users		√	√	√	√	√	√	√

Table 15: Training Curriculum EAAAP System

Note:

1. The Training Curriculum for EAAAP system mentions the indicative subjects on which trainings should be imparted by the Implementing Agency .
2. The Training Curriculum for EAAAP Modules mentioned above are indicative and will be finalized based on agreement and discussion between KPTCL and the successful Bidder
i.e. Implementing Agency .

3. The Business Users and Core users will be identified by KPTCL and shall be picked from the entire organization and from all levels.

The training activity for EAAAP System shall comprise of the followings:

a. Training material must include documents and videos for usage of EAAAP System
- Modules (Bilingual - Kannada/English). These materials will be uploaded to the EAAAP System itself and should be available as ready reckoners to the end users.
b. The content should be updated regularly and kept up to date as and when changes take place to the EAAAP System modules.
c. Training sessions shall cover more hands-on training rather than instructive mode.
d. The training and delivery options shall be on-line, instructor led classrooms. Training material will be organized by functional process that will serve as the training documentation for a functional area.
e. KPTCL plans to adopt training platform as e-classrooms in future. Implementing Agency should consider the same for compatibility.
f. Necessary handholding and change management support shall be provided post training.
g. Feedback exercise shall be conducted for each training and accordingly evaluation will be used for improvement of further trainings.
h. Implementing Agency in consultation and convenience of the KPTCL shall workout the training program and all the other modalities of the training, which should be delivered by OEM certified consultants and Implementing Agency .
i. Implementing Agency is required to submit the plan accordingly accommodating training requirements to cover entire user base. If there is increase in end user base during the project Implementing Agency shall impart training at no extra cost to KPTCL. The expected increase in end user base is approximately 2% YoY in the next 3 years.
j. The Implementing Agency shall provide associated documentation for all deployed systems to ensure a smooth transition from

deployment to post-deployment operations and maintenance of the system.

k. The ideal approach of the training should be formulation and involvement of core implementation group from the very start of the project to ensure maximum retention and adequate technical competency level.

l. Subsequent trainings and re-trainings should be conducted for identified groups/personnel.

m. Handholding during pre-implementation, implementation, Go Live and Post Go live should be done by the Implementing Agency .

n. Training calendar should be published to stakeholders and training sessions should be organized either on site or over the web as per the requirement of KPTCL.

o. Knowledge sharing strategy should be adopted.

p. Training plan and schedule shall be decided by KPTCL as per the availability of the staff. Implementing Agency shall conduct training sessions across all the 10 administrative offices as per the schedule. KPTCL shall ensure that all the employees attend the sessions at the allotted administrative office or location.

q. Implementing Agency shall provide the necessary access of OEM training platforms and data repository to KPTCL.

r. Training shall be planned in stages as required - before Roll-out and the end of the handholding period.

s. KPTCL is looking for competence and capacity development by necessary training. The Implementing Agency will facilitate for training to IT team of KPTCL on customized code development and deployment at KPTCL.

t. Implementing Agency shall carry out the capacity building of core team including functional and technical employees with an intent to create a team of experts capable to independently handle the application operations & maintenance task and issues, if any.

u. Implementing Agency shall carry out the training of KPTCL team on reports development, configuration of application setups and other skill sets as required to create a team of experts capable to independently handle the maintenance & support requirement by KPTCL.

v. Implementing Agency shall carry out the hands-on training of core team members & end users on EAAAP System and Other associated applications including training on system configuration, database administration, backup & restoration, development and maintenance task etc.

w. Implementing Agency shall formulate user manuals of EAAAP System and Other associated applications by considering the specific configuration of implemented solution.

x. Implementing Agency will design the standard curriculum of training as per RFP requirement with necessary inputs and approval of KPTCL.

6.13.5.6 Scope of training for EAAAP System End users

a. Implementing Agency along with OEM should propose comprehensive end user training plan for adoption of the applications developed/proposed to KPTCL.
b. The plan should incorporate a consistent, enterprise-wide user adoption strategy focusing on the following five key areas:
   - Business Alignment
   - Communication
   - User Training
   - Performance and Management
   - Reinforcement
c. As content may vary across key business units, the degree to which the actual process, tools, and rollout strategy are consistent will provide added economies of scale, as well as levels of skill standardization. In summary, the end goal is striving to achieve 100% user adoption of the EAAAP System application through behavioral and technical competencies.

6.13.5.7 Training Needs Analysis

Conduct a Training Needs Analysis to determine the training and development needs for all the job roles that will be affected by EAAAP System technology initiative at KPTCL. The OEM and Implementing Agency consultants will collect the appropriate data on user groups, functional and process requirements per user group, required skills and knowledge, existing training culture and training resources through workshops and interviews with KPTCL business owners and key business users. This will result in a Training and Development Plan including:

The training requirements per user group.

- Recommendations on the most appropriate training delivery methods and channels.
- Identification of the criteria for training success along with any challenges and risks.
- Plan and responsibilities for the development of the training materials, such as instructor guides, participant guides, media-based training and quick-reference guides.
- Knowledge sharing strategy to enable to perform future customizations internally.

6.13.5.8   Content Development

Development of customized, modular training materials based upon user roles and business process, and customized application. The OEM consultants along with Implementing Agency will work together with KPTCL Core team members and Project team to enable transfer of knowledge. The following materials will be developed:

- Paper-based classroom participant guides for each identified user group. These guides include hands-on exercises and are based upon _Day in the Life' scenarios.
- Paper-based classroom instructor guides including instructor notes with additional background information and points to be highlight during the training.
- Media-based training simulations for pre-class preparation, in-class practicing and knowledge and skills validation.
- Implementing Agency can also be required to provide context sensitive on-line help, which includes all materials provided in the hard copy manuals. Where possible, users should be able to add their own on-line help documentation.
- Usage of EAAAP System must be documented in video form and made available/distributed to all users of EAAAP System. All training manuals will be uploaded to EAAAP System software, also as FAQs etc. for ready reference.

6.13.5.9   Train-the-Trainer Program

Development and delivery of a Train-the-Trainer program to prepare Organization for the delivery of the training program. This program will include:
Training the KPTCL Core Team members on the customized version of the EAAAP System application's as it would be trained to an end-user, allowing the training team to model the approach.

- Opportunity for knowledge sharing in the areas of leading practice, concepts, new business processes and knowledge to the KPTCL Core Team members.
- Sharing of leading practices on creating an effective classroom and an appropriate learning environment.
- Sharing of leading practices on classroom communication to enable the KPTCL Core Team members to encourage student involvement and student interaction.
- The program includes instruction on non-verbal behavior, listening skills, questioning techniques, how to manage difficult behaviors, interpreting body language, and general presentation tips.

6.13.5.10   End user Training responsibilities to include the following

Task	Deliverables
Role Analysis	Training needs analysis matrix, identifying and defining the end-users of all locations affected by the implementation of new technology and associated processes
Curriculu m Design	Finalized-course designs, including: • List of business processes and system tasks • Outline of role-based training courses • Plan for incorporating business process and policy information.
Education Project Plan	A project plan detailing: • Timeline for entire project • Ownership and responsibilities for training material development and delivery • Work efforts and resource requirements from the KPTCL

Table 16: End User Training Responsibility

6.13.5.11 Onsite training and support

Task	Deliverables
Prototype Development	• Develop standards, design and develop prototype content deliverables utilizing the customer's application environment. Practice the review and revision lifecycle

Table 17: Onsite Training & Support

6.13.5.12 End user content development

Task	Deliverables
Content Development for the topics Identified	• End User training content in the form of simulations and Paper Based content and video sessions • Developing test material for topics identified

Table 18: End User Content Development

6.13.5.13 Train-The-Trainer Program

Task	Deliverables
Content Publishing	• Role-based training media courseware • Role-based instructor and participant guides

Train-the-trainer workshop	Training the KPTCL's Core Team members on the customized version of the EAAAP System as it would be trained to end- users, allowing the training team to model the approach to train End Users
	• Opportunity for knowledge sharing in the area of leading practice, concepts, new business processes and knowledge to the KPTCL
	• Each workshop will have at least 30 people. The workshop will be conducted in batches. The Implementing Agency will award a certificate of completion, after completion of each training workshop.
	• All the training material in soft and hard format will be handed over to the utility and will be treated as utility property.
Technical training	• Training the KPTCL's Core Team members on DC/DR Technology, HLD, LLD, Master Data Management etc.
	• This training will be given to the KPTCL's Core Team members responsible for carrying out technical activities related to the system like maintenance of database, operating system, backups etc.

Table 19: Train the Trainer Program

6.13.5.14   Training for Higher Management of KPTCL

- **EAAAP Sensitization workshop**: Sensitization workshop will be provided to members of higher management of KPTCL. The training would provide high level understanding of the EAAAP system and its functionalities: The session will also highlight the unique requirement of the proposed EAAAP system.
- **EAAAP Management Dashboard Training**: This entails training provided to Senior Management of KPTCL to be able to access and extract reports and other relevant analytical data for quick decision making.
- **Locations of training**: The training shall be provided at the location(s) at Corporate Office and Zonal and Administrative office locations of KPTCL. The space and furniture at these locations would be provided by the KPTCL.
- The training centre facility with seating capacity shall be provided by the KPTCL. The Implementing Agency shall arrange the necessary equipment's and peripherals to carry out the training of end users.

6.14 Facility Management Services (FMS)

The Implementing Agency shall be required to provide the required Help Desk Management and Ticketing Tool to manage entire EAAAP System installed & commissioned for KPTCL in order that the EAAAP System have maximum availability to enable KPTCL to realize their desired business objectives.

a) Implementing Agency shall provide the required Helpdesk Management and Ticketing Tool along with the L3 support to manage the system

b) Implementing Agency will be primary responsibility of providing desired services during the project implementation period. The duration of Facility Management Services (FMS) shall be for 3 years which shall start immediately from the date of Enterprise wide Go-Live of EAAAP System at all locations of KPTCL.

c) The Facility Management Services (FMS) would, include following major areas of services.
   i) Ticket logging through Help Desk Services
   ii) Technical Support Services
   iii) SLA monitoring etc.

d) The Implementing Agency shall provide adequate resources to provide L3 support. The Help Desk agents shall coordinate the assigning of user calls to FMS resources.

e) Provide necessary manpower (minimum of 10 resources) and training during the handholding period to the manpower identified by KPTCL for FMS which include Help Desk (L1 – with a minimum of 10 resources) and L3 support.

f) Provide helpdesk with ticketing tool and IT support services as part of EAAAP System, DC, DRC during the project implementation phase and further during the Facility Management Services for 3 years.

6.14.1   Functional Support

The Functional Support Services for application contemplated herein shall be provided for EAAAP system implemented by Implementing Agency . The Implementing Agency shall render both on-site maintenance and support services to KPTCL.

The scope of the services is as below: -

1. **Enhancements and defect fixes.**

   a) Implementing Agency shall incorporate technological changes and provide enhancements as per the requests made by KPTCL. Implementing Agency shall perform minor changes, bug fixes, error resolutions and minor enhancements that are incidental to proper and complete working of the application.

2. **Routine functional changes:**

   a) The Implementing Agency shall be responsible for user and access management, creating new report formats, and configuration of reports. Implementing Agency shall provide user support in case of technical difficulties in use of the software, answering procedural questions, providing recovery and backup information, and any other requirement that may be incidental/ancillary to the complete usage of the application. The Implementing Agency shall perform user ID and group management services. The Implementing Agency shall maintain access controls to protect and limit access to the authorized End Users of KPTCL.
   The services shall include administrative support for user registration, creating and maintaining user profiles, granting user access and authorization and providing ongoing user password support.

3. **Tuning of the EAAAP solution:**

   a) The Implementing Agency shall also undertake tuning of EAAAP, databases, any third-party software and any other components provided as part of the solution to optimize the performance.
   b) Deployment/Re-Deployment of EAAAP solution: The Implementing Agency shall be responsible for

deployment of the EAAAP solution and re-deployment in case of any upgrades to the underlying hardware or operating System and carry out any necessary testing.

c) The key service level requirements need to be ensured by the Implementing Agency during the operations and maintenance period. These requirements shall be strictly imposed and either KPTCL or a third-party audit/certification agency shall be deployed for certifying the performance of the Implementing Agency against the target performance metrics as outlined in the SLA's defined in the RFP.

6.14.2   Operations and Maintenance support for EAAAP System

Implementing Agency shall provide EAAAP System application development and maintenance/support services on an ongoing basis, especially in response to support required for integration, data exchange along with requests for changes in the applications through an ATS. Support in software development and maintenance shall include:

6.14.2.1 Maintaining usage of deployed EAAAP applications to ensure its effective day to day operational usage. The job includes support maintenance of all the application modules along with system software.

6.14.2.2 Implementing Agency shall debug and fix the operational problems, perform error handling while running the application during the project period.

6.14.2.3 Implementing Agency shall generate the additional system report, modify existing reports and queries, as per user's requirement.

6.14.2.4 Implementing Agency shall provide hands-on assistance to the users to resolve any operational doubts as and when needed while the application is in operations.

6.14.2.5 Implementing Agency shall be responsible for Integration of deployed EAAAP applications with other applications/systems during the project period.

6.14.2.6 Implementing Agency shall document all the changes incorporated in the application software and improve the documentation of existing user/system reference manuals of different modules wherever it is necessary and required.

6.14.3   User Management Services

The user management services shall include Directory Services for KPTCL which comprises of the following services:

- Domain management
- Group management
- User management
- Implementation of domain policies and standards etc.

The above-mentioned directory services shall be implemented and used within the enterprise environment of EAAAP applications at KPTCL DC

6.14.4 Server Infrastructure Operations and Maintenance Services

Implementing Agency shall carry out the below mentioned activities:

6.14.4.1 Resource Management

Implementing Agency shall be responsible for adequately sizing, provisioning and maintaining the necessary compute, memory, and storage required, building the redundancy into the architecture (including storage) and load balancing to meet the service levels.

While the initial sizing and provisioning of the underlying infrastructure may be carried out based on the information provided in the EAAAP tender. Implementing Agency shall be responsible for supplying only servers for On-premise DC.

6.14.4.2 VAPT & Audit

- Conducting regular vulnerability scanning and penetration testing of the systems, as mandated by Government Agency's policies.
- Review the audit logs to identify any unauthorized access to the government agency's systems.

6.14.4.3 Monitoring Performance and Service Levels

Implementing Agency shall provide and implement tools and processes for monitoring the availability of assigned applications, responding to system outages with troubleshooting activities designed to identify and mitigate operational issues.

- Reviewing the service level reports, monitoring the service levels and identifying any deviations from the agreed service levels.
- Monitoring of service levels, including availability, uptime, performance, application specific parameters, e.g. for triggering elasticity, request rates, number of users connected to a service.
- Detecting and reporting service level agreement infringements.
- Monitoring of performance, resource utilization and other events such as failure of service, degraded service, availability of the network, storage, database systems, operating systems, applications, including API access.

6.14.4.4 Backup

- Configure, schedule, monitor and manage backups of all the data including but not limited to files, images and databases as per the policy finalized by KPTCL.

- Restore from the backup wherever required.

6.14.4.5
- Deleted

6.14.4.6 Support for Third Party Audits
- Enable the logs and monitoring as required to support for third party audits

6.14.4.7 Miscellaneous

Prepare a comprehensive Facility Management Service plan for managing the DC services and keep it updated with any changes during the project. Create and maintain all the necessary technical documentation, design documents, standard operating procedures, configurations required to continued operations and maintenance of DC services.

6.14.4.8 Storage and Backup Management

The Implementing Agency shall perform backup of data & information for EAAAP System as per the requirement of KPTCL. This will include regular backup and restore operations and assuring security of the media through appropriate access control. In addition, the Implementing Agency shall also manage scheduled data replication. The activities shall include:

- Backup of operating system, database and application shall be performed as per stipulated policies of KPTCL at the on premise DC and DRC. The Implementing Agency shall provide required tools for undertaking these activities.
- Monitor and enhance the performance of scheduled backups, schedule regular testing of backups and ensure adherence to related retention policies.
- Ensure prompt execution of on-demand backups of volumes, files and database applications whenever required by KPTCL or in case of upgrades and configuration changes to the system.
- Real-time monitoring, log maintenance and reporting of backup status on a regular basis. The administrators shall ensure prompt problem resolution in case of failures in the backup processes.
- The administrators shall undertake media management tasks, including, but not limited to, tagging, cross-referencing, storing, logging, testing, and vaulting in fireproof cabinets
- The Implementing Agency shall ensure the physical security of the media stored in cabinets.
- The Implementing Agency shall also provide enough/adequate media for daily, weekly and additional backups for the duration of the contract.

6.14.4.9 Help Desk

Help Desk shall act as a single-point-of-contact for all service problems

pertaining to software & network. The Implementing Agency shall develop a comprehensive Help Desk Management and Ticketing solution specific to EAAAP operations with a telephone number, E-mail and call tracking mechanism that will resolve problems and answer questions that arise from the use of the offered solution as it is implemented at KPTCL.

Users can log the queries/complaints, which shall be resolved as per the Service Level requirements. The helpdesk queries/complaints can be related to connectivity, messaging, security, software, configuration and any other issues that arise in the EAAAP System.

Help Desk software shall take care of classification, automatic escalation, management, and status tracking and reporting of incidents as expected by the service level requirements. Status tracking shall be available to users through telephone number as well as online through software.

The Helpdesk will respond to and resolve the problems as per the SLA.

Problems shall be classified into various levels of priority mentioned in the SLA.

The assigned priority for each problem shall depend upon:

The extent of the problem's impact on the usability of the system

The percentage of users affected by the problem

The initial assignment of priorities is the responsibility of the Help Desk's Problem Manager on basis of SLA. However, KPTCL can change the priority assigned to a particular problem and the procedures that exist for escalating a problem to progressively higher management levels, until agreement is secured.

The precise definition of problem priorities shall be documented in the Implementing Agency 's SLA.

- Helpdesk shall troubleshoot on systems, applications (software), DC/DR services related issues, multimedia related issues, server administration, security policies, 3rd party coordination etc.
- After problem resolution, the logged problem in help desk will be closed and notification will be sent to user for confirmation and rate the customer service on defined parameter in helpdesk.
- Help Desk shall be responsible for change management like schedule up gradation of software components, DC/DR service components etc. Help Desk will co-ordinate and take approval from KPTCL for the same and will inform all users for such event in advance.

Following are the Implementing Agency 's Responsibilities regarding Help Desk:

6.14.4.10 Providing Help desk solutions application

The Service desk/help desk module shall include the automate ―Helpdesk Solution Application. A solution record is a predefined response to a problem or commonly asked question. A solution record consists of a symptom, a cause and a resolution. The solutions can be associated with incident and problem records. The Solution application is used to create, approve, and manage solution records. Search Solution can be used to search for and view solution records. The Helpdesk Solution application shall include the following features:

a) Ability to specify which solution records shall be available to self-service users in the Search Solutions application
b) Ability to specify a Classification for the solution
c) Ability to indicate a Status for a solution. A solution record can have one of the following statuses: DRAFT, ACTIVE, or INACTIVE
d) Ability to attach documents or Web sites to a solution record
e) Ability to use the Solutions application to change the status of a solution record
f) Ability to create, update and delete a solution in Solutions Application.

A. **EAAAP System Services**

a) Provide Level One Support for EAAAP System, including incident logging, assigning incident numbers and dispatching the appropriate support personnel to remedy a problem.
b) Prioritize problem resolution in accordance with the severity codes and Service Levels specified.
c) Provide system status messages, as requested.
d) Maintain the defined help desk operational procedures.
e) Notify designated personnel of failure of any component of EAAAP System, or of an emergency.
f) Initiate a problem management record (―PMR‖) to document a service outage to include (for example) date and time opened, description of symptoms, and problem assignment (Level Two/Level Three), and track and report on problem status, as required.
g) Monitor problem status to facilitate problem closure within defined Service Level criteria or escalate, as appropriate.
h) Monitor PMR closure, including documented problem resolution.
i) Provide KPTCL with complete and timely problem status through the problem tracking system, as requested.
j) Maintain an updated help desk personnel contact listing.

B. **User oriented Services**

a) Provide an interface for user requests, such as new user IDs, address changes, routing requests, and password changes.

b) Advise the End User to take reasonable steps to backup information, if possible, prior to attempting to affect a resolution either by phone or hands- on during Desk Side Support Service.

6.14.5.2 Release Management

The primary objective of release management procedure is to deliver, distribute and track one or more changes for/during release into the live environment and;

1. To plan and oversee successful rollout of software releases.
2. To communicate and manage expectations of KPTCL during the planning and rollout of new releases.
3. To ensure that software being changed is traceable, secure and that only correct, authorized and tested versions are installed.
4. The policy or procedural requirements arising out of the agreements signed or agreed between the Implementing Agency and KPTCL would supersede the procedural requirements stated in this document. The applicability of the current procedure is for personnel or process deploying releases of software and/or EAAAP System components into the production or live environment.

This is broad level of scope of work of Implementing Agency with respect to the software applications.

1. Release of new software, hardware, systems and services into live environment
2. Release of changes to EAAAP System and services in the live environment
3. Quarterly release of functionalities
4. Publishing calendar for release – to be published by Implementing Agency in consultation with the KPTCL
5. Decision on packaging and distribution of releases
6. Implementation of changes to software, hardware, systems and services
7. Building the change request.
8. Provide staffing (roles used as per rate card, effort required by role, effort by months or weeks as applicable) and timeline for a change request.
9. KPTCL will absorb the added/modified functionality from operational perspective which are implemented as part of Release Management in 15 days from the date of release if there is no major issue reported by KPTCL.

6.14.5.3 Performance Management

The recording, monitoring, measuring, analyzing, reporting, and forecasting of current levels, potential bottlenecks, and enhancements of performance characteristics for the services, networks, applications,

system software, and equipment within the scope shall be required. System tuning, and optimization is an inherent part of this contract.

Where warranted, the Implementing Agency will utilize capacity management data in combination with performance management data to identify ways to improve performance levels of the resources, extend their useful life, and request KPTCL to approve revisions/upgrades to the computing and communications hardware, software and other equipment such that higher levels of performance of the resources are obtained.

6.14.5.4 Capacity Management

The continuous monitoring, periodic analysis, and forecasting of the changes necessary to quantify capacity and configuration of finite resources comprising the computing and hardware/software infrastructure supported under this initiative by the Implementing Agency . The categories of resources to be capacity managed include but are not limited to servers & system software.

6.14.5.5 Security Management

The protection from unauthorized usage, detection of intrusions, reporting as required and proactive prevention actions are to be provided by the Implementing Agency .

6.14.5.6 Resources for Project and Service Management

As mentioned in Minimum resource requirement section in the Tender.

6.14.5.7 Preventative Maintenance Activity

The preventive maintenance activities shall be performed by the Implementing Agency to keep the system running at optimum level by diagnosis and rectification of all EAAAP System failures and would broadly include:
1. Configuration routine checking as part of a preventive maintenance which would include checking of functionality EAAAP System software,
2. Monitoring of the performance of the system and doing necessary tuning for optimum performance to accommodate any changes such as addition of new components.
3. Providing all necessary assistance to KPTCL for addition and modification of database and user interface & consumer portal displays and Database sizing activities.
4. Take Backup of the system at regular interval
5. Restoration of the systems upon its failure and to restore the functioning of the various systems.

6.14.5.8 Annual Technical Support (ATS)

1. All software should be supplied with applicable OEM warranties and support for the entire duration of the project. The OEM must provide necessary updates and patches during support period. The Implementing Agency must ensure the required updates and patches.
2. Annual Technical Support (ATS) should be provided for entire duration of the project. ATS should cover 24x7 supports from OEM for software products to be provided through Phone, Email or Onsite visit depending on the criticality and nature of the problem. The required support must be ensured by Implementing Agency .
3. Implementing Agency shall provide and apply regular patches to the licensed software including software, operating system, databases and other applications.
4. Implementing Agency shall provide for software license management and control. Implementing Agency shall maintain data regarding entitlement for software enhancements, refreshes and maintenance.
5. Implementing Agency must perform periodic audits to measure license compliance against the number of valid End User software licenses consistent with the terms and conditions of site license agreements, volume purchase agreements and other mutually agreed upon licensed software terms and conditions and report to KPTCL on any exceptions to Implementing Agency 's terms and conditions, to the extent such exceptions are discovered.
6. Implementing Agency shall manage complete OEM technical support for all the licensed software problems and/or questions, technical guidance, defect and non-defect related issues. The Implementing Agency shall provide a single-point-of-contact for software support and provide licensed software support including but not limited to problem tracking, problem source identification, problem impact (severity) determination, bypass and recovery support, problem resolution and management reporting etc.
7. Implementing Agency shall undertake regular preventive maintenance of the licensed software. If the Operating System or additional copies of Operating System are required to be installed / reinstalled / de-installed, the same shall be performed by the Implementing Agency.

6.15 Service Level Agreements

The Service Level Agreement (SLA) is the agreement between KPTCL and Implementing Agency during the project implementation and further during Facility Management Support phases of the project. The SLA defines the responsibility of Implementing Agency in ensuring the performance of Project based on agreed performance indicators as detailed in the agreement.

Implementing Agency shall be responsible for 24*7*365 management of all systems during the implementation of overall EAAAP solution and

Helpdesk Support and Ticketing System (for Facility Management Service (FMS) period). The KPTCL would monitor the Implementing Agency performance and compliance to standards as defined in SLA.

This section defines Service Level Agreement (SLA) for Project. The purpose of this section is to define the levels of service to be provided by Implementing Agency . The benefits of SLA are as followings:
   a) Define a process that applies to the performance related expectations or performance required by KPTCL regarding the project.
   b) Assist KPTCL to control levels and performance of services provided by the Implementing Agency .

6.15.1 Duration of the Service Level Agreement (SLA)

The service levels agreements shall remain valid for the entire tenure of the contract or till such time the SLA have been reviewed and revised by KPTCL.

6.15.2 Service Level Agreements and Targets

The service levels agreements shall be agreed by the Implementing Agency as a key performance indicator for this engagement. These key indicators shall be used while monitoring and measuring performance of Implementing Agency . The service level indicators have been categorized under:

6.15.3 EAAAP System - During Implementation SLA Indicators
Project Implementation – EAAAP System Go-Live Out

6.15.4 EAAAP System - Post implementation SLA Indicators
   a. Availability related SLA
   b. Performance related SLA
   c. Services related SLA
   d. Help desk activities etc.

To monitor the performance of the services, all service level agreements & targets to be monitored by IT based management tools . Implementing Agency would be required to provide access to the management tools to KPTCL for monitoring purposes and would also provide the MIS reports during overall project for SLA monitoring as a part of the contract.

The indicative list of such diagnostic/monitoring tools and technology requested and required by KPTCL to monitor the EAAAP System are as following:

Sl. No.	Diagnostic/Monitoring Tools

1	SLA Management tools
2	IT Infrastructure Monitoring Tools
3	Application Performance Monitoring tools
4	Help Desk Performance Monitoring tools etc.

These tools shall monitor the product, process and elements of system to generate reports and logs which can be utilized by KPTCL for further improvement and enhancements of overall system.

Implementing Agency must supply and implement the Help Desk tools with EAAAP System; however, it will be onus of Implementing Agency either to supply the remaining tools either with EAAAP System or shall procure under RFP for additional On premise IT Infrastructure for DC and DR.

The description of indicative Service Level Agreement (SLA) has been presented in the section below. The Service Level Agreement will be finalized and agreed based on the discussion between KPTCL and successful Bidder at time of signing the contract.

6.15.5 Service Level Agreements Monitoring

The KPTCL will carry out the quarterly monitoring and performance review of the Implementing Agency against the monthly formulated reports for SLA.
   a) A designated third party or personal from KPTCL will review the performance of the Implementing Agency against the SLA.
   b) The SLA reports shall be formulated based on the automated system generated reports.
   c) The Implementing Agency shall submit the monthly SLA report to designated Nodal officer as per agreed frequency and timeline.
   d) The review/audit report will form a basis of any action relating to imposing penalty on or breach of contract of the Implementing Agency .

6.15.6 EAAAP System - SLA Indicators During Implementation

a. EAAAP System rollout – SLA's & Penalty

The Implementing Agency will carry out the EAAAP System rollout including other supporting solution/system in all identified project areas as mentioned in RFP document and as per the agreed roll out plan.

Any delay in EAAAP System roll-out will attract penalty for delay subjected to maximum penalty of 10% of total cost of Implementation. Penalty of ½ percent per week on the total cost of implementation will be levied for the duration equivalent to number of weeks delayed which shall be deducted from subsequent months based on the milestone payments.

Note:

- If, Implementing Agency successfully carry out the design customization, data migration, rollout and Go-live of EAAAP System within the Project Timelines i.e. 18 Months, then the penalty deducted due to delay in implementation of respective phase, shall be refunded post approval from competent authority.
- No interest shall be paid by KPTCL for refundable amount.
- In case, the Implementing Agency is unable to implement the EAAAP System within the given timelines and project implementation duration extend beyond the specified period, in such case, KPTCL reserves the right to get the remaining part of project work completed from other agencies at the risk and cost of Implementing Agency and claim liquidated damages.

a) **Recovery of Penalty:**

The following procedure shall be adopted for recovery of the 10% penalty amount on total cost of Implementation and CGST, SGST at prevailing rate from the Implementing Agency for delay in implementation of the project.

- Calculate the penalty recoverable from the Implementing Agency as per contract terms and conditions for the works delayed beyond contractual agreement period.
- Limit the recovery of penalty to 10% of each bill value admitted.
- If the total penalty to be recovered is not fully recovered, the balance penalty should be recovered in the running bills of the Implementing Agency.

Note: Procedure for accounting of penalty recovered from Implementing Agency towards delay in implementation of the project & its refund.

i) Agency shall submit a request for condonation of delay if any within 12 (Twelve) months from the date of implementation of the project with valid reasons and documentary proof.

ii) In case no request for condonation of delay is made by the Implementing Agency within a period of 12(Twelve) months, the penalty amount shall be transferred to Miscellaneous income immediately after completion of such period.

iii) Once any penalty amount is transferred to Miscellaneous Income

Account, it shall, under no circumstances be considered for refund.

6.15.7   EAAAP System – SLA Indicators Post implementation

6.15.7.1   Calculation for Availability Service Levels

a) Uptime Calculation for the Month
1. {% Monthly Availability = [(Actual Uptime + Scheduled Downtime) / Total No. of Hours in a Month] x 100}
2. "Actual Uptime" means, of the Total Hours, the aggregate number of hours in any month during which each equipment/service is available for use.
3. "Scheduled Downtime" means the aggregate number of hours in any month during which each equipment/service, is down during total Hours, due to preventive maintenance, scheduled maintenance, IT infrastructure/Other equipment's problems, on premise DC IT Infrastructure problems or any other situation which is not attributable to The Implementing Agency 's (or Service provider's) failure to exercise due care in performing the Implementing Agency 's responsibilities.
4. The Implementing Agency will be required to schedule Planned maintenance time with prior approval of KPTCL. This will be planned except the Business hours of KPTCL. In exceptional circumstances, KPTCL may allow Implementing Agency to plan scheduled downtime in the working hours where actual production downtime will be minimal i.e. less than 30 Minutes.
5. The downtime for scheduled maintenance (patch application, upgrades – OS, Database, etc.) would need to be mutually agreed between KPTCL and Implementing Agency . To reduce this time, various maintenance activities can be clubbed together with proper planning.
6. "Total Hours" means the total hours over the measurement period i.e. one month (24 * number of days in the month).

b) Downtime Calculation:

The recording of downtime shall commence at the time of registering the call with Implementing Agency for any downtime situation for the application/service/equipment. Downtime shall end when the problem is rectified, and the application/service is available to the user.

Down time will not be considered for following:
1. Pre-scheduled preventive maintenance and health checks (Scheduled Downtime).

2. Failover time (15 minutes) in case of cluster environment. Beyond which the service would be considered as not available and appropriate penalty shall be imposed on the Supplier.

Typical Facility Management System (FMS) availability and duration of their requirement are tabulated below for reference.

The criticality of the required services is categorized under the five categories/priorities i.e. Critical, High, Medium and Low. Each of the Support Category is associated with respective response and resolution time.

The criticality definition chart is tabulated below for reference.

Support Category	Criteria	Maximum Response Time	Resolution
Critical	The system is unable to be used for normal business activities. There is certainty of financial loss to KPTCL.	30 mins	4 business hours
High	There is a problem with a part of the system, which impacts on KPTCL's decision making. No viable workaround is available. There is a likelihood of financial loss.	1 Hour	24 hours
Medium	The efficiency of users is being impacted but has a viable workaround.	1 Hours	2 business days
Low	A fault, which has no impact on processing of normal business activities.	1 Hours	7 business days

Table: SLA Criticality Chart

The final decision for categorization of the services based on respective category shall be taken by the KPTCL, post on boarding of Implementing Agency , though for simplicity followings are indicative categorization:

Service	Duration	Criticality
IT - Asset Management Services	8x6	Medium
FMS/ATS Tracking	12x6	Medium
On premise DC and Disaster Recovery center Administration – Remote Support	24 X7	Critical
Server Administrator Services – Remote Support	24 X7	Critical
Database Administration Services – Remote Support	24 X7	Critical
Business Unit (i.e. KPTCL - Head Quarters /Office Location etc.)	As Per Schedule	High

Table: SLA Categorization

The maximum penalty in a month/quarter (excluding the service levels for Resource Management) shall be 10% of Facility Management Services (FMS) charges for that month/quarter for respective services/component.

6.15.7.2 Availability of Service Levels

The below table shows the expected performance from the core services including performance criteria and service level agreements pertaining to the availability of services and activities required from the Implementing Agency during the Facility Management Support period.

The SLAs are applicable only for the L1 and L2 level escalations. The response time and resolution time for the issues raised shall be considered from the time of acceptance of the issue by the L1/L2 support teams.

Sl. No.	Service	Parameter	Service Level	Measurement Tool/ Validation	Penalty	
1.	Business Applications Software (EAAAP System, and Other Associated Systems)	Availability of Business Application Software as mentioned in the Scope of Work	>=99.90 % uptime	Availability & Downtime Reports measured using SLA Management Tools.

Measured 24*7 Basis and Validated by Monthly SLA Performance Report. | >=99.90% uptime | No Penalty |
					>=99.40% to <99.90% of SLA	1% of the Annual Technical Support (ATS) cost Part – (D)
					>=98.90% to <99.40% of SLA	5% of the Quarterly Payment
					>=96.90% to <98.90% of SLA	10% of the Quarterly Payment
					<96.90% of SLA	15% of the Quarterly Payment
2.	Business	Availability	>= 99.50	Availability &	>=99.50 % uptime	No Penalty

	Supporting Applications	of Application and System Software which are required to support the Business Applications as mentioned in Scope of Work	% uptime	Downtime Reports measured using SLA Management Tools. Measured 24*7 Basis and Validated by Monthly SLA Performance Report.	>=98.50% to <99.50% of SLA	2% of the Quarterly Payment
					>=96.50% to <98.50% of SLA	5% of the Quarterly Payment
					>=94.50% to <96.50% of SLA	10% of the Quarterly Payment
					<94.50% of SLA	15% of the Quarterly Payment
3.	Integration Services uptime	Availability of Web Services/ Middleware for	>99.5% uptime	Availability & Downtime Reports measured using SLA	For every 0.5% decrease of SLA	2% of the Quarterly Payment will be deducted
		Integrating EAAAP System.		Management Tools. Measured 24*7 Basis and Validated by Monthly SLA Performance Report.		. (Up to 10% of the Quarterly Payment)

Sl. No.	Service	Parameter	Service Level	Measurement Tool/ Validation	Penalty	
4.	Project Management	Submission of Monthly Project Status reports and Conducting Status meetings	100%	Submission of Minutes of Meetings and Monthly Project Status reports to Project-In-Charge of KPTCL.	In case, the Monthly meeting is not conducted due to Implementing Agency s default or in case the report is not produced within first 7 days of the month	2% of the Monthly Payment
8.	Server Administration/ Management	Rollout of patches (OS level) on Servers after patch being approved on	>=98%	Report	Roll out of patches & updation report for Servers	0.5% of the Quarterly Payment

Sl. No.	Service	Parameter	Service Level	Measurement Tool/ Validation	Penalty	
		test environment				
		Server	>=99.90 %	Report	>=99.90% uptime	No Penalty

			Administra ti on Services for uptime of Applicatio n servers			>=99.40% to <99.90% of SLA	1% of the Quarter ly Payment
						>=98.90% to <99.40% of SLA	5% of the Quarter ly Payment
						>=96.90% to <98.90% of SLA	10% o f the Quarter ly Payment
						<96.90% of SLA	15% o f the Quarter ly Payment
			Administra ti on Services for Uptime of Supportin g System Servers	>= 99.50 % uptime	Report	>=99.50 % uptime	No Penalty
						>=98.50% to <99.50% of SLA	2% of the Quarterl y Payment
						>=96.50% to <98.50% of SLA	5% o f the Quarter ly Payment
						>=94.50% to <96.50% of SLA	10% o f the Quarter ly Payment
						<94.50% of SLA	15% o f the Quarter

					ly Payment
9.	Database Administration Services	Database Administration Services For Uptime	>=99.95 %	Report	>=99.45% to <99.95% of SLA 1% of the Quarterly Payment
					>=98.95% 5% of the Quarterly Payment

Sl. No.	Service	Parameter	Service Level	Measurement Tool/ Validation	Penalty	
		of Database servers			to <99.45% of SLA	
					>=96.95% to <98.95% of SLA	10% o f the Quarterly Payment
					<96.95% of SLA	15% o f the Quarterly Payment
		MIS report of database scheme, disk space, storage and user role	>=99%	Report	0.5% of the Quarterly Payment	

10.	Backup / Restore Management Services	The Implementing Agency should take backup as per the backup schedule defined by the KPTCL	>=99%	Report	If the negligence is found in monthly report/audit, the Implementing Agency would be penalized as per KPTCL Guidelines.
		KPTCL would periodically (once a quarter on a random day) request the Implementing Agency to restore the backup data	100%	Report	Penalized as per KPTCL guidelines for every restore test failure

Sl. No.	Service	Parameter	Service Level	Measurement Tool/ Validation	Penalty
12.	Incident Management	Resolution of ticket logged in Incident Management tool	>=99%	Reports generated from Ticket logging system	0.5% of the Quarterly Payment
13.	Software Change Management	Resolution of Software Change Management Ticket	99%	Monthly Reports	2% of the Quarterly Payment if agreed date for requested change is not adhered
14.	Release Management	Release of approved software version	100%	Release on agreed date	5% of annual FMS charges if agreed software development date for final production deployment is not adhered

15.	Problem Management	Implementing Agency shall analyze all the incidents and provide a root cause report every month if there are more than 5 incidents of the same type. Implementing Agency shall take the needed	100% timely submission covering all incidents logged in that month	Root cause Report. Incident Report stating problems faced by the users. Report detailing corrective and preventive actions	5% penalty of the Quarterly Payment of that location/site, if the Implementing Agency does not submit a problem report for that Quarter. 5% penalty of the Quarterly Payment of that location/site, if the Implementing Agency does not perform the corrective action for more than one calendar month.

Sl. No.	Service	Parameter	Service Level	Measurement Tool/ Validation	Penalty
		corrective action to prevent further issues due to the same cause.			
16.	Security Management	Implementing Agency shall adhere to the Security policy developed in consultation with KPTCL	Monthly	100% Compliance.	No Penalty
				Non-Compliance.	0.5% of the Quarterly FMS Cost for every day's delay on an incremental basis.
17.	Implementati on of Audit Recommenda tions	Implementat ion of audit recommend ations given by KPTCL or its audit or which have been agreed by Implementing Agency to be implemented.	100%	Compliance Reports	0.2% of the Quarterly Payment for every non-compliance

| 18. | Resource Management | Number of shift days for which resource present at the designated location / Total number of shift days | >=98% averaged over all resources designated for Implementing Agency services – calculated on a monthly basis | Attendance track Call Log Audit calls / visits Measured on a monthly basis | If the resource availability is less than 95%, then payment shall be deducted on the pro-rata basis.

(Total FMS cost per day divided by nos. of persons deployed)

Further deduction Rs. 2,000/- per day (NR) per engineer/shall also be made on account of loss of |

Sl. No.	Service	Parameter	Service Level	Measurement Tool/ Validation	Penalty
					services
		Resource provided is not as per specified certification / experiences	100% of the resource given	Experience Certificate and CV of FMS personnel submitted by Implementing Agency to the KPTCL	Per day deduction = 0.5 * (Monthly value for that manpower) / 30
19.	SLA Monitoring Report	Availability of SLA reports covering all parameters required for SLA monitoring within the defined time	7 working days from the end of the month	Monthly Report	5% of Quarterly Payment

6.15.7.3 SLA for security incident & event management

All events must be monitored, and all incidents should be analyzed/reported and resolved on a 24x7 basis. Security event management should be covered completely but not limited to:
- Virus/Malware outbreak
- Reconnaissance attacks
- Application/Website monitoring

Validate the incident with the guidelines provided and exclude if it is a false positive. Priority is the level of response time identified when the incident ticket is created or updated based on the degree of the impact.

The SLAs are applicable only for the L1 and L2 level escalations. The response time and resolution time for the issues raised shall be considered from the time of acceptance of the issue by the L1/L2 support teams.

Sl. No.	Measurement	Service	Service Level	Penalty
1	Incident Reporting	Any failure / incident on any part of the solution shall be communicated immediately to KPTCL as an exceptional report giving details of impact, if any. Monthly measurement. The SLAs are applicable only for the L1 and L2 level escalations.	100% incidents to be reported to KPTCL within 2 hours with the cause and action for the incident.	No Penalty
			Delay beyond 2 hours	1% of the Quarterly Payment for every 4-hour's delay on an incremental basis.
			100% incident log to	No Penalty

		The response time and resolution time for the issues raised shall be considered from the time of acceptance of the issue by the L1/L2 support teams.	be submitted to KPTCL that comprises exceptional & normal reportable activities by 5th of every month for the previous month.	

Sl. No.	Measurement	Service	Service Level	Penalty
			Delay beyond the date of submission	1% of the Quarterly Payment for every day's delay on an incremental basis.
2	Information Security	Any failure/incident on any part of the information security breach shall be communicated immediately to KPTCL as an exceptional report giving details of impact, if any. Monthly measurement.	100% incidents to be reported to KPTCL within 2 hours with the cause and action for the incident.	No Penalty
			Delay beyond 2 hours	1% of the Quarterly Payment for every 2 hours delays on an incremental basis.
			100% incident log to be submitted to KPTCL that comprises exceptional & normal reportable activities by 5th of every month for the previous month.	No Penalty
			Delay beyond the date of submission	1% of the Quarterly Payment for every day's delay on an incremental basis.

Sl. No.	Measurement	Service	Service Level	Penalty
3	Security Change Management	Measurement of quality and timeliness of changes to the solution. monthly measurement	100% of changes should follow formal change control procedures. All changes need to be approved by KPTCL.	1% of the Quarterly Payment for every non-compliance incident
			All changes should be implemented on time and as per schedule & without any disruption to business.	1% of the Quarterly Payment for every non-compliance incident
			100% incident log to be submitted to KPTCL that comprises exceptional & normal reportable activities by 5th of every month for the previous quarter.	No Penalty
			Delay beyond the date of submission	1% of the Quarterly Payment for every day's delay on an incremental basis.

4	Implementation of Audit Recommendatio ns	Implementation of audit recommendation s by KPTCLor its auditor which have been agreed by Bidder & KPTCL to be implemented.	100% on time to be implemented as per timelines agreed upon with KPTCL.	1% of the Quarterly Payment for every non-compliance incident

6.15.7.4 Performance related SLA

Business Applications and Portals:

The Implementing Agency is to quote for appropriate systems with specification to meet the performance requirement of system/application.

Sl. No.	Measurement	Service	Service Level	Penalty	Measurement Tool/Method
1	Average loading time of Static Page in a Web	Response time is an important factor from the perspective of EndUser Experience	< 2 m sec	If the deviation is: • Less by 1% of SLA, Then 0.5% of the Quarterly Payment • >1% but < 5% of SLA Then 5% of the Quarterly Payment • >=5% but <10% of SLA Then 20% of the Quarterly Payment • >=10% of SLA then No Payment	Implementing Agency needs to ensure capturing of the listed parameters without any manual interventions and submission for approval to KPTCL.
2	Average response time of Dynamic Content Pages in a Web (excluding Human Input time)	Responsiveness of KPTCL Would be critical to solution's performance	< 4 sec		
3	Average response time For utility Business Application (excluding Human Input time)	Responsiveness of Utility Business Application	< 5 sec		

Process Operations Response Times

Process operations response times (end to end) are required of no less than:

Sl. No.	Measurement	Service	Service Level	Penalty	Measurement Tool/Method
1	Process operations response times	Update transactions to commit transactions: 2 seconds Simple query: 3 seconds Complex query: 4 to 8 seconds Batch operations: 15 Mins	>=90%	0.5% of Quarterly FMS charges	Implementing Agency needs to ensure capturing of the listed parameters without any manual interventions and submission for approval to KPTCL.

Note:

Implementing Agency will carry out the Performance monitoring of Business Applications & Operations response via Application Performance Monitoring tools and will identify the root cause of performance & operations issues i.e. Business Application, IT Infrastructure Sizing, Network connectivity etc. for applying the applicable penalty.

6.15.7.5 Helpdesk Service Levels Support

Implementing Agency should setup a centralized helpdesk at the location mutually decided and agreed with KPTCL. The Implementing Agency shall arrange and maintain within the contract value and throughout the contract period, all infrastructure necessary for managing the Help Desk.

Resources deployed for providing support services should be equipped with mobile phones and other necessary equipment's and solutions. Cost of the

same, throughout the contract period shall be borne by the Implementing Agency within the contract value. Implementing Agency should provide multiple channels to log a complaint such as Cell phones, landlines, E-mail, Intranet etc. Outage of any component would be calculated as a time between logging the call and closing the call. The Calls and e-mails shall be assigned a priority level on the following basis:

Deviation (% of call not closed) would be calculated based on the formula (1-(calls close/calls logged)) *100

Sl. No.	Parameter	Description	Target	Penalty	Measurement Tool/Method
1.	Critical priority	Has critical impact on KPTCLs operations. There is certainty of financial loss.	Should be resolved within 1 hour	If the deviation is: • Less by 1% of SLA Then 0.5% of the Quarterly Payment • >1% but < 5% of SLA Then 5% of the Quarterly	Help desk Feedback and log details
2.	High priority	The high impact problem with effect on the efficiency of users.	Should be resolved within 6 hours		Help desk Feedback and log details

Sl. No.	Parameter	Description	Target	Penalty	Measurement Tool/Method
3.	Medium priority	The low impact problem with effect on the efficiency of users.	Should be resolved within 12 hours	Payment • >=5% but <10% of SLA Then 10% of the Quarterly Payment	Help desk Feedback and log details
4.	Low priority incident	A fault, which has no impact on normal business activities.	Should be resolved within 1 week	• >=10% of SLA then No Payment	Help desk Feedback and log details
5.	Re opened incidents	The call logged by KPTCL user should be resolved on a permanent basis. The call closed by the help desk should not be reopened by the KPTCL users within 2 days' time.	Call reopened should be less than 10% of the total call closed		Reopened Calls

The SLAs are applicable only for the L1 and L2 level escalations. The response time and resolution time for the issues raised shall be considered from the time of acceptance of the issue by the L1/L2 support teams.

6.15.7.6   Contractor Performance & Applicable Penalty

The maximum penalty in a month/quarter (excluding the service levels for Resource Management) shall be 10% of Facility Management Services (FMS) charges for that month/quarter for respective services/component. For Resource Management, penalty shall be applicable as mentioned in resource section. If the total penalty reaches the penalty cap more than three instances per year (for the entire duration of the contract) staring from the date of contract, the same shall be deemed as non-performance and unsatisfactory services. However, KPTCL reserves the right to condone any such act of non-performance and unsatisfactory services considering various circumstances at that point in time.

The Total Penalty calculated (Including all Areas/Parameters of SLA) shall be on a pro- rata basis for each month and shall be deducted from quarterly payment of Facility Management Services (FMS) phase. The Total Penalties (Including all Areas/Parameters of SLA) calculated for a month/quarter shall not exceed 50% of the periodic monthly/quarterly payments including all of Facility Management Services (FMS) charges. If the penalties exceed more than 50% of the total periodic payment, it will result in a material   breach.   In   case   of a   material   breach,   the Implementing Agency will be given a cure period of one month to rectify the breach failing which a notice to terminate may be issued by KPTCL.

In the event of termination of contract based on non-performance by the Implementing Agency as per SLA, the Implementing Agency will be solely responsible for risk and cost factor thereon. In such an event, the performance Bank Guarantee furnished by the Implementing Agency will be en-cashed and will stand forfeited.

Penalty related to delivery of services may be waived by KPTCL, if cause of such delay is not in Implementing Agency control or the delay is due to KPTCL written request. Penalty shall be adjusted in case KPTCL approves such waiver. The penalty recovered shall be adjusted in the subsequent payment and no interest shall be paid on this amount.

6.16 Exit Management and Knowledge Transfer

At the end of Contract period, the Implementing Agency will be required to provide the necessary handholding and transition support including all information as may be necessary and reasonable to effect as a seamless handover as practicable in the circumstances to KPTCL or designated staff or any other agency that is selected for maintenance of EAAAP system post completion of Contract with the Implementing Agency .

The Implementing Agency will provide all information, handholding and support for all the activities and information in its possession or control at any time during the exit management period. Anything in the possession or in the control of Implementing Agency , associated entity or sub OEM is deemed to be in the possession or control of the Implementing Agency. The transition and handholding process will include but not be limited to, conducting a detailed walkthrough and demonstrations of the EAAAP System, handing over all relevant documentation, addressing the queries/clarifications with respect to the working/performance levels of the DC IT Infrastructure,), Software Licenses, handover of customized source codes, policies and procedure document, conducting training sessions etc.

The Knowledge transfer activity is an integral part of the scope of work assigned to Implementing Agency . This knowledge transfer activity will have to be carried out effectively, even in the case of end of Contract with the Implementing Agency or is terminated before the planned timelines.

Please note that this is an indicative list, any other activity, over and above these, as may be deemed necessary by the KPTCL or designated staff or any other agency that is selected for maintenance of EAAAP System to meet the service levels and requirements specified in the contract are also required to be performed by the Implementing Agency at no additional cost.

In the case of closure or termination of the project, the Parties shall agree at that time whether, and if so during what period, the provisions of this schedule shall be applied. The Parties shall ensure that their respective associated entities will carry out their respective obligations set out in this Exit Management Schedule.

6.17 Transfer of EAAAP System

a) KPTCL shall be entitled to serve notice in writing on the Implementing Agency at any time during the Exit Management period requiring the Implementing Agency and/or its sub-contractors to provide the KPTCL with a complete and up to date list of the assets and System configurations, License details, Customized Code within 30 days of such notice.

b) KPTCL shall also be entitled to serve notice in writing on the Implementing Agency at any time prior to the end of Exit Management period requiring the Implementing Agency to transfer the overall control to KPTCL or its nominated agencies.

c) In case of contract being terminated prematurely by KPTCL, the KPTCL reserves the right to ask Implementing Agency to continue running the project operations for a period of 3 months after termination orders are issued. In case of contract being terminated by Implementing Agency , KPTCL reserves the right to ask selected Implementing Agency to continue running the project operations for a period of 6 months after termination notice is served by Implementing Agency .

d) Upon service of a notice under this Article, the following provisions shall apply:
   i. All title to the assets shall be transferred to KPTCL, on or before the last day of the exit management period.
   ii. Payment to the outgoing Implementing Agency shall be made to the tune of last set of completed services/deliverables, subjected to the approval and compliance on contractual and SLA terms & conditions.

6.17.1   Transfer of Agreements

On the request of KPTCL or its nominated agency the Implementing Agency shall effect such assignments, transfers, licenses and sub-licenses as KPTCL may require in favor of the KPTCL or its replacement implementation agency in relation to any equipment or service, maintenance or service provision agreement between selected Implementing Agency and third party lessors, service providers, and which are related to the services and reasonably necessary for the carrying out of

replacement services by the KPTCL or its nominated agency or its replacement Implementing Agency .

6.17.2   **Exit management plan**

The Implementing Agency shall prepare an Exit Management Plan for transfer of operations to the KPTCL or its nominated agency or its replacement Implementing Agency . In the event of termination or expiry of contract with KPTCL, without affecting services to stakeholders adversely. The Implementing Agency shall get this process approved by KPTCL. The Exist Management Plan shall include, but not be limited to, the following:

a) A detailed program of the transfer process that could be used in conjunction with a replacement Implementing Agency including details of the means to be used to ensure continuing provision of the services throughout the transfer process or until the cessation of the services and of the management structure to be used during the transfer;

b) Plans for the communication with such of the Implementing Agency 's sub OEM, Bidder, staff, suppliers, customers and any related third party as are necessary to avoid any material detrimental impact on Project's operations as a result of undertaking the transfer;

c) Plans for provision of contingent support to KPTCL and Replacement Implementing Agency for a reasonable period after transfer.

d) The Implementing Agency   shall re-draft the Exit Management Plan annually thereafter to ensure that it is kept relevant and up to date.

e) Each Exit Management Plan shall be presented by Implementing Agency to the Competent authority at KPTCL and approved by KPTCL or its nominated agencies.

f) In the event of termination or expiry of Agreement, Project Implementation, or

Service Levels, each Party shall comply with the Exit Management Plan.

g) During the Exit management period, the Implementing Agency shall use its best efforts to deliver the services.

h) Payments during the Exit Management period shall be made in accordance with the Terms of Payment Schedule and Contractual conditions or as mutually agreed between the Implementing Agency and KPTCL.

i) An Exit Management plan shall be furnished by the Implementing Agency   in writing to the   KPTCL or its

nominated agencies within 90 days from the date of signing the contract.

6.17.3   Facilities to be provided by Client

1) Providing required details of existing Legacy system and any other Systems which are required for Integration.
2) Providing necessary approvals and signoffs on mutually acceptable conditions.
3) Arranging any meeting or workshop with the Legacy Application Owners or Vendors.
4) Space for implementation of Centralized IT - Help Desk.
5) Necessary sitting space with adequate facilities be provided by KPTCL at Corporate Headquarters.

7. Section VII: Functional Requirement Specification

7.1 Functional Requirement Specification of EAAAP System

The Functional Requirement Specifications (FRS) have following sections with the detailed functionalities, which needs to be earmarked responses as following:

7.2.1 Planning and Project Monitoring Module

Sl. No	Requirement description
	Project Planning
1	Ability to Communicate to members after Project Initiation Ability to provide planning & engineering support being a repository of documents & data like:
	a) Existing Power Map and Single Line Diagrams
	b) Data on loading of all existing transformers & lines
	c) Topo sheets (for lines)
	d) Information on upcoming generation capacities
	e) Information on upcoming industries
	f) Government & regulatory information
	g) Land Utilization Plan
	h) Structure Layout Diagrams
	i) Technical specifications
	j) Risk & effective mitigation strategies
	k) Previous projects information
	l) Learning from other projects
	m) Open access applications
	n) Land information (availability, ownership, cost, etc.)
	o) Other historical information, etc.

Sl. No	Requirement description
2	Ability to store details of statutory clearances, e.g. forest clearance, clearance from aviation authority, etc.
3	Ability to incorporate security measures, to limit changes by project owner / manager to only their respective projects
5	Ability to provide Project Management Tools for developing project plan
6	Ability to revise project plans
7	Ability to tie-up all documents related to a project in project control
8	Planning Support - Ability to create planning support repository which will consist of documents related to standard templates of resources, risk & effective mitigation strategies, learning from other projects, other historical data etc.
9	Ability to create project profile - Name, type, capacity, mode of funding, project cost center, location, beneficiaries, major milestones, technical details, financial details, etc.,
10	Ability to provide Indexation and categorization of proposals for new projects / schemes
11	Ability to record project cost estimates, during project setup
12	Ability to provide index and categorize various proposals for new projects /schemes. This is needed to keep track of the stage at which a new proposal is presently or to get a view of all the proposed projects or any one of the projects or cumulative.
13	Ability to highlight total plan budgets, based on five-year plan
14	Ability to identify projects for each year, for each office
15	Ability to provide template-based feasibility reports
13	Ability to provide template based DPR preparation
14	Ability to maintain vendors database and standard rates
15	Ability to create and link projects, sub projects, activities and tasks
16	Ability to create a Adhoc project, where a work break down structure is not required
17	Change in individual task completion dates, should reflect in overall project milestone dates

Sl. No	Requirement description
18	Ability to assign project owner, project manager, accountable person and key stakeholders
19	Ability to classify type of projectsturnkey/modular at project planning stage itself.
20	Ability to maintain a database stating technological options available in the market with financial cost involved
21	A suitable mechanism to index and categorize various proposals for new projects/schemes. This is needed to keep track of the stage at which a new proposal is presently or to get a view of all the proposed projects or any one of the projects or cumulative
22	Project planning to include schedule for material requirement
23	Project Planning steps should cover user defined work-flow with the ability to modify and approve the work-flow
24	Ability to index, record, capture and track every single document (file) associated with the project in Project Control Folder
Project Scheduling	
25	Ability for create pre-award schedule (timeline for finalisation of specs, NIT, bid evaluation timelines, contract)
26	Ability to revise the pre-award schedule including splitting, stretching and crashing of activities
27	Ability to support for attachments such as drawings, specs, instructions etc., in formats such as PDF, CAD, Visio, text/flat files, PPT, XLS, DOC, RTF, TIF, GIF, JPEG etc.,
28	Ability to balance resource usage in a given timeframe, to ensure optimal usage
29	Ability to Import/Export data to industry standard project management software applications such as Primavera/Project Scheduler/MS Projects etc.,
30	Ability to create project wise and department wise budgets for various projects/sub modules
31	Ability to define milestones with categorizations like HOLD point, CHECK point, etc., required actions at the milestones, and authority responsible for action

Sl. No	Requirement description
32	Ability to restrict/allow progress based on completion of required actions at HOLD point, CHECK point, etc.
33	Ability to link between projects, activities and tasks
34	Ability to schedule payments against key milestones
35	Status of projects awaited for order
36	Ability to generate report on key project milestones and scheduled payments
37	Ability to generate report on estimate time-based expenditure on each project/scheme
38	Ability to generate report on critical paths in projects
39	Ability to generate reports confirming to technical, operational, regulatory, statutory and other business requirements
Project Execution	
40	Ability to track the status of every item in the project package
41	Ability to record vendor deliverables inspection and results
42	Ability to issue compliance certificate, post quality inspection
43	Ability to record and track quality deviations
44	Ability to reconcile quality check against quality plans/checklists
45	Ability to update physical and financial progress
46	Ability to track completion of each module/activity, leading to the overall commissioning of project
47	Ability to track deliverables against individual vendors, leading to respective contract closure
48	Ability to generate, record and manage contract closure certificates
49	Submission control mechanism to set deadlines to receive budget requests
50	Ability to track changes made to the budgets, after budget approvals
51	Ability to setup a billing plan, that allows the release of payments upon achieving set

Sl. No	Requirement description
	milestones
52	Ability to break projects into activities, sub-activities indicating milestones with commonly used methods like PERT, CPM
53	Ability to change milestones pre and post facto
54	Ability to track / record "Issue Slip" by the designated authority to allot materials to be issued by the store for works at desired location
55	Ability to maintain online quality assurance during project execution
56	Ability to record and track quality deviations
57	Enable management to achieve organization-wide compliance and greater efficiencies in project delivery by capturing and deploying best practices and continually improving processes.
58	Enable project managers to gain insight into the performance of overall projects/schemes by identifying relevant project trends and problem areas using powerful analysis tools.
59	System should enable online project management process by enabling team members to easily manage, track, and report on their project activities through familiar tools, like the Web
60	Ability to incorporate security measures, to limit changes by project owners to only their respective projects and simulations.
61	Ability to track changes, with reasons, time and moderator.
62	Ability to record and track Bank Guarantee information
63	Ability to generate alert on Bank Guarantee expiration
64	Ability to generate note on Bank Guarantee extension/encashment/return
65	Ability to setup a billing plan, that allows the release of payments upon achieving set milestones.
66	Ability to record manpower deployment by contractors
67	Store baseline and revised plans
68	Report on activity-wise material consumption

Sl. No	Requirement description
69	Report on quality and quantity deviation
70	Report on status of the contracts
	Project Monitoring
71	Ability to monitor each activity/task in the project
72	Ability to monitor variations from schedules and send alerts
73	Ability to generate alerts for slippages at all levels (post and anticipatory)
74	Ability to generate alerts for delay in payments
75	Ability to generate alerts for delay in starting/completion major activities/milestones
76	Ability to generate Gantt charts, PERT, CPM, histograms, tables, charts etc.,
77	Ability to monitor project, resource wise, timeline wise, department wise and funding agency wise
78	Ability to monitor estimates versus actual : money amounts, services, labour, time span, vehicles used, plants used etc.,
79	Ability to monitor all projects consolidated, individual projects and individual tasks
80	Ability to capture all the project management activities for the entire cycle of construction projects i.e. from the point of proposal of a new project to final testing & commissioning of the project.
81	Ability to track every document in the project - to trace with who is the current owner of the file/document, for how long and why
82	Provide a central tracking system that enables project teams to record, assign & resolve issues and capture related risks pertaining to project.
83	Ability to store baseline and revised plans
84	Ability to make reports to funding agencies
85	Ability to display project total, accumulated costs in terms of actual, revenue, capitalization costs, future commitments etc.
86	Ability to maintain project percentage completed status (financial as well as physical) based on work to date

Sl. No	Requirement description
87	Ability to record delay in activities attributed to externalities (Legal cases etc.)
88	Ability to raise alerts for requirements for liaison with local authorities to solve out some external issues
89	Ability to check adherence to material availability with provision of alert generation in case of deviation
90	Ability to carry out resource tracking across projects
91	Ability to incorporate feedback from random inspection teams from corporate for major projects
92	Ability to generate alerts for delay in payments
93	Ability to record and monitor data on accidents during the project execution project and resources linked to each vendor
94	Ability to support NPV (Net Present Value) and SVA (Shareholder Value Added), analysis, IRR for projects and subprojects
95	Progress reports to funding agencies, management, regulatory bodies and others as per requirement
96	Slippage reports for all major milestones
97	Drill down facility and Ad-hoc reports, with filter, sort, query, charts etc.,
98	Ability to display project activities in Gantt charts, pie charts, histograms, tables, etc. Illustrating 'actual' to 'originally planned' projects progress in-terms of schedule and cost
99	Ability to define project related checklist / steps and issue alert for deviation/non-compliance
	Project Accounting
100	Ability to maintain database of vendors and standard rates including labour rates
101	Ability to maintain IEEMA price variation database
102	Record the costs for each major project or a set of activities under investigation; cost for each major milestone

Sl. No	Requirement description
103	Provide an analysis of resources used on a project compared to the estimate for different categories, i.e. money, time, materials, overheads etc with cost implications for all
104	Maintain all the cost records for the duration of the project;
105	Ability to reflect inflation in project costs
106	Ability to record information on payment terms, milestones, etc.
107	Ability to support alpha-numeric characters for project codes- no limit in length
108	Support for auto-generation and manual-generation of project codes and preserve uniqueness in project codes
109	Ability to review completeness/ correctness of invoice and certify completion of milestone
110	Ability to approve invoice and send information to Finance Deptt. For payments (hierarchy-based approval)
111	Ability to integrate with Financial Management System to view real time information on status of payments against unique project codes and invoice number
112	Ability to maintain payment records for the duration of the project against unique project codes
113	Ability to transfer data from Capital Work in Progress to completed capital works.
114	Ability to transfer data relating to completed capital works to the Fixed Assets system.
115	Ability to conduct project wise cash flow analysis for a minimum of 5 years
116	Cash flows to be monthly, quarterly, yearly and user defined as well
117	Ability to incorporate interim cash flow from a partially commissioned project to calculate its final IRR of the total project
118	Ability to establish security measures to ensure that the personnel are allowed to review/edit projects they are involved with ensuring proper authority and access control
119	Ability to notify all appropriate personnel regarding project closure
120	Ability to integrate with Standard accounting journals for areas such as interest

Sl. No	Requirement description
	capitalization and overheads, transportation etc.
121	Ability to provide security measures, to ensure that the project closure is done by authorized personnel only
118	Ability to generate reports confirming to technical, operational, regulatory, statutory and other business requirements
119	Ability to generate reports on current accumulated cost of a project vis-a-vis estimated cost
120	Provide up to date cost reports to management- project wise, activity wise as well as meeting customized requirements
	Integration with other programs
122	The system will use data captured by the Stores, finance, Payroll and Purchasing systems and pass the information to the General Ledger;
123	Data relating to completed capital works will be transferred to the Fixed Assets System.
124	Integration with stores control for stock items used
125	Ability to record Direct purchasing of goods and services (purchase orders; goods received notes etc for goods and services which do not pass through the stores system) through the Purchasing system
126	Ability to integrate with Standard accounting journals for areas such as interest capitalization and overheads etc into the General Ledger
127	Final costs transfer to general ledger only on project completion certification
128	Ability to link with revenue accounting on completion of the project
129	Index project cost codes to relevant general ledger account.
130	General Ledger accounts to be updated directly from the project accounting system as an associated function
131	Assets created through works under project cost control must be identified on completion for entry to the asset register.

Sl. No	Requirement description
132	All data must be identified to its correct financial year and month in that financial year so that any queries over the accuracy of charging resources to the project can be properly investigated. Consolidated data for each year is not adequate.
133	Capitalization of Projects (Capital work in progress). From projects to Assets Management.
134	Possible to link Purchase Order number of contracts (with contractors) with the project number
135	Integration with the Materials Management module to ensure material availability in site based on current stock and requirement of the project.
	General Requirements
136	Ability to build a comprehensive project database to capture the data pertaining to all aspects of projects
137	Ability to do Resource tracking across projects
138	Provision of Timesheets to facilitate time booking by project personnel
139	Ability to store and retrieve technical / financial qualifications of all suppliers and contractors and their past performance history
140	Ability to generate technical / financial specifications for projects and to analyze and evaluate the bids received
141	Enabling what-if modelling scenarios
142	Ability to record the costs for each major project or a set of activities under investigation;
143	Ability to provide an analysis of resources used on a project compared to the estimates for different categories, i.e., money, time, materials, overheads etc.;
144	Ability to maintain the records for the duration of the project and upto atleast 5 years after completion
145	Ability to provide management reports.
146	Ability to reflect inflation in project costs
147	Ability to highlight and correct errors, if detected in project management with proper notifications and authorization controls

Sl. No	Requirement description
148	Full data on any project must be kept throughout the life of a project and must be able to be printed out and/or reviewed on screen at any time.
149	Ability to create secure project codes
150	Ability to support alpha-numeric characters for project codes - no limit in length
151	Ability to support for auto-generation and manual-generation of project codes, and preserve uniqueness in project codes
152	Ability to capture documentation related to execution of various projects (existing & old) for retrospective analysis in future.
153	Ability to enable project managers to gain insight into the performance of overall projects / schemes by showing relevant project trends and problem areas using powerful analysis tools.
154	Enable project managers with what-if modelling scenarios to understand the impact of trade-offs and evaluate strategies to mitigate risk for projects /schemes.
155	System should enable online project management process by enabling team members to easily manage, track, and report on their project activities through familiar tools, like the Web
156	Ability to incorporate security measures, to limit changes by project owners to only their respective projects and simulations.
157	Ability to track changes with reasons
158	Ability to conduct cash flow analysis for a minimum of 5 years
159	Cash flows to be monthly, quarterly, yearly and user defined as well
160	Ability to establish security measures to ensure that the personnel are allowed to review/edit projects they are involved with.
161	Prevent further transaction processing/transfers against finalized jobs/projects
162	Capability to re-open closed projects
163	Ability to notify all appropriate personnel, that a project is closed
164	Ability to provide security measures, to ensure that the project closure is done by authorised personnel only
165	Ability to print project reports at summary level and detailed level

Sl. No	Requirement description
166	Ability to provide Drill down facility and Adhoc reports, with filter, sort, query, charts etc.,
167	Ability to integrate seamlessly with enterprise project structure/hierarchy and individual project structures
168	Ability to calculate schedule parameter uncertainty, perform probabilistic schedule risk analysis, probabilistic cost risk analysis, risk simulations, risk analysis reports
169	Ability to record Direct purchasing of goods and services
170	Ability to integrate with Standard accounting journals for areas such as interest capitalisation and overheads etc into the General Ledger
171	System should ensure Final costs transfer to general ledger only on project completion certification.
172	General Ledger accounts to be updated directly from the project as an associated function.
173	Assets created through works under project cost control must be identified on completion for entry to the asset register.
174	All data must be identified to its correct financial year and month in that financial year so that any queries over the accuracy of charging resources to the project can be properly investigated. Consolidated data for each year is not adequate.
175	Possibility to link Purchase Order number of contracts (with contractors) with the project number
176	Capture documentation related to execution of various projects (existing & old) for retrospective analysis in future.
177	Prevent further transaction processing/ transfers against finalized jobs/projects-No post fact editing
178	Ability to generate Gantt charts, histograms, tables, charts etc.
179	Ability to send SMS alerts to concerned officials at defined milestones for actions to be taken (e.g. payments) and deviations from schedules
180	Ability to provide necessary information to populate predefined Balanced Score Cards for monitoring of Key Performance Indicators for Planning, Engineering and Project function

Sl. No	Requirement description
180	Ability to provide necessary information to populate predefined Balanced Score Cards for monitoring of Key Performance Indicators
List of required Reports	
181	Ability to generate status report on: • Each project • Each vendor & sub-vendor • Projects started/ scheduled to end (as per LoA) in particular financial year • Projects funded by particular funding agency • Type of project (Greenfield/ Brownfield/ Renovation & Modernization • and lines/ substations/ bays/ transformer/ augmentation), etc.
182	Ability to generate proposals for new projects / schemes for approval by relevant authority
183	Ability to generate report on prioritised list of schemes to be undertaken based on Load Flow Study results, cost benefit analysis and budgetary constraints
184	Ability to generate Preliminary and Detailed Project report for new projects / schemes for approval by relevant authority
185	Ability to generate report on the current status of new proposals
186	Ability to generate report on status of clearances for each project
187	Ability to generate report on BOM/ BOQ
188	Ability to generate report on cost estimates for particular projects / scheme
199	Ability to generate reports confirming to technical, operational, regulatory, statutory and other business requirements
200	Ability to generate report on revised cost estimates during execution
201	Ability to generate report on key project milestones and scheduled payments
202	Ability to generate report on estimated time based expenditure on each project / scheme
203	Ability to export relevant project data into MS Excel for relevant reporting and analysis.

Sl. No	Requirement description
204	Ability to generate pre-customized report formats corresponding to the requirements of various funding agencies like JICA, PFC, REC, etc
205	Ability to generate report on project percentage completed status (financial as well as physical) based on work to date
206	Ability to generate reports confirming to technical, operational,regulatory, statutory and other business requirements
207	Ability to generate reports on current accumulated cost of a project vis-à-vis estimated cost
208	Ability to categorize and generate report on cost incurred in all projects in a particular year
209	Ability to categorize and generate report on costs incurred in all projects supported by a particular funding agency
210	Ability to categorize and generate report on cost incurred in all projects w.r.t. other details like substation or line projects, greenfield/ brownfield projects, etc.
211	Ability to generate report on budgeted cost of a project (against each unique code) vis-à-vis actual cost on a quarterly basis for capital budget monitoring
212	Report on Audit Paras
213	Report on Court Cases
214	Report on Arbitration Cases
215	Report on Material For Annual Report

7.2.2 Inventory, Procurement and Contracts Management Module

I

Sl. No.	Requirement Description		
	Material Records Management (Material Master)		
1	Ability to record and maintain item master list with availability of material number/code/part code as primary identifier for various material types including spares and consumables		
2	Ability to generate material code automatically for item entry to item master as well as support manual entry		
3	Ability to support alphanumeric material codes		
4	Ability to capture detailed material information including the categories of data to support core material management transactions like goods receipt, goods issue etc.		
	1) Basic data like Material No, Item Description, UoM, status, origin, type, conversion factors, ownership details etc.		
	2) Inventory management data i.e. material history, material classification, inventory location, **safety stock, ROLetc.**		
	3) Purchasing data i.e. purchase rule, tax/duties rule, ordering batch size etc		
	4) Costing data i.e. standard price, moving average price etc.		
5	Ability to support item groups or categorization of material into material groups, type and location etc		
6	Ability to support approval workflow and automatically trigger material data authorization upon material data entry		
7	Ability to modify material details and resubmit for approval		
8	Ability to track material authorization status pre and post approval		
9	Ability to track changes made to material record with details of changes made, changing entity and approver of changes		
10	Ability to reject material record and update material record status with reasons		
11	Ability to record whether material is moving or obsolete delete a material record which are moving, obsolete		
12	Ability to link material to vendor / supplier details		
13	Availability of search functionality based on material numbers, wild card entries, partial item description, shelf life, warranty period, specifications, etc		
14	Ability to display partial or full material master information to users across functional areas and restrict display of all information based on user roles/display authorization levels		
15	Ability to support multiple Units of Measure (UoM) for an item alongwith conversion factors		
16	Ability to create catalogues for different material types, spares and miscellaneous items		
17	Ability to capture details regarding insurance of the materials		

18	Ability to generate detailed item wise report of material information		
19	Ability to generate report on revaluation of materials and display valuation history		
20	Ability to generate report on material performance e.g. material history report, supplier blacklist report, damage during warranty period		
21	Ability to generate material reports for separate material type, material group, location etc		
22	Ability to handle tax variations in calculation of material pricing		
23	Ability to conduct material valuation according to		
	a) Accounting norms		
	b) regulatory norms		
24	Ability to assign authority to declare scrap material based on the Delegation of Power		
25	Each item should be linked with its approved technical drawing and equipments with their manufacturer's		
26	Ability to classify inventory under capital items, consumables, OEM spares and disposables.		
27	Ability to perform inter store material transfer		
	Manage Inventory		
28	Ability to record multiple physical store locations, capturing individual store physical description details		
29	Ability to support multiple inventory status for individual items across all storage locations including the following:		
	a) Available for Issue vis-à-vis Order Position		
	b) Scrapped		
	c) Obsolete		
	d) In Transfer/ Under Inspection		
	e) Blocked		
	f) Restricted Use		
	g) Under Repair		
	h) Special Project Stock		
	i) Reserved Stock		
30	Ability to record and track inventory status for Turnkey Contracts (these stocks are not held in KPTCL stores, but materials are recognized by issuing SR and immediately transaction is completed by issuing SRV to Contractor)		
31	Ability to track material movement for each store including:		
	a) Receipts		
	b) Issues		
	c) Inter Store Transfers		
	d) Transfer to Scrapped Stock		
	e) Transfer to Obsolete Stock		
	f) Consignment movements		
	g) Quarantines Stock		
	h) Returns		
	i) Under Repair		
32	Ability to track and monitor stock at various divisional stores at individual store level and at aggregate level		

33	Ability to plan for inventory based on consumption pattern, present stock, procurement lead times, projected requirements etc		
34	Ability to perform various kinds of inventory analysis like Fast/Slow/moving analysis, etc.		
35	Ability to analyze inventory in terms of 'items reached re-order/ safety level' and 'critical' items and generate appropriate alerts when inventory reaches predefined re-order points		
36	Ability to store shelf life details for items and display alerts when items reach end of life (user defined) and remains un-used.		
37	Ability to store material movement history in each store and for each item e.g. fast, slow moving and moving.		
38	Ability to classify inventory based on various inventory analysis like for various actions e.g. Stock taking, Criticality etc		
39	Ability to classify inventory under bulk material, finished goods, capital items, job work and disposables		
40	Ability to assign a service level to an inventory item e.g. 100% for critical items and this will be linked to re-order levels		
41	Ability to schedule stocktaking as per predefined business rules e.g. A Level Items will be counted once every month and freeze inventory for stocktaking		
42	Ability to support in stock replenishment for all stock items based on parameters like reorder point, safety stock level, consumptions patterns etc. The system should estimate ordering quantity and delivering schedule which can be converted automatically into purchase requisitions		
43	Ability to trigger stock replenishment for all stock items on the basis of various parameters like reorder level, safety stock level, material consumption, maximum stock level, lead time of material		
44	Ability to estimate suggested ordering quantity and delivering schedule for individual items for stock replenishment		
45	Ability to generate purchase requisitions based on re-orders automatically for items based on predefined system configurations		
46	Ability to support inventory valuation methods like Weighted Average, Standard Cost, Actual Cost etc.		
47	Ability to estimate total inventory carrying cost based on inventory valuation method		
48	Ability to generate report on Stores Accounting capturing the quantity and value information as per the current formats, for e.g., Report on ATD (Accounts Transfer Debit) and ATC (Accounts Transfer Credit)		
49	Ability to generate item wise stock status reports on current inventory status based on goods receipt, goods issue and stock balances on a daily/weekly basis. Also, ability to generate stock status on past date/period		
50	Ability to generate consolidated YTD/MTD inventory report on receipts, issues, stock adjustments, scrap inventory, goods returned to suppliers, etc		
51	Ability to consolidate and generate report on item wise total inventory levels for all stores		
52	Ability to generate stock-out reports		

53	Ability to generate report on inventory analysis e.g. material consumption pattern across stores		
54	Ability to generate report on availability of inventory during requisitioned and actual service level for items		
55	Ability to generate report on age analysis and shelf life evaluation		
56	Ability to generate report on un-used materials procured for a specific purpose		
57	Ability to track material movement for identification of slow & moving stocks and ability to generate alerts over a periodic basis.		
58	Ability to estimate ordering cost and EOQ for individual items		
59	Ability to support all approvals with digital signature/Bio metric of the approver		
	Goods Receipt		
60	Ability to take into consideration imprest material account		
61	Ability to take into consideration the buyback process work ex: purchase of batteries by exchanging old batteries		
62	Ability to record receipt of inventory items received from vendors/suppliers and generate Goods Receipt Note including record of place/location of receipt and goods details (unit, weight, specifications etc)		
63	Ability to record receipt of commercial documents received with goods like excise invoice duplicate for transport copy along with goods		
64	Ability to record receipt of technical documents like quality certification report received along with goods.		
65	Availability of control functionality for goods receipt i.e. receiving in excess/shortfall of Purchase Order (PO) quantity, quantity tolerance functionality or PO revision functionality		
66	Ability to support quality inspection after goods receipt and before introduction of goods to inventory and generate quality inspection report and record the inspection results for the goods		
67	Ability to support three-way matching of Good Receipt Note with Purchase Order (PO), Quality Inspection Report (QC) and Delivery Instruction		
68	Ability to club multiple lorry receipts (LRs) / consignments into single SRV		
69	Ability to record partial delivery of items and track different lots of supply from suppliers for the same PO		
70	Ability to automatically trigger evaluation of goods receipt and initiate payment process		
71	Ability to raise bill for payment with workflow based approval hierarchy for evaluation of payment		
72	Ability to record receipt of goods and track inter store transfers		
73	Ability to receive goods without P.O. or without proper documents and subsequent adjustment/regularization with approval of competent authority		
74	Ability to display updated inventory status after goods receipt for individual items, item groups and across stores		
75	Ability to receive advance shipment notice and attach scanned documents		

76	Ability to record receipt of inventory items purchased at different levels of hierarchy like Head Office Purchase and Area Office Purchase		
77	Ability to generate intimation notice to purchasing authority in case of return or replacement of rejected goods		
78	Ability to generate report on all Goods Receipt Note created over a period i.e. weekly\monthly for a storage location		
79	Ability to generate inventory status report based on goods received over time opening balance, goods received, goods issued, closing over time opening balance, goods received, goods issued, closing i.e. daily, weekly and monthly status report.		
80	Ability to generate report for all Goods Receipt Note and bill payments against individual PO		
81	Ability to generate exceptions during Goods Receipt including rejected quantity, items not as per P.O etc		
82	Ability to generate report on bills raised against SRV over a periodic basis in a store		
83	Ability to generate list of items with guarantee clauses, in particular guarantee period along with Delivery Instruction (DI) date		
84	Ability to enter consignee wise details of material received/payment made.		
85	Preparation of security/EMD/PEMD ledger		
86	Issue of PEMD certificate for deposit of PEMD with KPTCL		
87	Ability to generate list for refund of EMD for unsuccessful vender/refund of part EMD after retaining security of the P.O.		
88	Ability to generate list of statutory deductions i.e. income tax/GST		
89	Ability to generate item wise (Towers, ACSR, T/F etc) list of pending bills firm wise/payments made during months.		
90	Ability to generate list of updated rates of each item purchased PO wise.		
	Goods Issue		
91	Ability to create material issue request/store requisition (SR) for material including spares and miscellaneous items. The requisition record should have a reservation number, date of reservation, requestor name, stock location, material part number, quantity required, delivery address, accounting and costing information etc.		
92	Ability to generate SR manually and also automatically based on maintenance work orders, capital works project requirements estimated in system		
93	Availability of control functionality for goods issue i.e. issuing in excess/shortfall of SR quantity, quantity tolerance functionality or SR revision functionality		
94	Ability to modify material issue requests/SR based on approver update		
95	Ability to track changes made to SRs and display reservation history		
96	Ability to delete SRs automatically based on cancellations in work orders, capital works project etc and record reasons for cancellation		
97	Availability of configurable approval workflow for SR approval		
98	Ability to display material issue requests awaiting approval		
99	Availability of material control functionality to check against SR available inventory and approval status for issue of goods		

100	Ability to display availability of issuing material in each store before goods issue		
101	Ability to issue goods and generate goods issue slip		
102	Ability to support and create pick lists for those items awaiting issue to a capital works project, plant maintenance job, customer job, transfer request or over the counter issue		
103	Ability to configure the information details in the pick lists based on item details		
104	Ability to display updated store inventory status based on goods issued and available inventory at the store		
105	Ability to consolidate pick lists for items to be supplied to the same destination, user or job		
106	Ability to track that the pick list has been picked packed and issued and display the status of the pick list e.g. being picked, being packed, issued etc.		
107	Ability to capture delivery information within the system e.g. transportation type, carrier details, dimensions, weight etc.		
108	Ability to generate Gate Pass for material movement based on Goods Issue note		
109	Ability to modify goods issue information details e.g. quantity, material number if required and track modification history		
110	Availability of dual unit of measure i.e. UoM for storage e.g. units and UoM for issue e.g. kg and a defined relation between them leading to enable to issue exact quantity as requested in issue slip.		
111	Ability to record controlled issue of goods without reference document or store requisition e.g. goods issue for scrap (during emergency without SR)		
112	Ability to generate record on goods issued against approved SRs on an item wise and generate exceptions on a periodic basis		
113	Ability to generate report on the goods issued per store over a configurable periodic basis i.e. weekly/monthly		
114	Ability to generate report on aggregated goods issued for a particular item over a periodic basis i.e. weekly/monthly		
115	Ability to generate stock overview report showing goods received, goods issued and inventory status for all items in a store		
116	Ability to generate stock consumption statistics based on goods issue for the items over time		
117	Ability to block the requisitioned quantity in the system		
118	Ability to keep check on material issue depending on submission of timely utilization certificate or previous materials from end users (in totality or in parts)		
119	ability to integrate bar code tracking system with store inventory for seamless tracking of material, scanning of barcodes at stages from receiving goods to shelving them and real time visibilty of material		
120	Ability to record and track inter-store transfer of materials		
	Inter-Store Transfer		
121	Ability to support physical movement of stock between stores i.e. inter-store transfers		
122	Ability to record order for inter-store transfer by pre-configured		

	authorized entity in the system		
123	Ability to generate material issue request/store indent form/ store transfer note (SIN) based on order for inter-store transfer from the material requesting store to the material issuing store		
124	Availability of configurable approval workflow for SIN approval for inter-store transfer		
125	Ability to modify SIN based on approver update		
126	Ability to issue goods and generate Goods Issue Note for inter-store transfer		
127	Ability to post material transfer and update inventory status of issuing store		
128	Ability to generate Delivery Challan and Gate Pass based on Goods Issue note for inter-store transfer		
129	Ability to record receipt of goods at receiving store and generate Good Receipt Note		
130	Ability to display updated inventory status after goods receipt in receiving store		
131	Availability of material control functionality to check goods issued from issuing store with goods received in receiving store and post transfer of goods		
132	Availability of capture the Rate Contracts for Inter Store Transfer and rationalize the transportation linkage to Finance Module		
133	Ability to generate report on item wise inter-store transfer consolidated across stores		
134	Ability to generate report on all items received and issued for inter-store transfer for a storage location on a periodic basis		
135	Ability to generate exceptions and item quantity mismatches arising out of inter-store transfer		
136	Ability to report on trends of regular item shortages in a store resulting in inter-store transfers Store Return		
137	Ability to record and support workflow for return of un-used or excess material from field/sub-station to stores		
138	Ability to record and segregate dismantled material into scrap and healthy		
139	Ability to generate Store Return Warrant (SRW) on goods to be returned from field		
140	Ability to record receipt of goods at receiving store, generate Goods Receipt note and track its SR when goods are returned to store with separate code for used and damaged material		
141	Ability to display updated inventory status after goods receipt in receiving store		
142	Ability to generate accounting adjustments on a consolidated basis at Area Office level for all the Store Return Warrant (SRW) generated for that period		
143	Ability to generate report on materials returned to a store over a periodic basis e.g. weekly, bi-weekly		
144	Ability to generate summary report of Store Return Warrant (SRW) generated by the system over a periodic basis or location wise scrap/obsolete items (as declared by appropriate authority) returned to		

	the store from the field operations in KPTCL		
145	Availability of material control functionality to check goods issued from issuing store with goods received in receiving store and post transfer of goods.		
146	Ability to generate report of payments during the month store wise and the IUT bills.		
	Verifying Utilization of Materials		
147	Ability to track and monitor the use of goods in execution of work against Erection/Execution Order/DWA or letter of Intent		
148	Ability to track and monitor the final booking of goods against Erection/Execution order/DWA transferring the earlier booking against Lol		
149	Ability to track and monitor the particulars of use of goods i.e. date/period, location , name of work etc.		
150	Ability to generate list of statistically analyzed samples of locations of goods utilization for the purpose of verifying the use of goods by the Verifying/Supervising officers		
151	Ability to record the results of verification by the concerned officer		
152	Ability to generate report showing the particulars of use of goods like date/period, location, name of work, erection/execution order or Lol		
153	Ability to generate report showing list of statistically analyzed samples of locations of goods utilization		
154	Ability to generate report showing locations, name of work, date of verification, name of verifier and findings of the verification		
	Scrap Disposal/ Sales		
155	Ability to compile periodic report of scrap goods returned to the stores		
156	Ability to show scarp inventory with value		
157	Ability to provide approval workflow for scrap approval and capture the recommendation of the scrap committee		
158	Ability to identify declared scrap items in system and its location		
159	Ability to display scrap requests awaiting approval		
160	Ability to generate alert to initiate material disposal workflow with the scrap goods report completion as the trigger		
161	Ability to post scrap issue once it is sold		
162	Ability to generate material list for auction/sale by Stores based on material disposal report		
163	Ability to record auction/ sale result for scrap disposal including buyer information and material disposal details		
164	Ability to generate Goods Disposal note (GDN) after checking against payment information		
165	Ability to generate report on scrap items available in a storage location over a periodic basis e.g. weekly, bi-weekly etc.		
166	Ability to generate exception report for goods disposal process i.e. goods which are not being disposed on time, auctions not as held planned		
167	Ability to generate report on auction results and record auction sale information		

168	Ability to consolidate Goods Disposal note and generate completion report of sale based on goods disposed and payment terms		
169	Ability to account for receivables against scrap items sold		
170	Ability to generate account statement for scrap customers		
171	Ability to record and support workflow for material disposal of scrap items returned to the store from the field operations and the materials declared scrap at store.		
	Physical Inventory Verification		
172	Ability to support periodic physical stock verification process and update inventory status in system based on stock verification		
173	Ability to schedule physical stock verification in the system		
174	Ability to freeze inventory in the system for physical stock verification		
175	Ability to generate item master list for physical stock verification		
176	Ability to generate stock count sheets having detail information like Item No, Item description, Stock Location, Bin Location, Units of Measurement, etc to capture results of stock verification		
177	Ability to record the results of stock count in the system and record stock verification details		
178	Ability to analyze of stock count i.e. compare system stored inventory with physical count and generate exception report/ list of inventory difference		
179	Ability to record and capture approval for recount of the stock items which are at variance in the system prior to correcting system values		
180	Ability to record possible reason for variance in the system and record root-cause analysis		
181	Ability to support approval workflow for stock count results and variance, and support authorization hierarchy based on value of discrepancy, type of items etc for approval of variances		
182	Ability to update and modify inventory status, material master information based on physical stock verification after proper authorization		
183	Ability to and generate stock verification report with quantity and value information		
184	Ability to generate report on discrepancy for inventory items counted		
185	Ability to generate trend for variance items		
186	Ability to generate exception report for those items not counted in a storage location		
187	Ability to support periodic physical stock verification process, update and modify inventory status in system and modify material master information based on stock verification with authorization.		
188	Ability to generate Physical Inventory Document for any base storage location having detail information like Item No. Material Code, Material description Storage Location, Bin Location, UoM etc. And blank space to capture results of stock verification		
189	Ability to and generate stock verification report showing details of materials counted, Difference, date of posting the count document reference of the difference in amount.		
190	Ability to generate report on the number of times PI has been done on an item in a storage location		

191	Ability to intimate the respective Transmission Zonal Chief Engineer Electy., KPTCL as per performance by the stores		
	Procurement		
192	Ability to take into consideration the goods and service work.(like firewall purchasing)		
193	Ability to take into consideration any variation like IEEMA and qty variation		
	Procurement consists of the following sub-processes:		
194	Vendor Records Management		
195	Procurement Planning		
196	Purchase Requisition		
197	RFQ / Tendering		
198	Purchase Order Management		
199	Turnkey Procurement		
200	Service Procurement		
201	Contract Management		
	Vendor Records Management		
202	Availability of centralized vendor master records facilitating single vendor description and code across the organization		
203	Ability to record vendor records including alternate / short name for vendor, contact person for each vendor address, vendors bank account information		
204	Ability to record TDS details, PAN number and Tax details required for ensuring compliance with Indian Tax laws considering both direct& Indirect taxes, Default currency for invoice/payment		
205	Ability to record vendor specific information relating to an item/vendor relationship. The details should include vendor name, address, payment terms, price & quantity, free form comments, delivery information, item no. & description, discounts, vendor performance, after sales service performance and other text information etc		
206	Ability to support multiple addresses against each vendor		
207	Ability to support automatic vendor numbering		
208	Ability to define different vendor types e.g. domestic vendors, international vendors		
209	Ability to maintain vendor list details e.g. company history, saleable model, shipment, payment method		
210	Ability to maintain vendor lists for OEM vendors and trade vendors		
211	Ability to modify vendor records e.g. bank account information and support authorization of changes made		
212	Ability to support vendor classification (multiple parameters required to meet reporting, preferential treatment like waiver of EMD etc. payment prioritization and other needs) e.g. stationary suppliers, electrical suppliers, service suppliers etc		
213	Ability to classify vendors with regards to : supplier, Contractor, sub-Contractor, transporter, approved/ registered, blacklisted/active/not active, dormant, under trial, etc.		
214	Ability to support all kinds of sub-contracting activities like goods issue, goods receipt etc		

215	Ability to display vendors based on vendor grouping/ classification		
216	Ability to block vendors from being used due to a specific reason e.g. vendor bankruptcy, vendor reliability with effective date, with facilities to re-activate the vendor with due authorization from competent authority		
217	Ability to record vendor transactions history including purchasing history, payment history, penalty deduction record etc		
218	Ability to record evaluation of vendor credentials to qualify vendors as preferred vendors for specific items w.r.t. stated qualifying requirements		
219	Ability to generate vendor registration certificate indicating eligible item groups online.		
220	Ability to evaluate vendors based on multiple parameters like quality of material, quantity of material and adherence to delivery schedule, prices quoted by the vendor, vendor response time, performance of material in field and other user defined parameters		
221	Ability to restrict maintenance / access to vendor master record to specific users		
222	Ability to merge / correlate vendor details (e.g. one vendor taking over another vendor). Enabling tracking change of status from a date		
223	Ability to pay each invoice individually or multiple invoices together for same vendor and manage outstanding balances accordingly by linking payment to invoices.		
224	Ability to link every payment to invoice(s) and manage outstanding balances for individual vendors and PO wise		
225	Ability to generate alert for predefined vendors/POs/WOs before payment		
226	Ability to support payment options (Bank attachment cases, Power of attorney cases, etc)		
227	Ability to print cheques as per payment instruction		
228	Ability to support payment through LCs		
229	Ability to support predefined approval hierarchy and authorization workflow for payment to vendors based on amount, vendor category		
230	Ability to appropriate / adjust advance payments against multiple contracts/invoices subject to approval of competent authority		
231	Ability to display period-to-date, quarter-to-date, year-to-date vendor balances		
232	Ability to block payments to vendors by competent authority only		
233	Ability to integrate with finance functions e.g. accounts payable, general ledger		
234	Ability to track vendor/ supplier performance against pre-defined parameters set by KPTCL or regulator such as delivery period, inspection failure, material shortages, material faulty, material failure etc.		
235	Ability to generate periodic report on vendor alterations to vendor master		
236	Ability to generate vendor account statement to be sent to the vendors		
237	Ability to generate report on individual vendor performance and produce vendor delivery report on instances of rejected materials, missed delivery, incorrect location, incomplete delivery, returns due to		

	damage, over supply etc, average no. of delay, other user defined criteria defined by KPTCL.		
238	Ability to generate Vendor analysis reports for spend analysis, performance in terms of on-time in-full delivery, rejections, etc.		
239	Ability to generate reports by outstanding orders, orders shipped but not received, overdue outstanding orders, orders not fulfilled on time etc		
240	Ability to generate report on goods returned to vendor that shows the items returned to supplier by Location, Vendor, PO, Category, Product Code, Reasons for return, Value of Goods return etc		
241	Ability to generate timeline based communication history with the vendor regarding various services like delivery, payment, field service, etc.		
242	Ability to generate age vendor outstanding balance report i.e. balance due to / from vendors		
243	Ability to enter B/G details, alerts for renewal to firms & encashment if B/G not renewed		
	Procurement Planning		
244	Ability to support annual procurement planning and budgeting		
245	Ability to support annual material plan for individual area offices/ procurement/ projects/O&M departments/ purchase departments/ stores etc		
246	Ability to optimize individual requirements coming from business/ projects before generating procurement plan		
247	Ability to specify products or services after analysing the optimized requirements		
248	Ability to receive inputs from key partner suppliers/ vendors regarding products and service requirements planning		
249	Ability to generate the requirement of funds for next 3/6/12 months		
	Purchase Requisition		
250	Ability to display budget available before initiating purchase requisition		
251	Ability to display lead time for purchasing material by material number/ material group before creating purchase requisition		
252	Ability to create purchase requisition / indent for various types of purchases e.g., stock materials, services, assets, contract labour etc		
253	Ability to support approval hierarchy for authorization and release of purchase requisitions electronically		
254	Ability to set approvals levels based on norms recommended by KPTCL like items classifications, procurement value etc		
255	Ability to provide purchasing rights of routine items to end users of the items along with hierarchy-based spending limit		
256	Ability to record user defined instructions/ requisition details as part of the purchase requisition		
257	Ability to assign unique purchase requisition number and restrict creation of duplicate purchase requisitions through inbuilt checks etc		
258	Ability to track the authorization status and generate alerts based on purchase requisitions awaiting approval		

259	Ability to configure requisitions based on predefined criteria e.g. value, department, type of purchase etc		
260	Ability to modify purchase requisitions and resubmit for approval		
261	Ability to cancel purchase requisition and automatically return commit budget		
262	Ability to track and record the status of a requisition e.g. not approved, approved		
263	Availability of search functionality of previous purchase requisitions		
264	Ability to link the purchase requisition to a valid project or cost centre		
265	Ability to configure the release procedure for purchase requisitions based on type of line item e.g. as part of standard item list, requiring specialized documents and approvals etc		
266	Ability to track changes of purchase requisitions and generate audit trail history		
267	Ability to generate report of the purchase requisitions created over a periodic basis for the department / Area Office		
268	Ability to generate report on status of purchase requisitions		
269	Ability to generate report on purchase requisitions based on user defined criteria e.g. requisition number, status, date, material number, description, originator etc		
270	Ability to display report on search results on purchase requisition details based on key fields like purchase requisition numbers		
271	Ability to generate exception report on purchase requisitions rejected, not approved cancelled etc		
	RFQ/ Tendering		
272	Ability to create RFQ/Tender document manually or automatically through authorized requisitions		
273	Ability to create RFQ/Tender document including terms and conditions, item, with quantity and shipment schedules etc(commercial specifications)		
274	Ability to track and maintain repository of tender related transactions details such as number of tenders received, initial price offered by vendors, number of tenders received, negotiated price (multiple) and final price etc		
275	Ability to support automated Bid/Tender document creation through pre-configured standard Bid/Tender document templates with pre configured mandatory fields		
276	Ability to select vendors either manually or automatically based on vendor criteria for limited tenders		
277	Ability to support approval hierarchy for Bid/Tender document for authorization and release		
278	Ability to hold a RFQ/Tender document awaiting authorization and generate alert of Bid/Tender document awaiting approval		
279	Ability to record details of sale of tenders. E.g. Name of vendor, date of purchase, etc.		
280	Ability to electronically authorize the RFQ/Tender document for release		
281	Ability to modify RFQ/Tender document and resubmit for approval		
282	Ability to track and record all changes / amendments made to an Bid/Tender document and maintain change history		

283	Ability to track and record the status of an RFQ/Tender document e.g. not approved, approved		
284	Ability to record item wise specifications which will be part of tenders		
285	Ability to modify item wise specifications and support authorization levels for approval of modifications		
286	Ability to send notifications to the regular vendors for the RFQ/Tender document once the tenders are floated and send the tender document (fax/e-mail) and also enable web-access to the tender documents		
287	Ability to capture the vendor response and bids against the tenders and generate comparative statements for analysis		
288	Ability to attached scanned documents for vendors responses		
289	Ability to support configurable workflow for RFQ/Tender document response evaluation, selection and approval		
290	Ability to perform best fit Bidder analysis based on user defined parameters		
291	Ability to record earnest money deposit (EMD) against tenders		
292	Ability to generate alert for returning EMD for successful/un-Successful Bidder along with support for the authorization hierarchy.		
293	Ability for Bidder to enter their bid online. There should be security rules built in so that the customers access only the relevant information		
294	Ability to generate purchase orders manually and automatically from the approved bids		
295	Availability of search functionality of previous Bid/Tender documents generated through the system		
296	Ability to analyse historical data of tenders		
297	Ability to initiate, process & finalize & record service contracts with vendors		
298	Ability to convert approved bid to a customer order or contract in the application		
299	Ability to publish RFP and to respond to clarification through online portal		
300	Ability to issue repeat tenders		
301	Ability to integrate all the provisions of the adopted Procurement Policy and Procedures		
302	Ability to maintain record of EMD/PEMD of the firms		
303	Ability to maintain record of BGs on PO/WO basis and issue alerts for their extension along with provision of multilevel authorization hierarchy.		
304	Ability to capture the details of special provisions, terms and conditions, etc. in the Proposal		
305	Ability to evaluate the technical proposal on-line by the tender evaluation committee		
306	Ability to generate report on a RFQ/Tender document showing history of all changes		
307	Ability to generate consolidated report showing RFQ/Tender document status e.g. awaiting approval, Cancellation, approved for all Bid/Tender documents created over a time period		
308	Ability to generate report to track RFQ/Tender document progress		

309	Ability to generate report on all RFQ/Tender document closed over a period of time for a division / department		
310	Ability to generate reports by user defined criteria e.g. RFQ/ Tender document number, vendor, item no, originator department etc		
311	Ability to generate reports on RFQ/ Tender document evaluation results		
312	Ability to generate report on variance analysis of Budget vs. Actuals for procurement through tendering		
313	Ability to take out comparative statement based on defined format		
314	System should be able to define different loadings while taking out comparative statement		
315	Availability of search functionality of previous RFQs generated through the system		
316	Availability to generate audit remarks on the comparative statement of Bids		
317	The system should be able to capture proceedings of the Central Purchase Committee/Board Meetings along with provision of multilevel authorization hierarchy.		
	Purchase Order Management		
318	Ability to create purchase order (PO) directly or with reference to a Bid/Tender document, a contract, purchase requisition, or another purchase order.		
319	Ability to create PO for different types of purchases e.g. **stock materials**, services, assets, contract labour etc		
320	Ability to create PO with multiple delivery addresses and staggered delivery		
321	Ability to have the following as part of the PO:		
	Assign purchase order number both automatically and manually- requisition originators name and details as applicable - item details with document attachment options to enable viewing- item details- text fields for user defined special instructions- Standard Clauses of agreement.		
322	Ability to provide for ship-to address, bill-to address, invoice-sent-to address in the Purchase Order		
323	Ability to specify on order, shipment-from, bill-by/payment to be released, report-to (agents), etc. vendor address in PO		
324	Ability to capture payment terms in distinct parametric form e.g. full/part/advance, mode of payment, etc./address to release the payment		
325	Ability to capture inspection requirements, acceptance criteria, etc. in PO		
326	Ability to specify packing, shipping, scheduling instruction against item for PO (if desired unit wise packing may be asked for)		
327	Ability to record standard documents of latest version like Standard Terms and Conditions of Indigenous/Import procurement, PBG , Bankers List, EMD , BG for Adv, etc		
328	Availability of multiple UOM for items for inventory and for placing order		
329	Ability to support approval hierarchy for PO authorization based upon preconfigured criteria (also for repeat orders)		

330	Ability to track the authorization status and generate alerts based on PO awaiting approval		
331	Ability to modify the PO and resubmit for approval		
332	Ability to consolidate multiple purchase requisitions into single PO for the same vendor		
333	Ability to create multiple PO s from single requisitions for different vendors		
334	Ability to split PO between vendors based on user defined parameters		
335	Ability to distribute the costs for individual items in a PO to multiple accounts based on user defined distribution proportion to be charged to 'valid' accounts or project codes		
336	Ability to display budget available for the purchase and generate alert if no budget is available or PO value exceeds budget during PO creation		
337	Ability to refer to the type of procurement for an item during PO creation. The type of procurement for the item will be part of the item master data detailing whether the item :		
	a) Requires a material number		
	b) Requires an account assignment (i.e. whether you are required to enter an account assignment category)		
	c) Needs to be kept in stock		
	d) Requires a goods receipt and/or invoice receipt etc		
338	Ability to get the regular vendor list for the items selected in the PO		
339	Ability to refer to previously existing contracts with the selected vendors while creating PO		
340	Ability to generate notification on request for vendor acknowledgement for a PO		
341	Ability to record PO acknowledgement against the PO from vendors in the system		
342	Ability to capture Purchase Order receipt/ Acceptance and Planned delivery date given by the vendor in the system.		
343	Ability to follow up on the vendor for delivery by sending reminders/ risk & cost notice		
344	Ability to amend Purchase Order with user's approval/ financial concurrence and approval of Competent Authority and to keep track of all past amendments.		
345	Ability to attach documents and specifications to PO		
346	Ability to record delivery and shipping information relating to a PO		
347	Ability to record vendor performance data for deliveries against a PO upon inspection		
348	Ability to enable three/ four way matching of PO, Goods Receipt, Quality Inspection Report and Invoice generated in the system		
349	Ability to generate notifications to vendors based on overdue PO		
350	Ability to release schedules against a Purchase order for staggered delivery		
351	Ability to provide for taxes and duties for various/individual items in the Purchase order		
352	Ability to record specific terms of trade or payment in a PO e.g. Payment Terms and Due Dates etc		

353	Ability to record vendor discounts in the PO details		
354	Ability to search and display previously created PO by vendor, item code, PO number, MPR No, indent number		
355	Ability to generate alerts for PO about to become due to the originators		
356	Ability to track PO due dates and generate report to originators on overdue POs		
357	Ability to PO creation based on standard templates for regular purchase items		
358	Ability to follow-up on the vendor for order delivery		
359	Ability to display transactions history against the PO		
360	Ability to automatically calculate LD based on PO terms		
361	Ability to generate report on purchase order history for an item		
362	Ability to generate report on change history for a particular PO		
363	Ability to generate reports on PO by user defined criteria e.g. PO numbers, Vendors, Material numbers, originator, Area Offices		
364	Ability to generate report on POs due or overdue		
365	Ability to generate report on PO outstanding payment history		
366	Ability to generate report PO status		
367	Ability to generate report on user defined exceptions on PO e.g. delivery exceptions, payment exceptions etc		
368	Ability to create PO automatically based on preconfigured conditions in the application		
369	Ability to deduct penalty with reference to delivery schedule		
370	Ability to link price payable after material received beyond CDP with rates of new tender enquiry.		
	Turnkey Procurement		
371	Ability to create Letter of Award(LoA) directly or with reference to a bid/tender document, a contract, a purchase requisition or another LoA		
372	Ability to have the following as part of the LoA:		
	a) Assign LoA number both automatically and manually		
	b) requisition originators name and details as applicable		
	c) item details with document attachment options to enable viewing item details - text fields for user defined special instructions		
373	Ability to capture payment terms in distinct parametric form e.g. full/part/advance, mode of payment, etc./address to release the payment		
374	Ability to capture inspection requirements, acceptance criteria, etc. in LoA		
375	Ability to record standard documents of latest version like Standard Terms and Conditions of Indigenous/Imported procurement, PBG , Bankers List, EMD , BG/e-BG for Adv, etc		
376	Ability to support approval hierarchy for LoA authorization based upon preconfigured criteria		
377	Ability to track the authorization status and generate alerts based on LoA awaiting approval		
378	Ability to display budget available for the project and generate alert if no budget is available or LoA value exceeds budget during LoA creation		
379	Ability to refer to previously existing contracts with the selected vendors		

	while creating LoA		
380	Ability to generate notification on request for vendor acknowledgement for a LoA		
381	Ability to record LoA acknowledgement against the LoA from vendors in the system		
382	Ability to capture LoA receipt/ Acceptance, PBG given by the vendor in the system and Execution of Contract Agreement.		
383	Ability to follow up on the vendor for delivery by sending reminders/ risk & cost notice		
384	Ability to amend LoA with user's approval/ financial concurrence and approval of Competent Authority and to keep track of all past amendments.		
385	Ability to attach documents and specifications to LoA		
386	Ability to record vendor performance data for deliveries against a LoA upon inspection		
387	Ability to record specific terms of trade or payment in a LoA e.g. Payment Terms, Penalty/LD and Due Dates etc		
388	Ability to search and display previously created LoA by vendor, LoA number, and other user defined parameters		
389	Ability to display transactions history against the LoA		
390	Ability to make detailed estimates for civil, mechanical, electrical, instrumentation works, etc		
391	Ability to support multiple type/modes of tendering		
392	Ability to create a schedule of rates for various service items that would be used for all cost estimation for service procurement		
393	Ability to generate automatic alerts/ reminders when a contract isabout to be expired or requires renewal		
394	Ability to monitor the LoA execution with respect to time and cost budgeted vs. the time and cost left		
395	Ability to calculate deviations in scope and time and levy penalties/ liquidated damages and deduct the same from final payment to Contractor		
396	Ability to amend/cancel /off loading of contracts/ LoAs		
397	Ability to track LoA wise performance guarantee, Bank guarantee expiry dates		
398	Ability to track LoA history, search work orders by Contractors, nature of job, etc		
399	Ability to record payment terms and actual payments made, LD deducted , statutory deductions.		
400	Ability to link payment to the Contractor with the status of the contract execution for real-time monitoring		
401	Ability to send alerts at defined period/ status for a contract when specified parameter value is reached		
402	Ability to generate report on change history for a particular LoA		
403	Ability to generate reports on LoA by user defined criteria e.g. LoA numbers, Vendors, originator, etc		
404	Ability to generate report on LoAs due or overdue		
405	Ability to generate report on LoA outstanding payment history		

406	Ability to generate report on exceptions based on delivery slippages, deviations and cost overruns		
407	Ability to generate report on LoA/ Detailed Work award status		
	Service Procurement		
408	Ability to support procurement of services through recording details of list of service items, bill of services, estimated rates etc		
409	Ability to make detailed estimates for civil, mechanical, electrical, instrumentation works, etc		
410	Ability to revise estimates, if required, during the execution of the order		
411	Ability to support multiple type/modes of tendering for service procurement like RFQ, direct PO etc		
412	Ability to create a schedule of rates for various service items that would be used for all cost estimation for service procurement		
413	Ability to create a service requisition/ proposal from an existing requisition		
414	Ability to capture terms and conditions information for each contract proposal or Execution Order		
415	Ability to direct the tender to the appropriate authority fund allocation/ approval as per defined hierarchy		
416	Ability to generate Execution orders from the tender and the services chosen		
417	Ability to create multiple execution orders from one requisition		
418	Ability to compare the current offer with previous offers on another Execution Order		
419	Ability to record execution order receipt confirmation from the vendor		
420	Ability to generate unique execution order number		
421	Ability to specify staggered job completion pattern		
422	Ability to create a blanket execution order/ rate contracts with or without quantity commitment and with or without schedule		
423	Ability to generate automatic alerts/ reminders when a contract is about to be expired or requires renewal		
424	Ability to generate work schedule for various activities along with service item number, decribtion, completion date, status updation,etc		
425	Ability to monitor the order execution with respect to time and cost budgeted vs. the time and cost left		
426	Ability to record acceptance/ rejection/ partial acceptance of the service provided		
427	Ability to monitor the order execution with respect to materials issued, payments made to the Contractor, materials returned by the Contractor		
428	Ability to evaluate the Contractor performance based on pre-defined parameters, record and provide feedback		
429	Ability to calculate deviations in scope and time and levy penalties/ liquidated damages and deduct the same from final payment to Contractor		
430	Ability to provide a source list of various jobs with job codes and the related list of vendors attached to it		

431	Ability to capture details like original bid reference, value of work, date of commencement, contract period (completion date), scope of work BOQ, statutory requirements GCC conditions, special conditions of contract, etc.		
432	Ability to amend proposals and get on-line approvals for amendments		
433	Ability to amend/cancel execution orders/off loading of contracts		
434	Ability to track execution order wise performance guarantee, Bank Guarantee expiry dates		
435	Ability to track execution order history, search execution orders by Contractors, nature of job, etc		
436	Ability to record payment terms and actual payments made, LD deducted, statutory deductions.		
437	Ability to link material issues, returns against a execution order(including recovery against Free Issue of Material not returned/used) with material reconciliation contract wise		
438	Ability to track execution order status in terms of time and cost budgeted		
439	Ability to track execution order wise material and manpower usage versus the budgeted quantity and highlight any deviations		
440	Ability to link payment to the Contractor with the status of the contract execution for real-time monitoring		
441	Ability to send alerts at defined period/ status for a contract when specified parameter value is reached		
442	Ability to generate report on status of a service execution order		
443	Ability to generate report on service execution orders for a department		
444	Ability to generate report to evaluate vendor performance on user defined criteria		
445	Ability to generate report on exceptions based on delivery slippages, deviations and cost overruns		
446	Ability to generate reports on service procurement execution order status e.g. completed, vendor acknowledged		
	Contract Management		
447	Ability to support contracts both manually or automatically based on Bid/Tender document results and authorizations		
448	Availability of contract templates for regular items based on previous contracts for efficient contract creation		
449	Ability to integrate contract creation with other functionality like Bid/Tender document Vendor Management and PO management		
450	Ability to define delivery schedule containing precise information on the delivery e.g. quantity, dates as part of the contract		
451	Ability to support approval workflow for contract management with authorization hierarchy for approval and release of contract based on predefined user criteria		
452	Ability to generate alerts for contracts requiring approval to authorized users		
453	Ability to request for authorization in the next hierarchy if there is no response on the approval request by preset time horizon		
454	Ability to record and display the status of the contract i.e. awaiting approval, approved or rejected		

455	Ability to reject the contract during authorization, record the reason for rejection and return to the originator through the workflow		
456	Ability to assign vendors to the contract either manually or based on Bid/Tender document results		
457	Ability to modify the contract and resubmit for approval		
458	Ability to record contract related information like:		
	a) Contract Number		
	b) Contract Type		
	c) Terms and Conditions of the Agreement		
	d) Expiry Date		
	e) Contract Value		
	f) Related Information/ Supporting documents		
459	Ability to record all changes to the contract and track contract history		
460	Ability to search and retrieve contract information including contracts for materials or services that are no longer active		
461	Ability to attach documents e.g. specifications for contracts		
462	Ability to generate alerts for contracts nearing expiry to trigger renewal process		
463	Ability to check the contract value with procurement budget for the department		
464	Ability to request for vendor acknowledgement of the contract after sharing the contract with the vendor		
465	Ability to record vendor acknowledgements to the contract		
466	Ability to track the contracts which have not been acknowledged		
467	Ability to track contract performance bank guarantees/e-BG based on vendor, contract, and PO		
468	Ability to generate alerts based on expiry of bank guarantees/warranty for items/Defect Liability period		
469	Ability to generate extension letters for BG's		
470	Ability to generate extension letters by correlating the terms and conditions of the contract with the progress of work/contract		
471	Ability to define KPTCL and regulator specific rules to manage contracts		
472	Ability to generate report on all changes made to a contract		
473	Ability to generate report on contract status - approved, awaiting approval, expired etc		
474	Ability to generate report on user number, vendor, originator, authorizer, item etc		
475	Ability to generate report based on expiry of contracts/warranty for items/Defect Liability period		
476	Ability to generate report on vendor performance on contracted terms		
477	Ability to view historical transactions for a contract		
478	Ability to generate report on expected receiving date, payment date - item wise for a give time horizon e.g. monthly, quarterly, annual basis		
479	Ability to generate consolidated report of contracted values per vendor over a time horizon		
480	Ability to generate reports for contracts that are nearing expiry		
481	Ability to enter approval of RTC TTC and process payments accordingly.		
482	Ability to enter approval of Guaranteed Technical Parameters (GTP) and		

	Quality Assurance Plan(QAP)			
483	Ability to enter approval of Drawings and design review.			
484	Ability to vendor approvals for supply of materials to Turnkey works.			
485	Ability to enter approval of Inspection of materials for Turnkey works/ any other works where inspection of material is required.			
486	Ability for approvals of work slips with audit verification and authorization for turnkey works/other works.			
487	Ability for approvals of delay condonation with audit verification and due authorization.			
488	Ability for approvals of Final Quantity variation with audit verification and authorization for turnkey works/other works			
489	Ability for taking back the excess unused materials by the Turnkey contractors or returning to stores			
	Purchase Order Receipts			
490	Ability to generate purchase order (PO) receipts in the system			
491	Ability to generate and record consignment receipts. The consignment receipt need to have the following (but not limited to):			
	a) Item serial numbers, item batch numbers etc			
	b) Item wise quality inspection criteria..			
492	Ability to generate weekly, monthly, quarterly supply position			
493	Ability to generate instantaneous report of supplies against POs			
	Inspection and Testing			
494	Ability to record dates of offer for inspection & Testing, submitted by the supplier and actual date of Inspection by KPTCL, nomination/renomination of testing engineers, tracking of payment/re-payment history.			
495	Ability to record particulars such as quantity inspected, quantity failed during testing, quantity accepted, whether calibrated equipments were available during testing, details of inspection team , other observations of the inspection team			
496	Ability to generate Dispatch instructions incorporating names of consignee stores etc.			
497	Ability to record particulars of DI issued by KPTCL			
498	Ability to record details of actual delivery made by the supplier			
499	Ability of generate inspection requisition			
	General			
500	Ability to generate reports confirming to KPTCL requirements			
501	Ability to meet process/reporting requirements of approved documents like Procurement Policy and Procedures, etc.			
502	Ability to maintain record of EMD/PEMD of the firms			
503	Ability to maintain record of BG's on P.O./W.O. basis and on any other general basis			
504	To maintain record of audit para's and their replies on P.O./W.O. basis and on any other general basis			
505	To maintain record of court cases/arbitration cases along with details such as lower/higher H.C./S.C. case, counsel name, fee, alert for next date, capture proceedings, decisions etc. (tracking of court cases-related to tendering and procurment)			

506	Ability to capture Inspection Management activities		
507	Ability to have sub module for inspection call management.		
508	Ability to maintain 2 way communication between KPTCL & Suppliers online		
509	Interface with supplier online		
510	Request to be given by supplier online		
511	Ability to maintain record of the damaged goods, i.e DGR		
512	Ability to take into consideration the consultancy work.		
513	Ability to maintain PRO on PO/WO basis		
514	Reports on statutory clearances related to PTCC, railways, forest, airports, defence installations etc. and to generate alerts/reminders		
515	Ability to Maintain record spares List register maintained in Station location & TLM Sub division Premises		
516	Ability to take into consideration MSME and EMD Exempion option		
517	Ability to take into consideration Internal audit process		
	List of required Reports		
518	Reports on statutory clearances related to PTCC, railways, forest, airports, defence installations etc. and to generate alerts/reminders		
519	Record of the Damaged Goods (DGR)		
520	Ability to integrate with Material Management Module for release of work orders		
521	Ability to generate reports on consumption of materials		

7.2.3 Financial Accounting & Controlling Module

Sl.No.	Requirement Description		
	Financial Management		
	Financial Management Process consists of the following core processes: - General Ledger - Accounts Receivable - Accounts Payable - Cash Management/ Treasury - Budgeting/ Analysis - Costing and Financial Control - Fixed Asset Accounting		
Core Process	**General Ledger/ Schedule**		
Sub-Process Name	**Manage Ledger Relationships**		
1	Ability to provide the facility to have multiple, independent general ledgers/ schedules		
2	Ability to allow information to be consolidated within and across general ledgers for (month end) reporting purposes		
3	Ability for each General Ledger (GL) to be capable of supporting and be fully integrated with sales, purchase, stock and management accounting ledgers and cashbook		
4	Ability of each sub-ledger to relate to a separate control account in the general ledger		
5	Ability to open Memorandum Accounts for recording non-financial information		
6	Ability of automatic posting (Postings to sub-ledgers should result in automatic postings to the control accounts in the general ledger)		
Sub-Process	**Manage Calendar**		

Sl.No.	Requirement Description		
Name			
7	Define calendar based on organisations accounting and reporting requirements		
8	Facility to open multiple accounting periods i.e. open the next accounting period before closing the current accounting period		
9	Ability to close an accounting period to prevent any entries in that period		
10	Ability to control users to access past period for adjustments (e.g. to reopen a period that has been closed).		
Sub-Process Name	**Manage Chart of Accounts**		
11	Flexibility to accommodate current and any proposed chart of accounts structure and corporate/field organization structure		
12	Ability to provide facility to define and relate the following logical grouping structure and numbering convention to the chart of accounts: - Entities - Corporate - Core-business/ Non-core business - Zone/ Area Office/ Departments - Project/Branches - Voltage - Project - Activity - Cost Element		

Sl.No.	Requirement Description		
13	Ability to record the following information for each account code: - Entities - Corporate - Core-business/ Non-core business - Zone/ Area Office/ Departments - Expense/ Income/Assets/liabilities -Debit/credit/both -Transaction based on basic principles of accounts -Activity based on Voltage Classification -To assign Head office previlage - Department - Type of Billing - Projects - Any other related field		
14	Ability to transfer account from one office to another in case of change of area, for e.g., if a subArea Office is moved from one Area Office to another & Merger of one unit with other unit		
15	Option to have centralized or de-centralized account maintenance of chart of account value		
16	Ability to have parent-child hierarchy in chart of account values.Addition /deletion of any account code should be restricted.		
17	Ability to provide facility to amend and delete the entities (e.g.:department, Area Office) and its relationship		
18	Capture short as well as long description of accounts		
19	Provision to manage Multiple foreign currency transactions		
Sub-Process Name	**Manage GL Account Enquiry**		
20	Ability to display GL account balance in multiple views as follows: - Statutory - Responsibility (e.g. Cost centre, Area Office/departmental reporting) - Geographical		

Sl.No.	Requirement Description		
21	Ability to hold balances for multiple ledger types such as: - Actual - Budgeted - Forecast - Taxation		
22	Ability to allow enquiry by: - account codes and names - wild search - specific range of period, year and month - batch entry number - Zone/Circle/Division/Admin office - on demand queries		
23	Capability of the system to display: - online at least 10 years of history for account balances and posted transactions (Progressive) - account activity including opening balance, movement for the period, closing balance and year to date balance - breakdown of balances by drilling down to source document - GL account master data - ability to store balances for future years		
Sub-Process Name	**Manage GL Master Data**		
24	Ability to maintain the following master data records to store control information on how postings done into the general ledger account: - Name of the account - Description - Type of account (e.g. revenue/asset/liability/expenses) - Debit and Credit Rules - Tax posting - Reconciliation account in nature (e.g. Debtors' Control account) - Level of transaction details to be maintained within the GL Account - Alternative account number to store KPTCL existing GL account (easier for user to search new account code) - Automatic posting to prevent manual posting to accounts (e.g.: - Accounts Receivable, Account Payable)		

Sl.No.	Requirement Description		
25	Ability to create GL master data in hierarchy		
26	Ability to - Copy accounts between entities. - Add account codes - Change or modify account codes - For Closed accounts - block/unblock - Delete accounts. - Change description of accounts.		
27	Provide facility for mass creation of GL accounts that includes: - Copying entire chart using another chart of accounts as reference. - Copying single account. - Copying multiple accounts - Performing data transfer using program for GL account master data from legacy system - Allowing deletion of inactive accounts or accounts with no outstanding balance.		
28	Ability to:- - Assign an activity status to accounts (e.g. - active/inactive) - Retrieve an account master record via account alias		
29	Ability to immediately put across the electronic notification to relevant users after creation or change of master data.		
30	Ability to provide audit trail to log the creation, amendments and deletion of each GL account code.		
31	Ability to control creations, amendments and deletion of GL Master data by user-defined authorization.		
Sub-Process Name	**Manage GL Transaction Posting**		

Sl.No.	Requirement Description		
32	Ability to enter journal entries manually or interface journals from other applications, either individually or in batch. The information contained in a journal should include the following sub-levels: - Header Level anticipated transactions are for voucher series,transaction reference and accounting period. - Line level transactions will include account code, debit/credit amounts and analize codes.		
33	Ability to search account code, account name or responsible area during posting of documents		
34	Ability to provide facility of Look up accounts number and descriptions during journal entry		
35	Ability to electronically route journal for approval to an authorised user before posting to the general ledger. If rejected, the journal should be automatically routed back to the originator for correction.		
36	Alert for action for vouchers pending at different level		
37	Ability to assign unique number to journal entry- Monthly/Yearly		
38	Ability of the system to support the following types of journal - - Accrual journals, which automatically reverse themselves in the following accounting period. - Skeleton journals where the bulk of information is pre-coded, only the date and amount to be entered. - Recurring journals which are similar to skeleton journals but with the values pre-entered, though capable of modification.		
39	Ability to post allocation journals with user-definable rules (e.g.:apportionment of expenditure)		
40	Ability to restrict access to certain accounts by user-defined groups.		
41	Ability to control journal posting function by user-defined authorization		
42	Ability to provide function to reverse documentation-individual or in mass, after posting by reference document number		
43	Ability to post to a future and prior period by authorised users		
44	Ability to suspend and resume, at a later time, entry of journal that		

Sl.No.	Requirement Description		
	are incomplete or imbalance		
45	Ability to prevent posting to control accounts of subsidiary ledger		
46	Ability to update on-line with real time update		
47	Ability to provide facility to: - Allow storing (park) incomplete documents without carrying out extensive entry checks. - Specify templates to capture details of recurring transactions(e.g.: - fixed prepayments and accruals) - Allow amendment or deletion to recurring transactions prior to posting - Perform the posting automatically according to user-defined specification		
48	Ability to allow for multiple accounting entries (debits and/ or credits) for each transaction type		
49	Ability to provide running total of debit/credit amount		
50	Ability to provide running total of transactions in each batch		
51	Ability to perform batch processing as follows: - Update by batch mode while other users are still active in the system - Provide exception report for batch update - Post through overnight batch - Provide information on batch status (e.g.:- posted, processing,error) - Automatically assign document or batch number after journals areposted - Provide a journal edit listing on screen and printed. The information should contain but should not be limited to thefollowing: * Batch Number, Journal Posting date, Journal Creation date, journal type, source of journal, journal text, G/L account code, G/Laccount name and description, debit/credit amount, batch total and number of transactions.		
52	Ability to request for authorization of transaction exceeding maximum or transaction limits by user-defined authority		
53	Ability to ensure that all necessary postings from various other modules are posted to the ledger before starting the closing run		

Sl.No.	Requirement Description		
54	Ability to automatically generate the provisions for administrative expenses, materials/services received but invoice not received		
55	Ability to automatically carry forward balances at the end of the year to the balance sheet and reset all profit and loss account		
56	Ability to prevent inactive accounts from appearing on reports and financial statements		
57	Ability of auto alert for adverse-balances (debit/credit)		
58	Ability to integrate with payroll		
Sub-Process Name	**Manage Inter-office transactions**		
59	Ability to provide an electronic platform for units to record inter-unit transactions, with provision to view scanned documents		
60	Automatic alerts/reminders in inter-unit accounting recipient unit that an entry pertaining to the unit has been made		
61	Ability to provide for electronic acceptance or rejection of inter-unit accounting by the recipient unit with provision for comments		
62	Ability to generate a report of pending, responded and unresponded Inter Unit Transfers (IUTs)		
63	Ability to automatically create relevant accounting entries at both units on acceptance of the inter-unit accounting by the recipient unit		
Sub-Process Name	**Manage Accounting Year-end Closing**		
64	Ability to perform unlimited closing cycles		
65	Ability to perform month-end (soft closing) and year-end closing.		
66	Ability to automatically, at period end: - Post accruals - Reclassify credit and debit balances for reporting purposes		

Sl.No.	Requirement Description		
67	Ability to automatically update the closing balance of the previous period and opening balance of the current period with prior period transaction postings for all ledger balances. (e.g.: - actual, budget)		
68	Ability to automatically initiate a new financial year		
69	Ability to automatically - net off the expense and revenue accounts closing balances to retained earnings account and carry the same to the following accounting year - transfer the balances from selective chart of accounts heads to HO		
70	Ability to process the following types of transactions: - Current period transactions in the current period - Prior year transactions for the previous accounting period posted in the current period		
Sub-Process Name	**Manage Consolidation**		
71	Ability to allow for user-defined rules to facilitate consolidation for similar and dissimilar chart of accounts		
72	Facility to make adjustment/provision entries to the consolidated Trial Balance without impacting individual unit's Trial Balance(Only in HO)		
73	Facility to re-run consolidation multiple times after making adjustments to the unit's accounts		
74	Ability to : -Consolidate at multi levels -Consolidate actual and budget at balance sheet, profit/ loss account, cash flow statement, expenses and revenue account levels - Automatic generation of inter Office/ Department balances -Any other requirement		
75	Ability to pass Head office entries at year end such as reversal of previous year JV, Provision based on Actuarial valuation reports, Transfer entries from units to HO & viceversa		
76	Facility to change consolidation logic from time to time		

Sl.No.	Requirement Description		
Sub-Process Name	**Manage Year-end Reporting**		
77	Ability to produce the following financial reports in multiple levels (e.g. whole organization, reporting units such as Area Office,zones, departments) and for a user-defined period (for the month, year to date), but should not limited to: - Profit and loss account - Analysis of Profit and Loss account - Analysis of operating expenses - Balance sheet - Analysis of Balance Sheet -Trial Balance -Cash Flow and Funds flow statement - Notes to the financial accounts (account breakdowns) at HO		
78	Provide flexible Report Writer with the following minimum features: - Specify the format and layout of reports - Summarize and total the information to be reported- Select records to be included in the report- Select details from each record to be included Perform arithmetic calculation on the information selected or totals - Ability to add narrative comments to reports		
79	Ability to show financial data in thousands, millions etc. without creating rounding problem - Store the report format for later use - Produce reports in graphical form for presentation purposes.		
80	Ability to Split Notes into multiple Sub Notes		
81	Ability to produce user defined TDS, GST, Income Tax etc. statutory Reports etc		
82	Ability to compare actual data to budgeted data and/ or budgeted data to actual data in: -Annually -Semi Annaully -Quarterly, and -Monthly		
83	Ability to export reports to standard PC applications (e.g. Excel		

Sl.No.	Requirement Description		
	spreadsheet, .txt/.csv format)		
84	Ability to automatically carry forward closing balances of a particular financial year to opening balance of the current year, with user defined control and authorisation		
85	Ability to create multiple versions of financial statement report and ability to customise reports as required by the user		
86	Ability to generate comparative statements for various periods as defined by the user		
87	Ability to print various reports as required by users and management		
88	Ability to support computation of various financial ratios as defined by users and ability to compare the same with the previous year and year to date		
89	Ability to circulate the details required from various users across the organisation from EAAAP/Other databases for the purpose of accounts closing/auditing and also ability to receive information		
90	Ability to track compliance to Government Audit Comments and replies thereto with facilities to maintain additional relevant details and string search facility		
91	Ability to maintain Contingent Liability/Asset register Transaction listing -By Account -By Date -By Voucher Number -By Voucher Series -By User demand		
92	Allow for generating financial statements at the following levels -For Corporate Office -Across Area Office/ zone offices -Across cost centres - Across departments		
93	Should provide for generating financial statements as per Schedule III requirements of companies act 2013 and amendments thereto and also releated Notes to Accounts		
94	Ability to comply with all tax related statutory requirements in force in		

Sl.No.	Requirement Description		
	India and applicable to the company and the system should be upgraded with the latest tax laws on a regular basis		
95	Ability to generate all statutory reports applicable to the company as per prevailing laws		
96	Ability to comply with all future statutory requirements like IFRS, Ind-AS, GST, etc. as and when it is applicable to KPTCL		
Core Process	**Accounts Receivable**		
Sub-Process Name	**Manage Integration with General Ledger**		
97	Ability to fully integrate account receivables to the general ledger and the cash book and to allow transactional entries for customer invoices/bills, adjustment journals, collections and employee related bills		
98	Ability to trigger warning and block the posting if update is made to a finalized account		
99	Ability to restrict access to master record to unauthorised changes from being made		
100	Ability to set default values when posting items to the account. e.g.: the term of the payment specified in the customer master data are defaulted during the document entry		
101	Ability to set default interest rate or surcharge		
102	Maintenance of One time Customer accounts in AR		
Sub-Process Name	**Manage Receivable Processing**		
103	Ability to provide audit trail for source of Receivables		
104	Ability to generate periodic billing reports based on different parameters and consolidated report on total receivables at any point of time		

Sl.No.	Requirement Description		
105	Ability to create debit and credit memos into customer account		
106	Ability to provide reference for multiple invoices in single debit/ credit memos		
107	Ability to automatically link receivables posted to the general ledger by on-line/batch processing		
108	Ability to provide recording non-sales related receivables like borrowings, deposits, sale of investment, sale of assets, outstanding receivables considering payment terms, inter bank transfers, rent from quarters, selling of tender forms, advertisements etc and Transmission Billing Centre Billing activities & Receivables SLDC related receivables		
109	Ability to link with payment gateway		
Sub-Process Name	**Manage Incoming Payments**		
110	Ability to: -Accept various payment methods - cheque, bank draft, all online transaction like RTGS, /NEFT, G-pay, phone pay etc. - Bank transfer - Offset with other expense or GL account		
111	Ability to automatically link incoming payment posted to the general ledger by:- - On-line processing - Batch processing		
112	Ability to display incoming payment details and produce incoming payment reports on demand from the system - - By customer amount - By collection date - By method of payment - By location - By type of payment		
113	Ability to refund the customer and automatically post the refund to the customer account on authorization		

Sl.No.	Requirement Description		
114	Ability to refund to the customer using various payment methods such as: - Cash - Cheque - Bank Transfer		
115	Ability to over ride the payment method proposed by the system in exceptional cases		
116	Ability to print petty cash or payment voucher, cheque and refund statement from the system		
117	Ability to post refund transaction automatically to general ledger		
Sub-Process Name	**Manage Dishonoured Cheque Processing**		
118	Ability to manage: Post adjustment into the customer account. e.g.: reverse the original payment transaction to reinstate the original debt import dishonoured cheque details in an electronic media supplied by the bank		
119	Ability to capture reasons for dishonour of a cheque and maintain customer's payment default history		
120	Ability to charge penalty to the customer account based on user-defined conditions		
121	Ability to re-charge penalty imposed by bank to the customer account (if any)		
122	Ability to reverse payment posting from the general ledger automatically with differential treatment for current year and prior period transaction		
Core Process	**Accounts Payable**		
Sub-Process Name	**Manage Vendor Master Data**		

Sl.No.	Requirement Description		
123	Ability to capture the following information, but should not be limited to :- Vendor account number, vendor type (SME/ non-SME; etc),vendor name, address, fax, telephone, email, contact person, payment terms, payment methods, payment charges to be recovered, vendor bank details, paying bank details, GST number, PAN/ TAN number, payment location and payment lead time		
124	Flexibility to provide vendor account numbers: - Automatically upon creation of a new Vendor account(Vendor identification number(VIN))		
125	Ability to allow for the incorporation of a check digit as a security feature to ensure accuracy of data entry		
126	Ability to control the creation and change of vendor master data according to user security status		
127	Ability to allow for specified fields in the master data to be made mandatory or optional entry		
128	Ability to perform a consistency/ outstanding amount check on the account balance based on user defined specification before account is marked for closing the vendor accounts		
129	Ability to restrict access to master record to unauthorized changes from being made		
130	Ability to set default values when posting items to the account. e.g.: the term of the payment specified in the vendor master data are defaulted in during document entry		
131	Ability to trigger warning & block posting if update is made to a finalized account		
132	Ability to print vendor master data by new account, vendor account, status etc		
133	Ability to provide setting up of "infrequent vendors" account for processing transactions for rarely used vendors so as to obviate the need to set up individual master file records		
134	Ability to provide - a list of the blacklisted vendors so that they are debarred for any future transactions		

Sl.No.	Requirement Description		
135	Ability to provide - One time vendor accounts in AP		
136	Ability to provide for verification of Capital & Revenue bills with respect to allotted Budget, Accuracy, Arithmatic checks etc at HO (As per Delegation of Powers)		
Sub-Process Name	**Manage Payable Processing**		
137	Flexible to record payable: Automatically record payable entry from other system such as procurement module		
138	Flexible to record payable: Manually (direct record by the user)		
139	Ability to provide audit trail for source of invoice		
140	Ability to provide invoice register facility by which the invoices could be logged prior to entry into the ledgers		
141	Ability of the system to provide processing against purchase order/ contract/including formal Purchase Orders		
142	Ability of the system to provide processing Against purchase order/ contract only with a goods receipt note/service receipt note		
143	Ability to automatically generate debit/ credit memos based on PO, GRN, Quality, Inspections and acceptance tests as per KPTCL purchase regulation norms		
144	Ability of the system to provide collation of purchase orders in the invoice register by PO order type like material PO, Central PO, Local PO, etc. or collation on PO value, location of raising PO and master plan wherever applicable		
145	Ability to capture the following information, but should not be limited to:- Vendor code, Internal transaction reference, vendor transaction reference, transaction date, due date for payment calculated by the system from the payment terms, posting period, transaction value, order value to which the invoice relates, narrative for purchase ledger entry and multiple tax codes, multiple tax values , TDS, GST details, State/Outside state purchase		

Sl.No.	Requirement Description		
146	General ledger account code, ledger narrative, value, debit credit indicator and analysis code		
147	Ability to provide manual entry for non-material related expenses		
148	Ability to provide facility for entering invoices for prepaid expenses and apportion the amount between prepaid accounts on periodic basis		
149	Ability to provide facility for entering invoices pertaining to prior periods		
150	Ability to produce payable reports on demand within the system (but should not be limited to): - By invoice date - By vendor type - By zone/ Area Office		
151	Ability to trigger a warning if invoice amount exceeds balance of operating expenditure budget		
152	Ability to block posting if invoice amount exceeds balance of capital expenditure budget		
153	Ability to park document before posting in order to verify the correctness and completeness of data		
154	Ability to create debit and credit memos into vendor account		
155	Ability to reference multiple invoices in single debit/ credit memos		
156	Ability to post retention request into vendor account		
157	Ability to perform: -Refund retention to the vendor and automatically post the refund to the vendor account -Automatically offset retention paid up Against the Balance outstanding of Vendor account		
158	Ability to refund to the vendor using various payment methods such as: - Cash - Cheque - Bank Transfer		
159	Ability to provide functions to block for payment		

Sl.No.	Requirement Description		
160	Ability to manage direct payment to vendors by 3rd parties like lenders and posting related accounting entries		
161	Ability to generate statutory reports such as GST, GST TDS, TDS, PT, Royalty, Cess etc and facilitate filing of statutory returns as per prevailing Tax rules		
162	Ability to trigger automatic alerts prior to due dates of statutory requirements like tax payments/ return filings etc.		
163	Ability to create liability on Accrual basis		
164	Ability to charge/recover penalty to vendor account based on PO/DWA/user-defined conditions		
165	Ability to refund penalty recovered from vendors upon condonation of delay or transfer of penalty to Miscelleneous income if the delay is not condoned		
Sub-Process Name	**Manage Payment Processing**		
166	Ability to create a proposed payment list by determining:- -Item to be paid - items to be paid are selected and grouped for payments based on user-defined rules -Payment amount - based on user needs (e.g.: due date of the items) -To whom the payment is to be made - by specifying the payee -Payment Method - based on the payment method (e.g.:cash/cheque/ Third Party) according to the rules defined by the user -Payment through specified bank and a bank account		
167	Ability to make payment via methods such as: - Cash - Cheque - manual and pre-printed - Direct payment by 3rd Parties like lenders - Bank transfers/ Electronic Fund Transfer		
168	Ability to specify a minimum and a maximum amount for a single payment in order to identify the payment method to be selected by the payment program		

Sl.No.	Requirement Description		
169	Ability to over-write minimum and maximum value range and specify another payment method during the payment run		
170	Ability to generate recurring payment voucher		
171	Ability to capture the recurring payment information:- - Name of the vendor -Invoice Number - Recurring number/Bill Register number - Accounting information - Start and end payment date Frequency of payment indicator to identify the frequency of the recurring payment (e.g.:- weekly, monthly, quarterly, biannually,annually)		
172	Ability to allow recurring payment to be deleted or edited within its period of payment		
173	Ability to interface payment report downloaded from EAAAP into Bank website for payment processing		
174	Ability to specify the bank account from which the payment is made		
175	Ability to make payment with invoices automatically using user-definable rules such as: - By oldest invoice - By specific invoice		
176	Ability to match single payment with multiple invoices		
177	Ability to make partial payments		
178	Ability to print the vendor name on cheque for payment of miscellaneous invoice, where vendor records have not been created		
179	Ability to change payment methods or banks, payee, block items or cancel payment blocks		
180	Ability to display changes made and by whom		
181	Ability to allow invoices to be released for payment prior to due date as per user defined authorisation		
182	Ability to display or print exception listing. The exception listing should contain blocked items and all outstanding items which the		

Sl.No.	Requirement Description		
	payment program did not propose for payment (items that could not be settled despite being due)		
183	Ability to divide the task of editing the payment proposal between various users and enable several users to edit large payment runs at the same time		
184	Ability to perform payment approval functions to enable certain payments to have prior approval		
185	Ability to request for authorisation of transaction exceeding maximum or transaction limits by user-defined authorities		
186	Ability to :- - Carry out payment using the proposal list that has been approved - Create the payment documents and prepare data for printing the forms, payment advice notes, payment summaries		
187	Ability to print cheque online and perform the following functions:- Define void reasons (used during test print, page overflow and other user-defined reasons such as printed incorrectly, unusable) Determine the next free cheque number and store the allocation of payment document number to cheque number		
188	Ability to provide facility to print and reprint payment voucher together with cheque		
189	Ability to mark the reprint copy with the word 'DUPLICATE'. The payment voucher should include vendor invoice number, cheque number, addresses and other user-defined information		
190	Ability to provide feature to cancel payments and cheques		
191	Ability to provide access to payment cancellation information based on user defined selection criteria and print report on cancelled cheques		
192	Ability to provide full audit trails for cancelled cheques and payment vouchers		
193	Ability to split payment to more than one payee (e.g.:- payment involving withholding tax)		
194	Ability to automatically clear items based on user criteria after payment has been made:- - By account		

Sl.No.	Requirement Description		
	- By document number		
195	Ability to post payments for update to the Vendor Account		
196	Ability to automatically post to general ledger: - Cash discounts received - TDS IT & TDS GST/ GST - Bank Charges		
197	Ability to provide the facility to offset balances of vendor accounts in AP with balance of customer accounts in AR (for vendors who are also customers)		
198	Ability to provide access to projected cash requirement information based on selected items to notify head office of funds required to be transferred to the paying account		
199	Ability to print TDS certificates and print GST,Income Tax and TDS report compliant with regulations, and in file-formats which support e-filing		
Sub-Process Name	**Manage Document Posting**		
200	Ability to post transactions such as debit and credit memos into vendor account		
201	Ability to identify the transaction via document number series or document type		
202	Ability to provide facility for: - Automatic numbering of documents - Allow for multiple document series		
203	Ability to update to the vendor accounts with the following transactions: - Transfer from one vendor account to another - Miscellaneous debit/credit memo for adjustment		
204	Ability to automatically update the corresponding account codes in the general ledger after posting to the individual vendor account in the sub ledger		

Sl.No.	Requirement Description		
205	Ability to provide for automatic integration with cash book, general ledger, bank ledger, penalties/ LD account, purchasing, Project-wise,Material management system, TDS account, expense accounts		
206	Ability of the system to support multi-location payments. Payments through multiple subArea Offices and Area Offices and zones		
207	Ability to credit all payments first to the bank Clearing Account. Post confirmation from the bank the same will be updated to the books		
208	Ability of the system to maintain cumulative register of cheques and to generate the cheque register print immediately after printing the cheque		
209	Online Bill passing process through scanned Invoices from DMS & facilitate for linking of scanned documents with posted document ID's		
Sub-Process Name	**Manage Vendor Account Enquiry**		
210	Ability to view the account balances:- In summary(opening balance, transaction per posting period and closing balances) - By line items (drill down from summary) Drill down to document detail (e.g. purchase requisition, purchase order, invoice, expected delivery date)		
211	Ability to perform various display functions within a vendor account such as search, sort, display additional details (e.g. vendor master information), obtain total purchase per posting period etc.		
212	Ability to display cheque payment information on-screen based on cheque number or payment document number. The information includes: - Details of cheque recipient - Details of the cheque issuer - Corresponding payment and invoice documents		
213	Ability to provide online enquiry capability to vendor information via user defined selection and sorting criteria (e.g. all vendors that are on hold)		

Sl.No.	Requirement Description		
Sub-Process Name	**Manage Accounts Payable Reporting**		
214	Ability to: - select reports - edit reports (create/change/display) - export reports to a different systems - download data to spreadsheets (e.g. Excel) generate reports one at a time, multiple reports at a time, ad hoc and regular reports together - generate reports at on-line basis - generate reports in background - generate reports via batch allow creation of user-defined reports without need for technical skills - perform calculations (e.g. totalling, percentage) schedule for specific dates, the generation of these evaluations on a regular basis restrict report selection based on security of database,organisation structure		
215	Ability to produce the following payable reports, but should not be restricted to: - Invoices selected for payment by period, bank, payment method - List of approved invoices - List of cheques printed by cheque number and date - List of vendors with vendor master details - AP Liabilities Listing - Invoices under retention - List of inactive vendors - Outstanding Cheques which are overdue - List of cancelled and void cheques - Details of unpaid invoices (payment proposal exception listing) - Number of invoices and vendors processed within a payment run - Vendor aging report		
216	Ability to provide user defined GST, Income Tax, TDS and other statutory reports		

Sl.No.	Requirement Description		
217	Ability to produce vendor payment history including: - Payment by vendor - Payment by period for the current and prior year - Total paid by year - Total cumulative payments - Date, amount and cheque number last paid		
218	Ability to electronically route the reports to allow users to review reports		
219	Ability to provide facility to present report in graphs within the system		
220	Ability to preview report before printing		
Core Process	**Cash Management/ Treasury**		
Sub-Process Name	**General Function**		
221	Ability to monitor payment flows and safeguard liquidity		
Sub-Process Name	**Manage Cash Book**		
222	Ability of the cash book to receive automatic postings from the accounts payable and accounts receivables together with manual postings of other payments and receipts		
223	Ability to have integration with General Ledger. Posting will update specified general ledger accounts and general ledger cash book balances		
224	Ability to generate daily incoming report and daily outgoing report(Cash analysis)		
225	Ability to generate daily/ weekly/ monthly cash flow report		
226	Ability to provide daily balances from the Cash Book		
227	Ability to maintain Bank Guarantee		
228	Abitility to obtain performance guarantee from successful bidder		

Sl.No.	Requirement Description		
	before issue of DWA		
229	Forfeiture and encashment of Bank Guarantee when there is a breach of contract		
230	Ability to maintain details of Bank Guarantee details such as BG No, Date, Amount, Work Award or work order ref no., Name of the Firm, Validity, Name of the Bank etc		
231	Ability to trigger reiminders for renewal of Bank Guarantees before expiry of the validity and facilitate for renewals		
232	Ability to track the movement of Bank Guarantees at various levels such as Zone, Circle, Division & Administrative offices		
Sub-Process Name	**Manage Inter Unit Accounting**		
233	Ability of the system to maintain the funds released to the units and received from the units by the respective heads and automatically post the ledger entries against inter unit account		
234	Ability to generate the advise for the unit to pass the journal entry to inter-unit account post receipt of funds		
Sub-Process Name	**Manage Bank Reconciliation**		
235	Ability to integrate bank reconciliation system with the payment recording modules to eliminate any duplicate data entry"		
236	Ability to enter bank statement details:- - manually - by electronic means to match bank transaction information with receipts and payments in the system to produce an electronic bank reconciliation		
237	Ability to record bank statement transactions including:- - bank and other charges - interest received or paid - electronic fund transfers - periodic payments		

Sl.No.	Requirement Description		
	- dishonoured cheques (incoming/ outgoing)		
238	Ability to automatically generate postings into the general ledger for outgoing cheques/ transfers as follows: - cleared cheque/ bank transfer data delivered by the bank to generate the clearing entries		
239	Ability to automatically generate postings into the general ledger for incoming cheques/ transfers as follows:- Bank transfers and cheques received/ banked in to generate the clearing entries		
240	Ability to print cheque deposit and bank transfer listing		
241	Ability to post incoming cheques individually or in batch		
242	Ability to provide function to overview cheque deposit processing status online		
243	Ability to:- - record stop payment of cheques enable the matching of multiple receipts in the system with a single receipt transaction on the bank statement		
244	Ability to allow for short term planning from sources affecting the cash position. This includes:- - Bank balances - Maturing deposits and loans - Notified incoming payments posted to the bank accounts - Incoming payments (e.g.. cheques) with a value date - Outgoing cheques posted to the bank clearing account - Post dated cheques		
245	Ability to:- - Allow update of bank balance by bank accounts - Group bank accounts in a logical hierarchy by the type of account Display bank accounts by group or in more details by bank accounts via drill down		

Sl.No.	Requirement Description		
246	The system should automatically reverse items outstanding for more than three months upon approval		
247	Cheque register The system will maintain records of all cheques		
248	Cash Register The system will maintain details of all cash		
Sub-Process Name	**Cash Management for Payment Accounts**		
249	Ability to forecast cash outflow based on: Liabilities from account payable and borrowings, payroll due within a user specified period User defined level. For example, at HO (e.g. centralized) for Area Office or zone		
250	Ability to provide function to create, change and delete payment advice from sending bank (e.g. main) account to the receiving (e.g.payment) bank accounts		
251	Ability to provide function to create bank correspondence and/or print cheque		
252	Ability to post payment advice to the respective bank account		
253	Ability to post automatically to the respective bank accounts in the general ledger		
254	Ability to generate fund requests from Units to HO		
Sub-Process Name	**Manage Cash Flow Forecast and Information Systems**		
255	Flexibility to provide for: - Electronic bank reconciliation - Drilldown reporting tool - Journal/ posting overview (e.g. bank transfers, deposit) Comparison between actual cash flows with forecasted cash flows		

Sl.No.	Requirement Description		
256	Ability to produce forecast cash flow statement for at least 12 months with the following minimum details: - Opening balance - Cash outflows for: Loans Capital projects Revenue expenditure Interest payment Tax Dividends - Cash inflow from: Customers Interest received Loan draw down Net excess/surplus Closing Balance		
257	Ability to provide drill down capabilities to view details of outflows and inflows. For example, payment from capital projects can be further analysed by projects/ jobs.		
258	Ability to allow for medium and long term planning from sources affecting the liquidity position. This includes: - Receivables as expected incoming payments Payables as expected outgoing payments (e.g. materials, project and capital expenditure) - Planned payments of wages and salaries - Investments and borrowings - Planned dividend payment - Planned tax payment		
259	Ability to forecast these cash outflow and inflows based on: Trends in fees and charges for providing transmission services based on estimates and collection due dates (Accounts Receivable) Expenditure trends based on payment due dates (Accounts Management - Fixed deposit and borrowing terms Consolidated forecast of capital projects expenditure from Project Management		

Sl.No.	Requirement Description		
260	Ability to: - Enter forecast cash flow amount manually (e.g. dividend) - Calculate averages Apportion forecast amounts based on historical data (e.g.collection and expenditure patterns) in preparation of cash flow statement.		
261	Ability to perform 'What if' analysis on cash flow based on user-defined assumptions		
Sub-Process Name	**Manage Loans/ Grants and Deposit Management**		
262	Ability to maintain the following information in the loans and deposit master, but should not be limited to: - Lender - Agreement date (If any) - Loan Term, Moratorium - Instalment amount - Interest rate, reset clause - Loan type (Borrower's note loans, Policy loan, General loan, etc.) - Loan Source (Government or Private) - Security Details, charge created details, mortgage details - Other loan details and conditions		
263	Ability to provide function for handling the complete loan process for loan given and loan taken e.g. calculation of repayment schedule, Instalments due, Interest calculation, payment of instalment and interest, liability calculation and posting into books and reversal and vice versa.		
264	Ability to view the details source of loan report		
Sub-Process Name	**Manage Inter-unit Transfer Details**		
265	The system will maintain details of all inter unit transfers of: -Drawing account transfers from HO account to unit accounts		
Sub-Process	**Manage Cash Management/Treasury Reporting**		

Sl.No.	Requirement Description		
Name			
266	Total Collections into Bank Vs Total Confirmations From Bank		
267	Total Transfers to unit HO account by bank account number and transaction		
268	Cheques deposited Vs Cheques credited into bank		
269	Dishonoured checks by bank account number and identifying issuer of cheque		
270	Total cheques issued Vs Bank debits by bank account number		
271	Un-reconciled statement At the Area Offices / Accounting unit		
272	Total cheques issued Vs Bank debits		
273	Un-reconciled statement At the Zonal Office		
274	Total Transfers to HO account by bank account number and transaction		
275	Un-reconciled statement		
276	Ability to generate online fund requistion at Accounting units as & when required		
Core Process	**Budgeting/Analysis**		
Sub-Process Name	**Manage Budget Preparation**		
277	Ability to create the following budgets but not limited to: - Revenue Expenditure budget - Operating Expenditure/Depreciation budget - Capital Expenditure budget - Forecast Balance Sheet for 10 years - Forecast Profit & Loss for 10 years - Forecast Cash Flow for 10 years - Forecast Financial Ratio - Forecast Retained Income		

Sl.No.	Requirement Description		
278	Ability to prepare budget with Top-Down/Bottom-up method		
279	Ability to provide function to compute retained Income (RI) and cash for investment forecast based on user-defined criteria		
280	Ability to import/export budget details from / to external systems electronically (e.g. Spreadsheet -Excel)		
281	Ability to provide Windows-based spreadsheets for budget preparation		
282	Ability to check and balance the detailed-level budget and the summary-level budget		
283	Ability to navigate within the budget hierarchy (e.g. expand/collapse structure, drill down for details)		
284	Ability to provide a graphical representation of the budget hierarchy		
285	Ability to calculate and compare budget vs. actual in: - Amount variance - Percentage variance		
286	Ability to provide text facility to document any changes made and reasons of amendments within each version of budget		
287	Ability to retain user-specified versions of the budgets upon subsequent reviews		
288	Flexibility to: Maintain the original budget version and the revised budget version Update the original budget by - Increasing the budget amounts - Reducing the budget amounts - Reallocation of Capital & Revenue budget amounts. e.g. transfer budget from Area Office to other Area Office & re-allocation between different account groups/heads		
289	Ability to allow changes to be made to the 5 year forecast revenue and expenditure items either by manual entry or electronic upload		
290	Ability to meet process/reporting requirements of Budget Policy & Procedures of KPTCL		
291	Ability to control the following activities by account, date of change and user IDs:		

Sl.No.	Requirement Description		
	lock subsidiary budgets and master budget so as no changes can be made once approved - unlock such budgets to reflect budget changes		
292	Ability to aggregate the inputs from the different accounting units and prepare a draft consolidated budget		
293	Ability to segregate the final consolidated approved budget,accounting unit wise		
Sub-Process Name	**Manage Revenue/ Operating expenditure budget**		
294	Ability to define revenue / operating expenditure budget hierarchy for responsibility areas within the organisation to facilitate control and monitoring.		
295	Ability to classify revenue and expenditure items by means of a hierarchy. For example, personnel costs may consist of salary, wages, overtime, bonus etc.		
296	Ability to provide edit functions to create, insert, copy, delete responsible area or revenue / expenditure item within the hierarchy.		
297	Ability to identify revenue and expenditure as controllable and uncontrollable for budget control purposes.		
298	Ability to: Disallow posting into a GL account prior to budget approval /Allow posting into a GL account only after approval of budget		
299	Ability to control authorization to create, change, delete, budget, transfer and post by: - Budget version - Responsible area/ unit - Type of revenue/ expense		
300	Ability to provide level of access to create and maintain relevant assigned budgets: - Budgeting Cell can amend/ input all budgets for Area Offices/zones/ Head Office / departments; and - Budget can only be approved by authorised person as defined in the system		

Sl.No.	Requirement Description		
301	Ability to copy budget values into a new budget version: from a reference budget version (e.g. previous year budget or forecast budget) - by selecting specific revenue/ expenditure accounts		
302	Ability to revalue budget by percentage and by fixed amount		
303	Ability to provide formula (user-defined) for planning/ budgeting at the lowest level		
304	Ability to update budgets on-line, either individually or in mass		
305	Ability to extract either automatically or manually financial information for budgeting of revenue and expenditure items from: - Within the system - Other external systems Information required includes: - Revenue from transmission charges - Expected increase in requisition for higher transmission capacity by existing customers (e.g. based on trend or customer forecast) - New customers (supported by agreements) - Loan information - Salaries and wages - Historical and projected payroll cost and number of staff for user-defined period - Repairs and maintenance - Preventative maintenance schedule - Depreciation (provision for computation of depreciation as per (i) Companies Act (ii) ERC Regulations (iii) IT Act) - Existing assets		
306	Ability to generate monthly/ quarterly/ half yearly revenue/operating expenditure budget		
307	Ability to provide a text editor function up to the lowest budget level (i.e. revenue/ expenditure accounts) to capture supporting workings that derive the budget amount		
308	Ability to record budgets at all levels of the chart of accounts(selected/user defined) (all views of account number up to lowest level of the accounts and all levels of organization)		

Sl.No.	Requirement Description		
309	Ability to allow input budget data at detail level with automatic roll-up to summary level by using aggregation of account (i.e. revenue and expenditure items) at multiple levels of consolidation		
310	Ability to allow input budget data at higher level within the budget hierarchy and perform the following: manually allocate amounts to detail level based on user-specified methods allocate via automatic pro-rate apportionment to user-specified detail accounts Allow for manual override of apportioned amounts automatically pro-rated by the system Allocate budgeted overheads at the same level that actual expenses was allocated or based on information from other accounts. For example, Budgeted general expenses may be apportioned based on previous year actual		
311	Ability to provide the option to reflect changes to amounts in a new budget version or without indicating budget as a new version (i.e. overwrite original budget)		
312	Ability to check and highlight missing, incomplete budget items prior to consolidation (for example, a department missing from a set of departments defined for consolidation)		
Sub-Process Name	**Manage Capital Expenditure Budget**		
313	Ability to support both project/ non-project Capital expenditure budget		
314	Ability to define a budget hierarchy for Project/ Sub-project to facilitate control and monitoring		
315	Ability to: - Disallow posting into a GL account prior to approval of budget - Allow posting into a GL account only after approval of budget		
316	Ability to provide text editor function for budget exceed		

Sl.No.	Requirement Description		
317	Ability to: Provide for flexible user-defined budgeting period, e.g. 1 year, 3 years or 5 years Provide for sub-period budgets, e.g. monthly, quarterly, semi-annually, or annually - Provide ability to create and maintain a 12 months rolling budget		
318	Ability to carry forward budget outstanding from projects to the following fiscal year		
319	Ability to carry forward commitment amount from projects to the following fiscal year		
320	Ability to update budgets on-line, either individually or in batches		
321	Ability to provide the option to reflect changes to amounts in a new budget version or without indicating budget as a new version (i.e. overwrite original budget).		
322	Ability to provide budgeting on user defined periodic basis		
323	Ability of Corporate Budgeting process to be integrated with the budgeting and planning of the individual units and support functions		
324	Ability to provide comparative report between actual and any version of the budget		
Sub-Process Name	**Manage Budget Control**		
325	Ability to commit budget, after posting purchase requisition in purchasing system		
326	Ability to transfer budget between cost centre/ projects, according to the authorization level defined by users		
327	Ability to provide annual approval budget report		
328	Ability to integrate with the following modules at on-line basis, but should not limited to; Payroll Accounting: usage budget when post salary, bonus and wages etc. transactions Account Payable: usage budget when post expenses transactions via AP		

Sl.No.	Requirement Description		
	General Ledger: usage budget when post expenses transactions via GL Inventory Management: usage budget when issue to cost centre/project		
329	Ability to generate document number separately when create/change budget		
330	Ability to perform automatic budget availability checks during transaction posting.		
331	Ability to define tolerance limits either as a percentage or absolute value, depending on the amount exceed, automatically perform the following: - Trigger warning to user - Trigger warning to user and mail to budget owner - Disallow posting		
332	Ability to classify budget control type, such as - Cost/ Expenditure budget -Ability to define trigger warning to user when budget exceed - Capital Expenditure budget (Project) Ability to define trigger warning to user when commitment transaction exceed budget, but disallow posting when actual transactions exceed budget - Capital Expenditure budget (Non-project) Ability to define disallow posting when commitment and actual transaction exceed budget		
Sub-Process Name	**Manage Budgeting Reporting**		
333	Ability to download budget information to spreadsheet (e.g. Excel) for user analysis		
334	Ability to provide facility to present budget data in graphs or charts within the system		

Sl.No.	Requirement Description		
335	Ability to provide the following information in the form of reports/ for on-line viewing at multiple levels within the budget hierarchy (should not be restricted to): Comparison of actual against budget figures (in terms of quantity and value) - Budgeted Balance Sheet for 10 years - Budgeted Profit/ Loss account for 10 years - Budgeted Cash flow for 10 years - Budgeted Financial ratio for 10 years - Forecast Retained Income - Other forecast information Ability to spread budget over the financial periods based on: - Even spread - Seasonal spread - Fixed spread - Variable spread - Manual allocation (i.e. to enter budget figure to specific month)		
336	Ability to provide the flexibility to inquire budget information on responsibility area by user- defined parameters (e.g., time period, level of detail, activity, etc.). For example, variance calculations on month to month, year to year, year-to-date actual of specified balance sheet or profit/ loss items (for a particular year) against relevant budgeted values		
337	Ability to generate variance analysis (Actual/ Budget) reports by user-defined parameters (e.g., time period, level of detail, activity, etc.). Ability to print the report and electronically route the reports to allow users to review reports.		
338	Ability to provide exception reports for responsible areas (e.g. Area Office, zones) that exceeded budget with details such as: - Revenue/ expenditure (according to chart of accounts) - Actual to date - Budget - Variance (i.e. amount in excess of budget)		
339	Ability to automatically check and highlight abnormal data i.e. actual exceed budget more than 10% or less than 10%		
340	Ability to provide over/under budget reports		

Sl.No.	Requirement Description		
341	Ability to check fund availability real-time basis (for capital budget)		
342	Ability to view source of fund for each project in capital expenditure budget report		
343	Ability to generate budgeted financial statements for the accounting units		
Core Process	**Costing and Financial Control**		
Sub-Process Name	**Manage Cost Allocation - General Functions**		
344	Ability to integrate with the following modules at on-line basis in order to monitor and analyze reporting, but should not limited to: - General Ledger - Accounts Payable - Asset Accounting - Material Management - Inventory Management - Order and Project Accounting System - Budget Controlling - Payroll Accounting		
345	Cost Centre Accounting- System should be able to address organization structure hierarchy creation and capturing costs to enable CCA. Org structure to be decided at the time of Business Blueprint Phase (BBP)		
346	Ability to upload data from external system, for example, Excel spreadsheet, Access, etc. in to application system		
347	Ability to download information to spreadsheet (e.g. Excel, HTML) for user analysis		
Sub-Process Name	**Manage Costing Allocations**		

Sl.No.	Requirement Description		
348	Ability to allocate cost in various levels, for example: - Responsibility cost centre (Department/ Area Office/ Projects) - Service category/group - Customer group - Activity		
349	Ability to allocate actual or budget amount based on: - Fixed percentage - Variable percentage - Level of activity (e.g. floor area, number of employees) - Budgeted value/ quantity		
350	Provide facility to process allocations with ability to amend details prior to allocations		
351	Provide facility to reverse allocations		
352	Ability to simulate allocation method to check the correctness before update run		
353	Ability to run iterative/non-iterative cost allocation processing in system		
354	Provide facility for mass allocations posted/ reversed		
355	Ability to monitor and print allocation report before closing account		
356	Ability to allocate cost and expense between department/Area Office/ business unit/accounting units		
357	Ability to support multiple cycles of allocating overheads and iterative allocation cycles for the same		
358	It should be possible to have multiple basis for allocation of the overhead and allow to skip some P&L items from allocations		
359	Ability to provide the variance based on change in the method for allocation and allow user defined allocation mechanisms		
Sub-Process Name	**Manage Costing Analysis**		
360	Ability to define organization structure in hierarchy at various level		

Sl.No.	Requirement Description		
361	Ability to define main and alternative organization structure		
362	Ability to support comprehensive and flexible information system to analyse costs and expenses within organization and must have provisions for grouping at various levels		
363	Ability to analyse costs and expenses on-line, and trace them right back to the original document		
364	Ability to analyse costs and expense separately by responsibility area in account code level, account group level and Functional entity level		
365	Ability to display and call up details of allocation method via system		
366	Ability to support multiple sets of information (Budget/Plan/ Revised Plan etc.)		
367	Ability to provide comparisons across periods and automatically analyze variance		
Sub-Process Name	**Manage Costing Enquiry/ Reporting**		
368	Ability to monitor, analyse and evaluate reports on real time access		
369	Ability to download information to spreadsheet (e.g. Excel) for user analysis.		
370	Ability to transfer data to MIS		
Sub-Process Name	**Manage Order and Project Management - General Functions**		
371	Ability to define the details of the project on-line, but should not limited to: - Project type - Project ID, Project name - Sub project ID, Sub project name - Project responsible person - Budget, Actual Cost - Start date, finish date Resource required for the work that is carried out internally in a		

Sl.No.	Requirement Description		
	project		
372	Ability to integrate with the following modules at on-line basis in order to monitor and analyse reporting, but should not limited to: - General Ledger - Accounts Payable - Asset Accounting - Material Management - Inventory Management - Budget Controlling - Payroll Accounting		
373	-Allocation of employee cost,admin&gen expenses,depreciation, any compesation, interest capitlisation and other cost to on going projects/Works/Materials based on acoounting standards		
374	Ability to upload data from external system, for example, Excel, Access into application system		
375	Ability to download information to spreadsheet (e.g. Excel) for user analysis.		
376	Ability to trace cost/ expense by project/ sub-project		
377	Ability to automatically link wages/ OT/ other benefit from human resource module to project system module e.g. man-hour rate		
378	Ability to calculate and post interest from loan to project/ sub-project		
379	After project finished, ability to settle costs and expenses occurred in project to fixed asset, WIP or expenses by percentage, pro-rate or actual amount		
380	Ability to automatically link to record fixed asset in asset accounting module, after settled		
381	After closing project, ability to prohibit to post transactions from other module to this project		

Sl.No.	Requirement Description		
382	Ability to commit budget, when posted purchase requisition from purchasing module		
383	Ability to maintain Cost Registers for DCW, APW & R&M Works with respect to work orders/ DWA/ Award/ monitoring & acceptance of completion reports		
Sub-Process Name	**Manage Order and Project Management - Enquiry/ Reporting**		
384	Ability to provide flexible and comprehensive information system that assist to monitor and control project easier		
385	Ability to monitor, analyse and evaluate various information, such as Commercial project reports in hierarchy (single projects, partial projects or across several projects) - One or more projects in details by cost element		
386	Ability to monitor budget/commitment/actual reports by monthly, quarterly and yearly on real time basis		
387	Ability to monitor cumulative budget/ commitment/ actual reports		
388	Ability to monitor project progress by viewing % of completion		
389	Ability to check the history data from system, but should not limited to: - Start and Finish date - Resources usage - User who change budget - Project Status - User who close project		
390	Ability to create own reports to meet specific information needs		
391	Ability to view all information in the project immediately after entering data via other integrated modules and can run the reports in the background		
392	Ability to view on-line reports in graphic and Gantt chart		
393	Ability to download reports to Excel spreadsheet, Microsoft word etc for user analysis		

Sl.No.	Requirement Description		
394	Ability to transfer data to EIS (Executive Information System)		
395	Ability to capture and compare physical progress of project with that of financial progress(Quantity variation and price variation(asper IEEMA Indices))		
Sub-Process Name	**Manage Profitability Analysis - General Functions**		
396	Ability to evaluate core business/ non-core business or any combinations, with respect to KPTCL's profit or contribution margin		
397	Profit Centre Accounting- System should be able to address organization requirement of getting profit centre based accounting information and reports in future, requirements to be collected at the time of Business Blueprinting Phase		
398	Ability to transfer data from other systems on line, such as - Transfer cost centre costs - Transfer activity-based costs - Transfer billing document		
Sub-Process Name	**Manage Profitability Analysis - Planning**		
399	Ability to provide bottom-up planning e.g. based on planned transmission fees/charges on a lower level, which the system automatically aggregates through the individual planning levels		
400	Ability to provide budgeting on user defined periodic basis		
401	Ability to upload planning details from external systems electronically (e.g. by way of EXCEL spreadsheets) to system		
402	Ability to support fully integrated planning with other applications		
403	Ability to settle plan data from Project Management to profitability analysis		
Sub-Process Name	**Manage Profitability Analysis - Enquiry/ Reporting**		

Sl.No.	Requirement Description		
404	Ability to monitor and analyse data by dimensions/ segments or management desired view		
405	Ability to set security restrictions at various levels for user access to view the reports		
Core Process	**Fixed Asset Accounting**		
Sub-Process Name	**Manage Fixed Asset Master Data maintenance**		
406	Centralised definition of fixed assets categories, description, multiple depreciation rates, predefined residual values etc.		
407	Centralised definition of content of Fixed Asset Register to support Companies (Auditor's Report) Order, 2003 [CARO] and other statutory requirements		
408	Ability to maintain parent-child relationship across assets classes		

Sl.No.	Requirement Description		
409	Ability to maintain the following information in the fixed asset master, but should not be limited to: - Asset number - Group asset number - General information (e.g. description, make/model, quantity, acquisition date, owner unit, using unit) - Posting information (e.g. capitalisation date and amount, asset expiry date) - General ledger account assignment -Accumulated depreciation -Depreciation -Gain/ loss on disposal - Revaluation - Information on the origin of the asset (vendor information e.g. serial number) - Purchasing information (e.g. vendor number, purchase order number, receiving number) - Physical inventory data - Budgeting data (e.g. budget number) - Insurance data/ warranty - Depreciation data - asset useful lives, useful date, residual value, depreciation method - Asset location - Asset class/subclass - Asset type - Project/ job number - Remarks		
410	- ability to capture details of assets acquired on self execution works, deposit contribution works, deposit works, contrbution assets, gifted assets along with depreciation provision		
411	-ability to capture details of right to use assets but ownership rests with others(not to be accounted in books of KPTCL)		
412	Provision for Interim categorization at the end of Financial year (CWIP/Assets)		

Sl.No.	Requirement Description		
413	Examples of information required to be maintained within the Fixed "Asset system are as follows: - Responsible unit (e.g. zones/ Area Offices) - Physical location of asset - Usage (e.g. building - staff quarters, substation) - Quantity - Unit of measurement - Description/ additional information (e.g. land title number, capital project number) - Source of funding (e.g. capital contribution, own funds) - Acquisition method (e.g. purchasing, donation)"		
414	"Ability to perform: - Master record creation -Manually -Automatic posting from Material Management System, Asset" Database and other relevant system such as Vehicle Database - Master record changes Deactivate master record (this should be automatic upon retirement of asset) "Delete master record, provided that there is no posting was made to it -Block asset (to block further cost posting into the asset) -Change to location/ reporting unit -Change in assignment of asset to asset class -Change in asset useful lives"		
415	Ability to carry out mass changes automatically to a large extent for user-definable asset record selection criteria: - Mass change to depreciation methods - Mass change in depreciation rates - Mass change in useful lives - Mass change in asset classification - Mass change in locations/ reporting units		
416	Provide audit trail for creation, amendments, transfer and deletion for all asset group and sub groups		
Sub-Process Name	**Manage Fixed Assets Register**		

Sl.No.	Requirement Description		
417	Ability to maintain FA register locally at Area Office/sub-station levels Zones/Circle/Administrative offices/Accounting units		
418	Automatically consolidate FA Register at Area Office/sub-station level into FA Register for the company Zones/Circle/Administrative offices/Accounting units		
419	Ability to prevent Area Office/sub-station offices from entering/updating data in any FA Register other than their own FA Register		
420	Ability to record fixed assets as either capitalized or work-in-progress		
421	"Ability to define fixed assets at different levels such as: - Group asset (main and components) e.g. Land & Building" - Asset class/subclass (Group asset belongs to an asset class as per user defined norms) e.g. factory land - Asset type (e.g. tangible and intangible) Balance sheet (asset class is assigned to GL account code. This forms the Balance sheet item) Ability to upload Land records Documents .		
422	Ability to decide the asset categorisation at the time of order placement/contract finalisation		
423	Ability to maintain parent - child asset relationships		
424	Ability to differentiate between new asset and value adjustment/upgradation to existing capacity		
425	Record fixed assets with date placed in service in the past		
426	Record fixed assets with date placed in service in the future		
427	Ability to merge multiple fixed assets into one fixed asset		
428	Provision to rectify errors in recording fixed assets in the same period or in previous periods		
429	Ability to record number of units against each fixed assets e.g. chairs - 10 units (Block & Individual Assets)		
430	Ability to record fixed assets taken on lease, assets on other's property etc.		

Sl.No.	Requirement Description		
	Ability to upload asset lease records.		
431	Ability to generate Fixed Assets schedule in accordance with the Companies Act		
432	Ability to generate Fixed Assets schedule in accordance with the Income Tax Act		
433	Ability to generate Fixed Assets schedule in accordance with the Regulatory requirements		
434	Ability to update Fixed Asset Register upon capitalisation of asset		
Sub-Process Name	**Manage Assignment**		
435	Ability to assign an asset to a specific reporting unit or business area (e.g. Zones/Circle/Administrative offices/Accounting units) for internal reporting purposes e.g. When an asset is assigned to a specific reporting unit, the system should automatically post the transactions such as depreciation and gain or loss on disposal, to the account related to this asset to this reporting unit.		
Sub-Process Name	**Manage Addition of Fixed Assets**		
436	Ability to automatically or manually allocate a unique asset number upon creation of the asset master record		
437	Allow for asset additions and capital improvements including: - acquisition and capital improvement costs and dates - maintenance costs and dates - original and extended useful life - mass additions		
438	Ability to capture expenditure under "Capital Works In Progress (CWIP)" , till completion/commissioning of Asset		

Sl.No.	Requirement Description		
439	Ability to transfer from CWIP to respective Asset Account on completion of work Ability to capitalize asset via: Integration with Accounts Payable - Post the asset acquisition and the corresponding vendor liability in one transaction "Integration with Purchasing/ Inventory - Upon receipt of asset (with value), before invoice receipt - Upon receipt of invoice, asset is received (unevaluated) earlier - By moving the item from inventory"		
440	Ability to capitalise an addition or enhancement to an existing fixed asset in the current fiscal year. Similarly any reduction in Asset value to be incorporated in Accounts		
441	Ability to process a credit memo, which reduces the acquisition and production costs of an asset		
442	Ability to maintain component-wise break-up of the capitalised value of the asset like original cost, installation cost, allocated amount of indirect expenditure, interest capitalised etc.		
443	Ability to update the acquisition transactions automatically to the respective account codes in the General Ledger		
444	Monitoring assets given/taken on lease, hire purchase, instlament, buy back of asset etc.,		
Sub-Process Name	**Manage Transfer/ Splitting of Fixed Assets**		
445	Ability to: Move an asset, resulting in the need to change asset master data that cannot be otherwise changed (e.g. the asset class, main asset) Split up an asset or move part of an asset (transfer between asset groups, sub asset group) Transfer between departments, zones, Area Offices business responsibility units Transfer material from the inventory (current assets) to a fixed asset (for example, for a replacement part)		

Sl.No.	Requirement Description		
446	Ability to capture information such as: - Date of transfer - Previous department, zone, Area Office, main or sub-asset group - Cost, accumulated depreciation and net book values transferred -monitor released assets details, trnasfers, repairs, charging depreciation		
Sub-Process Name	**Manage Fixed Asset Disposal/ Retirement**		
447	Ability to identify "assets not in use/ awaiting disposal" based on user-defined criteria (e.g. asset class, location). The listing should contain the following information, but should not be limited to:		
448	General master data - location, description, make/ model, acquisition date - Asset history - Asset values (book value)		
449	Ability to electronically route proposed disposal listing to specific users for approval within the system		
450	Ability to perform the following within the Fixed Asset system: - Perform complete/ partial retirement - Provide simple method of retiring low value assets - Perform mass retirement - Capture cost of retirement (e.g. removal cost)		
451	Ability to make provisions against losses on retirement of assets in respect of Assets waiting for disposal		
452	Ability to automatically calculate the gain or loss on disposal/retirement		
453	Ability to capture disposal information such as: - Date of retirement - Cost, accumulated depreciation and net book values written off - Sales proceeds - Gain/ loss on disposal - Reasons for retirement - Mode of retirement e.g. sold, scrapped, donated etc.		

Sl.No.	Requirement Description		
454	Ability to post automatically or manually to the respective account codes in the General Ledger: - Gain or loss on disposal; - Sales proceeds; - Capitalization cost; and - Accumulated depreciation - Depreciation		
455	Ability to automatically determine the corresponding depreciation charge for the partial disposal, based on one of the following entries: - Amount of the acquisition costs being retired - Percentage rate - Quantity		
456	Ability to manually amend the partial disposal amount calculated by the system and then recalculate the corresponding depreciation for posting to the General Ledger		
457	Ability to post automatically or manually to issue invoice in the Account Receivable		
458	Ability to reinstate fixed assets incorrectly retired		
Sub-Process Name	**Manage Depreciation of Fixed Assets**		
459	Ability to support different methods of depreciating an asset, such as - SLM - WDV - As per Regulatory Requirement - User-defined rate tables - Sum of digit - Unit of use - Useful life		
460	Support change of useful life and effective rate of depreciation		
461	Support change in method of deprecation and rates of depreciation for a specific fixed asset or group of fixed assets during the life of the asset(s)		

Sl.No.	Requirement Description		
462	Ability to maintain multiple depreciation rates vis-à-vis the periods to which they apply and ability to calculate depreciation with retrospective effect wherever required		
463	Ability to facilitate adjustment of depreciation of fixed assets prior to and after updates to general ledger		
464	Ability to automatically post to the corresponding accumulated depreciation and depreciation expense accounts in the General Ledger		
465	Ability to provide at least daily/ monthly basis of calculating depreciation		
466	Ability to comply calculating depreciation with accounting standard and tax regulation and regulatory requirements		
467	Ability to provide for recalculations of depreciation expense on assets re-valued e.g. Depreciation = (revaluation amount remaining/ new estimated life)		
Sub-Process Name	**Manage Insurance of Fixed Assets**		
468	Record all insurance related details against fixed assets		
469	Record multiple insurance policy details against individual fixed assets		
470	System generated alerts/reminders to designated users about insurance premium payable, new policies to be taken, policies to be discontinued etc.		
471	Ability to automatically update insurance record on passing of the insurance premium bill with the policy details		
472	Ability to monitor sale/purchase of insurable assets and update insurance records automatically		
473	Ability to update details of claim settled / partly settled / rejected		
Sub-Process Name	**Manage Revaluation of Fixed Assets**		

Sl.No.	Requirement Description		
474	Ability to capture the following information: - Revaluation amount - Revaluation date - Revaluation method - Valuers' reference - Computation of revaluation surplus/ deficit and diminution		
475	Ability to keep the original asset cost details separated from the revaluated amounts and a history of revaluation for each asset over time		
476	Ability to automatically post revaluation transaction to update relevant accounts in the General Ledger (allowance for revaluation (surplus/deficit), allowance for diminution)		
Sub-Process Name	**Manage Physical Inventory of Fixed asset**		
477	Ability to print asset listing for physical count based on user-definable criteria The following information should be generated for each asset: - By owner unit - By using unit - By location - By asset class / asset category - By Date - By Retirement date - With asset ID - With asset Class - With asset description - With location - With quantity - With value		
478	Ability to capture physical count manually or automatically via data upload (e.g. using bar code scanning device, spreadsheet)		

Sl.No.	Requirement Description		
479	Ability to process the results of the inventory manually or automatically by: - Making comparison with information in the database - Retiring the asset if asset is confirmed missing - Change location if asset has changed location		
480	Enter the inventory date in the assets counted and assets identified as missing		
481	Ability to capture the following information for all types of adjustments such as: - Date of adjustment - Cost, accumulated depreciation and net book values adjusted - Adjustment reference document (if any) and authorization		
482	Ability to manually or automatically adjust the acquisition cost and corresponding depreciation for the missing assets to the General Ledger upon update of Fixed Asset system		
483	Ability to ensure that no duplication of the equipment/asset can occur. In other words an item of equipment, once defined, cannot be duplicated within the system.		
484	Ability to define continuous assets/equipment applicable to KPTCL's transmission assets. The system is to provide facility to allow an item of equipment to be defined as a function of its length.		
485	Ability to record any environmental issues or regulations required in the operation of the equipment / asset.		
486	Ability to record the physical location of each fixed assets		
Sub-Process Name	**Manage Integration**		
487	Ability to provide for automatic integration with General Ledger, Accounts Payable, Accounts Receivable, Project Management and Budget, including the following capability: - Automatic interfacing of accounting entries to the G/L module; Drill-back capability to Account Payable (e.g. Invoice, Purchase Order etc)		

Sl.No.	Requirement Description		
Sub-Process Name	**Manage FA Reporting and Enquiry**		
488	Ability to display asset description at individual asset level, summarised levels (e.g. asset class, asset group, by balance sheet) and by particular asset (e.g. asset number)		
489	Ability to provide drill-down from asset descriptive details to: - Balances - Depreciation - GL account code		
490	Ability to provide asset information via screen and print report, but should not be limited to: - By date, year (e.g. by year of capitalisation, year of disposal) - By type of transaction (e.g. acquisitions, transferred, retirement, written-off, etc.) - By asset location - for small assets which are portable - By owner unit or using unit (e.g. department, zones, Area Offices) - By asset class (main asset group, sub group, asset number) - By user-specified rules		
491	Ability to produce reports for various reporting, flexible report writing tools and on-line enquiry facilities for (but should not limited) to the following: - Financial reporting (e.g. audit and taxation) - Management reporting - Examples of standard reports are listed, but should not be limited to, as follows: - Assets at gross separately from accumulated depreciation - for period and year-to-date - Asset master at summary and detail level - Asset additions - Asset retirements Asset valuation - gross asset values, accumulated depreciation and NBV - Assets by source of funds (e.g. capital contribution, Grants, own funds) - Assets by acquisition method (e.g. purchasing, donation) - Depreciation expense using flexible user selection criteria		

Sl.No.	Requirement Description		
	- Depreciation forecast - GL posting summary - Assets not found at location Asset found at location other than that assigned in the asset record		
492	Ability to provide ad hoc listings via screen and/or print listings based on user defined specifications such as (but not limited to): - Select and sort by asset category - Select and sort by asset class - Select or exclude fully depreciated assets - Select or exclude retired assets - Select by GL account codes - Select by business units - Select by asset status - Select by asset location - Select by asset life within asset book		
493	Ability to provide reports that can analyse asset information: - By owner unit or using unit (e.g. zones, Area Office) - By time period (e.g. year) - By company, asset type, department and location. - By movement (such as addition, transfer or disposal) by account, current month or year-to-date activity		
494	-Assets taken/given on lease, buy back of assets, assets acquired under Self execution works, deposit contribution works, assets given on gift, assets maintained by others utility but right to utlise the asset by KPTCL		

Sl.No.	Requirement Description		
495	Provide for complete asset history, for example: depreciation, depletion and amortisation current period, year-to-date, accumulated net book value and residual value for finance, tax and regulatory requirement - remaining life - history transactions with line-item - repair and maintenance tracking - warranty claims and settlements tracking - insurance claims and settlements tracking - acquisition and retirement date		
496	Ability to provide the following details or reports for taxation purposes: Additions - Qualifying cost - Non-qualify cost - Year of assessment of acquisition Disposal/ write off - Qualifying cost - Non-qualify cost - Sales proceeds - Year of assessment of expiry Adjustments/ transfers - Qualifying cost - Year of assessment of adjustment/ transfer Reconciliation of fixed asset movements - Opening balance - Additions - Disposals - Transfer in/ out - Adjustments - Qualifying costs - Non-qualifying costs - Closing balance		
497	Generate reports on fixed assets at specific location		

Sl.No.	Requirement Description		
498	Ability to generate reports related to Capital WIP capturing (but should not be limited to) the following - Description of Work - Account Code - Letter of Award - Scheduled date of Completion -Total Estimated Cost and break-up in terms of material, labour,interest during construction, indirect expenses, etc - Payment -Total actual Cost and break-up in terms of material, labour,interest during construction, indirect expenses, etc - Date of Commissioning Source of Funding (Lender's name, loan amount, loan identification, Equity Contribution, etc)		
499	Financial / MIS Reporting Requirements		
Sub-Process Name	**Reporting Requirements for Estimates of Financial Resources**		
500	Ability to generate report on Financing of Capital Expenditure		
501	Ability to generate report on Revenue Expenditure on O&M		
502	Ability to generate report on Rate of Return on Net Fixed Assets		
503	Ability to generate report on Outstanding Dues to Central Govt. Undertakings & Others		
504	Ability to generate report on Efficiency Improvement Parameters		
505	Ability to generate report on Financial Statements of SLDC		
506	Ability to generate reports to meet all requirements under tax laws of India		
507	Ability to generate report on Rate of Return on equiy capital		
Sub-Process Name	**Reporting Requirements for Annual Financial Statement(Previous Year - Actual, Current Year - Budgeted and Ensuring Year - Estimates)**		

Sl.No.	Requirement Description		
508	Ability to generate a summary of companies budget as per parameters defined in the company's Annual Financial Statement(AFS)		
509	Ability to generate report on Estimates of O&M Expenses		
510	Ability to generate report on Estimates of Establishment & Administration charges		
511	Ability to generate report on Estimates of Interest Payable		
512	Ability to generate report on Loans from State Government		
513	Ability to generate report on Details of Borrowings		
514	Ability to generate report on Loans and Advances to the Employees		
515	Ability to generate report on Capital and Revenue Receipts/Expenditure and Closing Cash Balances		
Sub-Process Name	**Reporting Requirements for Revenue Monitoring**		
516	Ability to generate report on Revenue Realised and Remitted into Banks		
517	Ability to generate report on amount transferred by various bank to main account of the company		
Sub-Process Name	**Reporting Requirements applicable to all processes of the module**		
518	Ability to generate reports confirming to technical, operational,regulatory, statutory and other business requirements		
519	Ability to meet all MYT/ARR/Tariff/APR related processes/reporting requirements of KPTCL		
520	Ability to meet all Internal Audit related processes/reporting requirements of KPTCL		
521	Ability to support the requirements of Tax Audit and facilitate the preparation of various statements and annexures required therein		

7.2.3.1 Planning & Budgeting

Sl. No	Requirement Description	Compliance (S/C/T/W)	Comments (If any)
1	System should allow creation of budgeting templates, distribution of the same to departments and uploading of the same into a centralized repository through a web interface. System should provide flexibility to create templates in web interface as well as MS Excel spreadsheets		
2	System should allow departments to view standard budgeting templates created by the budgeting department with seeded / predefined values		
3	System should enable planning department to analyse data of previous years, to review planning forms submitted by departments		
4	System should have a built-in workflow, to enable planning department to upload consolidated plans in the database and forward it to appropriate authorities for approval		
5	System should be able to monitor plan utilization periodically to check for revision (e.g. if the expense is found to have reached 80% of the budget at the time of quarterly monitoring, check if revision is required in the budget)		
6	System should allow review of performance vis-à-vis Budget by authorized persons at various levels (Zone, HO etc)		
7	System should allow to store the plan data for multiple years; also, it should have the facility of making the future plans		
8	System should be able to create different type of plans in the same year. System should support multiple plan scenarios		
9	Should be able to maintain original plan, revised plan and latest forecast		
10	System should automatically allocate an annual budget over multiple accounting periods based on an equal amount or a		

Sl. No	Requirement Description	Compliance (S/C/T/W)	Comments (If any)
	specific monthly amount		
11	System should provide planning on a monthly, quarterly, half yearly and annual basis		
12	Should facilitate multiple level approvals and multiple iterations		
13	The system should be integrated with MS Office products like Excel		
14	The system should allow entry of supporting notes, comments for each value entered by the user		
15	The system should be capable of being connected Real-Time to the EAAAP layer for Budget vs. Actuals Variance analysis, without the need for data replication		

7.2.4   Human Resource Management Module

Sl. No.	Requirement Description		
	Organization Management (OM)		
1	Ability to define organization hierarchy, organization structure of corporate, Zonal, Circle ,Division, Sub-divisions etc., and voltage wise Stations.		
2	Ability to generate tree structure giving details of all unique role holders and reporting employees (defining reporting and reviewing relationship) - including dual reporting mechanism for a specific set of employees		
3	Ability to define various categories of employees across Group A,B,C & D (list of existing employees Technical/Minstrel wise , cadre wise, wing wise or unit wise on any date or cross section of time.		
4	Ability to define name of work flow, sub-functions and positions		
5	Ability to maintain reporting structure (hierarchy of positions) - including		

Sl. No.	Requirement Description		
	multiple reporting mechanism for a specific set of employees.		
6	Ability to create/delete/shift new office, functions & positions,posts		
7	Ability to maintain change in designations due to promotions/demotion, transfers		
8	Ability to define multiple organizational structures (positions) and Organization reporting relationships and integrate with the respective employee data		
9	Ability to restrict making changes in the Organisation Management to authorized persons only		
10	Ability to seek confirmation after every change made in the structure, changes to be made permanent only on authentication by the authorized person.		
11	Ability to change/restore/rollback changes to a previous (given) date and report inconsistencies		
12	Ability to tightly integrate administrative power definitions to work flows and approvals		
13	Ability to provide reports on list of vacant positions		
14	Ability to provide reports on reporting relationships (Functional, administrative) in a department		
15	Ability to issue orders advising to take additional charge and charge allowance		
16	Ability to clearly define the hierarchy of Delegation of Power in the organization for all processes being followed in HR policies		
17	Ability to view HR Policies & Procedures Handbook in System		
18	Ability to generate all required and ad-hoc reports for all processess		
	Human Resource Policies, Rules and Regulations, BESR to be included (Leave, Pay, Allowances, Pension)		
19	Ability to define all norms relating to Medical Advance and Medical re-imbursement in respect of employees and their dependants and process bills		
20	Ability to define delegation of powers to different authorities		

Sl. No.	Requirement Description		
21	Ability to process Medical Advance and Medical reimbursement in respect of employees and their dependants		
22	Ability to process transactions according to prevailing laws related to Employees (including contract/outsourced employees) & Employer and ability to incorporate changes as per revisions/notifications/orders issued by Organisation/Statutory bodies of state and central govt		
23	Ability to process matters relating to employees (including action taken reports against resolution passed)		
24	Ability to process cases for constitution of committees and reconstitution including trustee boards		
25	Ability to generate all required and ad-hoc reports		
Employee Master (Employee Service Book)			
26	Ability to maintain electronic record (E-Service record) of an employee's service history for KPTCL & ESCOMS (From Recruitment to Retirement). This includes all kind of information such as job roles, promotions, transfers, promotion, training, and other career-related data etc. Data collection (including manual data entry) from existing Manual Service Record, Data Cleansing and uploading it to proposed solution to be performed by Implementing Agency only		
27	Ability to maintain a) a centralized database of employees across Karnataka Power Transmission Corporation Limited (KPTCL) and all Electricity Supply Companies (ESCOMs) b) facilitate seamless access and movement of employee data between KPTCL and the ESCOMs.		
28	There should be a field in the master to reflect the company code to the department to which an employee is associated		
29	Ability to store all employee records from KPTCL and all ESCOMs in a single, centralized repository. This repository should be designed to support large volumes of data while ensuring high availability and performance		
30	Ability to maintain data consistency across all employee records, ensuring that updates, transfers, and changes in employee status are accurately reflected across the system		

Sl. No.	Requirement Description		
31	Ability to maintain robust security measures, including encryption, access controls, and audit trails, to protect sensitive employee data		
32	Ability to support role-based access control, allowing different levels of access for users based on their roles within KPTCL and the ESCOMs. Access permissions should be configurable to ensure that only authorized personnel can view or modify employee data		
33	Ability to allow authorized users from each ESCOM to have access to the centralized database to facilitate the seamless movement and management of employees between KPTCL and the ESCOMs. The system should ensure that access is granted without compromising data security		
34	Ability to maintain detailed logs of all access and changes to employee data, ensuring traceability and accountability.		
35	Ability to support the seamless transfer of employees between KPTCL and any of the ESCOMs. This includes updating the employee's records, department, reporting structure, and any other relevant data in real-time.		
36	Ability to Implement workflows to manage the transfer process, including notifications to relevant stakeholders and approval mechanisms to ensure proper authorization before any changes are made		
37	Ability to maintain a historical record of employee movements, including details of transfers, promotions, and other status changes, ensuring that all data is traceable and auditable		
38	Ability to integrate seamlessly with existing HR, payroll, and administrative systems used by KPTCL and the ESCOMs. This integration must support real-time data synchronization to avoid discrepancies between systems		
39	Ability to store and maintain employee personal data such as employee no., name, addresses, phone numbers, photo, emergency contact information and email addresses, Salary Bank Account Details, passport, PAN and Aadhar details. Etc		
40	Ability to maintain employee's gender, date of birth, blood group, citizenship, marital status, religion, caste etc.		
41	Ability to maintain an employee's education, certifications, degrees and any endorsements (Professional Membership)		

Sl. No.	Requirement Description		
42	Ability to maintain list of all educational Institutes/Colleges identified by AICTE/UGC/recognized Universities (by KPTCL) and provision for updation of the same		
43	Ability to maintain previous (multiple) employment details like name of the organization, department, position held (designation), start/end dates, reason for leaving, last salary drawn, references etc.		
44	Ability to maintain nomination details of dependents such as names, date of birth and contact details of spouse, children, parents, nominees , dependents details under different schemes, etc.		
45	Ability to maintain employee's recruitment category like physically handicapped/ sportsperson /ex-servicemen / SC / ST / OBC / compassionate grounds/Others/ Rural /Kannada Medium/HKRR/Project Displacement/Women Quota etc.		
46	Ability to update employee's recent photograph and photograph of dependents in specified year interval or age		
47	Ability to maintain employee's medical history and reimbursement data .		
48	Ability to maintain details of employee's health, medical history and capture the details (integrate with payroll for reimbursement amount)		
49	Ability to maintain the details of employees in Specially abled category (like reasons, date of status change, etc)		
50	Ability to store caste certification verification, Marks card verification & Certification & police verification report and detailed status		
51	Ability to receive and process requests of NOC for obtaining passport/visa /study abroad or for outside employment		
52	Ability to maintain the languages known with details of speak, read and write separately. Clear indication for the mother tongue		
53	Ability to maintain the details of spouse and relatives in the service of the organization including name, employee no., unit where working, designation with provision for automatic updation of records of the relative as and when it is updated for him by his controlling establishment		
54	Ability to maintain details of present designation, salary details, reporting hierarchy		

Sl. No.	Requirement Description		
55	Ability to maintain history of trainings attended (prior to joining & after joining) like name of the course, name of the Institution, month & year of training, duration of the course in days/weeks etc.(integrate with T&D)		
56	Ability to maintain the awards for which nominated / received by the employee including the name of the award, year of award, in which discipline/field and date of receipt of award and special status/ privilege, if any, to be given to him for the award		
57	Ability to maintain date of joining, probation period, date of confirmation and appointment details like notification no. and date etc.,		
58	Ability to maintain details of promotion from one grade / scale / discipline to another including any reappointment through internal selections/in service appointments		
59	Ability to maintain full transfer history of the employee including the current & new location, nature of transfer (self-initiated / company initiated), date of joining and date of relieving at different locations, number of times transferred/cancelled but kept in abeyance etc		
60	Ability to maintain Post to which salary is being charged and also maintain present place of posting including date of joining of each unit/office, name of the office, present designation, grade etc.		
61	Ability to maintain history of Disciplinary Action, Review Authority Appeals/ Court Cases / ACB / Lokayuktha case taken / initiated against the employee including date of charge sheet, nature of charges, amount of financial loss to organization, date of punishment and nature of punishment/exonerated.		
62	Ability to maintain details of suspended employees (reasons of suspension, time duration of suspension, restricted privileges etc.)		
63	Ability to change employee job status (Active-Trainee, Probation, Extended probation, Regular, Contractual, deputation, Suspended, absconding (FIR) & Exit Resigned, VRS, Terminated, Compulsory Retirement)		
64	Ability to check/approve the continuation of service of the employee attaining a certain age		
65	Ability to date and time stamp all changes in the database enabling data availability on 'as on date/time' basis		

Sl. No.	Requirement Description		
66	Flexibility of additionally capturing any information relating to employee at a later date		
67	Ability to link employee data with the position based standard responsibility (Job) Matrix (in case of additional/incharge)		
68	Ability to maintain details of concurrent job details of employees/additional responsibilities/special duties in addition to regular responsibilities		
69	Ability to maintain the details of employees with the membership with various Committees (permanent or temporary) and membership of any professional organization		
70	Ability to update only authenticated data reflected in the employee master on prompt		
71	Ability to maintain employee data with regards to claims, etc.		
72	Ability to maintain and view employee leave details		
73	Ability to maintain employee data with respect to PF, NDCPS/UPS/OPS, Pension, Family Pension, Gratuity, etc. and the nominations for the same		
74	Ability to create organizational chart of all positions and reporting relationships		
75	Ability to differentiate employees on the basis of Technical/ Non technical basis		
76	Ability to differentiate employees on the basis of Group Wise (chapter wise as in our department)		
77	Ability to provide restricted access to different classes of employee master data		
78	Ability to maintain the insurance related details for each employee, like insurance number, nominee details, amount etc.		
79	Ability to maintain Audit trial of all changes made to sensitive information		
80	Ability to maintain performance appraisal/confidentiality report of employees		
81	Maintenance & Updation of all information in Employee Master data since recruitment/ deputation (such as personal details, addresses, Nature of Appointment, Qualification, Department exam, transfers, deputation details,		

Sl. No.	Requirement Description		
	change of location etc till resignation/termination/retirement/death while in service of employee		
82	Ability to maintain service files documents in scanned form including Proof of Date of Birth, domicile, Bonds, if any, executed, disciplinary cases details, photograph (photos in fixed year intervals), children birth certificate etc.		
83	Ability to maintain the details of Loan availed (For all employees) for land purchase, house/flat purchase, construction of residential house, addition/alteration of constructed house and repair of house etc		
84	Ability to issue Release Orders to release the loan money by the respective accounting unit against sanction order		
85	Ability to provide details of employees applying for higher education		
86	Ability to submit and declare of Assets and Liabilities by employees online		
87	Ability to provide reports of employees based on blood group, length of service, age, qualification, experience, department, salary bands etc.		
88	Ability to provide reports to Admin&HR department on employees personal, educational & professional details not updated in the system		
89	Ability to provide reports on all employee details as per department, class/cadrewise, location in specified period,(chapter wise)		
90	Ability to provide reports on employee counts retired, resigned, suspended, terminated or left, per department on which condense class/cadre-wise, superannuating in a specified period		
91	Ability to provide reports on status of details of disciplinary proceedings, time, progress, status		
92	Ability to provide reports on personnel released from one place and not joined other office		
93	Ability to maintain details of training programmes attended during employment and ability to obtain reports on trainings opted		
94	Ability to assign Incharge, Additional, Independent, Officiating charge for posts asper KPTCL policies		

Sl. No.	Requirement Description		
95	Ability to generate all required and ad-hoc reports		
	Attendance & Leave Management		
96	Ability to mark attendance and integrate for payroll processing with a provision to link attendance capturing devices		
97	Ability to apply all kinds of leave under the appropriate category and state the reasons for it		
98	Ability to apply for NOC for abroad tour(and view the status of application BY EMPLOYEE)		
99	Ability to Check the status of leave request		
100	Ability to approve/cancel/modify leave requests by employees/Officers		
101	Ability to maintain different category of leaves with details such as Leave credited/utilized/available etc		
102	Ability to approve or cancel leaves of subordinates		
103	Ability to intimate the controlling officer when an employee goes on unauthorized leave (unmarked attendance) / returns back from unauthorized leave/ extends leave/reports in the middle of the sanctioned leave period (along with appropriate reduction in sanction)		
104	Ability to provide reports to subordinates and A&HR in ESS on attendance & leave details		
105	Ability to provide reports to A&HR and head of the office on employees presently on leave in the department		
106	Ability to provide the Controlling officer with consolidated status of present/absent employees working under him/her		
107	Ability to provide report on attendance details & leave quota/balances		
108	Ability to provide reports on number of employees for whom leave has not been approved/declined/modified		
109	Ability to view vacancy list & status of vacancy (Filled/vacant/abolished)		
110	Ability to view Office-wise manpower strength by head of the office, sectionwise.		

Sl. No.	Requirement Description		
111	Ability to apply for in service posts as per KPTCL policies		
112	Ability to record requests by employees for passport/visa /study and outside employment and permission granted/rejected thereof		
113	Ability to handle making online application for sanction of LTC/HTC/other entitlements through ESS and approval through workflow		
114	Ability to update work schedule/shift pattern of employees		
115	Ability to maintain working hours, weekly offs and national/local holidays (ability to mark attendance on notified holiday and generate double wages)		
116	Ability to define overtime facility		
117	Ability to define and process overtime allowances cases beyond ceiling limit		
118	Ability to define types of leaves: half pay leave, earned leave, casual leave, study leave, maternity, paternity, child care - all types		
119	Ability to define admissible leave for employees of all class		
120	Ability to track attendance and map it with applied leave (between applied and leave granted)		
121	Ability to record employee's punch in/punch out date/time details (integrating with access card machine)		
122	Ability to manually update attendance & leave details of employees in case of employees to whom access card is not applicable		
123	Ability to correct attendance & leave details of employees		
124	Ability to update half day attendances/leaves in the system (based on leave conditions)		
125	Ability to generate all required and ad-hoc reports		
	Training & Development (T&D)		
126	Ability to view the training calendar and nominate oneself and subordinate for the same		
127	Ability to approve/reject the Training requests for specific programmes which were not included as training needs		

Sl. No.	Requirement Description		
128	Ability to view history of past trainings attended		
129	Ability to provide reports on training calendar of present/past years		
130	Ability to provide reports on training programmes attended during employment		
131	Provision to define training - short-term, long-term, trainable and non trainable training needs and Provision to capture ad-hoc courses offered by various entities		
132	Ability to design selection criteria for various in-house/ external trainings especially higher studies		
133	Ability to provide training feedback by the employee supervisor 6 months post training for training effectiveness		
134	Ability to capture Training Policy and customize process to update/edit the policy		
135	Ability to issue permission for acting as examiner/faculty member/guest lecturer in different technical/management institutes		
136	Ability to capture Training needs of employees met/not met during the quarter/year		
137	Ability to formulate and update Annual Training Calendar with list of Training Programmes, Batch size, target group etc.		
138	Ability to provide input to Finance & Accounts Module for payment to Trainers/Institutes		
139	Ability to update list of Trainers/Institutes for various training programmes		
140	Ability to record participant's attendance in training programmes and employees nominated but did not attend a training programme		
141	Ability to notify HoD/employees about the nomination for training programme		
142	Ability to define and print training nomination letters to be sent to employees for invitation		
143	Ability to customize training feedback form, effectiveness form and training nomination letters		
144	Ability to analyze training feedback		

Sl. No.	Requirement Description		
145	Ability to book training rooms by departments for specific training programmes, for in-house programmes.		
146	Ability to capture course content of all training programmes along with list of Target group, batch size for for in-house programmes.		
147	Ability to support the process of Induction Training for new recruitees by integrating with the recruitment module		
148	Ability to maintain topic/subject-wise database of internal & external faculty, number and details of courses conducted by them quarterly, half-yearly, yearly and cumulative		
149	Ability to maintain training budget (for each category of training) - cost of training - actual expenses. Link the TA/DA/Hotel expenses payment records to find out total cost of training. (The TA bill passing system should be linked to the Training system to ensure feedbacks)		
150	Ability to maintain data for internal training exam and certification obtained by staff		
151	Ability to maintain data on external certifications obtained by the staff		
152	Ability to have online registration, cancellation, reminder, and confirmation of training classes		
153	Ability to upload external brochures or training programme received from external institutes		
154	Ability to raise Requisition / Purchase Orders (PO) for clearing professional fees of Trainers/Institutes/Stationery/Photocopy of training course content/material etc.		
155	Ability to monitor Planned Training against actual training conducted based on user defined parameters such as number of trainings, budget, participants etc.		
156	Ability to maintain training database with full training history of all employees		
157	Ability to raise requests for guest house booking for guests & other field employees nominated for training		
158	Ability to view status of requests for guest house booking for guests & other field employees nominated for training		

Sl. No.	Requirement Description		
	Reporting Requirements		
159	Ability to produce individual and departmental training reports		
160	Ability to provide report with the participant list and total training hours for each employee during specific period		
161	Ability to calculate total Training Cost in a year against the T&D Budget		
162	Ability to provide reports on training programmes nominated for but not attended during employment (reasons for not attending)		
163	Ability to generate all required and ad-hoc reports		
	Heading to be added		
164	Ability to request for VRS (integrate with Employee Master for status of <u>disciplinary proceedings)</u>		
165	Facilitate employee to fill exit process		
166	Ability to apply for NDC (No Demand Certificate)/clearance from various departments (where employee had worked) at the time of Exit		
167	Ability to initiate for NDC at the time of transfer		
168	Ability to record request for transfer through employee self service and indicate appropriately at the time of transfer exercise. Record of such request wherever acceded to be maintained		
169	Ability to generate increment letter through the system		
170	Ability to view clearance request approved/ rejected by department and the reason for the same		
171	Ability to generate reports on the total number of employees applied for transfers, number approved/rejected/pending		
172	Ability to view administration handbook for guidelines on aspects such as Travel, Guest Houses, Conference Rooms etc.		
173	Ability to provide links to the important items hosted in various in-house websites/ intranet e.g. important circulars/ instructions/ policy documents etc.		
174	Ability to define VRS guidelines		

Sl. No.	Requirement Description		
175	Ability to request for VRS as per the rules defined for the scheme		
176	Ability to approve for VRS as per the rules defined for the scheme (Integrate with Payroll & E-Exit)		
177	Ability to generate reports on the total number of employees applied for VRS, number processed/rejected/pending per year		
178	Ability to Provide workflows. Accommodates multiple levels of review and approval		
179	Facilitate administrator to create new self-service facility as and when required.		
180	Ability to define guidelines for retirement, suspension, dismiss etc.,		
181	Facilitate E-Exit process for employees at the time of exit. For retirement, send reminder of the retirement date to the employee one year in advance		
182	Ability to process NDC (No Demand Certificate)/clearance from various sections at the time of Exit		
183	Ability to notify (flag) individuals of any outstanding balances from various departments such as payroll, time office, purchase, establishment procurement- whichever applicable) when employee exits		
184	Ability to generate and print Leaving Certificate / Experience Certificate once all approvals are granted		
185	Ability to maintain case details of the employees reinstated/reappointed after being terminated		
186	Ability to retrieve details of terminated employees in case he/she is reinstated or reappointed		
187	Ability to calculate back pay or other entitlements of reinstated/reappointed employees (as applicable)		
	Reporting Requirements		
188	Ability to view clearance request approved/rejected by department and the reason for the same		
189	Ability to generate reports on the total number of employees applied for resignations/VRS, number approved/rejected/pending ability to view the		

Sl. No.	Requirement Description		
	complete report on the exit formalities which would be available whenever it wants to be seen		
190	Ability to generate all required and ad-hoc reports		
	Integrate Time and Leave Management with OM, ESS & PayrollModule		
191	Facilitate leave balances to be merged/ transferred/ credited through an accrual process in the system automatically based on user defined criteria		
192	Ability of record keeping and maintenance of historical data Reporting Requirements		
193	Ability to provide reports on Log in/Log out date/time data		
194	Ability to provide reports on late coming hours (summing up late hours to automatically debit from employee leave)		
195	Ability to provide reports on total number of admissible leave and actual leaves taken in a period by an employee		
196	Ability to produce report to reflect the half day leave, unauthorized absence, repeated late arrival by employee to job location or employee working less than their normal working hours for Time keeping and disciplinary action		
197	Provide customizable 'workflow' for all internal processes & approvals associated with the payroll system		
198	Ability to submit / update declarations for Income Tax calculation		
199	Ability to view compensation and benefit details (Pay Slip)		
200	Ability to apply for Loans & Advances and Check the status of approval (Integrate with Payroll Module)		
201	Ability to display and print pay slip information for each pay period, including gross pay, taxes, other deductions and net pay, with pay period and year-to-date totals		
202	Ability to define the computation of allowances like shift allowance, double wages etc., and deductions		
203	Ability to display and print Income tax computations		
204	Ability to display and print Insurance related details for self		

Sl. No.	Requirement Description		
205	Ability to apply for medical advance, HTC/LTC/Transfer TA/Transfer grant/advance/reimbursements		
206	Ability to enter and approve general claims and expenses through the system		
207	Ability to provide report on past salary slips & income tax statements		
208	Ability to provide report on month-wise insurance premium payment/deduction statement.		
209	Provision to define tax rates (including available deductions, exemptions, taxation slab rates, standard deduction, surcharge etc) Provision for TDS calculations (if any) & tracking of TDS payable to the Government of India. Compute TDS based on previous year tax deducted (e.g. 1/12th deducted on a monthly basis)		
210	There should be a single employee master and it should be integrated with all the company codes		
211	Approval limits for expense reimbursement should be configured based upon the hierarchy limits		
212	Maintain information of the salary bank account		
213	Ability to allow for the creation of user defined components of Pay like Recurring and Adhoc Allowances, Recurring and Adhoc Deductions , User Defined Allowances & Deductions		
214	Ability to allow for the computation of the following elements: Fixed Pay elements applicable to all employees Like Basic, PF, Special Allowance,		
215	Ability to allow the setup of multiple payrolls with different payroll administrators & combining payroll (clearly def. semi variable, static variable payments)		
216	Ability to allow restriction of administrative functions to a few select payroll users		
217	Ability to have a data upload facility to upload period/limit data		
218	Ability to allow the maintenance of slab-wise details for statutory elements like Income Tax as well as user defined elements		

Sl. No.	Requirement Description		
219	Provision to calculate reduction in salary based on attendance policy/manual approval		
220	Ability to generate Form 16		
221	Ability to generate TDS challan & return		
222	Ability to allow the following calculation of onetime payment of allowance and / or deduction: Incentive, arrear, ex- gratia, uniform, lease / conveyance maintenance, Foundation day, etc, By Amount: enter amount to be deducted or payable, by Days: enter number of Days for system to compute the amount based on Basic Pay or gross Pay and/or any other component of Pay, By Percentage: enter percentage for system to compute the amount based on basic pay or gross pay and/or any other component of pay		
223	Allow for input of start and end date for recurring payment / deduction		
224	Ability to automatically update Payroll database for changes in employee record without interfering with payroll processing (e.g. Promotions in the middle of month (DURING annual increment, change in basic))		
225	Ability to allow Back dated calculations		
226	Ability to allow a final settlement report for each terminated employee		
227	Ability to allow provision to suspend Payroll runs or control final settlement processing on a case to case basis		
228	Ability to have the provision to run separate bonus/ incentive runs		
229	Ability to provide and handle unlimited pay account codes and drawing banks		
230	Ability to have a provision to process Arrear and backdated Payment calculations		
231	Provision to recover advances in subsequent pay periods with a single/multiple transaction		
232	Ability to maintain earnings history information (i.e., a record of all pay of all activity) for each employee for a user-specified period of time		
233	Ability to support multiple banks or savings institutions per employee		
234	Linkage with Punishments i.e. suspension should result in nonpayment of subsistence allowance		

Sl. No.	Requirement Description		
235	Ability to calculate HRA Rebate as per the prevailing Income Tax Law/Rules		
236	Ability to handle tax exemptions as per the prevailing Income Tax Law/Rules		
237	Ability to process casual leaves for the part time sweeper and other part time employees		
238	Ability to handle Provident Fund/VPF rules like Calculate and deduct contributions according to the respective Statutory Acts/ Company policy etc,		
239	Ability to conduct full and final settlement of employee during Exit		
240	Ability to notify (flag) individuals of any outstanding balances when employee is terminated		
241	Ability to record an employee's selection of benefit, retirement and deduction options		
242	Ability to automatically recover salary advances		
243	Ability to define multiple payment methods (Bank Transfer/Cheque Payment)		
244	Ability to require approval before a specific payment is made to an employee		
245	Ability to forward the overtime schedule to the top management for approval if the amount of overtime is over a defined percentage of the basic salary		
246	Ability to maintain a salary range for each job family or job class/career band		
247	Ability to automatically adjust calculations for mid-pay period salary, advanced salary, and employment actions		
248	Ability to convert the payroll to an excel sheet		
249	Ability to assign work calendar (scheduled work days, scheduled holidays, etc.) to one or more employee groups		
250	Ability to default standard holiday data, as well as user-defined holiday data		
251	Ability to create and maintain work calendars over user-defined years		
252	Ability to provide input to Finance & Accounts Module for salary payment based on attendance. Statutory and voluntary deductions		
253	Ability to calculate arrears in case promotion is made with retrospective effect		
254	Ability to update salary details on promotion/annual increment etc.,		

Sl. No.	Requirement Description		
255	Ability to upload and maintain history of pay scale		
256	Ability to link the payscale to employee		
257	Ability to generate all required and ad-hoc reports		
	Support for allowances, reimbursements, loans etc.		
258	Ability to support encashment of Leave, Tour and travel claims etc		
259	Ability to release of festival advance and other advances (user defined) against salary		
260	Ability to provide Employee-wise recovery position, recovery list and outstanding balances list - month-wise or as user defined period		
261	Ability for payment of employee reimbursement claims such as Medical, TA & other allowances including cashless facilities and recovery of excess advances		
262	Ability to support Recovery of union/associations contributions , festival advance recovery etc.,		
263	Ability for provision of Housing loan or any other loan component to be adjusted against the employee salary		
264	Ability to support payment of educational allowance, transfer allowances and any other user defined allowances		
265	Ability to support recovery of all other types of loans with reports like recoveries made, overdue list etc.		
266	Ability to support computation of all types of allowances and arrears thereon with consequent tax adjustments		
267	Ability to support payment of salary arrears as per KPTCL requirements with tax adjustments. It should also support payment of arrears calculated in user defined installments or in lump sum		
268	Ability to define loans and its various characteristics such as periodicity, interest rate, ceilings details etc.		
269	Ability to attach loan sanctioning rules to every loan type		
270	Ability to allow payroll to deduct the amount due from an employee (in case of loans/advances etc.)		

Sl. No.	Requirement Description		
271	Ability to generate all required and ad-hoc reports		
	Personal Taxation		
272	Ability to Define tax rules to determine employees tax liability as prevailing tax laws for computing actual tax liability of employee		
273	Ability to capture employee asset details such as various land holdings, investments in shares, any bank deposits and various sources of income		
274	Ability to provide investment declaration form in electronic format. The employee will be required to fill and submit the form electronically so as to automatically updation of salary record and tax calculation by the system		
275	Ability to ensure support for major statutory reports / certificates of taxes in the user defined format		
276	Ability to compute employee wise provisional income tax liability and enable view facility to employees for Tax planning		
277	Ability to generate all required and ad-hoc reports		
	Deductions		
278	Ability to compute deductions to be made out of salary and facilitate recoveries in payroll processing		
279	Ability to make deductions effective: In the current period, In any pay period or periods selected, In any user-defined frequency selected, Between user-defined start and stop dates, Until an user defined limit is reached		
280	Ability to have Start and stop dates for deductions should be maintained: On the Employee Master file		
281	Ability to reverse deduction to be included in next pay check if incorrectly withheld / Option with user		
282	Ability to prioritize deductions: Using the deduction code, Using a separate priority number		
283	Ability to be prompted by system when employee status changes to leave to determine how deductions will be paid while on leave: take when return lump sum		
284	Ability to apply or stop certain deductions based on user criteria		

Sl. No.	Requirement Description		
285	Ability to generate all required and ad-hoc reports		
	Pay slip Run		
286	Ability to provide for online calculation of employees pay slip/salary amount		
287	Ability to perform on-line calculation of pay and benefits for terminated employee based on termination date		
288	Ability to incorporate different scenarios for change in pay-roll structures		
289	Ability to provide analysis of impact of revision of any / all components like pay, allowances, deductions etc.		
290	Ability to display the status of the Payroll calculations and to approve generated payroll in different levels		
291	Ability to run Payroll multiple times before finalization to ensure accurate pay computation		
292	Ability to post the amount of salary paid for each element of pay for an employee, based on the relevant GL account code and employee cost centre information to General Ledger. Financial postings include: Element, Amount, GL Account, Cost Centre		
293	Ability to Post salary payment advice including multiple payment methods such as bank, cash and cheque to General Ledger		
294	Ability to generate pay slip with following detail: Taxable and non-taxable components in separate columns, Tax till date, Calculated, Recovered, Projected, Loan balances and no. of installments deducted / left, NDCPS, Professional Tax, Income Tax, LIC & other deductions		
295	Abiliy to generate various reports on all types of Earnings and Deductions etc.		
	NDCPS & Terminal Benefit Management(Incorporate provisions of NDCPS		
296	Ability to provide end to end integration for NDCPS data transfer from this system to other system and vice-versa		
297	a)Ability to incorporate provisions of NDCPS (New Defined Contributory Pension Scheme) Act & Rules b)Ability to support pooling the monthly contribution of NDCPS in to the online NDCPS management system		

Sl. No.	Requirement Description		
298	Ability to generate unique PPANfor new NDCPS Employees		
299	Allows differentiation of employees (e.g. NDCPS not deductible based on eligibility criteria)		
300	Ability to Support NDCPS settlement process.		
301	Ability to support process of taking NDCPS advance online from the centralized NDCPS section		
302	Ability to perform NDCPS application processing, loan sanctioning, loan disbursement, modification of loan installments, loan short closure, recovery through payroll, final settlement during closing/transfer for different type of NDCPS loans (support linkage with loans against NDCPS)		
303	Ability to deduct loan installments (& separately track deductions, loan balance etc)		
304	Ability to Generate all types of MIS reports.		
305	Ability to maintain nominee details and payment to nominee in case of death of an employee (Integrate with Employee Master)		
306	Ability to provide NDCPS Returns and other statutory forms		
307	Ability to adjust NDCPS deductions (& other allowances) between lending company and KPTCL (applicable for employees on deputation)		
308	System should generate all types of reports/registers related to NDCPS management		
309	Ability to allow multiple user-defined messages to be printed on Cheques		
310	Ability to prepare statutory dues statement details & bank clearance month wise as per statutory scheme and remittance activity to the designated bank account		
311	Ability to generate various information as to be required time to time by the statutory authority relating to NDCPS settlement, NDCPS loan, statutory pension information and information as pertaining to contractual employees, etc		
312	Ability to process the statutory pension cases at the time of retirement/death/resignation/transfer		

Sl. No.	Requirement Description		
313	Ability to generate all required and ad-hoc reports		
	PF & Terminal Benefit Management		
314	Ability to support pooling the monthly contribution of PF in to the online PF management system		
315	Allows differentiation of employees (e.g. PF not deductible based on eligibility criteria)		
316	Ability to Support PF settlement process including generation of settlement sheets and relevant vouchers for accounting		
317	Ability to deduct loan installments (& separately track deductions, loan balance etc)		
318	Ability to Generate all types of MIS reports as per request of Bank		
319	Ability to maintain nominee details and payment to nominee in case of death of an employee		
320	Ability to provide PF Returns and other statutory forms		
321	Ability to adjust PF deductions (& other allowances) between lending company and KPTCL (applicable for employees on deputation)		
322	System should generate all types of reports/registers related to PF management		
323	Ability to prepare statutory dues statement details & bank clearance month wise as per statutory scheme and remittance activity to the designated bank account		
324	Ability to process the statutory pension cases at the time of retirement/death/resignation/transfer		
325	Ability to generate various information as required by the statutory authority from time to time regarding awarding contract to the contractors with job details , payroll information, compliance to statutory authority in respect of contractors' employees, etc.		
326	Ability to generate all required and ad-hoc reports		
	Gratuity Management		

Sl. No.	Requirement Description		
327	Ability to perform employee- wise gratuity calculation as per defined rules		
328	Ability to perform forfeiture of Gratuity in case of dismissals etc.		
329	Ability to generate gratuity payment cheques/ bank A/c.		
330	Ability to maintain nominee details and payment to nominee in case of death of an employee		
331	Ability to generate all types of reports/registers related to Gratuity management		
	Pension Management		
332	Ability to intimate the employees three months before their retirement about Gratuity and Pension claim forms etc. Calculate, sanction and authorization of commutation of pension, pension, & family pension under both New & Old pension schemes		
333	Ability to perform pension sanctioning and authorization process.		
334	Ability to maintain nominee details to facilitate pension processing		
335	Ability to support pension disbursement and support multiple payment modes for pension		
336	Ability to calculate family pension and payment		
337	Ability to support all related accounting procedures including generation of vouchers and related reports		
338	Ability to perform Income tax calculation and deduction for pension payment as per Government of India guidelines		
339	Ability to develop and implement centralised Pension Payment Management System and integrate with NIC portal to allow pensioners to verify their continued existence through Aadhaar-based biometric authentication through Digital Life Certificate to process centralised pension payments.		
340	Ability to generate all required and ad-hoc reports		
	Deputation		

Sl. No.	Requirement Description		
341	Ability to handle employees joining and going out on deputation / LIEN along with details like: Leave salary contribution, Pension, nomination & other details -To generate bills towards Pension & Gratuity, Leave Salary/ NDCPS contribution based on KPTCL rules and regulations After deduction of NDCPS contribution same shall be transferred to the Fund Manager for crediting the same to each employee's account.		
342	Ability to handle the pensions, promotions etc. of the employees going from KPTCL or coming to KPTCL on deputation along with updation in the employee master		
343	Ability to generate all required and ad-hoc reports		
	Reporting Requirements for Payroll Module		
344	Ability to generate reports on list of employees based on pay scales		
345	Ability to have provision for generating ad-hoc payroll reports & provision for generating user defined reports		
346	Ability to generate reports on list of employees for whom system notified error in payroll run		
347	Ability to generate reports about Rate of salary increments by employee Accounting unit wise.		
348	Ability to produce reports on employee cost by employee/ Organization unit/Designation, etc.		
349	Ability to generate all required and ad-hoc reports		
	Transfer Postings		
350	Ability to maintain records and facilitate Transfer process activities		
351	Ability to record Transfer Policy & Procedure		
352	Ability to prepare Transfer list based on the user defined criteria		
353	Ability to generate transfer orders		
354	Ability to record the transfer orders cancelled, approved or deferred		
355	Ability to request transfers by employees (subject to minimum eligibility criteria specified in transfer policy) and approve/reject transfer requests of		

Sl. No.	Requirement Description		
	employees		
356	Ability to process NDC, obtain clearance from other departments/sections and issue the same		
357	Ability to capture details of officers on deputation to outside agencies/or deputation to KPTCL		
358	Ability to generate lists of transfer requests by the Competent Authority for deciding on transfers. The office may also transfer an employee without any request/recommendation as per the Transfer Policy		
359	Ability to integrate with list of workmen exempted from transfer for being medically incapacitated, being office bearers of recognized unions and association		
360	Ability to integrate with compensation and benefit module		
361	Ability to update new designation, change of cadre/class, salary details etc. in Employee Database upon Transfers/promotions		
362	Ability to maintain complete history of employee transfers since recruitment and Integrate with Employee Master		
363	Ability to maintain promotion data for all designations along with details such as Promotion order reference date, Date of reporting to new designation, Time scale of promotional post, Promotion declined status etc.		
364	Ability to facilitate online counselling for selection of place during promotion		
365	Ability to generate all required and ad-hoc reports		
	Reporting Requirements		
366	Ability to generate Last pay certificates/Bonus card/Non-payment certificate etc from one unit to another unit		
367	Ability to generate reports on total pending, approved/rejected cases of transfer		
368	Ability to generate reports on status of officers/staff whether released or not released or whether joined/not joined (along with dates) as per transfers/promotion orders as on particular date or cross section of time is available readily from this system		

Sl. No.	Requirement Description		
369	Ability to generate standard and Ad-hoc reports based on user requirements		
370	Ability to generate all required and ad-hoc reports		
	Promotion		
371	Ability to define rules for promotion eligibility in terms of tenure, seniority, residual service, performance, achievements, disciplinary actions, medically incapacitated category etc.		
372	Ability to enforce relaxations in eligibility norms to reserved category candidates, allocating certain percentage of vacancies for these categories		
373	Ability to define grade advancements within a channel (seniority/merit/time based)		
374	Ability to carry out the entire promotion process through work flows		
375	Ability to process cases suitable or unsuitable for promotion as well as pending cases if any based on performance, in interview and other		
376	Ability to generate single page bio-data report for each employee due for promotion		
377	Ability to upload Promotion List and print Promotion Letters of candidates found suitable for promotion		
378	Ability to issue order of promotion		
379	Ability to calculate and generate reports on present working, vacant, extra cost, waiting period etc		
380	Ability to handle Back Dated promotions with respect to Promotion Policy		
381	Ability to approve promotion list by appropriate ordering/approving authority		
382	Ability to enforce deferred dates of promotion due to punishment imposed.		
383	Ability to update new designation, change of cadre/class, salary details etc. in Promotion Database		
384	Ability to record the promotion orders cancelled, approved or deferred		
385	Ability to give input to Payroll Administrator to update salary details on promotion as per policy		

Sl. No.	Requirement Description		
386	Ability to redefine the promotion process on change of policy		
387	Ability to record transfer option of an employee at the time of promotion and generate reports for the management for making transfers on promotion		
388	Ability to generate all required and ad-hoc reports		
	Reporting Requirements		
389	Ability to generate a list of eligible candidates for promotion of different grades and streams in consideration of period spent under suspension , extra ordinary leave without pay, on medical grounds etc		
390	Ability to generate list of pending cases of promotions with requirement of particulars		
391	Ability to generate reports on status of officers/staff whether released or not released or whether joined/not joined (along with dates) as per transfers/promotion orders as on particular date or cross section of time is available readily from this system		
392	Ability to generate seniority list of all officers and staff (with particulars like dob, doj, qualifications) on any date/time		
393	Ability to provide reports on total employees promoted during specific period, category wise, unit wise, designation wise (all details)		
394	Ability to provide reports on employees not selected for promotion or cases deferred or pending or dropped with reasons		
395	Ability to generate all required and ad-hoc reports		
	Compensation & Benefits		
396	Ability to maintain the compensation and benefits as per policies of the organization		
397	Ability to perform Income Tax calculation		
398	Ability to calculate compensation and benefit details (Pay Slip) of each employees		
399	Ability to issue orders granting Band Pay		
400	Ability to compute and fix annual increments, special increments to employees		

Sl. No.	Requirement Description		
	as per their annual revision cycle		
401	Ability to compute fixation of pay during promotion, career advancement, NHS		
402	Ability to capture the details of loans and advances of employees (by appropriate authority)		
403	Ability to Check Loan Balances		
404	Ability to handle making online application for sanction of LTC/HTC/other entitlements through ESS and approval through workflow		
405	Ability to process HTC/LTC reimbursements		
406	Ability to approve general claims and expenses through the system		
407	Ability to track loan requests made by employees and send reminders, Feedback & Grievances		
408	Ability to track and record all compensation payment made towards accident related cases under Workmen Compensation Act of 1923		
409	Ability to show details on all aspects, place of accident (office), cause, report on how the accident happened, witnesses, name of investigation officer, and other officers involved in the process at the field, investigation details and determination of compensation amount		
410	Ability to generate all required and ad-hoc reports		
	Reporting Requirements		
411	Ability to provide report on past salary slips & income tax statements		
412	Ability to provide report on expense requests such as Travelling expenses & Dearness allowance claims approved/claimed/rejected/paid		
413	Ability to provide report on month-wise/year-wise accident compensation sanctioned and all details related to it		
414	Ability to provide report on month-wise insurance premium payment receipt		
415	Ability to submit Annual performance/Confidential reports by employees and enable approval workflows as per KPTCL policies		
416	Ability to design and redesign the Annual Performance & Confidental Report		

Sl. No.	Requirement Description		
	formats from time to time		
417	Ability to notify/send reminders to controlling officers to take timely action to arrange submission of Annual Performance & Confidential Reports		
418	Ability to fill Training Needs in the APR forms		
419	Ability to generate all required and ad-hoc reports		
	Reporting Requirements		
420	Ability to update and fetch reports on the details of vigilance/DE/Lokayuktha clearance and detailed status of vigilance proceedings from Employee profile		
421	Ability of generate performance reports and detailed status		
422	**Staffing - Manpower Planning**		
423	Capability to maintain manpower requirement details based on competencies, skills, experience, qualification and other criteria		
424	Capability to cadre-wise manpower requirements for a specified period based on data relating to new upcoming units/resignations/dismissals/future retirement etc through preparation of pre-position statement and estimated cost calculation		
425	Capability to analyze the unit-wise, cadre-wise, grade-wise resources available and required and do a gap analysis with specific time frame		
426	Facility to create new posts or modify existing posts (by retaining the history) through appropriate approval		
427	Capability to issue alerts before any position falling vacant due to retirement/term of temporary or contractual employee getting over		
428	Capability to generate a consolidated manpower details (Department-wise/Section-wise/Unit-wise)		
429	Capability to integrate with the recruitment/promotion module for filling up of vacancies		
430	Facility to define the terms and conditions for recruitment of deceased dependents (Compassionate appointment)		
431	Facility to record the details of the applicants of deceased dependents		

Sl. No.	Requirement Description		
	(Compassionate appointment)		
432	Facility to furnish the list of applicants of deceased dependents found eligible for being called for Compassionate appointment		
433	Facility to record the eligibility conditions of the deceased dependent applicants and accordingly take decisions		
434	Support vacancy and post based roster system for recruitment		
435	Facility for managing recruitment for special categories requiring relaxation in norms		
436	Facility to maintain recruitment schedule in accordance with the requirement plan		
437	Facility for generating advertisement for recruitment for internal / external candidates for publication on HRMS portal, Media and websites		
438	Facility to attach documents / credentials in soft form as a part of the application or at any other time as decided by the institution		
439	Facility to auto generate unique identity number for each new applicant		
440	Facility to create workflow for approval of application through various levels		
441	Facility to capture details of the Recruitment Policy and to alert users if there is any violation of the policy		
442	Facility to route recruitments through various levels of approvals and review. Audit trails of the entire approval process should be available		
443	Facility to report generation for all the above functionalities with a provision for dynamic querying		
444	Ability to generate all required and ad-hoc reports		
	Selection		
445	Facility to design tests to be conducted in written or online modes		
446	Facility for generation of call letters for written test/interview with allocation of Roll numbers (same as unique identity numbers allocated during recruitment phase) and venue. Should support manual intervention in changing venue/centre subsequently.		

Sl. No.	Requirement Description		
447	Facility to create a competency framework (matrix) for various competency types (functional/ behavioral/ leadership) with desired proficiency levels for each position/grade		
448	Facility to maintain various types of tests and maintain a question/answer database of each type of test (functional, psychometric, analytical etc.) to be administered as part of the selection process		
449	Facility to define the evaluation criteria and generation of results post-evaluation		
450	Ability to track results / Applicant's progression		
451	Generation of merit list of candidates on user configurable criteria such as category-wise, centre-wise, alphabetically, roll no.-wise, score-wise etc.		
452	Ability to record payments made to the panel members/invigilators/candidates etc.		
453	Capability to maintain details of the candidates resorting to unfair means		
454	Generation of system driven regret letters and/or offer / appointment letters through both manual as well as electronic modes (with terms and conditions for appointment)		
455	Ability to issue orders of appointment on contract basis		
456	Ability to issue orders of re-engagement (or extension) of retired officers, on contract basis with re-employment terms		
457	Ability to issue order on completion of probation period		
458	Facility to maintain checklist for verification and acknowledgement of various aspects related to joining viz., medical reports, testimonials, other relevant certificates, etc.		
459	Should allow for maintaining a checklist of details to be mentioned in each employee's personnel file		
460	Ability to conduct online counselling for recruitment		
461	Ability to generate all required and ad-hoc reports		
	Confirmation		

Sl. No.	Requirement Description		
462	Facility to change employment status from probation to confirmed/not confirmed after one year from the date of joining (BY CONSIDERING REQUIRED CONDITIONS LIKE PROBATIONARY PERIOD TRAINING, EXAM PASS ETC,)		
463	Facility to attach scanned copy of the Departmental Exam clearance certificate to employee profile		
464	Facility to attach service continuity certificate for checking unauthorized attendance of the employee on probation		
465	Facility to attach scanned copy of the police verification certificate and medical fitness certificate of the employee		
466	Ability to generate all required and ad-hoc reports		
	Reporting Requirements for Staffing		
467	Facility to generate reports on Recruitment cost incurred/employee and cost per recruitment agency per project		
468	Facility to generate report on the time taken by agency to recruit for a position		
469	Facility to generate reports on Time taken for filling up a vacancy i.e. from paper advertisement to appointment letter		
470	Facility to generate reports on the time taken for deceased dependent recruitment (i.e. from receiving application till appointment)		
471	Facility to generate reports on Education and Age profile employees (EXPERIENCE IN SELECTED FIELD)		
472	Facility to generate reports on the details of contractual employees in KPTCL		
473	Facility to generate reports on the appointment and confirmation details for user defined period		
474	Facility to generate reports on the Superannuation details		
475	Facility to generate reports on the cadre wise details (category wise)		
476	Ability to generate all required and ad-hoc reports		
	Requirements for Legal/Departmental/Other Judicial Enquiries/Cases/Orders		

Sl. No.	Requirement Description		
477	Ability to capture Court cases filed at labor court & high court, industrial tribunal & other competent authority relating to Employees & Organisation		
478	Ability to maintain details of Number of cases filed, Pending, disposed per year etc. at various courts		
479	Facility to maintain legal opinions given by different legal professionals/legal cell		
480	Ability to generate all types of reports related to Legal/Departmental/other judicial enquiries		
481	Facility to maintain compliance of the orders of different courts		
482	Facility to maintain record of category of court cases at high court such as writ, civil revisions, appeal, contempt of court etc.		
483	Facility to maintain details of appeals filed by the company against different orders		
484	Facility to maintain all relevant database for all courts, tribunals, Compensation court, gratuity tribunal including appellate forums		
485	Facility to check/monitor status of all pending cases including cases on service matters related to employees and contract/ outsourced labourers		
486	Facility to maintain checklists for defending any case filed against the company		
487	Facility to maintain checklists of the supporting documents that an advocate needs to submit while raising bills		
488	Facility to generate reports on the total amount of payout on litigation cases during a specified period		
489	Facility to generate report on review of court cases		
490	Facility to generate reports on the total number of legal cases filed against the company by employees (per year) against disciplinary actions /non settlement of terminal dues/other issues		
491	Facility to generate reports on the total number of legal cases filed against the company by others during a specified period		
492	Facility to generate reports on the total number of employee court cases		

Sl. No.	Requirement Description		
	decided in favour of the company		
493	Facility to generate reports of pending cases allotted to particular advocates by any office		
494	Facility to generate reports of pending cases according to involvement of outstanding dues		
495	Facility to generate reports of pending cases according to date/month of filing the cases		
496	Facility to generate reports on amount of revenue allowed by court in favour of company after disposal of cases		
497	Facility to generate reports advocate wise and office wise legal expenditure		
498	Facility to generate reports on amount realised through out of court settlement		
499	Ability to generate all required and ad-hoc reports		
	Travel Management		
500	Ability to maintain the following a) Define TA & DA policies b) Submission of various employee claims c) Workflow process to authorize the employee claims d) Calculation and processing of various claims submitted by employees as per policies e) Accept or reject facilty to authorized/competent authority f) Make online payments for all kinds of Employee claims, advances, pay & allowances as per KPTCL norms g) provide reports on all past travel requests with details on travel advance cleared/allowances claimed and actually paid (AND ANY RECOVERIES FROM EMPLOYEES) etc		
	Conference/Meeting Room Booking		
501	Ability to automate conference room / seminar hall / auditorium booking		
502	Ability to raise requests for conference room booking based on availability		
503	Ability to cancel/modify conference room booking		
504	Ability to approve/decline conference room booking		

Sl. No.	Requirement Description		
505	Ability to add/remove approving authority for approval of conference room booking		
506	Ability to add/delete list of conference rooms		
507	Ability to integrate with finance to generate bill for providing conference hall on rent		
508	Ability to generate all required and ad-hoc reports		
Guest House Room Booking			
509	Ability to automate Guest House / Inspection Bunglow / Circuit House booking		
510	Ability to raise requests for booking of rooms		
511	Ability to add/delete list of rooms		
512	Ability to show availability of Guest Houses/rooms on a specific date, time and by the concerned employee/department and purpose		
513	Ability to raise requests to cancel/modify room bookings		
514	Ability to approve/decline request for room bookings		
515	Ability to add approving authority for approval for room booking		
516	Ability to accommodate request of extending/shortening booking period for already booked room		
517	Ability to approve/decline request for extending/shortening booking period for already booked room		
518	Ability to raise requests for guest house booking for guests & other field employees		
519	Ability to view status of requests for guest house booking for guests & other field employees		
520	Ability to approve requests for guest house booking for guests & other field employees by administrator		
521	Ability to integrate with finance to generate bill for providing Guest House on rent		

Sl. No.	Requirement Description		
522	Ability to generate all required and ad-hoc reports		
	Departmental quarters allotment		
523	Ability to maintain list of company wise quarters details like Area, Address, No. of houses based on different classifacations, etc.,		
524	Ability to maintain and update the policies regarding departmental quarters allotment		
525	Ability to process application for quarters allotment		
526	Ability to view/update the list of present occupants of the quarters, and list of vacant quarters		
527	Ability to deduct the quarter rent from the salary of the occupants (integrate with the Payroll module)		
528	Ability to issue the No Demand Certificate when occupants vacate the quarters and consequently stop deducting rent from salary (integrate with Payroll module)		
	Reporting Requirements		
529	Ability to provide reports on the list of present occupants of the quarters, quarters they are occupying, and list of vacant quarters		
530	Ability to provide reports on the total number of applications processed regarding quarter allotment in a year		
531	Ability to generate all required and ad-hoc reports		
	Employee welfare and CSR		
532	Ability to maintain the history of employee welfare and CSR initiatives undertaken over time, separately		
533	Ability to calculate the amount spent on employee welfare and CSR initiatives separately		
	Reporting Requirements		
534	Ability to provide separate reports on the total number of employee welfare and CSR initiatives undertaken within a specified time with amount spent on each		
535	Ability to generate all required and ad-hoc reports		

Sl. No.	Requirement Description		
	Miscellaneous requirements		
536	Facility to generate Appreciation Letter and to record the outstanding work done by the employee for which the Appreciation Letter is being awarded.		
537	Facility to issue NOC for purchasing property, going abroad, making passport, etc.		
538	Ability to record the process of giving a gift to the employee at retirement		
539	Ability to generate all required and ad-hoc reports		
	List of other required reports		
540	Report showing Vacancy statements (Post wise, office wise, Class wise)		
541	Report on Audit Paras		
542	Report on Court Cases		
543	Report on Arbitration Cases		
544	Report showing how many RTI applications have been received in any particualr time, how many have been disposed off and how many are pending.		
545	Ability to generate all required and ad-hoc reports		
	Departmental Exam:		
546	Ability to capture all the employee's details who are appearing for departmental exam.		
547	Ability to Capture marks obtained in offline exam.		
548	Ability to generate the results.		
549	Ability to generate various reports such as Hall-Ticket, Result Register, Result OM etc.		
550	Ability to update the details of Departmental exam in Employee profile a) Exam applied details such as Reg No. Year, Etc. b) No. of attempts taken c) Status such as Pass/Fail along with Marks		
551	Ability to generate all required and ad-hoc reports		
	Audit:		

Sl. No.	Requirement Description		
552	Ability to support all internal & external Audit process followed by KPTCL		
553	Ability to generate all required and ad-hoc reports		

7.2.4.1   Self Service for Employee and Manager

Self Service Module for Employees & Employer				
Sl. No.	Requirement Description	Requirement	Compliance (S/C/T/W)	Comments (If any)
1	Provision to maintain a database for KPTCL policies, regulations, manuals, circulars, NOC's, transfer orders, promotion orders, increment and pay fixation, disciplinary action reports, approved- permissions and personnel document etc.	Standard		
2	Ability to capture HR Policies	Standard		
3	Ability to define all clauses under TA & DA rules	Standard		
4	Ability to define delegation of powers to different authorities	Standard		
5	Ability to receive and issue online NOC for various requirements such as obtaining passport/visa /study abroad/Tour or for	Standard		

	outside employment etc.			
6	Ability to maintain different category of leaves (EL, CL, HPL, FPL, SCL, CCL, EOL etc) with details such as Leave credited/utilized/balance etc and ability to apply all kinds of leave under the appropriate category with a provision to approve/reject such leaves by controlling officers	Standard		
7	Ability to process House Building Loan or any other loan for the land purchase, house/flat purchase, construction of the residential house, addition/alteration of constructed house and repair of the house	Standard		
8	Ability to issue Release Orders to release the loan money by the respective accounting unit against sanction order	Standard		
9	Ability to submit various types of reports such as Investment declaration for Income tax purpose, Confidential reports/Annual performance report, Assets & Liabilities, Leave surrender request etc	Standard		

10	Ability to issue orders advising to take additional charge and charge allowance	Standard		
11	Provision to manage Leave management system including status of leave application through mobile applications over internet ex: Leave requests and approvals	Standard		
12	Approval workflow for leave management system	Standard		
13	Ability to mark attendance and fill time sheets	Standard		
14	Ability to apply for leave under the appropriate category and state the reasons for it	Standard		
15	Ability to Check the status of the leave request	Standard		
16	Ability to approve/cancel/modify leave requests by employees	Standard		
17	Ability to view accrued leave balances	Standard		
18	Ability to approve or cancel leaves of subordinates	Standard		
19	Ability to provide reports to subordinates and HR&A in ESS on attendance & leave details	Standard		

20	Ability to provide consolidated status of present/absent employees working under him/her	Standard		
21	Ability to record requests by employees for passport/visa /study and outside employment and permission granted/rejected thereof	Standard		
22	Ability to submit / update declarations for Income Tax calculation	Standard		
23	Ability to view compensation and benefit details (Pay Slip)	Standard		
24	Ability to apply for Loans & Advances and Check the status of approval (Integrate with Payroll Module)	Standard		
25	Ability to display and print payslip information for each pay period, including gross pay, taxes, other deductions and net pay, with pay period and year-to-date totals	Standard		
26	Ability to view Income tax computations	Standard		
27	Ability to apply online for sanction of various advances like Medical, Travel, Transfer Grant, LTC/HTC & other reimbursements through ESS and approval through	Standard		

	workflow			
28	Ability to view various types of Pay & allowances provided by KPTCL	Standard		
29	Ability to enter and approve general claims and expenses through the system	Standard		
30	Ability to provide a report on current & previous salary slips & income tax statements	Standard		
31	Ability to provide month-wise reports on deductions made out of salary ex: LIC premium, Festival Advance recovered etc.	Standard		
32	Ability to view Employee profile details stored in E-Service Record	Standard		
33	Ability to record requests by employees for pursuing higher education and permissions granted/rejected thereof	Standard		
34	Ability to issue orders granting higher studies without pay	Standard		
35	Ability to support Employee Exit and Full and Final process	Standard		
36	Ability to request for VRS	Standard		

	(integrate with Employee Master for the status of disciplinary proceedings and HBL)			
37	Facilitate employee to fill exit interview form (for resignation)	Standard		
38	Ability to apply for NDC (No Demand Certificate)/clearance from various KPTCL's units at the time of Exit	Standard		
39	Ability to initiate for NDC at the time of transfer	Standard		
40	Ability to check the status of selection for promotion after the interview	Standard		
41	Ability to record request for transfer through employee self-service and indicate appropriately at the time of transfer exercise. Record of such request wherever acceded to be maintained	Standard		
42	Ability to view clearance request approved/ rejected by KPTCL and the reason for the same	Standard		
43	Ability to view HR Policies & Procedures Handbook including a list of infrastructure facilities for a particular level of employees,	Standard		

	authority for various approvals (DoP), special or additional powers for authorisation			
44	Ability to view administration handbook for guidelines on aspects such as Travel, Local Conveyance, empanelled car agency, Guest Houses, Conference Rooms etc.	Standard		
45	Ability to provide links to the important items hosted in various in-house websites/ intranet, e.g. important circulars/ instructions/ policy documents etc.	Standard		
46	Ability to request for VRS as per the rules defined for the scheme	Standard		
47	Ability to approve for VRS as per the rules defined for the scheme (Integrate with Payroll & E-Exit)	Standard		
48	Ability to Provide workflows. Accommodates multiple levels of review and approval	Standard		
49	Facilitate administrator to create new self-service transactions as and when required.	Standard		
50	Ability to fill exit interview form by superior & HR (for	Standard		

	resignation)			
51	Ability to process NDC (No Demand Certificate)/clearance from various KPTCLs at the time of Exit	Standard		
52	Ability to notify (flag) individuals of any outstanding balances payable/recoverable	Standard		
53	Ability to view Last pay certificates/Bonus card/Non-payment certificate etc sent from one unit to another unit	Standard		
54	Ability to generate reports on the total number of employees applied for resignations/VRS, number approved/rejected/pending ability to view the complete report on the exit formalities which would be available whenever it wants to be seen (Individual)	Standard		
55	Approval limits for expense reimbursement should be configured based upon the hierarchy limits	Standard		
56	Ability to require approval before a specific payment is made to an employee	Standard		

57	Ability to forward the overtime schedule to the top management for approval if the amount of overtime is over a defined percentage of the basic salary	Standard		
58	Ability to provide investment declaration form in electronic format. The employee will be required to fill and submit the form electronically to automatically updation of salary record and tax calculation by the system	Standard		
59	Ability to provide for the online ad-hoc calculation of employees pay slip/salary amount	Standard		
60	Ability to submit Transfer application online	Standard		
61	Ability to record Transfer Policy & Procedure	Standard		
62	Ability to request transfers by employees (subject to minimum eligibility criteria specified in transfer policy) and approve/reject transfer requests of employees	Standard		
63	Ability to process NDC, obtain clearance from other KPTCLs/sections and issue the same	Standard		

64	Ability to generate lists of transfer requests/recommendations received to be reviewed by the Competent Authority for deciding on transfers with/without promotions. The office may also transfer an employee without any request/recommendation as per the Transfer Policy	Standard		
65	Ability to record request for transfer through employee self-service and indicate appropriately at the time of transfer exercise. Record of such request wherever acceded to be maintained	Standard		
66	Ability to maintain the compensation and benefits policies of the organisation	Standard		
67	Ability to handle making an online application for sanction of LTC/HTC/other entitlements through ESS and approval through workflow	Standard		
68	Ability to process an application for medical advance, HTC/LTC reimbursements	Standard		
69	Ability to approve general claims and expenses through	Standard		

	the system			
70	Ability to track loan requests made by employees and send reminders, Feedback & Grievances	Standard		
71	Ability to track and record all compensation payment made towards accident related cases under the Workmen Compensation Act of 1923	Standard		
72	Ability to show details on all aspects, place of the accident (office), cause, report on how the accident happened, witnesses, the name of investigation officer, and other officers involved in the process at the field, investigation details and determination of compensation amount	Standard		
73	Facility to edit the policies by the specified level of authorities	Standard		
74	Facility to list various techniques to facilitate communication	Standard		
75	Facility to track/monitor the status of a pending case against respective employee	Standard		
76	Ability to show & print Employees pay- slip at users	Standard		

	end			
77	Ability to view various Earnings & deductions made by Employer	Standard		
78	Ability to generate report on deductions made from Employer as well as employees contributions for a period of time	Standard		
79	Ability to submit Employee Pension Docket online with necessary approval procedure at various levels as per KPTCL norms	Standard		

7.2.5   Asset and Maintenance Management Module

Sl. No.	Requirement Description		
	Sub-Station and Transmission Line Maintenance		
	General		
1	Ability to interface with other modules of KPTCL like Financial Management Module, HR Management Procurement and Materials Management Module and Project Management Module		
2	Ability to receive work orders from Procurement and Materials Management Module		
3	Ability to group the work order based on the nature of work like:		
	1) Planned Maintenance by all wings		
	2) Breakdown / Emergency Maintenance		
4	Ability to send online request to higher Official for execution of work order		
5	Ability to receive online approval from higher Official to carry out a particular work		
6	Ability to view steps and milestones of a work order to be executed		
7	Ability to meet reporting requirements of approved documents like: Standard Operating Procedures, Maintenance Schedule, Safety Manual, Transmission System, Planning Procedures, Procurement Policy & Procedures, Budget Policy & Procedures, Standard project reporting formats.		
8	Ability to provide necessary information to generate predefined Score Cards for monitoring of Key Performance Indicators		
9	Ability to capture testing and inspection related parameters of equipments whose tests and inpecion are carried out		
10	Ability to transfer information from SCADA to collect real time parameters of key elements across multiple locations		
11	Ability to view precautionary steps/safety instructions to be followed for executing every work order as per KPTCL rules and regulatory requirements		
12	Ability to provide Material/labour service requisition and verification process		
13	Ability to capture asset hand over process with Single Line diagram and other required information		
14	Ability to provide feasibility report for 11kV feeders		
15	Ability to capture T&P holder, its annual counting & scrapping procedure and imprest bills process and procedure		
16	Provision for capturing details of MB book, Completion Report and Asset Commission Certificate & submission of the same		

Sl. No.	Requirement Description		
17	Condition monitoring of Assets/Equipments needs to be captured. It also includes capturing of required test results and various statisitical and analysing reports based on the same		
18	Ability to provide scheduling of maintenance works,RT and R&D tests etc and intimation to concerned officers on the same		
19	Ability to capture various activities carried out by shift engineers in stations		
20	Spare equipment management and scrapping of materials management		
21	Provision of interface or integration with any existing system like SCADA, GIS,SAS etc.		
	Reports		
22	Ability to generate exception reports – List of works carried out by not complying with the defined service and execution standards of KPTCL		
23	Ability to generate reports confirming to technical, operational, regulatory, statutory and other business requirements		
24	Ability to generate zone wise or area wise reports for energy loss, outage list, monthly work program, material stock position and line patrolling schedule		
	Manage Routine Maintenance		
25	Ability to upload the list of routine maintenance plan on system		
26	Ability to view the list of pending routine maintenance plans		
27	Ability to raise maintenance execution orders pending list as SMS alerts at defined intervals to concerned officials to assist proactive work plans		
28	Ability to raise the flags to the concerned officials assigned for the Routine work orders and Execution orders		
29	Ability to help reviewing Routine Maintenance Schedules execution orders as per geographic locations		
30	Ability to keep track of skill wise location of manpower for assigning jobs based on proximity, skill and availability		
31	Ability to allocate online, particular work to concerned department /group of personnel/ individual		
32	Ability to view job allocations for individual resources		
33	Ability to reallocate field resources as per job requirement both for internal Employees of KPTCL or contract laborers		
34	Ability to view job wise special tools requirement for carrying out an execution order		
35	Ability to view the real time location wise material availability		
36	Ability to raise requisition to stores for issue of the material required for carrying out execution order.		
37	Ability to highlight in the requisition, the location wise material availability		

Sl. No.	Requirement Description		
38	Ability to send a purchase request to procurement department if work needs purchase of material (This should be raised after viewing the availability of the material online)		
39	Ability to upload the receipt of material required for work		
40	Ability to generate a requisition for PTW (Permit To Work) in order to isolate equipment for maintenance and forward the same online for Authorized Person's approval		
41	Ability to receive approvals including PTW online from the Authorized Persons		
42	Ability to view all PTW issued/outstanding on a piece of asset or a system itself		
43	Ability to capture details of accidents required for further proceedings. Accident(Human/Animal/Crop) reporting procedure and its integration with Legal wing & HR wing need to be captured.		
44	Ability to share accident related information with HR Management & General Administration module for legal requirements		
45	Ability to view past details of accidents along with actions taken.		
46	Ability to close all work permits issued on a particular asset after completion of the job on it and inform about the same to all the concerned Officials online		
47	Ability to record and archive all executed work permits		
48	Ability to update the details of work carried out on a particular job in the system		
49	Ability to update the details of material consumed and return of materials in execution, in the Procurement and Materials Management Module		
50	Ability to update reasons for delay in executing a particular maintenance job		
51	Ability to graphically depict and manipulate online schedules in the form of GANTT charts by multiple variables like period, time, work group , work order relationship, etc		
52	Ability to generate PO (Purchase Order) for labour contracts		
53	Ability to enter routine testing results into system		
	Reports		
54	Ability to generate the list of maintenance execution orders received for the day / week / month / user defined period		
55	Ability to generate report on the equipment utilization history and statistics of performance		
56	Ability to view the list of pending maintenance execution orders for the day / week / month / user defined period		
57	Ability to view the details or reasons for specific pending maintenance jobs as a report for user defined period		

Sl. No.	Requirement Description		
58	Ability to calculate the cost of resources utilized for carrying out a particular job and generate it as a report		
59	Ability to generate maintenance schedule report		
60	Ability to generate reports for Planned Maintenance Vs Achieved Maintenance for all types of maintenance jobs for user defined periods		
61	Ability to generate cost of maintenance report for each equipment/group of equipment/ types of equipment or user defined sets		
62	Ability to generate Contract Labour Attendance Report		
63	Ability to generate labour requirement report for various maintenance works		
	Manage Preventive / Predictive Maintenance		
64	Ability to upload the Preventive/Predictive Maintenance Plan for a set of equipment / system		
65	Ability to view the Preventive/Predictive Maintenance Plan for a set of predefined maintenance equipment / system		
66	Ability to raise alerts in form of SMS to do periodical testing of equipment based on certain pre-set parameters (Time based, Meter based, Condition based and Period based)		
67	Ability to review any outages, overhauls or shutdowns planned for user defined period		
68	Ability to list and raise the flags to the concerned personnel who are allocated the execution orders		
69	Ability to exchange information with system study software for carrying out load flow study, sensitivity analysis etc.		
70	Ability to aid investigation of issues and update details of the problem specified based on historical information		
71	Ability to allocate resources for carrying out Preventive / Predictive Maintenance activity		
72	Ability to maintain detailed history of the equipment to be maintained		
73	Ability to receive triggers from the system to do maintenance checks on the resources whose warranty period is due for expiry		
74	Ability to view job wise special tools requirement for carrying out an execution order		
75	Ability to view the real time location wise material availability from the Procurement and Materials Management Module		
76	Ability to raise requisition to stores for carrying out execution order		
77	Ability to highlight in the requisition, the location wise material availability as tracked in the Procurement and Materials Management Module		
78	Ability to send a purchase request to procurement / materials department if work needs purchase of material (This should be raised after viewing the availability of the material online)		

Sl. No.	Requirement Description		
79	Ability to store history and detailed results of various tests performed on an asset		
80	Ability to capture all the Preventive /Predictive Maintenance activities carried on an asset. Ability to retrieve these details as and when required for future reference		
81	Ability to automatically rearrange Preventive / Predictive Maintenance Schedules as and when the previous activity is accomplished or due to problems like manpower shortage, other unforeseen circumstances, etc		
82	Ability to escalate through a trigger to one's senior Official if a Preventive/Predictive Maintenance activity is not carried out within the specified time frame		
	Reports		
83	Ability to view the list of Preventive / Predictive Maintenance activities to be carried out in a specified period as a report		
84	Ability to generate report on the equipment utilization history and statistics details of its performance		
85	Ability to generate a comparative report detailing the list of Preventive/Predictive Maintenance activities to be carried out and the actual Preventive/Predictive Maintenance activities carried out over a specified period		
86	Ability to view online various reports related with critical equipment like reliability centred maintenance report, risk based inspection report, etc		
87	Ability to use details of planned Preventive / Predictive Maintenance activities for resource allocation and scheduling		
88	Ability to generate a report of missed out Preventive/Predictive Maintenance activities for a specified period		
89	Ability to view as a report the detailed maintenance history of an asset on which Preventive/Predictive Maintenance activity was carried out		
90	Ability to view the list of all assets which are due for inspection/maintenance based on chronology		
91	Ability to generate a report on common equipment failures based on fault codes		
92	Ability to list as a report the MTBF (Mean Time Between Failures) and the MTBR (Mean Time Between Repairs) for an item of an asset/equipment		
93	Ability to generate a report with historical data of failures on an asset over a set time period		
94	Ability to generate Preventive/Predictive Maintenance Plan and Overhaul Plan		
95	Ability to generate an Annual Maintenance Calendar		
96	Ability to generate Preventive/Predictive Maintenance Report of Transmission Lines		

Sl. No.	Requirement Description		
97	Ability to generate Preventive/Predictive Maintenance Report of Sub-Stations		
	Manage Emergency / Breakdown Maintenance		
98	Ability to receive the details of Transmission Line or Sub-Station faults in the database		
99	Ability to receive inputs regarding breakdowns of any network component / equipment capturing severity & criticality		
100	Ability to aid in investigation of the inputs regarding breakdown received and update the details of problem in the database		
101	Ability to list and raise the flags to the concerned personnel allocated for handling the complaint		
102	Ability to allocate resources for rectifying / replacing network component / equipment		
103	Ability to intimate to higher authorities about any component/equipment replacement and obtain their approval online		
104	Ability to view the list of special tools required for handling the inputs regarding breakdown		
105	Ability to check for the availability of material (including network component / equipment) in the stores		
106	Ability to view the real time material availability in the Procurement and Materials Management Module		
107	Ability to send request to the competent authority for procurement of equipment		
108	Ability to request issue of material (including network component/equipment) through online to the procurement/material management department with the necessary approvals from the concerned Officials		
109	Ability to upload the receipt of the material required for work		
110	Ability to update the details about job completion		
111	Facility to record and update issues if any faced for maintenance related jobs		
112	Ability to detail out steps of work carried out along with resources in the database		
113	Ability to receive approvals including PTW online from the Authorised Persons		
114	Ability to view all PTW issued/outstanding on a piece of asset or a system itself		
115	Ability to capture details of accidents required for further proceedings		
116	Ability to share accident related information with HR Management & General Administration module for legal requirements		
117	Ability to view past details of accidents along with actions taken		
118	Ability to close all work permits issued on a particular asset after completion of the job on it and inform about the same to all the concerned		

Sl. No.	Requirement Description		
	Officials online		
119	Ability to record and archive all executed work permits		
120	Ability to update reasons for delay in executing a particular maintenance job		
121	Ability to graphically depict and manipulate online schedules in the form of GANTT charts by multiple variables like period, time, work group , work order relationship, etc		
122	Ability to raise requisition to concerned official for issue of mobile vans		
123	Ability to highlight in the requisition, the location wise availability of mobile vans		
124	Ability to upload the receipt of mobile van		
125	Ability to update information of release of mobile van		
126	Ability to generate PO (Purchase Order) for labour contracts		
127	Ability to enter testing results into system		
128	Ability to aid in tracking down the cost incurred in breakdown maintenance		
	Reports		
129	Ability to generate report on the equipment utilization history and statistics details of its performance		
130	Ability to report common equipment / asset failures and repair times based on the failure codes		
131	Ability to generate a report detailing the resources utilized to restore breakdowns in a period of time		
132	Ability to produce statistical report linking the cause of failures and the effects of failures		
133	Ability to generate report detailing MTBF (Mean Time Between Failures) and the MTBR (Mean Time Between Repairs) regarding breakdown		
134	Ability to report equipment down time and group of equipment down time over a period of time including their fault codes		
135	Ability to generate detailed breakdowns reports and costs associated with it		
136	Ability to generate Emergency/Breakdown Maintenance Report for Transmission Lines		
137	Ability to generate Emergency/Breakdown Maintenance Report for Sub-Stations		
138	Ability to generate a Progress Report and Status of Breakdown Maintenance		
139	Ability to generate reports on emergency / breakdown reasons for each equipment / group of equipment / types of equipment for user defined periods		

Sl. No.	Requirement Description		
	Manage Statutory Requirement		
140	Ability to flag triggers on the statutory maintenance activities to be carried out on certain equipment at specified predetermined period		
141	Ability to view the previous statutory reports prepared on specified assets		
142	Ability to use earlier statutory reports as template for preparing new reports		
143	Ability to update necessary details in the system after completion of statutory maintenance activities		
	Reports		
144	Ability to generate reports as required by statutory authorities for a predetermined period on an asset or on an equipment or on a system		
	Asset Maintenance		
	Maintain Asset and its Performance		
145	Ability to allow user to enter/define /view/modify and classify assets(i.e. all **Station Assets, Transmission line assets, Building, Vehicle & IT assets, SCADA,RTandR&D,Hotline related assets etc.,**) using internationally accepted nomenclature codes and/or KPTCL or regulator defined codes		
146	Ability to classify/store/retrieve/update details about assets based on:		
	Hierarchy to be		
	· Region in which it is present		
	· Location where it is present		
147	Ability to develop and maintain a location based Grid network for Asset mapping		
148	Ability to classify the locations with sub classification and specifications for an asset		
149	Ability to associate a single location with single or multiple assets		
150	Ability to graphically display a productive unit hierarchy displaying the parent and child relationship in the system		
151	Ability to associate assets into hierarchical or network systems (each sub location can have one parent for hierarchical system and multiple parents for network systems)		
152	Ability to modify location hierarchies by moving branches from one parent to another parent		
153	Ability to move the asset from one productive unit of the hierarchy to the other along with all the details of the asset		

Sl. No.	Requirement Description		
154	Ability to keep track of history of location changes done on an asset or a part of the system		
155	Ability to track the location of asset as it is moved between stores, repair shops and vendors		
156	Ability to classify assets as operating assets and in-store assets		
157	Ability to search for a particular asset by providing minimal criteria of the same		
158	Ability to graphically locate and display/map equipment/asset meeting a specific criterion		
159	Ability to store all the details about the asset like Purchase Details, Vendor Details and their Recommendations, Expiry Details, Warranty Details, Name Plate Details, Technical and Engineering Details, etc		
160	Ability to access detail information of Asset from the Procurement and Materials Management Module		
161	Ability to assign inventory to GL by a respective account code and cross reference of an asset/component/equipment to the Financial and Accounting Management Module		
162	Ability to define and retrieve an asset by specifying a problem class or a problem cause with links to its current location		
163	Ability to track life-to-death accountability for assets		
164	Ability to allow / disallow multiple asset grouping and ungrouping		
165	Ability to allow multiple level grouping / hierarchy of assets (e.g. A transformer might belong to network connectivity hierarchy and also a part of geographically oriented hierarchy)		
166	Ability to roll-up maintenance costs across hierarchical systems, sub systems, and locations		
167	Ability to maintain real-time information associated with lines/equipments		
168	Ability to generate reports by assimilating the data manually logged in from control-room registers		
169	Ability to record the asset usage statistics		
170	Ability to define asset criticality factor for fault and maintenance management		
171	Ability to define failure classes and failure hierarchies to record equipment problems for immediate analysis		
172	Ability to maintain a track for reasons of asset failure (Root Cause Failure Analysis)		
173	Ability to exchange information for system study for maintenance planning purpose		
174	Ability to view & update records related to any environmental issues or regulations to be followed in maintaining the asset		

Sl. No.	Requirement Description		
175	Ability to record and maintain useful life of equipment for the purpose of repair and replace decisions along with the previous history of the equipments		
176	Ability to maintain asset manuals, technical drawings, operating instructions, safety instructions, schematics in a document library and ability to retrieve as and when required		
177	Ability to view the warranty details of an asset by any authorised user with ease		
178	Ability to check whether the asset is still under the period of warranty before issue of a work order. Ability to auto triggers and in turn pop up warning to user to take necessary action		
179	Ability to track & locate the real estate / land assets pertaining to KPTCL		
	Reports		
180	Ability to retrieve details about the performance of an equipment over a period of time		
181	Ability to generate a report on the asset usage statistics such as operating hours, number of operations, etc against the standard conditions		
182	Ability to generate a report detailing the outage hours of an equipment or an asset over a period of time		
183	Ability to generate a report on the operational statistics of an asset like Mean Time Between Failures, etc		
184	Ability to list a report detailing the idle assets in a location in specific period of time		
185	Ability to generate report on an asset based on user defined criteria like asset class, location, etc		
	Manage BOM / Tools / Spares		
186	Ability to maintain the list of parts of equipment. Ability to maintain the details of real time quantities of parts available in the stores		
187	Ability to maintain history of changes to part list of an equipment		
188	Ability to maintain the drawings of equipment parts along with the recent changes or modifications done on it.		
189	Ability to maintain details recent changes or modifications done on it.		
190	Ability to maintain details of individuals who made modifications for reference		
191	Ability to review the tools and equipment available		
192	Ability to set the ROL (Re Order Level) and ROQ (Re Order Quantity) of various spares required for the equipment		
193	Ability to notify to the concerned personnel once the spares' count reaches ROL (Re Order Level)		
194	Ability to send reminders to the concerned Officials who are in possession of tools if they do not provide the tools beyond the time limits allocated to them		

Sl. No.	Requirement Description		
195	Ability to escalate the issue to higher Officials if the tools are not received from the concerned even after sending them the reminders		
	Reports		
196	Ability to generate a report detailing the list of tools and tackles		
197	available with various Sub-Stations/Sub-Area Offices, etc at any point of time		
	Cost Control of Assets		
198	Ability to automatically integrate an asset with the General Ledger, Accounts Payable, Accounts Receivable, Project Management and Budget of the financial system through an unique account code		
199	Ability to display detailed description about the account code assigned to the asset or equipment to the concerned Official		
200	Facility to capture information about resources such as description of work, unit, location and other fields as required		
201	Ability to update the standard labour/Contractor rates for a particular work to be done		
202	Ability to list the total cost incurred due to internal labour while carrying out a maintenance activity on an asset. This will include both directly entered labour hours and labour overheads		
203	Facility to allow manual keying in of minor project expenses like transport, petty cash, etc		
204	Ability to drill down costs from projects to source transactions		
205	Ability to break down project cost by resource type		
206	Ability to track project expenditures and compare it against the budget allocations		
207	Ability to raise a trigger if the actual expenditure has exceeded budgeted allocation		
208	Ability to list the total cost incurred due to usage of equipment or tools during work		
209	Ability to list the total cost incurred due to work performed by a Contractor		
210	Ability to approve the work performed by the Contractor by the concerned Official before payment of dues to them by the finance department		
211	Ability to establish costing limitations against a piece of asset / equipment or a productive unit		
212	Ability to capture cost expenditure against an asset including procurement, maintenance and disposal		
213	Ability to track asset expenditures and evaluate this against the budget allocations		
214	Ability to track costs/expenditures against an individual asset or a defined group of assets		

Sl. No.	Requirement Description		
215	Ability to estimate cost to be incurred for a maintenance activity and send it to work order management system for invoice generation		
216	Facility to allow the user to project the cash flow for a user defined time period		
217	Allow changes in project expenditures and aid in preparation of revised cash flows		
218	Ability to roll all work order costs to the proper asset		
219	Ability to maintain cost history by location		
220	Ability to generate Sub-Station wise material allotment		
221	Ability to generate Purchase Orders and track their status		
	Reports		
222	Ability to display as a report all the maintenance cost incurred during the life of an asset including the labour, material and Contractor costs, etc		
223	Ability to simulate the life cycle maintenance cost for an item of equipment when different operational conditions and maintenance strategies are entered as parameters		
224	Ability to generate report detailing the total internal labour cost incurred due to maintenance of an asset/equipment or a cost centre		
225	Ability to generate report detailing the total external labour cost incurred due to maintenance of an asset/equipment or a cost centre		
226	Ability to generate report detailing the total equipment usage cost incurred due to maintenance of an asset / equipment or a cost centre		
227	Ability to generate report for material requirement of decentralized items		
228	Ability to generate report for material requirement for centrally purchased items		
229	Ability to capture procedures related to audit paras, court cases, arbitration cases		
230	Ability to capture all the Preventive /Predictive Maintenance activities carried on all KPTCL asset such as Equipments,Lines, Building(Civil), Vehicles, IT equipments etc.		
	List of additional reports		
231	Report on details of Tripping/Breakdowns of 220 KV transmission lines		
232	Report on Shunt Capacitor Operation installed at various Grid Substation		
233	Report on Capacitors installed vs. Planned		
234	Report on replacement of the following:		
	· Breakers		
	· CT's		

Sl. No.	Requirement Description		
	· PT's		
	· LA's		
	· Batteries		
	· Conductor & Power Cables		
	· C&R Panels		
	· Relays		
	· Disc insulator with Anti-Fog Disc		
235	Report on Civil works carried out for P&M		
236	Report on Capital Maintenance of Power Transformers carried out		
237	a) Review Report on Failed Transformers		
	b) Report on Transformer repair status shall be made available.		
238	Report on Reliability Index (11 KV feeders) for different towns of Karnataka		
239	Report on Power Availability Factor Circle-wise		
240	Report on Operating parameters of Transmission organization		
241	Disposal of unserviceable scrap		
242	Report on Audit Paras		
243	Report on Court Cases		
244	Report on Arbitration Cases		

7.2.5.1   Management of Linear Assets

Sl. No.	Requirement Description		
245	The system should Define group of assets and association of unlimited user-defined attributes		
246	All Linear assets should be geo-referenced and accessible under a G1S user interface		
247	System should be able to Map linear data such as Repeated units, Land marks, Start, End, Length, and so on.		
248	System should be able to represent and model assets that extend for several kilometers with changing characteristics and conditions requires modeling and management tools		
249	Linear assets will be managed in networks, connecting assets together end-to-end as opposed to the hierarchical structuring of assets.		
250	System should be able to handle " Dynamic segmentation" of the Linear asset		

Sl. No.	Requirement Description		
251	The system should maintain the details about Asset procurement, asset type, department name, quantity, cost, procurement cost etc.		
252	System should allow data capture for Linear Assets and help in managing maintenance of the same		
253	The system should Assign unique ID to each asset		
254	The system should setup the assets in a hierarchical architecture so as to easily find and group assets		
255	The system should support multiple asset locations with flexibility of moving or transferring an asset to other organization without losing the integrated attributes or work history		

7.2.5.2   Permit to Work

Sl. No.	Requirement Description		
256	Should be able to access information of all the work orders which are assigned to self		
257	Should be able to request for work permit against the assigned workorders. Should be able to initiate extension request for already active permits which require extension		
258	System should be able to receive warning or error message if there is already a permit issued for the same equipment or if there are open cross reference permit or certificates and is still open. Also provision of multiple work permits on same equipment/station/lines		
259	While requesting for work permit should have visibility of all the hazards present at site while performing the job		
260	Should be able to create and attach additional certificates to work permit for approval as per the risk involved in the job		
261	In case of isolation is required, should be able to indicate the isolation points/ switches in isolation certificate with their tagging and un-tagging condition		
262	Should be able to attach the Job Safety Analysis to work permit		
263	Ability to capture work line permits, all required approval procedures and process		
264	Should be able to monitor the approval status of Requested work permit and certificates		

7.2.6   Document Management System & Workflow Management System

Sl. No.	Requirement Description		
1	DMS should have multiple Admin users		
2	The functionality of creating and end-dating users		
3	User Access through password		
4	User password change		
5	Unlimited user creation		
6	MIS report on Users, their activities and volume of scanned pages and count of data entry fields		
7	Authority Hierarchy Management with Password security system		
8	Create multiple roles for users		
9	Can assign roles to users		
10	Uploading of documents		
11	Appending in an existing file		
12	Searching for the digital document using Document Search Type		
13	Searching for the digital document using Same File Search		
14	Searching for the digital document using Keyword Search		
15	Document Download Interface		
16	The system should able to handle multiple file format (PDF, PDFA, PNG, JPG, MS-Office etc)		
17	There should be the user-defined size for the document to be uploaded		
18	The system should allow users based on security to access the data		
19	The system should allow users to create a folder (or similar functionality) to group data		
20	The system should allow users to share a file through a hyperlink		

Sl. No.	Requirement Description		
21	Index files systematically for quick, easy retrieval later on given its file key		
22	The capability of host DMS on the cloud		
23	Capability to hosts on-premise		
24	The system should have the functionality to archive a file or folder		
25	Ability of Document Management System & Workflow Management System function to interface with the all other modules/sub-modules under the scope.		
26	Ability for indexing and retrieval tools to locate documents		
27	Ability to ensure security to protect documents from unauthorized access		

7.2.7 File Management and Other System

Sl. No.	Requirement Description		
1	The solution should have automated File Processing system.		
2	The solution should enable file tracking		
3	The solution should include workflow capability to move files between approvers within the organization & outside		
4	The solution should have provision for noting with unique numbering, provides record of reviews		
5	The solution needs to be configurable for easy implementation rather than development from scratch.		
6	It should enable new file creation		
7	It should enable customized numbering of files		
8	The solution should have provision for document Storage & Retrieval		
9	The solution should enable department specific workflow.		
10	The solution should able to integrate with digital signature		
11	The file can be moved and shared in a secured manner within and different departments		
12	The access should be role-based and on SSO basis		
13	The solution should give provision to create different file types.		
14	The configuration of workflow should be easy and enable drag and drop facility.		
15	It should have the audit trial for noting and attributes in the file		
16	The solution should have the capability to print digital files		
17	The solution should be integrated with other modules like procurement, human resource etc.		

7.2.7.1   Authorization and Single Sign on

Sl. No.	Requirement Description		
1	Solution must provide access to only those applications/ resources that the user is authorized to.		
2	Once a user has been authenticated to the sign on system, access to all authorized Web applications and resources must be handled by this system		
3	Solution must provide capabilities to ensure dual factor authentication for re-authentication or sensitive resource access.		

7.2.7.2   Extraction Transformation and Loading

Sl. No.	Requirement Description		
1	The solution should include an ETL tool that can be used to extract, transform and load data from disparate source systems and perform the necessary transformations to establish a common format		
2	The solution should support batch data extraction, transformation and loading		
3	The solution should have a user-friendly GU1 for the users to handle ETL processes, such as:		
	a) Modify data feeds		
	b) Change of Business logic used for data ETL		
	c) Modify ETL parameters		
	d) Create, edit and execute a large number of		

Sl. No.	Requirement Description		
	transformation rules		
4	The solution should support mport & export wizard and supporting connections with source and destination adapters including OLEDB, ADO .Net, Flat files, and XML formats		
5	The solution should include a data mining tool that provides bottom-up, discovery-driven data analysis		
6	The solution should provide data mining algorithms which help discover patterns and uncover business data to reveal hidden trends		
7	The solution should support analysts by creating analytic starting pints including graphs, key performance indicators (KP1s), data grids and advanced visualizations like Decomposition Tree, Performance Map and Perspective View.		

7.2.7.3   Data warehouse

Sl. No.	Requirement Description		
1	Should be able to connect and extract data from the EAAAP solutions and do transformations before loading		
2	Should be able to connect to any other systems and extract data and do transformations before loading		
3	Should be able to extract in Real - Time and in batch from Other systems		
4	Should have pre-built Drag & drop standard process		
5	Should have pre-built data models		
6	The solution provided should work on a in-memory database		
7	The solution should provide Slowly changing dimensions support with integrated time dependency		
8	Should have built-in Currency and unit conversion		

Sl. No.	Requirement Description		
9	Should have Complex hierarchies support		
10	Should have Time & date hierarchies including all fiscal year features		
11	Support for detailed Analysis Authorizations		
12	Should have Predefined modeling patterns for transaction & master data optimized		
13	Should be able to Comparable performance tracking over time		
14	Should have Integrated data processing and error monitoring/handling across systems		
15	Should have Scheduling framework for all DWH processes		
16	Should have Fine-grained security model with mass handling capabilities		
17	Should have Object and Hierarchy level security		
18	Should have Access-control at row level		
19	Should have Analytic Privileges grant different users access to different portions of data in the same view based on their business role.		
20	Should have Auditing & Access statistics including identity handling		
21	Should have Possibility to trace on application logic, database access and effect of authorizations		

7.2.7.4   Analytics, Dashboard and Reporting

Sl. No.	Requirement Description		
1	The solution should be capable of scheduling a report for execution refresh and or distribution and or publish		

Sl. No.	Requirement Description		
2	The solution should be capable of distributing reports through email as Body or Attachment		
3	The solution should permit viewing of reports through web		
4	The solution should permit prioritizing reports during execution		
5	The solution should be capable of publishing reports to a central store for access by different users		
6	The solution should allow users to send report to specified user(s) at scheduled times		
7	The solution should have interface to search and filter the data of the report		
8	The solution should provide exception reporting mechanism		
9	The solution should provide Senior Management Dashboards		
10	The solution should be capable of drill down and drill up with the report tool		
11	The solution should be capable of creating ad-hoc queries and reports for analysis		
12	Should not require knowledge of SQL or database to create self-service adhoc reports		
13	The solution should be able to convert reports to MS- Excel, MS- Word & PDF format directly		
14	The solution should provide the following display formats in the reports a) Sections b) Tables c) Pivots d) Charts		
15	The solution should permit display of multiple result sets in the same document		
16	The solution should permit the user to browse through metadata for detailed information on		

Sl. No.	Requirement Description		
	objects to build adhoc reports		
17	The solution should facilitate the user to create custom objects formulas for repeated use in reporting tool		
18	The solution should provide graphical interface for creating custom formulas		
19	The solution should have a GUI tool with drag and drop features to build reports		
20	The solution should permit conditional formatting based on thresholds or data ranges for any cell in the report		
21	Solution should provide pre-built templates which can be used for report designing		
22	The solution should restrict access to data and report based on user responsibilities		
23	The solution should have the ability to allow users the following for creating their own views or reports with ease:		
24	a) Select column		
25	b) Apply filters and sort orders c) Summation		
26	d) Drill down! drill up e) Averaging		
27	The system shall provide the ability to drill down, drill across, and slice-and-dice.		
28	The system shall enable role-based access to information.		
29	Identifies and clearly describes what business information, analytical tools and techniques, and decision support is required by the business to realize BI-driven improvement opportunities regarding management processes, customer processes, and/or operational processes;		

Sl. No.	Requirement Description		
30	Provides the essential input to the process of defining specific BI projects and prioritizing those projects based on key criteria such as business impact and timeto-market;		
31	Provides the means of aligning BI, business process improvement, and balanced scorecard initiatives;		
32	Drives key data architecture decisions;		
33	Provides the basis for end-to-end traceability between BI requirements approved by business users and the delivered data stores and BI applications		
34	Provides a key baseline against which the performance of the BI initiative can be measured.		
35	Identifies and clearly describes what business information, analytical tools and techniques, and decision support is required by the business to realize BI-driven improvement opportunities regarding management processes, customer processes, and/or operational processes;		

7.2.7.5 Mobile Application

Sl. No.	Requirement Description		
1	App for view Time Events (Punch in/out) requests		
2	Search for an employee in an organization		
3	Check My Addresses data		
4	Check My Bank data		

Sl. No.	Requirement Description		
5	Check My communication data, such as your Telephone Number, Fax and E-mail		
6	Check My family data, such as your spouse, child, father, Mother		
7	Employees to create and submit leave requests quickly		
8	Enable employees to check and manage a digital version of all their paystubs/Payslips (Monthly)		
9	Check My Personal data, such as your name, birth date, marital status etc.		
10	Can view the upcoming leaves and work schedule of direct reportee employees		
11	Can display and submit your travel expenses (Reimbursements)		
12	Approve employee requests such as leave, Travel etc.		
13	Display/Change		
14	Structure Overview		
15	Project Costs - Plan/Actual/Commitment/Remaining Planned/Assigned		
16	Project Budget - Budget/Actual/Commitment/Remaining Planned/Assigned		
17	Display Purchase Requisitions by Project		
18	Display Purchasing Documents by Project		
19	Display List of Stock Values - Sales Order and Project Stock		
20	Post Goods Receipt		

Sl. No.	Requirement Description		
21	Post Goods Issue		
22	Create Entry Sheet for PO		
23	Display/Change Service Entry Sheets		
24	Display Actual Costs and Revenues		
26	Display Commitments		
27	Display Asset Value		
28	Display Material Document List		
29	Change Network Activity Status		
31	Create Purchase Requisitions		
32	Manage Purchase Requisitions Centrally		
33	Display Purchase Requisitions by Project		
34	Create Purchase Order Centrally		
35	Manage Purchase Orders		
36	Monitor Purchase Order Down Payments		
37	Display Purchasing Documents by Project		
38	Purchase Order Items by Account Assignment		
39	Display List of Stock Values - Sales Order and Project Stock		
40	Post Goods Receipt for PO		
41	Post Goods Issue		
42	Create Entry Sheet for PO		
43	Display/Change Service Entry Sheets		
44	Display Material Document List		
45	Supplier Invoices List		
46	Count Physical Inventory		

Sl. No.	Requirement Description		
47	Procurement Overview Page		
48	Physical Inventory Analysis		
49	Create Physical Inventory Document		
50	Financial Statement – Grid-Based		
51	Display G/L Account Balances		
52	Display Line Item Entry		
53	Post General Journal Entries		
54	Display Line Items in General Ledger		
55	Actual Cash Flow		
56	Reconcile GR/IR Accounts		
57	Accounts Payable Overview		
58	Asset Transactions		
59	Bank		
60	Budget Analysis		
61	Cash Flow - Detailed Analysis		
62	Clear G/L Accounts		
63	Clear Incoming Payments		
64	Clear Outgoing Payments		
65	Cost Centers - Actuals		
66	House Bank		
67	House Bank Account		
68	Journal Entry		
69	Manage Bank Accounts		
70	Manage Commitment Items		
71	Manage Bank Statements		

Sl. No.	Requirement Description		
72	Manage Funds		
73	Overdue Payables		
74	Overdue Receivables		
75	Post General Journal Entries		
76	Post Incoming Payments		
77	Post Outgoing Payments		
78	Profit Centers - Plan/Actual YTD		
79	Projects - Actuals		
80	Trial Balance		

7.2.8 Company Secretary Function – Process Management

Sl. No.	Requirement Description		
1	Ability to prepare Agenda in user defined formats regarding proposals submitted by different sections such as procurement, planning, store, projects, HR etc by competent authority of concerned departments after competent approval.		
2	Ability to attach related documents to the proposals		
3	Ability to send notice and agenda of Board meetings & arrange the meetings.		
4	Ability to record & circulate minutes of meeting		
5	Ability to record action to be taken by the concerned departments and intimate the concerned stakeholders and send proposals passed by the BoD		
6	Ability to support workflow regarding record of correspondence on the action taken by the concerned departments on the recommendations given by the BoD		
7	Ability to send notice and agenda of different meetings to		
	be conducted such as Annual General Meeting & Extra-ordinary General Meeting, Business Committee & Audit Committee meetings		
8	Ability to record & circulate minutes of meeting and also send to the concerned departments		
9	Ability to generate check list for ensuring compliances of various provisions of Companies Act		
10	Ability to undertake workflow related to allotment of shares, transfer of shares, alteration of MOA & AOA, charge creation, appointment/ change in Directors/ Auditors, etc.		
11	Ability to undertake workflow related to filing of various Returns & Forms as required under the provisions of Companies Act with Registrar of Companies & Central Govt		
12	Ability to undertake workflow related to maintenance of various statutory records & registers as required under the Companies Act		
13	Ability to undertake workflow related to preparation of Annual report and Directors' report of the Company		

Sl. No.	Requirement Description		
14	Ability to generate requisition for temporary advance		
15	Ability to send expenditure details to Finance		
16	Ability to undertake workflow related to expenses involved in issue of shares like payment of Stamp duty on share certificates by obtaining approval from competent authority		

7.2.9   Production Planning

Sl. No.	Requirement Description		
1	Process design when one material is produced from a different material. Illustration: An angle is formed from a steel bar or a frame is formed from angles and channels etc.		
2	Ability to create Bill of Materials		
3	Ability to define Routing for production of different forms of structural items like frames,		
4	Ability to make material and resource planning		
5	Ability to create integrate with Material Management Module for release of work orders		
6	Ability to generate reports on consumption of materials		

7.2.10   Mobile Application

Additional requirement has been placed based on the current requirement in KPTCL

Sl. No.	Requirement Description		
1	App for view Time Events (Punch in/out) requests		
2	Search for an employee in an organization		
3	Check My Addresses data		
4	Check My Bank data		
5	Check My communication data, such as your Telephone Number, Fax and E-mail		
6	Check My family data, such as your spouse, child, father, Mother		
7	Employees to create and submit leave requests quickly		
8	Enable employees to check and manage a digital version of all their paystubs/Payslips (Monthly)		
9	Check My Personal data, such as your name, birth date, marital status etc.		
10	Can view the upcoming leaves and work schedule of direct reportee employees		
11	Can display and submit your travel expenses (Reimbursements)		
12	Approve employee requests such as leave, Travel etc.		
13	Display/Change		
14	Structure Overview		
15	Project Costs - Plan/Actual/Commitment/Remaining Planned/Assigned		
16	Project Budget - Budget/Actual/Commitment/Remaining Planned/Assigned		
17	Display Purchase Requisitions by Project		
18	Display Purchasing Documents by Project		
19	Display List of Stock Values - Sales Order and Project Stock		
20	Post Goods Receipt		
21	Post Goods Issue		

Sl. No.	Requirement Description		
22	Create Entry Sheet for PO		
23	Display/Change Service Entry Sheets		
24	Display Actual Costs and Revenues		
26	Display Commitments		
27	Display Asset Value		
28	Display Material Document List		
29	Change Network Activity Status		
31	Create Purchase Requisitions		
32	Manage Purchase Requisitions Centrally		
33	Display Purchase Requisitions by Project		
34	Create Purchase Order Centrally		
35	Manage Purchase Orders		
36	Monitor Purchase Order Down Payments		
37	Display Purchasing Documents by Project		
38	Purchase Order Items by Account Assignment		
39	Display List of Stock Values - Sales Order and Project Stock		
40	Post Goods Receipt for PO		
41	Post Goods Issue		
42	Create Entry Sheet for PO		
43	Display/Change Service Entry Sheets		
44	Display Material Document List		
45	Supplier Invoices List		
46	Count Physical Inventory		
47	Procurement Overview Page		
48	Physical Inventory Analysis		

Sl. No.	Requirement Description		
49	Create Physical Inventory Document		
50	Financial Statement – Grid-Based		
51	Display G/L Account Balances		
52	Display Line Item Entry		
53	Post General Journal Entries		
54	Display Line Items in General Ledger		
55	Actual Cash Flow		
56	Reconcile GR/IR Accounts		
57	Accounts Payable Overview		
58	Asset Transactions		
59	Bank		
60	Budget Analysis		
61	Cash Flow - Detailed Analysis		
62	Clear G/L Accounts		
63	Clear Incoming Payments		
64	Clear Outgoing Payments		
65	Cost Centers - Actuals		
66	House Bank		
67	House Bank Account		
68	Journal Entry		
69	Manage Bank Accounts		
70	Manage Commitment Items		
71	Manage Bank Statements		
72	Manage Funds		
73	Overdue Payables		

Sl. No.	Requirement Description		
74	Overdue Receivables		
75	Post General Journal Entries		
76	Post Incoming Payments		
77	Post Outgoing Payments		
78	Profit Centers - Plan/Actual YTD		
79	Projects - Actuals		
80	Trial Balance		
81	Ability to view and generate Maintenance Order		
82	Ability to view and change Maintenance Plan		
83	Ability to carry out Resource Scheduling for Maintenance Planners		
84	Ability to create and view job cards		
85	Ability to view and create Task List		
86	Ability to view and create purchase requisition and Material requisition		
87	Ability to generate KPI Reporting: Predefined one-click report		
88	Ability to create Maintenance Notice		
89	Ability to update master data for Equipment		
90	Ability to view and add inspection details for equipment		
91	Ability to track Completion Confirmation for Maintenance of Equipment		
92	Ability to view Equipment details		
93	Ability to view and change Functional Location		
94	Ability to view and generate Maintenance Notification		

7.2.11 Functional Requirement Specifications for existing KPTCL and ESCOMS Pension Trust and Gratuity Trust

	1.1FRS in respect of Pension payment management
1	Ability to define norms for calculation of monthly pension /family pension/ approval of rolls for payment
2	Ability to capture the details of pensioners from 102 existing pension disbursing Units (1 being KPTCL Unit and others belong to ESCOMs)
3	Ability to capture basic details of pensioners/family pensioners whenever new pensioner/family pensioner is added
4	Ability to migrate data from existing system to new system
5	Ability to edit pensioner/family pensioner details by the pension disbursing offices with at least two level of checks/approvals
6	Ability to Generate regular pension roll based on the data available in the database
7	Ability to generate fund requisition note of Commutation of Pension and Gratuity and onward submission to concerned corporate offices.
8	Ability to maintain pension schedule on par with scale register maintain in the units
9	Ability to bifurcate the entire liability of pension/family pension/arrears among GoK and ESCOMs by taking the ratio (Percentage) of service rendered upto 31.05.2002 as GoK portion and remaining as ESCOM's portion.
10	Ability to generate pension arrears/DA arrears/ supplementary rolls
11	Ability to bifurcate all arrears/supplementary bills among GoK and ESCOMs based on the ratio/percentage arrived.
12	Ability to perform Income tax calculation
13	Ability to revise DA from the applicable date centrally and generation of DA arrears
14	Ability to revise pension whenever pension is revised and calculation of arrears
15	Ability to stop disbursement of pension/family pension at the time of death of pensioner/Family pensioner or at the time of non-production of life certificate and re-start the generation of pension/family pension once life certificate is produced and also calculation of pension/family pension for the months stopped by providing provision for generation of supplementary rolls
16	Generation of digital Life certificate and integrating the same with the pension/Family pension roll.

	1.1 FRS in respect of Pension payment management
17	Ability to generate enhanced family pension for death while in service and restore to normal family pension after the date of restoration to normal family pension amount
18	Ability to restore normal pension after the date of restoration of commutation
19	Ability to transfer the pensioner/family pensioner to other divisions wherever he/she requests
20	Ability to receive the pensioner/family pensioner transferred from other division
21	Ability to sanction Family pension due to death of existing pensioner
22	Ability to maintain nominee details and payment to nominee in case of death of pensioner/family pensioner
23	Ability to delete unapproved pension rolls/bills
24	Ability to deduct PSF, IT and any other deductions from Pension while generating pension/family pension roll and preparation of deduction statement
25	Ability to generate Form 16 for IT deductions
26	Ability to set alert whenever life certificate is due / at time of normal restoration of pension/family pension
27	Ability to send reminder message to pensioner/family pensioner for life/re-marriage certificate via e-mail/sms/whatsapp
28	Ability to generate fund requisition statement and fund requisition letter based on rolls generated.
29	Ability to arrange payment of monthly pension/family pension to all disbursing division by PENSION TRUST.
30	Ability to generate all reports in connection with pension payment
31	Facility to send message regarding payment made to individual pensioners via e-mail/sms/whatsapp
	1.2 Reporting Requirement
32	Ability to view and take printouts of monthly pension rolls/supplementary bills/ pension arrears/DA arrears bills at Disbursing Unit
33	Ability to generate report of stopped pensioner due to various reasons like non-production of life certificate/death
34	Ability to generate Report for alerting restoration of pension/family pension every month or for stopping the pension for the want of life certificate

	1.1FRS in respect of Pension payment management
35	System should generate all types of reports every month in connection with pension management like providing details of pensioners whose pension has been stopped for various reasons like transfer out, death or for want of life/re-marriage certificate and for addition of pensioner/ family pensioner by superannuation/VR etc.,
36	Report showing all disbursements pertaining to single person from the date of commencement till the date specified.
37	Disbursing Unit has to get Monthly report showing details of basic pension, DA, deductions and net amount to be payable along with bifurcation of GoK and ESCOMs liability.
38	Ability to take print out of fund requisition statement by the Units
39	Ability to view the reports even by Audit wing
	2.1 Facility to be included for reimbursement of commutation and gratuity paid by Corporate office of KPTCL/ESCOMs and PCKL
40	Provision to capture details of employees who have retired in the previous month at Corporate office level of KPTCL and ESCOMs such as employee name, date of Birth, Date of Entry into Service, gratuity amount admissible/Commutation amount admissible and bifurcate the total gratuity amount/commutation amount as GoK portion and ESCOM's portion taking percentage of service rendered upto 31.05.2002 as GoK portion and remaining as ESCOM's portion.
41	Generation of rolls for reimbursement of amount requested by corporate offices of KPTCL/ESCOMs after the payment from their side
42	Ability to generate fund requisition letter and fund statement at Trust office
43	Arranging payment of commutation and gratuity to Corporate offices of KPTCL/ESCOMs by Trust
	2.2 Reporting Requirement
44	Month-wise /COMPANYWISE reports showing the details of amounts paid to Corporate offices of KPTCL/ESCOMs by Trust towards reimbursement of commutation and Gratuity with bifurcation among GoK and ESCOMs.
	3. Employee self-service for pensioners
45	Facility to send message regarding payment made to individual pensioners/family Pensioner

1.1 FRS in respect of Pension payment management	
46	Ability to send message to pensioner/family pensioner for reminding life / re-marriage certificate
47	Facility to view the Pension/Family Pension by the pensioner/Family Pensioner
4. Pension Trust and Gratuity Trust Accounts	
48	Ability to capture receipts in the form of contribution from KPTCL, PCKL and ESCOMs and other receipts to both Pension Trust and Gratuity Trust
49	Maintenance of Cash book
50	Capturing payments of Pension/Family pension, Commutation of Pension from pension module and DCRG payments from gratuity module
51	Generation of JVs, preparation of JV analysis, cash analysis and Trial Balance, Bank Reconciliation Statements, Cash flow/receipts and payments statements periodically
52	Preparation of Annual Accounts of both Trusts including balance sheet, P&L account and schedules
53	Maintenance of various schedules like investments, contributions, disbursements of pension and gratuity
4.1 Reporting requirements	
54	Monthly cash book reports
55	Ability to show JV, JV analysis, cash analysis and Trial Balance, Bank Reconciliation Statements, Cash flow/receipts and payments statements periodically
56	Ability to display of Annual Accounts of both Trusts including balance sheet, P&L account and schedules
57	Reports showing the investments, contributions disbursements of pension and gratuity periodically

7.2.11.1   Functional Requirement Specifications for newly formed NDCPS Family Pension Trust and Gratuity Trust

	1.1 FRS in respect of Pension payment management
1	Ability to define norms for calculation of monthly family pension/ approval of rolls for payment
2	Ability to capture the details of Family Pensioners from disbursing Units of KPTCL and ESCOMs
3	Ability to capture basic details of family pensioners whenever new family pensioner is added
4	Ability to edit family pensioner details by the pension disbursing offices with at least two level of checks/approvals
5	Ability to Generate regular family pension roll based on the data available in the database
6	Ability to generate fund requisition note of Gratuity and onward submission to concerned corporate offices.
7	Ability to maintain family pension schedule on par with scale register maintained in the units
8	Ability to generate Family pension arrears/DA arrears/ supplementary rolls
9	Ability to perform Income tax calculation
10	Ability to revise DA from the applicable date centrally and generation of DA arrears
11	Ability to revise family pension whenever family pension is revised and calculation of arrears
12	Ability to stop disbursement of family pension at the time of death of Family pensioner or at the time of non-production of re-marriage certificate and re-start the generation of family pension once re-marriage certificate is produced and also calculation of family pension for the months stopped by providing provision for generation of supplementary rolls
13	Generation of digital Life/re-marriage certificate and integrating the same with the Family pension roll.
14	Ability to generate enhanced family pension for death while in service and restore to normal family pension after the date of restoration to normal family pension amount
15	Ability to transfer the family pensioner to other divisions wherever he/she requests
16	Ability to receive the family pensioner transferred from other division
17	Ability to maintain nominee details and payment to nominee in case of death of family pensioner

18	Ability to delete unapproved family pension rolls/bills
19	Ability to deduct IT and any other deductions from family Pension while generating family pension roll and preparation of deduction statement
20	Ability to generate Form 16 for IT deductions
21	Ability to set alert whenever re-marriage certificate is due / at time of normal restoration of family pension
22	Ability to send reminder message to family pensioner for life/re-marriage certificate via e-mail/sms/whatsapp
23	Ability to generate fund requisition statement and fund requisition letter based on rolls generated.
24	Ability to arrange payment of monthly family pension to all disbursing division by FAMILY PENSION TRUST.
25	Ability to generate all reports in connection with Family pension payment
26	Facility to send message regarding payment made to individual Family pensioners via e-mail/sms/whatsapp

1.2 Reporting Requirement

27	Ability to view and take printouts of monthly family pension rolls/supplementary bills/ family pension arrears/DA arrears bills at Disbursing Unit
28	Ability to generate report of stopped family pensioner due to various reasons like non-production of re-marriage certificate/death
29	Ability to generate Report for alerting restoration of family pension every month or for stopping the family pension for the want of re-marriage certificate
30	System should generate all types of reports every month in connection with pension management like providing details of family pensioners whose family pension has been stopped for various reasons like transfer out, death or for want of re-marriage certificate and for addition of family pensioner by death of employee while in service
31	Report showing all disbursements pertaining to single person from the date of commencement till the date specified.
32	Disbursing Unit has to get Monthly report showing details of basic family pension, DA, deductions and net amount to be payable
33	Ability to take print out of fund requisition statement by the Units
34	Ability to view the reports even by Audit wing

	2.1 Facility to be included for reimbursement of gratuity paid by Corporate office of KPTCL/ESCOMs and PCKL	
35	Provision to capture details of employees who have died while in service in the previous month at Corporate office level of KPTCL and ESCOMs such as employee name, date of Birth, Date of Entry into Service, date of death gratuity amount admissible	
36	Generation of rolls for reimbursement of amount requested by corporate offices of KPTCL/ESCOMs after the payment from their side	
37	Ability to generate fund requisition letter and fund statement at Trust office	
38	Arranging payment of gratuity to Corporate offices of KPTCL/ESCOMs by Trust	
	2.2 Reporting Requirement	
39	Month-wise /COMPANYWISE reports showing the details of amounts paid to Corporate offices of KPTCL/ESCOMs by Trust towards reimbursement of Gratuity	
	3. Employee self-service for pensioners	
40	Facility to send message regarding payment made to individual family Pensioner	
41	Ability to send message to family pensioner for reminding re-marriage certificate	
42	Facility to view the Family Pension by the Family Pensioner	
	4. NDCPS Family Pension Trust and Gratuity Trust Accounts	
43	Ability to capture receipts in the form of contribution from KPTCL, PCKL and ESCOMs and other receipts to both NDCPS Family Pension Trust and Gratuity Trust	
44	Maintenance of Cash book	
45	Capturing payments of Family pension, pension module and DCRG payments from gratuity module	
46	Generation of JVs, preparation of JV analysis, cash analysis and Trial Balance, Bank Reconciliation Statements, Cash flow/receipts and payments statements periodically	
47	Preparation of Annual Accounts of both Trusts including balance sheet, P&L account and schedules	
48	Maintenance of various schedules like investments, contributions, disbursements of Family pension and gratuity	

4.1 Reporting requirements	
49	Monthly cash book reports
50	Ability to show JV, JV analysis, cash analysis and Trial Balance, Bank Reconciliation Statements, Cash flow/receipts and payments statements periodically
51	Ability to display of Annual Accounts of both Trusts including balance sheet, P&L account and schedules
52	Reports showing the investments, contributions disbursements of family pension and gratuity periodically

8. Section VIII: Technical Specifications

8.1 Technical Fitment of Solution

The entire section is the minimum requirement and hence mandatory and needs to be supplied as per the specification and requirements of the KPTCL.

EAAAP solution design and integration approach with existing as well as upcoming applications will be evaluated based on but not limited to the details and clarity in the document on following aspects:

- Justification of unpriced BOM – Unpriced BOM covering entire Functional/Technical Requirement Specification.
- Application Architecture
- Data Architecture
- Technology Stack
- Proposed Solution with Technical Design, Proposed Specifications, Proposed Configuration etc. on upcoming Cloud based Solution
- Proposed Technical Architecture and Technologies / platforms with rationale and benefits (Compute Platform, OS Platform, tools proposed for the managing the project requirements, such as SLA monitoring tools, Project Monitoring)
- Rational for BOM/BOQ quoted for successful operation of EAAAP Stack on year on year basis.
- Proposed Approach for operations in virtualized & On-Prem IT Infrastructure Environment
- Integration capabilities with external third-party applications
- Integration capabilities with upcoming solution and applications
- Conformance to Industry Standards as specified in the RFP
- Innovative or unique feature of solution proposed
- Approach to meet the performance SLAs etc.
- Proposed infrastructure and bandwidth sizing should be validated by the proposed EAAAP, associated Application and services OEMs.
- In case of any Disaster and Disaster Recovery Drill, the IA shall ensure 100% replica of the Production Environment at Disaster Recovery Environment for operations of EAAAP solution.
- DC Storage requirement should be sized based on Year on Year data growth.

NOTE: Bidder should supply the UNPRICED detailed BOM (Bill of Material) as a part of their technical bid along with make, proposed minimum specifications and detailed specifications as well as clearly articulated and legible architecture proposed for the solution. The solution so designed shall work on high-availability mode at 70% resource utilization in all Application, DB and other servers. Bidder shall justify the solution based on expected transactions and number of concurrent users. The proposed solution may be evaluated using the experience of other similar production environment to assess the appropriateness of design of Transactions and Concurrent users.

The Bidder are required to provide their responses to Technical Requirements in the following table:

Bidder Response	Remark
Yes	If the proposed EAAAP Solution meets the requirement.
No	If the proposed EAAAP Solution does not meet the requirement, the same feature shall be customized or through any bolt-on applications by the bidder. In such cases marks will not be awarded for such items.

8.2 Technical Requirements

Below are the technical requirements of the proposed EAAAP system.

a) System Technical Requirements:

Sl. No.	System Technical Requirements	Bidder's Response (Yes/ No)	Explanation (If any)
A	**GENERAL REQUIREMENTS**		
1	Specify if real-time data update among modules in the EAAAP Solution is supported?		
2	Does the system support distributed processing?		
3	Does the system support the TCP/IP protocol stack?		
4	Does the EAAAP product support Virtualised environment and HCI environment? Which all variants of OS do it support?		
5	Please clarify how high availability is ensured in your system, particularly for the database, application, whole system.		
6	Does the system support load balancing?		
7	Is the system Scalable? Give details of upward scalability in terms of maximum number of users and the maximum volume of transactions that can be supported.		

Sl. No.	System Technical Requirements	Bidder's Response (Yes/ No)	Explanation (If any)
B	**INSTALLATION/ENHANCEMENTS/ UPGRADE**		
8	Please specify whether the following types of system implementation tools are provided:		
	(a) Quick implementation/configuration tools		
	(b) Development tools (e.g. report writer, screen painter, programming language, etc.). Are these tools built –in or separately available & integrable		
	(c) Debugging, auditing and testing tools (for both functional and performance testing)		
	(d) Provision for remote patch and version administration		
	(d) Toolbar		
	(e) Varying screens and formats for different users of the same module		
9	Specify policy on future upgrades and Future release. Also explain your product lifecycle management with product-technology roadmap for the next 7 years.		
10	The upgrades should have minimal impact to the system installed on the following areas:		
	(a) Configured parameters		
	(b) Customized programs		
	(c) Modified standard program source		
11	Do you provide notification and patches of system enhancements and fixes to the Purchaser after implementation on a proactive basis? Does ATS cover this?		
12	How many versions have been released in last five (5) years* (period ending December 2023)? Please specify detail of versions, month/year of release, and the changes made with each release*		

Sl. No.	System Technical Requirements	Bidder's Response (Yes/ No)	Explanation (If any)
13	Are there any major upgrades due? (If so when are these expected?) *		
14	Will the above upgrade affect adversely the current version? (Provide information as to what extent it will affect)		
C	**FLEXIBILITY**		
15	Does the system support Multiple Languages e.g. English, Kannada and any other foreign languages?		
16	Is the system configurable in terms of data retention, automatic time-outs to adapt various work load and usage pattern?		
17	Does the system provide forced time-out for idle users?		
	Can the parameters for triggering this be defined by system administrator?		
18	Does the system offer 'Fast-path' options for speedier navigation in the system?		
19	Does the system provide data archiving capabilities, which can, selectively, archive inactive/obsolete data into separate storage media?		
20	Does the system synchronize the time (clock) with other Third-Party software?		
	Does it allow GPS clock synchronisation?		
21	Please specify the utility used to synchronize the time (clock) with other Third-Party software.		

Sl. No.	System Technical Requirements	Bidder's Response (Yes/ No)	Explanation (If any)
D	**TECHNICAL INTERFACING/ INTEGRATION / CONVERSION**		
22	Does the system support real time updates or interfaces with software from other Vendors or in-house developed systems, including systems like GIS, SCADA, etc.?		
	a. Does this system support automated data-exchange interface with other data sources like MS SQL, Foxpro, MySQL, Postgres sql or any flat file data source?		
	b. Does it have a built-in OPC interface client for connecting any standard OPC server for real time data acquisition?		
	c. Does it support automated data exchange with e-procurement system of govt. of Karnataka		
23	a. Does the system support data conversion tools? Please specify the data conversion tools provided?		
	b. Does the software provide bulk data uploading/ downloading tools? Please provide details.		
24	Does the system have an inbuilt e-mail tool?		
25	Does the system support e-mail integration with systems such as GMAIL, Microsoft's Outlook Express and Lotus Notes etc.? Please specif y other supported e-mail systems?		
26	Can the system integrate with SMS gateway to allow SMS alerts on mobile?		
27	Does the system provide User GUI which is web based and O/S & browser independent?		
28	Which all web browser variants and versions does your software support?		
29	Please also specify remote access software that is supported.		

Sl. No.	System Technical Requirements	Bidder's Response (Yes/ No)	Explanation (If any)
30	Does the system support access via the Internet with secured connectivity?		
	Does it support IP-sec VPN?		
	Please specify how it is supported and the functions that are supported.		
31	Does it support Public / Private Key Infrastructure?		
32	Does the system support interfacing with smart phones, tablets, PDA, Mobiles? Kindly provide details of products supported.		
33	Does the system support interfacing with Smart Card readers, Biometric Card readers, RFID devices, data acquisition systems, in-motion weighbridges etc.? Please provide details of standard supported.		
34	Does the system support the upload and download of the following type of documents into/from the system:		
	(a) Microsoft Word files		
	(b) Microsoft Excel files		
	(c) Open Document format (ODF)/ PDF files		
	(d)Engineering drawing (AutoCAD/ MicroStation) files		
	(e) Data files (including ASCII formats like *.csv etc.)		
	(f) Image files		
	(g) Microsoft Power point files		
	(h) Microsoft Project files		
	(i) Microsoft Access files		
	(j) Primavera (Project management solution) files		
35	Does the system support data export and import facility to variety of databases and other software packages?		

Sl. No.	System Technical Requirements	Bidder's Response (Yes/ No)	Explanation (If any)
36	Kindly confirm whether Purchaser can use the database being supplied as part of the EAAAP project for developing other bolt –on applications. What are the restrictions, if any?		
37	Does the system support access of Employee Self Services and Payroll services from mobile (Android, iOS, Window) and external sites?		
E	**SECURITY**		
38	Does the system provide details of user activity/security violation for auditing?		
39	Does the system restrict users from unauthorized access by allowing only the authorized users with valid profile/password to access only the allowed transaction, as well as be capable of restricting access to unauthorized users?		
40	Does the system have multiple levels of security such as Objects, Transactions, Forms, and Process etc.?		
41	Does the system have a capability to assign activities to roles, and map roles to users and provide role-based access to users?		
42	Does the system have a capability to track changes to fields or settings (for audit trail)?		
	Can this audit functionality be customized and based on changing criteria as per the user requirement?		
43	Does the system track User ID, Terminal, Session etc. as a part of the audit trail?		
44	Is the system capable of encrypting/decrypting sensitive data?		
45	Does the system include parameters on global and user level security? Specify the configurable security parameters provided by the software?		

Sl. No.	System Technical Requirements	Bidder's Response (Yes/ No)	Explanation (If any)
46	Does the system provide user and user group authorization administration tool to assign security levels to functions and data, and allow the access by users/by groups with valid security level only?		
47	Does the system have the feature of automatic log-off if there is no user activity for a specified time period?		
F	**BACKUP/ RESTORE**		
48	Does the system support third party Backup tools and technologies?		
	If yes, please mention the names of the tools, technology, processes supported.		
49	Does the system support backup of database while in operation?		
50	Does the system support parallel recovery?		
G	**OPERATIONAL**		
51	Does the system provide transaction processing monitor with easy to use GUI?		
52	Does the system provide database administration with reporting facility?		
53	Does the system have system monitoring with reporting facility?		
54	Does the system provide performance monitoring with reporting facility?		
55	Does the system provide performance tuning tools?		
56	Does the system provide for transaction reversal option?		
57	Is the system compatible with Third Party system monitoring package, such as HP Open View, CA-Uncentre, IBM Policy Director, or other Network Management software etc.?		
58	Does the system have the ability to report the following system alerts to administrator?		

Sl. No.	System Technical Requirements	Bidder's Response (Yes/ No)	Explanation (If any)
	(a) Network alert		
	(b) Database alert		
	(c) Operating system alert		
59	Does the system provide methods to manage and prioritize batch jobs queued?		
60	Does the system support job scheduling?		
61	Does the system offer graphics and charting capabilities?		
	Will you provide the following documentation?		
	(a) Product Manuals		
62	(b) Functional specification (with the transaction, report and field level descriptions, dataflow diagrams, performance parameter, high level database and application design)		
	Does the system support handling of errors in the following manner?		
	(a) Error logging		
63	(b) Ability to redo/rollback a transaction after recovery from software/hardware failure to ensure data integrity		
	(c) Is the data deletion controlled centrally as per the defined policy?		
64	Does the system restrict users from deleting data directly unless authorized to do so?		
65	Does the system support logical deletion first and physical deletion should be done only as per the company policy either at day end or month end to allow the reversal of deletion by user whenever necessary?		
66	Are Temporary data, table or files generated by the system automatically managed by the system itself?		
67	Does the system allow multiple users to access the same module simultaneously?		

Sl. No.	System Technical Requirements	Bidder's Response (Yes/ No)	Explanation (If any)
68	Can the system display data according to users specified sorting order and selection criteria?		
69	Does the system allow designing of workflow with the ability to define business rules, alerts and triggers without programming?		
70	Does the system support creation of secondary workflow attach to a parent?		
71	Does it support Issue management for tracking of document threads against an issue (e.g. document thread against a court case, dispute etc.?)		
72	Can transaction be previewed or simulated for analysing accuracy and effect of transaction before it is taking affect?		
73	Can transactions be rolled back? Kindly explain the process including audit trail.		
74	Does the system provide utilities to automate report distribution process, so that user is notified after a report is generated to facilitate easy retrieval?		
75	Does the system provide separate module for implementing Knowledge Management solution having the following capabilities?		
	(a) System should provide fast access to knowledge repository as per defined security norms and roles		
	(b) System shall have capability to analyse contribution and/or usage by groups and users to knowledge database.		
H	**CONTROL ENVIRONMENT**		
76	Does the system support version control to maximise the productivity of development teams as well as to minimise rework or confusion?		
77	Please specify the order used in creation of objects for performing export and import of objects		

Sl. No.	System Technical Requirements	Bidder's Response (Yes/ No)	Explanation (If any)
I	**BENCHMARKING**		
78	Please convey if the following benchmarks can be met:		
	For transactions:		
	(i) 90% of online update transaction- Max 5 seconds		
	(ii) 90% of online enquiry transaction-Max 5 seconds		
	(iii) Batch update transaction- Max 5 hours		
J	**BANDWIDTH**		
79	Bandwidth requirements:		
	(a) Specify typical bandwidth requirements for transmitting EAAAP data from one location to another location per user		
	(b) Specify typical bandwidth requirements for transmitting information between the client, application server and the database per user		
	(c) Specify typical bandwidth requirement for transmitting EAAAP BLOB data?		
K	**REPORTS**		
80	Can transaction be previewed or simulated for analysing accuracy and effect of transaction before it is taking affect?		
81	Can transactions be rolled back?		
	Kindly explain the process including audit trail.		
82	Is drill down to all kind of reports possible?		
83	Can any document or report be previewed before printing?		
84	Does the system provide facilities for scheduling report generation and printing?		

Sl. No.	System Technical Requirements	Bidder's Response (Yes/ No)	Explanation (If any)
85	Can report distribution be automated, so that user is notified after report is generated and the user retrieves report after notification?		
86	Does the system provide functionality to users in generating reports on their own without involving technical programming? Does the system allow customization of standard reports?		
87	Does the system provide user-friendly interfaces and generate graphical reports and queries?		
88	Does the system provide flexible Report Writer with the following minimum features:		
	- Modifying the format and layout of reports		
	- Facility to Summarize and calculate totals for the information to be reported		
	- Ability to include only select records in the report		
	- Ability to include only select data from any set of records		
	- Ability to perform arithmetic calculation on the information selected or totals		
	- Ability to add narrative comments to reports		
	- Ability to show financial data in thousands, millions etc. without creating rounding problem		
	- Store the report format for later use		
	- Ability to produce reports in graphical form for presentation purposes.		
L	**INDIA LOCALIZATION**		
89	Does system support India specific requirements e.g. taxes, duties & other government levies and statutory requirements, payroll etc.?		
	Is the system compatible with regulations on INDAS and GST etc?		

Sl. No.	System Technical Requirements	Bidder's Response (Yes/ No)	Explanation (If any)
	What is the roadmap for upcoming regulations?		
M	**INDUSTRY SPECIFIC SOLUTIONS**		
90	Are any industry specific solutions available for Electricity Utilities with an emphasis on power transmission sector?		
91	If yes, please provide list of Industry specific list of modules / functionality. Also mentioned its applicability for electricity transmission utility		
	Please provide date from which the modules have been commercially available.		
92	List of reference sites where these modules have been implemented		
N	**TRAINING AND ON-LINE HELP**		
93	Does the system have comprehensive help facility wherein the users can obtain system specific technical / functional help online?		
94	Does the system maintain a database of FAQ(s)?		
O	**LICENSING**		
95	Provide confirmation on Perpetual Licensing model with unlimited number of users		
P	**OTHERS**		
96	Can the system generate relevant transaction documents, number and time stamp for future reference and tracking?		
97	Does the system provide online logging of issue/ complaint by users?		
98	If not, what is the tool proposed as a part of your offer for logging of complaints, tracking resolution, escalation etc		
99	Deleted		

Sl. No.	System Technical Requirements	Bidder's Response (Yes/ No)	Explanation (If any)
Q	**ARCHITECTURE**		
100	Does the system architecture allow minimising modifications so as to preserve the package upgrade path?		
101	a. Does the system have declared Application programming interfaces?		
102	Does the system provide for multi-tiered architectures with separate rule engine and reporting layer?		
103	Does the system support interoperability to the extent that business processes, application and data can be shared and integrated across the organization?		
	Does the system provide application architectures that are highly granular and loosely coupled?		
104	Approach for Disaster Management facilities		

b) Mandatory Features:

The proposed EAAAP engine must provide a design time interface and a run time interface for designers to manifest newer development/changes without having to largely write code other than what is required for interfacing. The proposed platform should have the following capabilities.

The bidders are expected to provide complete details of the proposed EAAAP system's technology used by them and provide a demo of the same as part of their solution presentation and demonstration. Non complaint bids will be rejected.

Note: If the Bidder's response mentioned is 'NO' for any of the following mandatory features, the bidder will be disqualified

SL. No	Mandatory Feature	Bidder's Response (Yes/ No)	Explanation (If any)
	All of the Following features must be made available in the proposed EAAAP system		
1	**Authentication**		
	Authentication based on Internal DB based and External LDAP or MS-AD based authentication Support for SSO integration		
2	**Audit Trails**		
	Audit trails for all or any selected transactions, records		
3	**Access Controls**		
	Access Controls for software features based on Access Control List		
	View only or Add/ Edit Data Access control at Table, Row or Columns		
	User, Roles and Rights Management: Ability to define User and Role classes, define organizational structures and cross link them to arrive at effective security and access control schema, without having to write code.		
4	**Application Portal Pages**		
	All applications also need to have content pages from within which the application pages can be embedded or called. Development and design of such pages must be codeless and produce attractive and user friendly design.		
	Support for CSS 2.x		
	Support for CSS 3.x		
	Support for CSS 4.x		
5	**E-Forms**		

SL. No	Mandatory Feature	Bidder's Response (Yes/ No)	Explanation (If any)
	E-Forms engine to design, render and develop e-forms that can be deployed without having to write code for forms, dropdowns, multilingual interfaces, validations, error messages, persistence data model and integration.		
	Built in, all of these screen controls: Text, Boolean, Numeric, Decimal, Dropdown, Lookup, Images, Attachments, Lat/ Long, Currency, Date/Time, Multi Line, html editor, Radio, Checkbox, Phone, email, URL, Video, Image		
	Built in all of the advanced controls for Dependent Lookup, Multi dependent Lookup, Checkbox List, Multi Column List Grid, Dependent List Grid, Pickup list, Auto Complete		
	Built in RegEx for common data types and Ability to build Custom RegEx		
	Basic Validations such as default value, min-max range, mandatory fields		
	Control of Audit trailing at field level		
	Control of Form Layout in multi column or Card		
	Multi Lingual Forms		
	Field level help text customization		
	Field level error message customization		
	Custom Validations at field level		
	API based interlinking at form or field level		
	Control of Field level visibility, editability based on		
	Skip logic for field level conditional formatting, visibility, mandatory-ness, Show, Hide, Enable, Disable fields based on rules		
	Support for Multi-Tab, Multi Section Forms including wizard type form flow for ease of use		
	Support for embedding child-tables, multirow tables within the forms		
	Browser based Visual Forms designer		
	Formula Builder: Ability to define complex on form computations using Excel like formula builder		

SL. No	Mandatory Feature	Bidder's Response (Yes/ No)	Explanation (If any)
6	**Database Structure and maintenance:**		
	Enterprise class DB persistent model along with DR,Memory scaling, partitioning, dB monitoring, dB operations from creation of tables associated with the forms must be automated without having to write code or knowhow of the DB. The product must be able to operate without code change for most of the commercially available DBMS		
	Must be supported on current versions of Postgres, MS-SQL, Oracle, , My-SQL		
	Form design must propagate to creation, versioning and update of table structures without having to get into dB level administration or changes		
7	**Workflow**		
	Drag-&-Drop Workflow designer to render and develop electronic workflows that can be deployed without having to write code for processes, escalation, branching, SLA management, validations, error messages, persistence data model and integration, both actor driven		
	Browser based Visual Workflow designer		
	Task Portal: Ability to view, Assign, Pull back, Forward, Escalate tasks with SLA and rule based task management such as FIFO, LIFO, etc.		
	Complex Rules based Tasks routing		
	User Configurable Task list		
	Intuitive Dashboards for Approvals		
	Notifications/Escalation/Re-assignment		
	Reminder Service for Workflow instances crossing a defined SLA		
8	**Business Rules**		
	Business Rules engine to design, render and develop business rules that can be deployed without having to write code for business rules, validations, workflow branching, error messages and exception handling.		
9	**Automation of Actions**		
	Support for automation of tasks such as messaging. Robotic Process Automation to design, render and develop task automation that can be deployed without having to write code for handling simple (single step) process based and computation steps.		

SL. No	Mandatory Feature	Bidder's Response (Yes/ No)	Explanation (If any)
	Support for DB event based design and execution of Support for timer based design and Actions execution of Batch jobs: Automation tools for creation of CRON jobs at the OS level to conduct automated nightly operations.		
10	**Reports and MIS:**		
	Reports engine to design, render and develop reports and without having to write code for ad-hoc reports, document generation, multidimensional cubes, search and filters		
11	**Creation of APIs**		
	Integration touch points from this system may run into 100s and it is expected that the system is based on modern to build API interfaces that can be published for consumption of data by other applications within the security boundaries already defined.		
12	**Consumption of third party APIs:**		
	This system is expected to consume a large number of other APIs provided by other systems and it should be possible to define automatically all such consumption of API at the event stage without having to write code.		
13	**CI/CD:**		
	CI/CD must be available as intrinsic part of the proposed solution.		
14	**Micro Services:**		
	Micro Services based Scaling and consumption of services is a Must. The proposed system should be defined as a micro services based architecture. Proposer to describe adherence to Micro services models		
15	**Code/System Documentation:**		
	The system should automatically version control the artefacts developed, manage the life cycle of these artefacts and produce code level documentation of the generated code without having to spend time and effort.		
16	**DevOPS:**		
	Frequent changes demand that the DevOps must be automated and streamlined without having to require specialist intervention routinely and bringing together Business Analysts / developers /		
17	**Built on Open Source:**		

SL. No	Mandatory Feature	Bidder's Response (Yes/ No)	Explanation (If any)
	Entire proposed stack must be built on top of open source technologies and must not have any Servers, Operating systems, devices, interfaces, DBMS or browsers.vendor lock in for the components such as Application		
18	**Scalability:**		
	Both horizontal and vertical scaling at the vCPU, NLB and Cluster levels must be demonstrable.		
19	**Mobile Apps:**		
	The system should automatically generate native and boot strapped browser apps for mobile environments such as Android/iOS without having to write code.		
20	**Security, Encryption and Digital**		
	The system must have independent class of tools for incorporating the security aspects without having to code.		
21	**Version Management**		
	Version Management for all artefacts created using low-code/no-code engine		
22	The Platform must provide the ability to create dashboards to help authorities to track key KPIs for applications and services.		
23	Platform must be mobile enabled for field service technicians and must support offline\online work.		
24	The platform and developed applications/services must support web interfaces, rich mobile (iOS and Android natively), and APIs (RESTful) and continuous experience.		
25	Platform should have inbuilt workflow designer through drag & drop or pick and select functionality and should support all sequential, parallel and conditional designing capabilities.		
26	The platform should have the capability of creating web layouts, which can be used in any user's device like laptop, smartphone or tablets, build in the web once and used in different devices.		
27	User can start a process from desktop and then he/she can continue the service from other device or mobile. Save as draft.		
28	The design environment should allow for on-the-fly GUI construction which includes but not limited to predefined responsive layouts, elements and transitions.		

SL. No	Mandatory Feature	Bidder's Response (Yes/ No)	Explanation (If any)
29	The platform should also provide the capability to build AI-enabled apps with a variety of connectors that should support cognitive services, machine learning and conversational experiences (like chatbot, whatsapp etc.)		
30	Platform should support geofencing capabilities		
31	Platform should be capable to integrate with digital signature providers		
32	Platform should support integrations with various Payment Gateway Providers with easy of steps to enable and configure the PGI with business processes.		
33	Platform database should support all ACID compliances		
34	Platform should support both RDBMS and NoSQL databases		
35	Platform should have easy and simple option to create tables and fields to citizen developers		
36	Platform should provide capability to create CRUD operations without writing SQL		
37	Platform should have inbuilt database index management options to optimize the performance		
38	Platform should have Data Source builder to fetch data from multiple entities to re-use the combine / aggregated data		
39	Platform should have option to write SQL queries for effective use of RDBMS native features		
40	The built-in IAM should support integration with SSO providers such as Auth0 using OpenID and SAML standards		
41	Platform should expire the session after certain idle time and it should be configurable by administrator		
42	Platform should provide branding options to white-label and it must be configurable by administrator		
43	Platform should have in-built themes to choose or fully customizable by administrator		
44	Platform should support UI framework to create views on the data with configurable actions to perform various business functions.		
45	The workflow system should be able to specify, trigger and interact with different types of events either internally or externally raised.		
46	The workflow system must support the ability to raise events to be processes by other workflows.		

SL. No	Mandatory Feature	Bidder's Response (Yes/ No)	Explanation (If any)
47	Should support parallel, sequential and conditional workflows		
48	Should support to trigger notification alerts to stakeholders in the workflow and notifications should be fully configurable		
49	Should support to configure multiple buttons at each workflow step with options like approve, reject or return or etc., It must be fully configurable		
50	Should support notifications via email, SMS, Whatsapp, and similar		
51	The platform should have rule engine framework with visual builder to create complex if-elseif-else conditions		
52	The platform should have rule engine framework to set values to attributes within app or to set visual validations		
53	The platform should have rule engine framework to call out triggers, notifications, integrations, reports		
54	The Solution should allow for notifying an authorized user if activities are not completed in the predefined time (KPIs, Escalation, etc.)		
55	The system must allow users to be informed of various situations in the progress of their transactions via various techniques including but not limited to: SMS, Email, Platform Notifications		
56	Option to preconfigure system Notification templates.		
57	The platform should support to create various visual reports such as tabular, various chart/graphical reports and printable document reports		
58	The platform should support export capabilities such as Excel, CSV, PDF and similar for all reports		
59	Should be able to schedule reports to generate periodically based on pre-defined conditions and to trigger via email as an attachment		
60	Should be able to re-use the reports inside dashboards for visualization		
61	Should be able to restrict the report access to user(s) and/or role(s)		
62	Should be able to define data-access on the reports to logged-in user(s)		
63	Platform should support to create customizable reports		

SL. No	Mandatory Feature	Bidder's Response (Yes/ No)	Explanation (If any)
64	Platform should support NLP Reports to generate reports by end-users as per the business use-cases and operational needs.		
65	The platform should provide sandbox capabilities to perform development > testing > deploy activities		
66	The platform should have configurable stages such as Dev, QA, UAT without impacting the Production environment		
67	The platform must encrypt data-at-rest and data-in-transit.		
68	Apps built with enterprise-grade security against several vulnerabilities and attacks		

Section IX: Project Activity , Deliverables , Timeline, SLA, Payment Schedule and Penalty:

Refer section 6.11

9. Section IX - FORMS

Form: 1 Letter of Application

(On Company Letterhead of the Bidder)

To,   Date: / /

The Superintending Engineer (IT)
Corporate Office, Kaveri Bhavana, KPTCL,
Bangalore-560009,
Karnataka, India

Subject: Application for "Implementation of Enterprise Application, Automation & Analytics Platform" in KPTCL"

Dear Sir,

- Being duly authorized to represent and act on behalf of <Name of Applicant>

_____ (here in after referred to as "the Applicant"), and having reviewed and fully understood all the pre-qualification criteria provided, the undersigned hereby apply to be pre-qualified by yourselves as a Bidder for "Implementation and Support for EAAAP Solution at KPTCL".

- Attached to this letter are authenticated copies of original documents defining:

  o The Applicant's legal status:

  o The principal place of business:

  o The place and date of incorporation/registration:

  o Original or certified copies of Power of Attorney in favor of Authorized Signatory in the standard format (refer Form: 7 (Proforma of Power of Attorney)

- You and your authorized representatives are hereby authorized to conduct any inquiries or investigations to verify the statements, documents, and information submitted in connection with this application, and to seek clarification from our bankers and clients regarding any financial and techno-commercial aspects. This Letter of Application will also serve as authorization to any individual or authorized representative of any institution referred to in the supporting information, to provide such information deemed necessary and requested by yourselves to verify statements and information provided in this application, or with regard to the resources, experience, and competence of the applicant(s).

- You and your authorized representatives may contact the person(s) indicated in

Form: 2 (Particulars of EAAAP Vendor) and Form: 3 (Particular of Implementation Partner) for further information. The undersigned is (are) fully authorized to act on behalf of the Applicant.

- This Application is made in the full understanding that:
  o Bids by Bidders will be subject to verification of all information submitted against pre-qualification criteria at the time of tendering.
  o You reserve the right to (i) Amend the scope and value of any contracts to be tendered under this Project. (ii) Reject or accept any application, cancel the Tendering process, and reject all applications.
  o You and your personnel and agencies shall not be liable for any such actions and shall be under no obligation to inform the Applicant of the grounds for them

The undersigned declare that the statements made and the information provided in the duly completed Application are complete, true and correct in every detail.

Signature

_____

Name & Designation

For and on behalf of

(Name of Applicant)

Company Seal:

Place:

Date:

Form: 2 Particulars of EAAAP Vendor

Sr. no.	Description	Response
A	**General Information**	
1.	Name of the Firm	
2.	Nationality of the Firm	
3.	Complete Address of Head/Registered Office	
4.	Name of the Contact Person	
5.	Telephone Number (with ISD & STD Code)	
6.	Fax Number (with ISD & STD Code)	
7.	E-Mail Address	
8.	Type of Firm (Proprietary / Partnership /	
9.	Year and Place of Establishment	
10.	Firm is: Y Member of a group of Companies (if Yes, give name, address, connection and description of other Companies)	
11	List of countries where offices located	
12.	List of countries where EAAAP implemented	
B	**Indian Operations**	
1.	Head of Indian Operations	
2.	Indian Head/Registered Office Address	
3.	Name of the Contact Person	
4.	Telephone Number (with ISD & STD Code)	
5.	Fax Number (with ISD & STD Code)	
6.	E-Mail Address	
7.	Number of offices in India	
8.	Number of Development Centres in India	

9.	Number of full time employees
	     Y EAAAP Development Related
	     Y Others	

10.	Alliances / Partners	
C	**Proposed EAAAP Product** License)	
1.	Name	
2.	Version, if any	
3.	Release, if any	
4.	Database	
5.	Front-end	
6.	Dependencies on hardware	
7.	Dependencies on other software	
8.	Dependencies on other tools	
D	**Support and Upgrades**	
1.	Describe support offered with respect to upgrades, bug fixes, changes in statutes, functional assistance, etc.	
2.	List of support offices in India	

3.	Number of staff available for EAAAP support
	  Y In India
	  Y Internationally	

Location:		
Date:		
Signature of Authorized Signatory:		
Name of Authorized Signatory:		
Designation of Authorized Signatory:		
Official seal of the Company:		

Note: *Where the information cannot be provided in the table format, please furnish the information on a separate sheet. Please ensure proper reference between the table row and the additional sheet used.*

Form: 3 Particular of Implementing Agency

Sr. no.	Description	Response*
A	**General Information**	
1.	Name of the Firm	
2.	Nationality of the Firm	
3.	Complete Address of Head/Registered Office	
4.	Name of the Contact Person	
5.	Telephone Number (with ISD & STD Code)	

6.	Fax Number (with ISD & STD Code)	
7.	E-Mail Address	
8.	Type of Firm (Proprietary/ Partnership / Private/ Public)	
9.	Year and Place of Establishment	

10.	Firm is:
	    Y Member of a group of Companies (if Yes, give name, address, connection and description of other Companies)
	    Y Subsidiary of a large organization (if Yes, give full details of the holding Company)	

11.	Net worth () at the end of the last three financial years ending March 2024 (Please attach document certified by CA in practice)	
12.	Annual revenue () in the last three financial years ending March 2024 from similar projects (Please attach certified annual reports for last three years)	
13.	List of countries where offices located	
14.	List of countries where proposed solution is implemented	
Location:		
Date:		
Signature of Authorized Signatory:		
Name of Authorized Signatory:		
Designation of Authorized Signatory:		
Official seal of the Company:		

*** Note:**

(i) *Where the information cannot be provided in the above format, please furnish the information on a separate sheet. Please ensure proper reference between the row number (in above format) and the additional sheet used.*

Form: 4 Proforma for Bid Security /EMD

PROFORMA FORMA FOR BANK GUARANTEE (For Bid Security/EMD)

(To be stamped in accordance with Stamp Act. If any, of the Country of the issuing Bank)

Bank Guarantee No.: _____

Date: _____

To,

The Superintending Engineer (IT)
Corporate Office, Kaveri Bhavana, KPTCL,
Bangalore-560009,
Karnataka, India

Dear Sir/Madam,

In accordance with your Notice Inviting Tender no. ………………….. having its Registered Head Office at ……………….. (herein after called the Bidder) wish to participate in the said Tender for…………………………

As an irrevocable Bank Guarantee against Bid Security for an amount of …………. is required to be submitted by the Bidder as a condition precedent for participation in the said Tender, which amount is liable to be forfeited on the happening of any contingencies mentioned in the Tender Document, we, the …………………………Bank at …………………………………………………… Having our Head Office/ Registered Office at …………………………………………………………………………….. (Address of Bank) guarantee and undertake to pay immediately on demand by Karnataka Power Transmission Corporation Limited the amount of …………………………………………… (in word and figures) without any reservation, protest, demur and recourse. Any such demand made by said Purchaser shall be conclusive and binding in us irrespective of any dispute of difference raised by the Bidder.

This Guarantee shall be irrevocable and shall remain valid up to @……………….If any further extension of this guarantee is required, the same shall be extended to such required period on receiving instructions from M/s…………… …………………….on whose behalf this Guarantee is issued.

All right of Karnataka Power Transmission Corporation Limited under this Guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities there under unless KPTCL brings any suit or action to enforce a claim under this Guarantee against the Bank with in ninety (90) calendar days from the above mentioned expiry date of validity or, from that of that extended date.

In witness where of the Bank, through its authorized Office, has set its hand and stamp on this ……………………….. Day of ………………2024 at…………………………

WITNESS:

------------------------   ----------------------
(Signature and Name)   (Signature and Name)

--------------------------   --------------------------------------
(Official Address)   (Designation with Bank Stamp)

Attorney as per Power of Attorney no.…………………………………………………………….

Date:

Form: 5 Proforma for Power of Attorney

POWER OF ATTORNEY IN FAVOUR OF AUTHORIZED SIGNATORY

KNOWALL MEN BY THESE PRESENTS THAT I, ………………………………… a Company incorporated under the Companies Act, 1956 (or equivalent Act/Law in case of Foreign Bidders) and having its registered office at …………………………………… (hereinafter referred to as "the Company") has been authorized by the Board of Directors of the Company, inter alia, to execute contracts in the name of and for and on behalf of the Company. Whereas I consider it necessary and expedient that ………………………………… of the Company be given the authority and power to sign Tender, Contract, Deeds and Instruments including amendments in connection with Tender for "Supply, Installation, Commissioning, Implementation and Support for EAAAP Solution at KPTCL" floated by Karnataka Power Transmission Corporation Limited (KPTCL/Purchaser) vide Tender Notice no…………………………………

I accordingly hereby nominate, constitute and appoint above named……………………… severally, as my lawful attorney to do all or any of the acts specifically mentioned immediately herein above.

I, the Executant do hereby agree and undertake to ratify and confirm whatever either of the said Attorney shall lawfully do or cause to be done under and by virtue of this power of Attorney and the Acts of Attorney to all intents and purposes are done as if I had done the same on behalf of the Company if these presents had not been made.

IN WITHNESS where I, ………………………………… has executed these presents this the …………………… day of ……………… at …………………………

……………………………………
Specimen Signature of Attorney

Name:

Designation:

……………………………………
Specimen Signature of Attorney

Name:

…………………………………
Signature of Executant

Name:

Designation:

…………………………………
Signature of Executant

Name:

Designation: Designation:

....

Company Seal: Company Seal:

Form: 6 Proforma for Declaration

I, (name of the Director or equivalent officer) of (address) hereby states that:

I am currently a Director (or equivalent officer) of ....

I understand that the Purchaser has provide an officer in relation to "Supply, Installation, Commissioning, Implementation and Support for EAAAP Solution at KPTCL".

I confirm that neither the Implementing Agency nor any of the Implementing agency's Personnel shall engage in any personal, business or professional activity (except activities which are specifically excluded in conflict clause) which conflicts or could conflict with any of their obligations in relation to this Project.

I confirm that I have made enquiries of all appropriate persons and taken other steps as appropriate so as to obtain the knowledge and information as required to make this declaration.

Words and expressions which are defined in the Tender Document issued by the Purchaser have the same meaning when used in this Declaration.

I confirm that I have responded to this Tender Document strictly in line with it's requirement as per the formats provided in the same and I understand that deviations from any clause/instruction of the Tender Document will result in rejection of my proposal at any phase of the Bid evaluation.

AND I MAKE this solemn declaration conscientiously believing the same to be true.

MADE AND DECLARED at this .... day of 2024

....
Authorized Signature

Date:

Place:

Form: 7 Key Resources Proposed

Provide details of key resources of Project Implementation Team as defined in resource requirement clause 6.8.

Sr. no.	Name of Resource*	Designation	Role Proposed	Remarks
1.				
2				
3				
4				
5				
6				
7				
8				

[**Important Note:** Except in case of resignation or severe injury or death of proposed resource, replacement of key resources is strictly not allowed in the entire duration of the contract without prior permission and formal approval of the Purchaser. In case replacement is inevitable (only in the circumstances as specified above), the same should be done within thirty (30) calendar days by providing another resource having equivalent profile (in terms of qualification, experience, certification etc.) after obtaining formal approval from the Purchaser)*

Please provide the detailed CV of all the key resources (as mentioned above) in the format given below:

Sr. no.	Attribute	Remarks
1.	Proposed position (only one candidate shall be nominated for each position)	

2.	Name of Firm	
3.	Name of Staff	
4.	Designation	
5.	Date of Birth	
6.	Nationality	
7.	Language (Speak/ Read/ Write)	
8.	Education (indicate college/university and other relevant specialized education of staff members, giving names of institutions, degrees obtained and year of completion)	
9.	Membership and professional association	
10.	Other training (indicate significant training / certification which are relevant for this Project)	
11.	Details of relevant projects where staff has worked (Name of the EAAAP Product must be mentioned in each EAAAP project)	Project 1 Name: Project Detail: Position Held (from month/year-to month/year): Individual's Role & Responsibilities: Individual's Deliverables: Key Achievements:
		Project 2 Name: Project Detail: Position Held (from month/year-to month/year): Individual's Role & Responsibilities: Individual's Deliverables: Key Achievements:
		Project N Name: Project Detail: Position Held (from month/year-to month/year): Individual's Role & Responsibilities: Individual's Deliverables: Key Achievements:

12.	Countries of work experience	
13.	Employment Record	From month/year-To month/year: Employer: Position held: Role & Responsibilities: From month/year-To month/year: Employer: Position held: Role & Responsibilities:
14.	Details of Certification(s)	
15.	Signature of Staff / Authorized Signatory	
16.	Date & Place	

Refer Section 6.11

Note: Payment will be released on successful completion of each and every milestone, Implementation Agency shall raise the Invoice along with the deliverables, any relevant documents corresponding to the milestone.

PROFORMA OF BANK GUARANTEE FOR CONTRACT PERFORMANCE
e-BANK GUARANTEE FORMAT

(To be stamped in accordance with stamp Act)

Ref...................   Bank Guarantee No .... Date
....

      TO

      Dear Sirs,

In consideration of the Karnataka Power Transmission Corporation Limited, (hereinafter refereed to as the Owner which expression shall unless repugnant to the context or meaning thereof include its successors, administrators and assigns) having Awarded to M/s........................... with its Registered/Head Office at

.... (hereinafter referred to as the 'Service provider' which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns), a Contract by issue of Owner's Letter of Intent to Award No.................dated.................. and the same having been unequivocally accepted by the Service provider, resulting in a Contract bearing No.......... dated ....valued at...............for ....(Scope of Contract) and the Service provider having agreed to provide a Contract Performance Guarantee for the faithful Performance of the entire Contract equivalent to ....   *

...............(%)...............percent) of the said value of the Contract to the Owner.

We .... (Name & Adress)

having its Head Office at ....(hereinafter referred to as the 'Bank' which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby Guarantee and undertake to pay, the Owner, merely on demand any and all monies payable by the Service provider to the extent of ....as aforesaid at any time up to

...............**............... (days/Month/year) without any demur, reservation, contest, recourse or protest and/or without any reference to the Service provider.

Any such demand made by the Owner on the Bank shall be conclusive and binding notwithstanding any difference between the Owner and the Service provider or any dispute pending before any Court, Tribunal, Arbitrator or any other Authority. The Bank undertakes not to revoke this Guarantee during its currency without previous consent of the Owner and further agrees that the Guarantee herein contained shall continue to be enforceable till the Owner discharges this Guarantee

The Owner shall have the fullest liberty without affecting in any way the liability of the Bank under this Guarantee, from time to time to extend the time for Performance of the Contract by the Service provider. The Owner shall have the fullest liberty,without affecting this Guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Service provider, and to exercise the same at any time in any manner, and either to enforce or to forebear to enforce any covenants, contained or implied, in the Contract between the Owner and the Service provider or any other course or remedy or security available to the Owner. The Bank shall not be released to its obligations under these presents by any exercise by the Owner of its liberty with reference to the matters aforesaid or any of them or by reason of any other act of omission or Commission on the part of the Owner or any other indulgences shown by the Owner or by any other matter or thing whatsoever which under law would, but for this provision have the effect of relieving the Bank.

The Bank also agrees that the Owner at its option shall be entitled to enforce this Guarantee against the Bank as a Principal Debtor, in the first instance, without proceeding against the Service provider and notwithstanding any Security or other Guarantee the Owner may have in relation to the Service provider's liabilities.

Notwithstanding anything contained herein above our liability under this Guarantee

is restricted to Rs......................and it shall remain in force up to and including

......................and shall be extended from time to time for such period (not exceeding one year), as may be desired by M/s ....on whose behalf this Guarantee has been given.

Dated this ....day of ....20.........at ....

WITNESS:

....
(Signature)   (Signature)

....
(Name)   (Name)

....
(Official Address)   (Designation with Bank Stamp)

Attorney as per Power of

Attorney No ……………..

Date …………………

Note:

*   This Sum shall be Five percent (05%) of the value of the total contract price of specific assignment/project.

The stamp papers of appropriate values shall be purchased in the name of issuing Bank.

The Bank Guarantee shall be valid till the expiry of 90 days after the end of the contract period.

It is mandatory to submit the Contract Performance Bank Guarantees only in the form of e-Bank Guarantee (e-BGs) from the Banks integrated with NeSL, any other mode of Performance Bank Guarantees from such Banks will not be accepted. The details of Banks which are integrated with NeSL is listed at Annexure-A and 'Indicative Challan for obtaining e-BG from Bank' is at Annexure-B of this section.

The details of Banks which are integrated with NeSL for obtaining e-BG is as below:

1. AU Small Finance Bank Limited
2. Axis Bank Limited
3. Bank of Baroda
4. Bank of India
5. Canara Bank
6. City Union Bank Ltd
7. Federal Bank Limited
8. HDFC Bank Limited
9. Hongkong and Shanghai Banking Corporation Limited (HSBC)
10. ICICI Bank Limited
11. IDBI Bank Limited
12. IDFC First Bank Limited
13. Indian Bank
14. Indian Overseas Bank
15. IndusInd Bank
16. Karur Vysya Bank Limited
17. Kotak Mahindra Bank Ltd
18. Punjab National Bank
19. RBL Bank
20. South Indian Bank Ltd
21. State Bank of India
22. Yes Bank Limited

For issuance of Electronic-Bank Guarantees (e-BG) through National e-Governance Services Limited (NeSL) platform, the details of Challan form for obtaining e-BG from Bank is as under:-

1	PAN / UIN*	AABCK7281M
2	Name	KPTCL
3	Email ID	ceetenderingkptcl@gmail.com
4	Name of the Representative	Chief Engineer (Electy), Tendering & Procurement, KPTCL, Kaveri Bhavan, Bengaluru
5	Mobile Number	9480813992
6	Relation to Contract	Beneficiary
7	Contract Reference Number	Tender Enquiry No./LOI/PO
8	BG Amount	
9	BG CCY	Rs.
10	Expiry Date	
11	Claim Expiry Date	
12	Vendor Code	
13	Business Unit Code	
14	Other detail sought by concerned banks (if any)	

ON A STAMP PAPER OF Rs. 500/-

UNDERTAKING

Tender No......................................

To

SEE(IT),

KPTCL

(Name of the Firm/ Company) Name of the tender

Due Date of Tender

Dear Sir,

Dated:

1. Having read the conditions of contract and services to be provided, the receipt of which is hereby duly acknowledged, we, undersigned, offer to provide the required Services for the work with the conditions of contract and specifications for the sum shown in the   price bid(in terms of Percentage (%)) in KPPP portal and made part of this Bid.

2. We undertake, to enter into agreement within stipulated period of being called upon to do so and bear all expenses including charges for stamps, etc and agreement will be binding on us.

3. If our Bid is accepted, we will obtain the guarantees of a Scheduled Bank for a sum not exceeding 5% of the value of the total contract price for the due performance of the Contract.

4. We have not been blacklisted by any Government/Central/ State Govt. Department/Universities/Educational Institutions/ Organization/Board in the last five years as on the date of bid submission owing to non- performance after the award of work/contract.

5. We agree to abide by this Bid for a period of 180 days from the last date of bid submission and it shall remain binding upon us and may be accepted of any time before the expiration of that period.

6. Until an agreement is signed and executed, this Bid together with your written acceptance thereof in your notification of award shall constitute a binding contract between us.

7. We understand that you are not bound to accept the lowest or any bid, you may receive.

Dated this ....day of 2024

Signature of

In capacity of

Duly authorized to sign the bid for and on behalf of
_____

Witness   _____

Address   _____

Signature   _

Form: 10 Proforma for Contract Agreement

"**CONTRACT AGREEMENT FORMAT**"

This agreement made on this   day of **..........**.month**.............**.Year between Karnataka Power Transmission Corporation Limited having its Office at Kaveri Bhvan, 3rd Floor, Bengaluru-560009, India (hereinafter referred to as a "Owner" or KPTCL which expression shall include its administrators) on the one part and ....(Name of the Firm) having its registered Office at ....(Office Address) (hereinafter referred to as the "Contractor" name of the Contracting Company, which expression shall include its administrators, successors, executors and permitted assigns) the other part.

WHEREAS KPTCL desirous for the work of Implementation and Support for Enterprise Application, Automation and Analytics Platform (EAAAP) System at KPTCL for conducting the bid process for procurement of required transmission services for transmission projects to be implemented for KPTCL Intra-state transmission projects under tariff-based competitive bidding in accordance with scope specified in the tender document as per its bid specification No: ....

AND WHEREAS ....(Name of the   Firm) had participated in the above referred bidding vide their proposal dated .... and KPTCL awarded the contract to ....(Name of the Firm) on Terms and Conditions of Bid Documents   referred   to therein,   and   this   award   has   been   accepted ....(Name of the Firm) resulting into a"Contract".

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:
1.Award of Contract:

    KPTCL has awarded the Contract to ....(Name of the Firm) for the work of work of Implementation and Support for Enterprise Application, Automation and Analytics Platform (EAAAP) System at KPTCL for conducting the bid process for procurement of required transmission services for transmission projects to be implemented for KPTCL Intra-state transmission projects under tariff-based competitive bidding in accordance with scope specified in the tender document on the terms and conditions contained in its Letter of Intent to award the contract No: .... dated .... and the documents referred to therein for the sum of Rs. (In terms of Percentage (%)....................   inclusive of all taxes, duties and other Levis. The award has taken effect from the aforesaid letter of intent to award the contract. The terms & expressions used in the Agreement shall have the same meaning as are assigned to them in the contract document referred to in the succeeding article.

2.0   Contract Documents:

   2.1   The Contract shall be performed strictly as per the Terms and Conditions stipulated herein and in the following documents attached herewith (hereinafter referred to as "Contract Document").

   i)   KPTCL's bidding documents in respect of specification No: .... issued vide its letter No. ....dated............... consisting of Instruction to Bidders, Eligibility and Evaluation Criteria, Background, Scope of Work, General Conditions of Contracts and Special Conditions of Contract and Tender Forms, Annexures including all amendments issued vide its letter No...........................dated..............

   ii)   "......................(Name of the Firm)" proposal dated .... Along with Bid proposal sheets, Bid forms, Price bid submitted by......................(Name of the Firm).

   iii)   KPTCL's Letter of Intent to Award the Contract (LOA/LOI) No: .... for the work of Implementation and Support for Enterprise Application, Automation and Analytics Platform (EAAAP) System at KPTCL for conducting the bid process for procurement of required transmission services for transmission projects to be implemented for KPTCL Intra-state transmission projects under tariff-based competitive bidding in accordance with scope specified in the tender document is duly accepted by ....(Name of the Firm) vide their letter dated ....

All the aforesaid contract documents shall form an integral part of this agreement, in so far as the same or any part conforms to the bidding document and what has been specifically agreed to by the Owner in his letter of intent to award the contract (LOA/LOI). Any matter inconsistent therewith, contrary or repugnant thereto or any deviations taken by the Contractor but not agreed to specifically by the Owner stands withdrawn by the Contractor. For the sake of brevity, this agreement along with its aforesaid contract documents shall be referred to as the "Agreement"

3.0   Conditions & Covenants:

   3.1   The scope of contract, consideration, terms of payment, taxes wherever applicable, insurance, penalties, performance guarantee and all other Terms and Conditions are contained in KPTCL's letter of intent to award the contract (LOA/LOI) No: .... The contract shall be duly performed by the Contractor strictly and faithfully in accordance with terms of the agreement.

   3.2   The scope of work shall also include of all such items/services, which are not specifical1y mentioned in the contract documents, but which are needed for successful, efficient, safe & reliable operation of the system.

   3.3   Work Completion Period/Time lines:
         Time is the essence of the contract. The time lines shall be strictly adhered to and "....................... (Name of Firm)" shall perform the work in accordance with the agreed Time lines as given in LOA /DWA/tender document.

3.4 **Quality Plans:**

The Contractor is responsible for the proper execution of the approved quality plans. The work beyond the customer's hold points will progress only with the Owner's consent. The Owner will also undertake quality surveillance and quality audit of the Contractor's works, systems and procedures and quality control activities. The Contractor further agrees that any change in the quality plan will be made only with the Owner's approval. The Contractor shall also perform all quality activities, agreed with the Owner to demonstrate full compliance with the contract requirements.

3.5 The contractor guarantees that the supplies/services under the contract shall meet the quality and performance parameters as stipulated in the tender documents and in the event of any deficiencies found in the requisite performance figures, the Owner may at its option reject the supplies/services or alternatively accept it on the Terms and Conditions and subject to levy of the penalties in terms of contract documents. The amount of penalties so leviable shall be in accordance with the contract document.

3.6 It is further agreed to by the Contractor that the contract performance guarantee shall in no way be construed to limit or restrict the Owner's right to recover the damages/ compensation due to short fall in the supplies/services performance figures as stated in para 3.5 above or under any other clause of the agreement. The amount of damages/ compensation shall be recoverable either by way of deduction from the contract price, contract performance guarantee and/or otherwise.

3.7 The contract performance guarantee furnished by the Contractor is irrevocable and un-conditional and the Owner shall have the powers to invoke it not withstanding any dispute or difference between the Owner and the Contractor pending before any Court, Tribunal, Arbitrator or any other Authority.

3.8 This agreement constitutes full and complete understanding between the parties. Any modification of the agreement shall be effected only by a written instrument signed by the authorized representatives of both the parties.

4.0 Settlement of disputes:

4.1 It is specifically agreed by and between the parties that all the differences or disputes arising out of the agreement or touching the subject matter of the agreement, shall be decided by a competent Court at Bangalore.

4.2 Notice of Default:

Notice of default given by either party to the other party under the agreement shall be in writing and shall be deemed to have been duly and properly served upon the parties hereto if delivered against acknowledgement or by fax or by registered mail with acknowledgement duly addressed to the signatories at the addresses mentioned herein above.

IN WITNESS WHEREOF, the parties through their duly authorized representatives have executed these presents (execution whereof has been approved by the competent authorities of both the parties) on the day, month and year first above mentioned at Bengaluru.

WITNESSES:

1...................

(Owner's signature)

2...................   Superintending Engineer (IT)
                           KPTCL,Kaveri Bhavan,
                           Bengaluru-560009

1................................   (Contractor's signature)

2................................

Form: 11 Compliance with the Scope of Work

The bidder shall meet all the mandatory compliance criteria. The following table depicts key components of the Scope of Work. Failure in meeting the mandatory compliance criteria will result in disqualification of the bidder. Please fill the following form:

Sr. no.	Scope of Work		Response
A	**Product Related**		
1.	Proposed EAAAP Solution		Name of the Solution
2.	Proposed EAAAP Solution Version		Version Name / Number
3	Proposed EAAAP product with Offline Functionality for all Modules		Yes/No
4.	Modules proposed		Name of Modules
5.	Is the EAAAP Solution latest?		Yes/No
6.		Warranty (Including Annual Technical Support) from EAAAP Solution Vendor for a period of Three (3) calendar years from the date of Final Acceptance of EAAAP Solution	Yes/No
7.		Does the EAAAP Solution support 24x7 operations since the business units work on all the three shifts and requisitions from the stores may happen at any time of the day.	Yes/No
8.	Database(DB) proposed		Name of DB product

Sr. no.	Scope of Work		Response
9.		DB server configuration, administration, trouble shooting and Performance tuning	Yes/No
10.		Installation of applications, database and related tools	Yes/No
11.		Maintenance of database and other tools including application of patches	Yes/No
12.		Taking necessary backup, performing necessary restores	Yes/No
13.		High availability/failover system is considered (clustering etc.)	Yes/No
14.	Bolt-on Application		Name of Bolt-on
15.		Brief functionality of bolt-on software	Functionality
16.	Developed code for the software	The title, rights and IPR over such customization will be passed on to the Purchaser	Yes/No
B	**Implementation Related**		
17.	Detailed Project Plan indicating the key phases and activities of the Project and the expected timeline is proposed in Techno-commercial Bid		Yes/No

18.	The Implementing Agency conduct an 'As-Is' business process and information requirement study at the Purchaser's unit level		Yes/No
19.	Based on 'As-Is' Business Process and Information Requirement study, the Bidder will prepare a task level 'To-Be' Business Process document		Yes/No
20.	Solution Development		
21.		Configuration of modules as per agreed 'To- Be' process	Yes/No
22.		Based on the agreed Business Solution Design Document, the Bidder will prepare solution prototype (including all customization, interfaces etc.).	Yes/No
23.		Interfacing of bolt-ons	Yes/No
24.		System Integration Tests will be done	Yes/No
25.		Availability of ESS screens in English	Yes/No
26.		Provide the entire necessary ICT infrastructure (Hardware, networking, all software and other tools) during development and testing phase.	Yes/No

Sr. no.	Scope of Work		Response
27.	Business Solution Design Simulation		
28.		The Purchaser expects that the prototype validation will go through multiple iterations (often referred to as Business Solution Design Simulation sessions). Changes to the solution must be presented to the users in next round of BSDS. This will be an iterative process till the BSDS is signed-off as acceptable by PMU	Yes/No
29.		The BSDS validation must be conducted in a formal set up with proper test scripts prepared by the Implementing Agency and approved by the Purchaser. The feedback provided to the Bidder after each round of BSDS must be documented and submitted to PMU. The action on feedback will be approved by PMU.	Yes/No
30.	User Acceptance Testing		
31.		User acceptance tests shall be carried both on the development server & on production server to ascertain the full load capability of the production environment (Full load and stress test).	Yes/No

Sr. no.	Scope of Work		Response
32.		Performance and stress testing will be done using tools other than those provided by the E A A A P Product Vendor.	Yes/No
33.	Go-live Acceptance Test		
34.		The Go-live Acceptance Tests shall be conducted jointly by the Bidder and the Purchaser in accordance with the approved test scripts.	Yes/No
35.	Access Control Matrix for User roles in ERP		
36.		The Bidder will submit an Access Control Matrix Template to the Purchaser. Once the template is filled up by the Purchaser, the Bidder will configure the Access Control Matrix in the EAAAP application.	Yes/No
C	**Master Data Related**		
37.	Preparation of master data list in consultation with the Purchaser for machinery, parts, consumables, stores, raw material etc.		Yes/No

Sr. no.	Scope of Work		Response
38.	Preparation of codification scheme for all the master data, wherever applicable, in consultation with the Purchaser		Yes/No
39.	Preparation of codes for all the above mentioned products in consultation with the Purchaser		Yes/No
40.	Data preparation and entry of all master data in the EAAAP Solution		Yes/No
D	**Data Conversion Related**		
41.	Identifying the data elements to be converted/ collected based on business requirement		Yes/No

Sr. no.	Scope of Work	Response
42.	Preparing formats in which the identified data elements must be collected to facilitate data conversion/preparation, clearly categorizing mandatory and optional elements	Yes/No
43.	Data preparation, data entry, data migration and data digitization of data provided by the Purchaser in physical register or any other form	Yes/No
44.	The Bidder must validate the data in terms of format.	Yes/No

Sr. no.	Scope of Work	Response
45.	The Bidder will prepare necessary data conversion scripts and document the same. He will also identify / provide necessary reports to facilitate verification of data converted.	Yes/No
46.	The Bidder will execute data conversion on test instance for each data element and get sign- off from the Purchaser in terms of adequacy and correctness.	Yes/No
47.	The Bidder will clean the data entered by them from the register after validation by the Purchaser	Yes/No

Sr. no.	Scope of Work		Response
48.	Bidder should assign a resident full-time resources with necessary qualifications as specified in this Tender Document		Yes/No
E	**Document Management System**		
49.	Document digitization and indexing		Yes/No
50.	Document history creation		Yes/No
F	**Handholding and Maintenance Support (FMS & ATS)**		
51.	Provide on-site post implementation support for a period of Three (3) From Date of Final Acceptance		Yes/No

Sr. no.	Scope of Work	Response
52.	The Implementing Agency shall deploy at least Ten (10) dedicated skilled resources at the Purchaser premise for help desk support from 9AM to 7PM for all working days (considering six days a week - from Monday to Saturday) of the Purchaser and its business units for a period of Three (3) calendar years from the date of first Go-live of EAAAP Solution. Help Desk support shall include, but not limited to, basic menu / screen level support, addressing general queries of users, logging requests, assigning requests to specific help desk individuals, recording resolution, tracking overall time taken for resolution, etc.	Yes/No

53.		The Implementing Agency shall provide technical support, in a suitable on-site and off-site combination, from 9AM to 7PM for all working days (considering six days a week - from Monday to Saturday) of the Purchaser and its business units for a period of Three (3) calendar years from the date of first Go-live of EAAAP Solution. If off-site support model is proposed by the Implementing Agency, total (fixed & variable) cost of network connectivity (leased line/VPN) between Implementing Agency's Support Centre and Purchaser's data centre has to be borne by the Implementing Agency and also at least two (2) technical persons should be deployed at data centre for day-to-day operations. Technical support shall include, but not limited to, installation of new versions / releases (including next generation release) upgrades, bug fixes, functionality enhancements, patches to cater to changes (including tax, legal, statutory and policy requirements), any modification or enhancement to existing business, changes to configurations, customizations, database administration, data back-up and archiving, security and other technical assistance.	Yes/No

Sr. no.	Scope of Work		Response
54.		Have you suggested appropriate SLA for maintenance support?	Yes/No
55.	Annual Technical Support (ATS) of EAAAP Product for a period of Three (3) calendar years from the date of supply of licenses		Yes/No
56.		The support should include supply of new versions / releases (including next generation release) upgrades, bug fixes, functionality enhancements and patches to cater to changes (including tax, legal, statutory and policy requirements) along with related documentation within thirty (30) calendar days of their availability in India and not later than twelve (12) calendar months after they are released in the Country of Origin as well as other technical support from EAAAP Product Vendor's help desk.	Yes/No
G	Training and Change Management		
57.	EAAAP Solution Overview Training for Steering Committee & Project Management Unit members at the beginning of implementation		Yes/No

Sr. no.	Scope of Work		Response
58.	Technical Training for Purchaser's Technology Team members at the beginning of the implementation		Yes/No
59.	Functional Training for Purchaser's Core Team members at the beginning of implementation		Yes/No
60.	End User Training for Purchaser's end users spread across all the location before each Go-live		Yes/No
61.	Change management programs as per agreed plan		Yes/No
H	**ICT Infrastructure Procurement**		
62.	Network (LAN & WAN) design for Purchaser's business locations		Yes/No
Sr. no.	Scope of Work		Response

63.	Visit to key locations for IT Hardware & Network Infrastructure requirement and sizing		Yes/No
64.	A tentative hardware list is provided		Yes/No

Form: 12 Declaration on not being blacklisted

(To be submitted on the Letterhead of the Company)

To,

The Superintending Engineer (IT)
Corporate Office, Kaveri Bhavana, KPTCL,
Bangalore-560009,
Karnataka, India

Dear Sir/Madam,

We confirm that our company is not blacklisted for any fraudulent actions by KPTCL or by any state/central Government institution or any Public Sector Organization.

It is hereby confirmed that I/We are entitled to act on behalf of our company/ corporation/firm/ organization and empowered to sign this document as well as such other documents, which may be required in this connection.

Signature

Name & Designation

For and on behalf of

Name of Applicant

Company Seal:

Place:

Date:

Form: 13   Implementation Experience

	Proposed solution Implementation Project Information (one form for each project reference duly certified by authorized signatory) (provide details of projects executed, and as per required criteria mentioned in RFP, in specified financial years ending with 31st March 2024)	
1	**Client Information**	
	Name of client	
	Name of the person who can be referred to from Client's side, with name, designation, postal address, contact phone, fax no., email id	
	Nature of business / operations of client	
	Revenue/Budget (in case of Government dept.) of the client	
	Size of operations of customer impacted by the solution in terms of turnover, number	
2	**Project Details**	
	Brief description of the Project	
	Functional areas of business covered in the project	
	Implementation Geographical Location/ Number of Locations / business units at which the project is implemented	
	Project Value in INR	
	Duration of engagement (with Start date and end-date/expected end-date)	
	Scope of the Project (Consulting, Proposed solution Implementation, Networking, Training, Post-Implementation,)	
	Details of the Solution in terms of the following:	
	Modules implemented	
	Version of solution Implemented	
	Current version of the solution	
	Information about upgrade	
3	**Supporting Documents** (As per specified in RFP)	
	Relevant experience certificates/ documents issued by the Customer organizations indicating the successful completion of the project	

Form: 14   OEM Authorization to Bid

(To be submitted on the Letterhead of the Company)

To,

The Superintending Engineer (IT)
Corporate Office, Kaveri Bhavana, KPTCL,
Bangalore-560009,
Karnataka, India

Sub: Authorization of <Company name of Bidder) to Provide Services

Dear Sir/Madam,

This is to certify that I/We /are the Original Equipment Manufacturer in respect of the solution listed below. I/We confirm that <name of Implementing Agency > ("Implementing Agency ")/Implementing Agency is a certified partner to provide implementation services of our solution and have due authorization from us to provide services to KPTCL that are based on our solution(s) listed below as per Request for Proposal (RFP) document relating to providing of the project of EAAAP Solution at KPTCL.

We further endorse the warranty, technical support and licensing terms provided by Implementing Agency /Implementing Agency to KPTCL.

Sr. no.	Solution Name	Version
1		
2		

Signature
(Authorized Signature (In full and Initial)

Name & Designation

For and on behalf of

Name of Applicant

Company Name   Company Seal

Date

Form: 15   Quality Assessment Details (CMMi Level)

(To be submitted on the Letterhead of the Company)

To,

The Superintending Engineer (IT)
Corporate Office, Kaveri Bhavana, KPTCL,
Bangalore-560009,
Karnataka, India

Dear Sir/Madam,

We would like to provide/confirm the following information on the quality certification of our organization.

Level of CMMi Assessment	
Date of Assessment	
Validity of the Assessment	
Name of the Assessing company and their contact details	
Units/Locations Assessed	
Mandatory Supporting Documents	
Proof of Assessment issued by auditors	

We have attached a copy of the certificate in support of the above information.
Dated this ___ day of ___202_

Signature
(Authorized Signature (In full and Initial)

Name & Designation

For and on behalf of (Bidder Name)

Name of Applicant

Company Name   Company Seal:

Place: Date:

Form: 16   The Legal entity of Bidder

Details of the Organization	
Nature of the legal status in India	
Nature of business in India	
Date of Incorporation	
Date of Commencement of Business	
Registrar of Companies - Reference no.	
Address of the Headquarters	
Address of the Registered Office in India	
Other Relevant Information	

Mandatory Supporting Documents:

a) Certificate of Incorporation from Registrar of Companies(ROC) Relevant sections of Memorandum of Association of the company or filings to the stock exchanges to indicate the nature of business of the company
b) Certification on commencement of business

Form: 17   Technical/Functional Specification Confirmation

(To be submitted on the Letterhead of the Company)

To,

The Superintending Engineer (IT)
Corporate Office, Kaveri Bhavana, KPTCL,
Bangalore-560009,
Karnataka, India

Dear Sir/Madam,

Please find enclosed the Compliances to the Technical/Functional Specification requirements mentioned in the Section 7 of this RFP. All The Technical/Functional Specification requirements defined are covered in the enclosure with the responses against each requirement.

Dated this ___ day of ___202_

Signature

(Authorized Signature (In full and Initial)

Name & Designation

For and on behalf of (IA Name)

Company Name: Company Seal:

Place:

Date:

Form: 18   Patent Rights/copyrights confirmation

(To be submitted on the Letterhead)

To,

The Superintending Engineer (IT)
Corporate Office, Kaveri Bhavana, KPTCL,
Bangalore-560009,
Karnataka, India

Sub: Undertaking on Patent Rights/copy rights during implementation of EAAAP Solution at KPTCL

I/We do hereby undertake that none of the deliverables being provided by us is infringing on any patent or intellectual and industrial property rights as per the applicable laws of relevant jurisdictions having requisite competence.

I/We also confirm that there shall be no infringement of any patent or intellectual and Industrial property rights as per the applicable laws of relevant jurisdictions having requisite competence, in respect of the equipment's, systems or any part thereof to be supplied by us.

We shall indemnify KPTCL against all cost/claims/legal claims/liabilities arising from third party claim in this regard at any time on account of the infringement or unauthorized use of patent or intellectual and industrial property rights of any such parties, whether such claims arise in respect of manufacture or use. Without prejudice to the aforesaid indemnity, we shall be responsible for the completion of the supplies of the software/applications including upgrades as and when they are made available and uninterrupted use of the software solution and/or system or any part thereof to KPTCL and persons authorized by KPTCL, irrespective of the fact of claims of infringement of any or all the rights mentioned above.

If at a later date it is found that it does infringe on patent rights, I/We absolve KPTCL of any legal action and KPTCL will have the right to claim damages.

Yours faithfully,

On behalf of [Bidders Name]

Authorized Signature [In full and initials]

Name and Title of Signatory:

Company Name: Company Seal

Place: Date:

Form: 19   Support Commitment

(To be submitted on the Letterhead)

To,

The Superintending Engineer (IT)
Corporate Office, Kaveri Bhavana, KPTCL,
Bangalore-560009,
Karnataka, India

Sub: Undertaking on providing support during Implementation and Post Implementation

Dear Sir/Madam,

We the provider of EAAAP system, do hereby undertake that our solution being implemented pursuant to the Request for Proposal (RFP) document relating to providing of the EAAAP Implementation, training & maintenance services, to KPTCL will have support During implementation and As well post implementation till end of the contract

Dated this ___ day of ___202_

Yours faithfully,

On behalf of [Bidder Name]

Authorized Signature [In full and initials]

Name and Title of Signatory:

Company Name: Company Seal

Place:

Date:

Form: 20   Solution commitment

(To be submitted on the Letterhead)

To,

The Superintending Engineer (IT)
Corporate Office, Kaveri Bhavana, KPTCL,
Bangalore-560009,
Karnataka, India
Dear Sir/Madam,

We, the owners of the EAAAP system, would like to confirm that the components proposed to be licensed to KPTCL, against the functional requirements elaborated in the RFP and shared meets the requirements of KPTCL both in terms of functional coverage and scale of operations.

Dated this ___ day of ___202_

Yours faithfully,

On behalf of [Bidders Name]

Authorized Signature [In full and initials]

Name and Title of Signatory:

Company Name: Company Seal

Place:

Date:

Form: 21 Undertaking on Personnel

(To be submitted on the Letterhead)

To,

The Superintending Engineer (IT)
Corporate Office, Kaveri Bhavana, KPTCL,
Bangalore-560009,
Karnataka, India

Sub: Undertaking on Personnel

Dear Sir/Madam,

1. I/We do hereby undertake that those persons whose profiles were part of the basis for evaluation of the bids and have been identified as "Key Personnel" of the proposed team, including Project Director, Technical/Solution Architects, Network/Database Expert, Business Analyst, and Domain Expert for the design and development and implementation of EAAAP system and shall be deployed during the Project as per our bid submitted in response to the RFP.

2. I/we undertake that all the resources proposed for deployment on the Project at KPTCL site are Indian Citizens as per the Citizen Act and we are open for verification and security clearance of the above resources by KPTCL.

3. We undertake that any of the identified "Key Personnel" shall not be removed or replaced without the prior written consent of KPTCL.

4 Under exceptional circumstances, if the Key Personnel are to be replaced or removed, we shall put forward the profiles of personnel being proposed as replacements, which will be either equivalent or better than the ones being replaced. However, whether these profiles are better or equivalent to the ones being replaced will be decided by KPTCL. KPTCL will have the right to accept or reject these substitute profiles.

5. We also undertake to staff the Project with competent team members in case any of the proposed team members leave the Project either due to voluntary severance or disciplinary actions against them.

6. We acknowledge that KPTCL has the right to seek the replacement of any member of the Project team being deployed by us, based on the assessment of KPTCL that the person in question is incompetent to carry out the tasks expected or found that person does not really possess the skills/experience/qualifications as projected in profile or on the ground of security concerns or breach of ethics.

7. In case we assign or reassign any of the team members, we shall be responsible, at our expense, for transferring all appropriate knowledge from personnel being replaced to their replacements within a reasonable time.

Yours faithfully,

On behalf of [Bidders Name]

Authorized Signature [In full and initials]

Name and Title of Signatory:

Company Name: Company Seal

Address:

Place:

Date:

Form: 22 Commitment on latest Software delivery

(To be submitted on the Letterhead)

To,

The Superintending Engineer (IT)
Corporate Office, Kaveri Bhavana, KPTCL,
Bangalore-560009,
Karnataka, India

Dear Sir/Madam,

I/We do hereby confirm to deliver the latest versions of the software as available on the date of delivery on mutually agreed terms, that addresses the requirements of KPTCL, pursuant to the Request for Proposal (RFP) document relating to providing of the ERP Application and associated software components, Implementation, training and maintenance services, Information Technology Infrastructure and System Integration services to KPTCL at the same cost committed in the Price proposal.

Yours faithfully,

On behalf of [Bidder Name]

Authorized Signature [In full and initials]

Name and Title of Signatory:

Company Name: Company Seal

Address:

Place:

Date:

Form: 23 Project Plan

Form: 24 Price Bid

SL No	Particulars	Base rate	Taxes	Total Cost
1	Proposed software solution License			
2	Cost of Development, Implementation & Migration			
3	Training			
4	Hardware for DC			
5	ATS for 3 years			
6	FMS for 3 years			

Note

Bidders should not upload the Price bid form as part of technical Bid. If the price bid is uploaded the bidders will be disqualified.

Note: "The final quantity for each of line item in the below table may vary and shall be finalized during the issue of LOI/DWA to the successful bidder. KPTCL reserves the right to add or reduce the quantity at any time during the contract period".

Form: 25 Declaration of Acceptance of Terms and Conditions in RFP

(To be submitted on the Letterhead)

To,

The Superintending Engineer (IT)
Corporate Office, Kaveri Bhavana, KPTCL,
Bangalore-560009,
Karnataka, India

Sub.: Selection of Bidder for Implementation of EAAAP Solution in KPTCL.

Dear Sir/Madam,

I have carefully gone through the Terms & Conditions contained in the RFP document [Tender no. …………………………………..]

Regarding Selection of Bidder for Supply, Installation, Commissioning, Implementation and Support for EAAAP Solution at KPTCL.

I declare that all the provisions of this RFP/Tender Document are acceptable to my company. I further certify that I am an authorized signatory of my company and am, therefore, competent to make this declaration.

Yours faithfully,

Authorized Signature [In full and initials]

Name and Title of Signatory:

Company Name: Company Seal

Address:

Place:

Date:

Form: 26 Letter of Proposal Submission

(To be submitted on the Letterhead)

To,

The Superintending Engineer (IT)
Corporate Office, Kaveri Bhavana, KPTCL,
Bangalore-560009,
Karnataka, India

Dear Sir/Madam,

We, the undersigned, offer to Implementation of EAAAP Solution in KPTCL in accordance with your Request for Proposal dated [Insert Date] and our Proposal. We are hereby submitting our Proposal on e-procurement portal, which includes

a) Pre-Qualification and Technical Proposal
b) Financial Proposal
c) EMD of the prescribed amount (paid online as defined in the e-Procurement platform)
d) Bid processing fee of the prescribed amount (paid online as defined in the e-Procurement platform)

We hereby declare that all the information and statements made in this Proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.

If negotiations are held during the period of validity of the Proposal, we undertake to negotiate on the basis of the proposed staff. Our Proposal is binding upon us and subject to the modifications resulting from Contract negotiations.

We understand you are not bound to accept any Proposal you receive.

Yours faithfully,

Authorized Signature [In full and initials]

Name and Title of Signatory:

Company Name: Company Seal

Address:

Place: Date:

Form: 27 Approach and Methodology

[Technical approach and methodology are key components of the Technical Proposal.]

Technical Approach and Methodology. In this chapter you should explain your understanding of the objectives of the Assignment/job, approach to the Assignment/job, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. You should highlight the detailed technical architecture of the solution including hardware details, training methodology, Operations, Acceptance Testing and Maintenance Activities. Bidder should also explain the methodologies you propose to adopt

and highlight the compatibility of those methodologies with the proposed approach. The documentation should include details regarding application architecture, database, network infrastructure requirements, back-up and disaster recovery plan. All the manuals shall be in English and the documentations should be clearly indicative of the overall solution with architecture diagram.

AM should necessarily have but not limited to

- Functional Architecture
- Solution Architecture
- Deployment Architecture
- Technology Stack
- Product features and Modules
- BOM of DC
- Configuration for DR.
- Work Plan and Project plan
- Resource Deployment

Yours faithfully,

Authorized Signature [In full and initials]

Name and Title of Signatory:

Company Name: Company Seal

Address:

Place:

Date:

Form 28

Declaration regarding near relationship with KPTCL

employee

I_____ S/o_____

R/o _____

Hereby certify that none of my relative(s) as defined in the Tender / Bid document is / are employed in KPTCL. In case at any stage, it is found that the information given by me is false/ Incorrect, KPTCL shall have the absolute right to take any action as deemed fit, without any prior intimation to me.

Signature:
Name:

Signed in capacity of:
Date:

KARNATAKA POWER TRANSMISSION CORPORTION LIMITED
(A Govt. Of Karnataka Undertaking)

Page | 34

8. Section XIII: Annexure

8.1 Annexure: 1 Standards of Performance

Sr. no.	User Activity	Maximum permissible time	
		LAN	WAN
1.	Menu Navigation-To display the menu as per the defined user role and profile	< 1 sec	< 3 sec
2.	Screen Opening-To display the selected data entry screen from the menu chosen	< 2 sec	< 5 sec
3.	Field Navigation-To navigate between the data entry fields in the screen	< 1 sec	< 2 sec
4.	Look-up Response Time-To display items from list of values	< 1 sec	< 2 sec
5.	Look-up Response Time-To display items from table	< 5 sec	< 8 sec
6.	Screen Navigation-Time taken to navigate from one screen (tab page) to another which does not involve processing in earlier screen	< 1 sec	< 2 sec
7.	Transaction Commit-Response time taken to commit a simple transaction like Stores Issue Voucher, Stores Receipt Voucher etc.	< 2 sec	< 3 sec
8.	Query Retrieval Response Time-Simple query	< 5 sec	< 10 sec
9.	Query Retrieval Response Time-Medium complexity	< 8 sec	< 12 sec
10.	Query Retrieval Response Time-High complexity query	<15 sec	< 20 sec
11.	Reports Generation Response Time-Simple report	< 5 sec	< 10 sec
12.	Reports Generation Response Time-Medium	< 30 sec	< 50 sec
13.	Reports Generation Response Time-High complexity	< 1 min	< 3 min

8.2 Annexure: 2 Minimum Technical Requirement for Infrastructure Proposed

The Proposed Technical Speciation are only minimum and indicative. The Bidder should propose, optimize and Size the Infrastructure which meets the requirement of RFP and the Performance Criteria. Bidder can go for either x86 Architecture or Engineered Servers or any other better solution.

Database Server (Indicative)

1. Minimum 12 or More CPU Core per CPU Socket. The server should be offered   with at least 48 Cores and scalable to at least 8 processors sockets processor with 2.1 GHz or higher.

2. OS support: Microsoft® Windows Server Enterprise/Data center (2022) Edition / Red Hat® Enterprise Linux / SUSE® Linux Enterprise Server / Solaris for x86 or higher/AIX OS.

3. Memory (RAM): Min. 512 GB scalable to 1024 GB.

4. RAID controller: with RAID 5 with min 256 MB cache.

5. Disk bays: Support for min small form factor hot plug SAS / SCSI hard drives.

6. HDD hot pluggable 300/450 GB 2.5‖ 10 K RPM HDD or more.

7. Ethernet ports: at least 4 x 10/100/1000 Mbps or more.

8. Fiber Channel Ports: 2 x 8/16 Gbps.

9. Security: Power-on password / admin password / unattended boot / selectable boot / boot without keyboard.

10. Power supplies: Hot plug redundant AC power supply.

11. Management feature to identify failed components even when server is switched off.

12 Should be Rack Mountable.

13 Should provide Secure Sockets Layer (SSL) 128 bit.

14 Should support Encryption and Secure Shell (SSH) Version 2 and VPN for secure access over internet.

15 Should be able to manage systems through a web-browser.

16 Should include all necessary power cords, adapters, data cables, connectors, CDs, manuals, brackets accessories, wire managers, etc. required for installation and commissioning of the equipment.

17 The Systems Management software should provide Role-based security. Should provide Pre-failure warning for – CPU, Memory, Hard disk etc.

Application Server (Indicative)

1. Minimum12 or More CPU Core per CPU Socket. The server should be offered with at least 24 Cores and scalable to at least 4 processors sockets processor with 2.1 GHz or higher

2. OS support: Microsoft® Windows Server 2022, Enterprise Edition / Data Center, Red Hat® Enterprise Linux 5 & 4 AP / SUSE® Linux Enterprise Server 9 / Solaris for x86 or higher/AIX OS.

3. Memory (RAM): Min. 256 GB scalable to 1024 GB.

4. RAID controller: with RAID 5 with min 256 MB cache.

5. HDD hot pluggable: x 300/450 GB 2.5‖ 10 K RPM HDD or more.

6. Disk bays: Support for min small form factor hot plug SAS / SCSI hard drives.

7. Ethernet ports: At least 4 x 10/100/1000 Mbps or more.

8. Fiber Channel Ports: 2 x 8/16 Gbps.

9. Security: Power-on password / admin password / unattended boot / selectable boot / boot without keyboard.

10 Power supplies: Hot plug redundant AC power supply.

11 Management feature to identify failed components even when server is switched off.

 12 Should be Rack Mountable.

13 Should provide Secure Sockets Layer (SSL) 128 bit.

14 Should support Encryption and Secure Shell (SSH) Version 2 and support VPN for secure access over internet.

15 Should be able to manage systems through a web-browser.

16 Should include all necessary power cords, adapters, data cables, connectors, CDs, manuals, brackets accessories, wire managers, etc, required for installation and commissioning of the equipment.

17. The Systems Management software should provide Role-based security. Should provide Pre-failure warning for – CPU, Memory, Hard disk etc.

Web Server(Indicative)

1. Minimum 12 or More CPU Core per CPU Socket. The server should be offered with at least 24 Cores and scalable to at least 4 processors sockets processor with 2.1 GHz or higher

2. OS support: Microsoft® Windows Server 2022, Enterprise Edition / Data Center, Red Hat® Enterprise Linux 5 & 4 AP / SUSE® Linux Enterprise Server 9 / Solaris for x86 or higher/AIX OS..

3. Memory (RAM): Min. 256 GB scalable to 1024 GB.

4. RAID controller: RAID 5 with min 256 MB cache.

5. HDD hot pluggable: 4 x 300/450 GB 2.5‖ 10 K RPM HDD or more.

6. Disk bays: Support for min 8 small form factor hot plug SAS / SCSI hard drives.

7. Ethernet ports: At least 4 x 10/100/1000 Mbps.

8. Fiber Channel Ports : 2 x 8/16 Gbps.

9. Security: Power-on password / admin password / unattended boot / selectable boot/ boot without keyboard.

10 Power supplies: Hot plug redundant AC power supply.

11 Management feature to identify failed components even when server is switched off.

12 Should be Rack Mountable.

13 Should provide Secure Sockets Layer (SSL).

14 Should support Encryption and Secure Shell (SSH) and support VPN for secure access over internet.

15 Should be able to manage systems through a web-browser.

16 Should include all necessary power cords, adapters, data cables, connectors, CDs, manuals, brackets accessories, wire managers, etc, required for installation and commissioning of the equipment.

17 The Systems Management software should provide Role-based security. Should provide Pre-failure warning for – CPU, Memory, Hard disk etc.

Test Servers (Indicative)

1. Minimum 12 or More CPU Core per CPU Socket. The server should be offered with at least 24Cores and scalable to at least 4 processors sockets processor with **2.1** GHz or higher

2. OS support: Microsoft® Windows Server Enterprise Edition / Red Hat® Enterprise Linux / SUSE® Linux Enterprise Server / Solaris for x86 or higher/AIX OS.

3. Memory (RAM): Min. 128 GB scalable to 1024 GB.

4. RAID controller: with RAID 5 with min 256 MB cache.

5. HDD hot pluggable: 4 x 300/450 GB 2.5‖ 10 K RPM HDD or more.

6. Disk bays: Support for min 8 small form factor hot plug SAS / SCSI hard drives.

7. Ethernet ports : At least 4 x 10/100/1000 Mbps or more.

8. Fiber Channel Ports : 2 x 8/16 Gbps.

9. Security: Power-on password / admin password / unattended boot / selectable boot/ boot without keyboard10 Power supplies: Hot plug redundant AC power supply.

11 Should possess the management feature to identify failed components even when server is switched off.

12 Should be Rack Mountable.

13 Should provide Secure Sockets Layer (SSL).

14 Should support Encryption and Secure Shell (SSH) and support VPN for secure access over internet.

15 Should be able to manage systems through a web-browser.

16 Should include all necessary power cords, adapters, data cables, connectors, CDs, manuals, brackets accessories, wire managers, etc, required for installation and commissioning of the equipment

17 The Systems Management software should provide Role-based security. Should provide Pre-failure warning for – CPU, Memory, Hard disk etc.

Database

1. Database should address all the structured and un-structured data storage requirements of the proposed system

2. Database should have a high tolerance of failure

3. Underlying database should support 24x7 high availability

4. Data scalability and manageability should be integral part functionality of the database

5. Should support User-defined Data Types & User-defined Functions

6. Should provide Unicode support

7. Database should support native automated disaster recovery capability with seamless switch over and switch back between primary and disaster recovery sites

8. Database should be capable to support plug and play data transfer across platforms or operating systems

9. Database should be able to support various types of content like Texts, Images, Multi-media, and XML content natively

10 Database should ensure data synchronization between database servers across database servers in heterogeneous platforms on near real-time basis by capturing messages at the source database, stage messages in a queue, propagate messages from one queue at the source to another queue at the target and consuming messages. Data redundancy across modules must be minimized to eliminate real time synchronization needs

11 Database should support database encryption, backup encryption and support for external key management

12 Database should be capable to deploy fine grained access control, separation and segregation of duties and native encryption capabilities. The database should also prevent access to sensitive application data by highly privileged users

13 Database should control access to the applications, databases and data with flexible security controls

14 Solution should provide options or utility to encrypt/decrypt sensitive data

15 Solution should support data export and import facility to variety of databases and other software packages

16 Solution should provide backup (hot & cold) and recovery facility

17 Solution should be able to schedule a backup/restore task

18 Solution should be compatible with 3rd party system monitoring package.

19 Solution should support selective encryption of the stored data

20 Database should support a single unified data model hosted on a single database

21 Database platform should support enhanced configuration and management of audits

22 Database design & architecture should be in line with the functional and non-functional requirements of the proposed system

23 Database should be highly available with every processing node providing full view of data. This means, in case of failure of one server, each remaining server in the cluster should provide full access to all data at any point in time

24 Should support clustering exploiting rapidly emerging disk storage and interconnect technologies

25 Should provide disaster recovery solution to maintain transaction consistency

26 Should provide restrictive data access that enables different types of users to have secure, direct access to mission-critical data sharing

27 Should control data access down to the row-level (row-level security) so that multiple communities of users with varying access privileges can share data within the same database

28 Should provide Public Key Infrastructure (PKI) support

29 Should provide support for comprehensive auditing for _inserts', _deletes', _updates 'and _selects', and quickly spot and respond to security breaches

30 Should store XML content native to database

31 Should have the ability to index, search, and analyses text and documents stored in database

32. Should support different partitioning schemes to split large volumes of data into separate pieces or 'partitions' which can be managed independently

33. Solution should have automatic way of migrating the data of existing database in case of data structure change during transfer to new versions

34. Solution should support export and import of data possible from different legacy systems/ other systems/ databases in different file formats (Text, Excel, MS-Word, XML) & on specified time intervals

35. Database should support the resource allocated to the per user session

36. Database should support standalone / integrate with Operating system security

37. Should support the connectivity to the database through ODBC, OLEDB, JDBC or through Native drivers

38. System should be able to archive data, based on user specified parameters (i.e. data range) and restore archival data for on-line use when required

Other General Requirements

1. Should be highly scalable and capable of delivering high performance as & when transaction volumes/ users increases(to support up to 1000 users) without compromising on the response time

2. Patch upgrades should not affect the current version adversely

3. Solution architecture should be with minimum package modifications so as to preserve the package upgrade

4. All components should be based on standards to avoid compatibility issues

5. Should have ability to withstand all single point of failure by providing clustering features

6. Should support the use of fault tolerant multiprocessor architecture & cluster processing

7. Should support auto-switching to available server in case of server failure

8. Should support distributed processing

9. Should support load balancing

10. Should be possible to configure data replication synchronously or asynchronously

11. Development infrastructure should support ongoing development/upgrade needs during and post implementation

S. No.	Section no./ Clause no.	Page No.	Description/ Reference/ Subject	Clarification Sought	KPTCL Replies
1	**2.4 Responsibility of Implementing Agency(IA)**	21	Study the existing network architecture and end user hardware existing in KPTCL offices and come up with detailed Bandwidth requirement as well as a BOM for end user infrastructure required.	Please provide current infra-available.	Details to be provided to Successful Bidder
2	**2.16 Performance Bank Guarantee**	29	Contract Performance Bank Guarantee (PBG) shall be 5% of the total cost quoted by the bidder.	We request to make it 3%.	Tender condition prevails
3	**b) Technical Evaluation – Matrix**	55	Bidder / OEM should have successfully completed Enterprise Automation Application project implementation in State or Central Government/PSU in India. Scope including installation, configuration, customization, implementation and Roll Out of Software in last Ten (10) Years. Marks would be awarded based as below: Core modules (Max 20 Marks) (1 module = 10 marks) (> 1 module = 20 marks) A) Finance Management B) Procurement and Materials Management (Stores & Purchase) C) Employee Payroll Other modules (Max 20 Marks) (1 module = 10 marks) (> 1 module = 20 marks) A) Asset Maintenance Management B) Human Resource Management System (HRMS) and Self Services for Employees C) Project Planning & Management D) e-Office/File Automation/Business Process Management	Request you to kindly add Budgeting, Fund Management and Mobile App in the Core and Additional modules as these are also Major separate modules in PSU's. Request for following changes: Bidder / OEM should have successfully completed Enterprise Automation Application project implementation in State or Central Government/PSU in India. Scope including installation, configuration, customization, implementation and Roll Out of Software in last Ten (10) Years. Marks would be awarded based as below: Core modules (Max 20 Marks) (1 module = 10 marks) (> 1 module = 20 marks) A) Finance Management B) Procurement and Materials Management (Stores & Purchase) C) Employee Payroll Other modules (Max 20 Marks) (1 module = 10 marks) (> 1 module = 20 marks) A) Asset Maintenance Management B) Human Resource Management System (HRMS) and Self Services for Employees C) Project Planning & Management D) e-Office/File Automation/Business Process Management E) Budgeting F) Fund Management G) Mobile APP	Tender condition prevails

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ಮಾಹಿತಿ ಮತ್ತು ತಂತ್ರಜ್ಞಾನ
ಕಎಪ್ರನಿವಿ, ಕಾವೇರಿ ಭವನ
ಬೆಂಗಳೂರು–560 009

S. No.	Section no./ Clause no.	Page No.	Description/ Reference/ Subject	Clarification Sought	KPTCL Replies
	3.2.1 Pre-Qualification Criteria for Bidder – General Details	54	Pt. No. 12	Request you to kindly add Budgeting, Fund Management and Mobile App in the Core and Additional modules as these are also Major separate modules in PSU's. Request for following changes:	Tender condition prevails
			a) Bidder or OEM should have successfully completed at least One (1) project implementation on the offered platform in State or Central Government/ PSU in India having more than 1000 active users. Scope including installation, configuration, customization, implementation and Roll Out of Software during the last Ten (10) Years.	a) Bidder or OEM should have successfully completed at least One (1) project implementation on the offered platform in State or Central Government/ PSU in India having more than 1000 active users. Scope including installation, configuration, customization, implementation and Roll Out of Software during the last Ten (10) Years.	
			b) Such implementation should have covered at least one (1) module from Core modules and any 1 module from other modules out of the below listed modules in :	b) Such implementation should have covered at least one (1) module from Core modules and any 1 module from other modules out of the below listed modules in :	
			Core modules	**Core modules**	
			i) Finance Management or ii) Procurement and Materials Management	i) Finance Management or ii) Procurement and Materials Management	
			(Stores & Purchase)	(Stores & Purchase)	
			iii) Employee Payroll	iii) Employee Payroll	
			Other modules	**Other modules** i) Asset Maintenance Management ii) Human Resource Management System (HRMS) and Self Services for Employees	
			i) Asset Maintenance Management		
			ii) Human Resource Management System (HRMS) and Self Services for Employees	iii) Project Planning & Management	
			iii) Project Planning & Management	iv) e-Office/File Automation/Business Process Management	
			iv) e-Office/File Automation/Business Process Management	v) Budgeting	
				vi) Fund Management	
				vii) Mobile APP	
4	**3.2.1 Pre-Qualification Criteria for Bidder – General Details**	54	Pt. No. 13	There are very few PSU's and Government departments with over 3000 users. Thus request the following change:	Tender condition prevails
			The offered OEM platform should have been used in PSU/ Central/ State Government organizations in India in at least Three (3) projects during the last Ten (10) financial years with at least 3000 users in each of the implementations.	The offered OEM platform should have been used in PSU/ Central/ State Government organizations in India in at least Three (3) projects during the last Ten (10) financial years with each implementations managing over 1,000 crore of funds.	
5	**6.4.2 Supply of EAAAP System Licenses**	98	Supply of EAAAP software platform perpetual Licenses with no limitation on number of users as per the specifications outlined in the Section VI of this document.	Request you to add UAT server, Training server and development server license also as follows: Supply of EAAAP software platform perpetual Licenses for UAT, Training, Development and Production servers with no limitation on number of users as per the specifications outlined in the Section VI of this document.	As stated in the RFP, it is a comprehensive requirement that perpetual licenses shall be provided for all server environments, including: User Acceptance Testing (UAT) Training Development Production servers
6	**6.6 IT Infrastructure Scope**	107	**Scope of Work for supply of on-premise compute**	All vendors should quote for mentioned specification of hardware only. Also please define specifications for all other items like Database, OS, system software, networking software, VM software etc. to be supplied so that all vendors quote for that only.	Bidders shall propose specifications based on their preferred solutions, provided they meet the standard requirements outlined in the RFP and align with industry best practices.
7	**6.14.4.2 VAPT & Audit**	188	**6.14.4.2 VAPT & Audit**	We request you to kindly fix:	As outlined in the RFP under Clause 6.5.5, the schedule for the VPAT and audit requirements have already been provided.
			□ Conducting regular vulnerability scanning and penetration testing of the systems, as mandated by Government Agency_s policies.	1. The periodicity of VPAT should be fixed	
			□ Review the audit logs to identify any unauthorized access to the government agency's systems.	2. VPAT and Audit should be conducted by the Department	
8	**6.14.4.3 Monitoring Performance and Service Levels**	188	**6.14.4.3 Monitoring Performance and Service Levels**		Bidders are allowed to propose their choice of tools or software, provided that they meet the standard requirements outlined in the RFP to utilize their preferred solutions and ensure that all proposals align with KPTCL's operational and security needs.
			Implementing Agency shall provide and implement tools and processes for monitoring the availability of assigned applications, responding to system outages with troubleshooting activities designed to identify and mitigate operational issues.	Please clarify what tool is required so that all vendors can quote the same.	

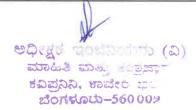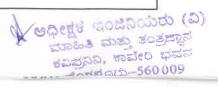| S. No.	Section no./ Clause no.	Page No.	Description/ Reference/ Subject	Clarification Sought	KPTCL Replies
9	6.14.5.5 Security Management	193	**6.14.5.5 Security Management** The protection from unauthorized usage, detection of intrusions, reporting as required and proactive prevention actions are to be provided by the Implementing Agency.	Please clarify what tool is required so that all vendors can quote the same.	Bidders are allowed to propose their choice of tools or software, provided that they meet the standard requirements outlined in the RFP to utilize their preferred solutions and ensure that all proposals align with KPTCL's operational and security needs.
10	6.15.4 EAAAP System - Post implementation SLA Indicators	195	**6.15.4 EAAAP System - Post implementation SLA Indicators** The indicative list of such diagnostic/monitoring tools and technology requested and required by KPTCL to monitor the EAAAP System are to be provided by the bidder	Please clarify what tool is required so that all vendors can quote the same.	
11	6.15.7.6 Contractor Performance & Applicable Penalty	221	**6.15.7.6 Contractor Performance & Applicable Penalty** The Total Penalty calculated (Including all Areas/Parameters of SLA) shall be on a pro- rata basis for each month and shall be deducted from quarterly payment of Facility Management Services (FMS) phase. The Total Penalties (Including all Areas/Parameters of SLA) calculated for a month/quarter shall not exceed 50% of the periodic monthly/quarterly payments including all of Facility Management Services (FMS) charges. If the penalties exceed more than 50% of the total periodic payment, it will result in a material breach. In case of a material breach, the Implementing Agency will be given a cure period of one month to rectify the breach failing which a notice to terminate may be issued by KPTCL.	We request that the maximum penalty for all payments for a defined period be to a maximum of 10%	Tender condition prevails
12	General Query		General Query	Please confirm system users profile & their functionalities.	Tender condition prevails as per clause 6.4.2 & 6.4.3
13	General Query		General Query	Please provide the total number of business processes and/or workflows that needs to be automated.	Bidders shall present innovative and comprehensive plans for existing processes being followed and automate the identified processes which are agreed by KPTCL to enhance overall efficiency and effectiveness in our operations
14	General Query		General Query	Please mention the number of total number of users who will be access in the below systems: 1)Workflow/BPM System 2)Document Management System (DMS application users and through External/Third Party Applications)?	Tender condition prevails as per clause 6.4.2 & 6.4.3
15	General Query>>Scanning		General Query>>Scanning	Is digitization of documents in scope of project ? If yes, please specify the number of locations from where the scanning needs to be done and also the number of users who will be using the scanning solution?	Tender condition prevails as per clause 6.3.6
16	General Query		General Query	Is OCR based extraction functionality required in scanning solution? Share the specific documents list for which OCR is required.	Not Applicable
17	General Query		General Query	How many users will access the mobile solution?	Tender condition prevails as per clause 6.4.2 & 6.4.3
18	Section 7.2.7>>Pg 389		File Management and Other System	Please mention the number of total named and concurrent users who will be accessing the File Management System	Tender condition prevails as per clause 6.4.2 & 6.4.3
19	Page 22, Section 2.6		Interfacing and Integration with Existing applications	Please mention the list of all the applications/systems with which the proposed solution needs to be integrated. We understand that the below is the given list of departments that are to be integrated. Apart from this please provide total count of the 3rd party external applications like e-gov, UDAI, aadhar portals payment gateways etc. Geographical Information System (GIS) Supervisory control and Data Acquisition (SCADA) Relay Testing & Research & Development (RT and R&D) Scheduling, Accounting, Metering and settlement of transactions (SAMAST) Energy Billing	Apart from the indicative list outlined in Clause 2.6, the bidder shall identify the third-party external applications subsumed in performing the activities listed in the Functional Requirement Specification (FRS) across all functions during requirement gathering phase
20	General Query		Payment Gateway	What are the payment gateways that needs to be integratedare ?	bidder shall identify the payment gateways during requirement gathering phase which are required to be included in performing the activities listed in the Functional Requirement Specification (FRS) across all functions

S. No.	Section no./ Clause no.	Page No.	Description/ Reference/ Subject	Clarification Sought	KPTCL Replies
21	6.4.4.5, page 102		Implementing Agency shall make necessary provisions for management reports, dashboards, business intelligence tools, and data migration in line with the expectations of users provided in the functional requirements.	what is the volume of total documents that is to be migrated ?	The soft version of data to be transformed and uploaded to proposed solution using standard templates
22	6.4.4.5, page 102		Implementing Agency shall make necessary provisions for management reports, dashboards, business intelligence tools, and data migration in line with the expectations of users provided in the functional requirements.	What will be the volume of daily document generation in the system?	Bidder shall identify the same during requirement gathering phase
23	General Query		General Query	Is there any requirement of front end portals ? if yes then please share the list of portals.	Tender condition prevails as per clause 6.4.2 & 6.4.3
24	General Query		General Query	If case of portal users, what is the expected user count who will be accesing the portal ?	Tender condition prevails as per clause 6.4.2 & 6.4.3
25	General Query		General Query	Do we have to provide Communication Management Tool?	To be provided as part of EAAAP Implementation
26	section 8.0, page 414,		Proposed Approach for operations in virtualized & On-Prem IT Infrastructure Environment	What are the list of enviornments required(Prod, UAT, Development, Testing, HA and DR)	The list of environments required are as follows: 1. Development 2. Test 3. Staging 4. Pre-Poduction 5. Production 6. Training
27	section 8.0, page 414, Section 7.2.6>>Pg 387		1. Proposed Approach for operations in virtualized & On-Prem IT Infrastructure Environment 2. The capability of host DMS on the cloud	Is the solution to be hosted on prem or on cloud? or both, please give detailed requirement	The proposed solution to be hosted on prem as per tender clause 2.4
28	Section 7.2.8>>Pg 400		Company Secretary Function – Process Management	Is there a requirement of correspondence management system for managing incoming and outgoing correspondences? If yes, how many users will be accessing the system?	Tender condition prevails as per clause 6.4.2 & 6.4.3
29	General Query		General Query	Which deployment module is envisaged (VM based/ Container based) ?	Container module is envisaged
30	General Query		General Query	What is the Current ERP system being used at KTPCL if any ?	At present no integrated application platform is being used for all processes but various standalone applications are being used by KPTCL
31	General Query		General Query	What are the initiation channels through which a transaction/ticket/flow will be processed?	Ticketing tool to be provided as per clause 6.3.16 outlined in RFP
32	section 2.4, point b		Design, Development, Implementation, Testing, Training and Deployment of EAAAP Solution under Low-Code/No-Code Platform	will the low code platform be a part of the ERP solutioning ? Please confirm.	The proposed solution to be offered under LCNC platform as outlined in clause 2.4 of RFP
33	Form 22, page 486		providing of the ERP Application and associated software components, Implementation, training and maintenance services, Information Technology Infrastructure and System Integration services to KPTCL	We understand that the ERP will be the underlying solution on top of which multiple applications like workflow, DMS, front end designs, customer portals, analytics platform will be built . please confirm.	There is no underlying solution. The entire FRS specified in RFP to be built on Integrated Low-Code/No-Code (LCNC) application platform. Incase any specified items listed in FRS cannot be built in LCNC, such solutions should be built and integrated with proposed solution
34	Sec 8.2 b, Page 428		Authentication based on Internal DB based and External LDAP or MS-AD based authentication Support for SSO integration	We understand that KPTCL uses MS Azure as the AD and the expectation is to do LDAP integration for SSO, please confirm?	To be provided as part of EAAAP Implementation by Bidder
35	Sec 8.2 b, Page 429		Multi Lingual Forms	Please confirm all the languages in which the forms are to be developed	The proposed EAAAP solution shall facilitate English, Kannada & Hindi languages
36	Sec 7.2.7.3, pg 391		Data Warehouse	Should have Scheduling framework for all DWH processes - please explain the DWH Process and what is meant by DWH	The proposed solution to have centralized repository to store, manage, and analyze large volumes of data from multiple sources. It consolidates data from different operational systems and external sources, allowing organizations to perform complex queries and analyses to support decision-making, business intelligence, and including matrix reporting.
37	Sec 7.2.7.4, Pg 392		Dashboard	Please explain the type of reports required at dashboard	Bidder shall identify the same during requirement gathering phase
38	Payment Terms		Payment Terms	Request to consider modifying the payment terms to Software Licenses: 100% license payment upon delivery of software licenses Implementation: 50% in advance along with Purchase order, 30% upon SRS sign off and 20% upon UAT Sign off Annual Support Charges: 100% in advance along with Purchase order	Tender condition pravails

S. No.	Section no./ Clause no.	Page No.	Description/ Reference/ Subject	Clarification Sought	KPTCL Replies
39	**Penalty Charges**		Penalty Charges	Request to consider capping the penalties at 5% of the total contract value	Tender condition pravails
40	**3.2.1 Pre-Qualification Criteria for Bidder – General Details**	52 of 500	Bidder should have valid CMM Level 3 certification and ISO 27001:2013& ISO 9001:2015 & ISO 20000-1:2018 as on bidding date	We kindly request to change this clause as below; Bidder should have valid CMM Level 3 or higher certification and ISO 27001:2013 / 2022 & ISO 9001:2015 & ISO 20000-1:2018 as on bidding date	While CMM Level 3 certification is specified, bidders with higher certifications against the mentioned certificates will also be considered in the evaluation process
41	**3.2.1 Pre-Qualification Criteria for Bidder – General Details** **Point No.13**	54 of 500	Documents to be uploaded Relevant Work Orders along with the certificates of proof confirming number of users.	We understand that relevant work orders, along with proof of live URL user data or proof of the number of users mentioned in the work order/RFP, along with self-certification, will be considered as valid proof. Kindly confirm our understanding	Correct
42	**4.18 Intellectual Property Rights**	73 of 500	4.18.3 Further, the copyright of all reports and software shall lie with the Purchaser. The developed Source-code of software shall be handed over to the Purchaser upon successful Go-live (within 7 (seven) calendar days, after Go-live of Phase-I).	As low-code/no-code platforms do not generate source code, we propose that the developed source code of any software specifically created for KPTCL be handed over during the exit management phase. We request KPTCL to amend the clause as follows: "4.18.3 - Further, the copyright of all reports and software shall lie with the Purchaser. The developed/customized source code of software shall be handed over to the Purchaser during the exit management phase or upon contract completion."	Tender condition prevails
43	**2.29 Modes of Submission EMD** **Form: 4 Proforma for Bid Security /EMD**	38 of 500 441 of 500	EMD payment of Rs.53,00,000	Form 4 in the RFP provides the format for submission of EMD in Bank Guarantee format. However, the KPPP portal (https://kppp.karnataka.gov.in/kppp) does not provide an option for uploading the Bank Guarantee scan copy. We kindly request consideration for the submission of the EMD via Bank Guarantee and request confirmation of the online submission process.	KPPP allows payment of the entire EMD amount through online mode
44	**6.6 IT Infrastructure Scope** **8.2 Annexure: 2 Minimum Technical Requirement for Infrastructure Proposed**	107 of 500 & 494 of 500	IT Infrastructure Scope	We notice the IT Infrastructure Scope is provided in both clause 6.6 and clause 8.2. Could you kindly confirm which details are to be considered for BoQ comparison and scope?	Tender condition prevails
45	**7.1 Project Director (PD)**	57 of 500	ii. Experience in designing, sizing, defining technical and functional specifications of proposed solution platform of power transmission company	We kindly request this clause be modified as follows: "ii. Experience in designing, sizing, and defining technical and functional specifications of the proposed solution platform."	Tender condition prevails
46	**7. Proposed Human Resources From Implementing Agency /OEM**	58 of 500	7.7 The Programmer shall possess B. Tech/B.E./MCA/MSC or higher qualification with at least 5 years of experience years as a developer/programmer with expertise on utilities software solutions including Proposed EAAAP application platform.	We kindly request this clause be modified as follows: "7.7 - The Programmer shall possess a B. Tech/B.E./MCA/MSc or higher qualification with at least 5 years of experience as a developer/programmer with expertise in software solutions, including the proposed EAAAP application platform."	Tender condition prevails
47	**6.14 Facility Management Services (FMS)**	185 of 500	e) Provide necessary manpower (minimum of 10 resources) and training during the handholding period to the manpower identified by KPTCL for FMS which include Help Desk (L1 – with a minimum of 10 resources) and L3 support.	We assume that L3 support can be provided offshore. Kindly confirm.	Offsite L3 Support is allowed but Offshore support not allowed

S. No.	Section no./ Clause no.	Page No.	Description/ Reference/ Subject	Clarification Sought	KPTCL Replies
48	6.14.4.2 VAPT & Audit	188 of 500	Conducting regular vulnerability scanning and penetration testing of the systems, as mandated by Government Agency_s policies.	We assume that the cost of VAPT & Audit will be borne by KPTCL. Please confirm.	The cost of VAPT & Audit to be borne by Bidder
49	b) Technical Evaluation – Matrix	55 and 56	Bidder / OEM should have successfully completed Enterprise Automation Application project implementation in State or Central Government/PSU in India. Scope including installation, configuration, customization, implementation and Roll Out of Software in last Ten (10) Years. Marks would be awarded based as below: Core modules (Max 20 Marks) (1 module = 10 marks) (> 1 module = 20 marks) A) Finance Management B) Procurement and Materials Management (Stores & Purchase) C) Employee Payroll Other modules (Max 20 Marks) (1 module = 10 marks) (> 1 module = 20 marks) A) Asset Maintenance Management B) Human Resource Management System (HRMS) and Self Services for Employees C) Project Planning & Management D) e-Office/File Automation/Business Process Management Relevant Work Order/ Purchase Order and satisfactory completion of project of customer issued by officer not below the Rank of Executive Engineer or Equivalent Client Authorized signatory.	As per our understanding the bidder can submit multiple purchase orders to meet the module requirements to get full marks.	Tender condition prevails
50	Project Director (PD)	57	Experience in designing, sizing, defining technical and functional specifications of proposed solution platform of power transmission company	We request to remove the word "power transmission company"	Tender condition prevails
51	7.2.4 Human Resource Management Module	353	445. Facility to design tests to be conducted in written or online modes.	Could you please clarify if these tests will be conducted on the proposed solution? Or somewhere else.	Details to be collected during requirement gathering phase
52	6.3.6 Data Digitization and Migration	90	C) Support in conducting the acceptance testing and verifying the completeness and accuracy of the data migrated from the legacy systems to the proposed solution.	Could you provide details on the format and size of the data that needs to be migrated from the legacy systems to the proposed solution?	Details to be collected during requirement gathering phase
53	iv. Integration and Interoperability	92	a. System Integration: The centralized database should integrate seamlessly with existing HR, payroll, and administrative systems used by KPTCL and the ESCOMs. This integration must support real-time data synchronization to avoid discrepancies between systems.	Are the existing HR, payroll, and administrative systems used by KPTCL and ESCOMs compatible for API integration? If so, could you provide a sample API for reference?	Details to be collected during requirement gathering phase
54	7.2.1 Planning and Project Monitoring Module	226	M. Open access applications	Could you please elaborate on what is meant by "Open access applications" in this context?	Details to be collected during requirement gathering phase
55	7.2.1 Planning and Project Monitoring Module	226	O. Other historical information, etc.	Could you provide the format and size of the data that needs to be migrated from the legacy systems to the proposed solution?	Bidder shall ascertain the same during requirement gathering phase
56	7.2.1 Planning and Project Monitoring Module	228	29. Ability to Import/Export data to industry standard project management software applications such as Primavera/Project Scheduler/MS Projects etc.,	What type of data needs to be imported and exported? Is there an available API for integration with industry-standard software such as Primavera, Project Scheduler, or MS Projects?	Details to be collected during requirement gathering phase
57	7.2.1 Planning and Project Monitoring Module	243	75. Ability to receive advance shipment notice and attach scanned Documents	Could you please provide more details on the requirements for attaching scanned documents with advance shipment notices?	Details to be collected during requirement gathering phase
58	7.2.2 Inventory, Procurement and Contracts Management Module	247	154. Ability to generate report showing locations, name of work, date of verification, name of verifier and findings of the verification	Is the requirement limited to reporting location names, or is GIS functionality also needed?	Details to be collected during requirement gathering phase
59	7.2.2 Inventory, Procurement and Contracts Management Module	250	227. Ability to print cheques as per payment instruction	Is the expectation for the system to build functionality to print cheques directly?	Details to be collected during requirement gathering phase
60	7.2.2 Inventory, Procurement and Contracts Management Module	253	299. Ability to publish RFP and to respond to clarification through online portal	Could you provide more details on how the RFP publication and clarification response mechanism should function through the online portal?	Details to be collected during requirement gathering phase
61	7.2.2 Inventory, Procurement and Contracts Management Module	254	313. Ability to take out comparative statement based on defined format	Should the system automatically generate the comparative statement, or should it be based on a predefined format provided by the users?	Details to be collected during requirement gathering phase
62	7.2.2 Inventory, Procurement and Contracts Management Module	254	314. System should be able to define different loadings while taking out comparative statement	Could you please provide more information on the types of loadings to be considered when generating comparative statements?	Details to be collected during requirement gathering phase

S. No.	Section no./ Clause no.	Page No.	Description/ Reference/ Subject	Clarification Sought	KPTCL Replies
63	7.2.2 Inventory, Procurement and Contracts Management Module	254	316. Availability to generate audit remarks on the comparative statement of Bids	Could you provide additional details on the audit remarks functionality in relation to bid comparison?	Details to be collected during requirement gathering phase
64	7.2.2 Inventory, Procurement and Contracts Management Module	262	508. Ability to maintain 2 way communication between KPTCL & Suppliers Online	Will suppliers be considered part of the system, and will they have direct access to the platform?	Details to be collected during requirement gathering phase
65	7.2.3 Financial Accounting & Controlling Module	315	478. Ability to capture physical count manually or automatically via data upload (e.g. using bar code scanning device, spreadsheet)	Will the infrastructure for data uploads (e.g., bar code scanning devices, spreadsheet uploads) be provided by KPTCL? Please confirm	Details to be collected during requirement gathering phase
66	7.2.5 Asset and Maintenance Management Module	376	69. Ability to exchange information with system study software for carrying out load flow study, sensitivity analysis etc.	Could you provide more information on load flow study, and what kind of sensitive analysis will be carried out?	Details to be collected during requirement gathering phase
67	Users	-	General	Please confirm the total number users for this EAAAP system; i) Total no. of Internal users ii) Total no. of external users (iii) Other users, if any (iv) Concurrency of users	Tender condition prevails as per clause 6.4.2 & 6.4.3 Details on approximate users to be collected during requirement gathering phase
68	2.8 Interpretations	27	b) Consortium: Consortium not allowed	Request you to allow consortium for this tender	Tender condition prevails
69	3.2.1 Pre-Qualification Criteria for Bidder – General Details	53	Bidder must have a minimum of 200 employees on its payroll. Bidder or OEM shall have at least 100 full time resources with a minimum of 01-year experience in the proposed Enterprise Application, Automation and Analytics platform (s) in India.	Request you to amend this clause as mentioned below if consortium is not allowed: Bidder must have a minimum of 200 employees on its payroll. Bidder or OEM shall have at least 50 full time resources with a minimum of 01-year experience in the proposed Enterprise Application, Automation and Analytics platform (s) in India.	Tender condition prevails
70	6.2.2	88	The indicative list of such diagnostic/monitoring tools and technology requested and required by KPTCL to monitor the EAAAP System are to be provided by the bidder Contract period: The total contract period is 4 years 6 months as below: a) 15 days from the date of DWA for Pilot development b) 3 months for As-is study from DWA c) 1 year for development & implementation after completion of AS-IS d) 3 months for stabilization e) 3 years for ATS & FMS The contract period may be extended for another period of 3 years on mutual agreement basis	15 days for pilot development and demo to KPTCL is too short period, instead it is requested to be changed to 30 days for Pilot development.	Tender condition prevails
71	6.1.1	159	Pilot Development Penalty is specified as forfeiture of the BG	Kindly, note the penalty seems too stringent. Kindly make this 5% of the milestone	Tender condition prevails
72	8.2 (a) Point 17	431	Entire proposed stack must be built on top of open source technologies and must not have any Servers, Operating systems, devices, interfaces, DBMS or browsers. Vendor lock in for the components such as Application	Entire proposed stack must be built on top of open source technologies and must not have any Servers, Operating systems, devices, interfaces, DBMS or browsers. vendor lock in for the components such as Application However, Implementing agency's proprietary tools which would be used for project management, efficiency improvement & tracking in software development life cycle, risk management tool can be proprietary. Additionally, any other tool that the agency will use to efficiently develop the system	Allowed to oversee the project management of implementation of EAAAP
73	3.2 point 9	53	Bidder must have a minimum of 200 employees on its payroll. Bidder or OEM shall have at least 100 full time resources with a minimum of 01-year experience in the proposed Enterprise Application, Automation and Analytics platform (s) in India	Bidder must have a minimum of 200 employees on its payroll. Bidder or OEM shall have at least 50 resources with a minimum of 01-year experience in the proposed Enterprise Application, Automation and Analytics platform (s) in India.	Tender condition prevails

S. No.	Section no./ Clause no.	Page No.	Description/ Reference/ Subject	Clarification Sought	KPTCL Replies
74	General	11	Last date for online submission of Tender Documents Dt. 23-10-2024 by 17.00 hrs	We have carefully examined the RFP and we are keen to participate and extend our services acknowledging the vision and objectives of the department. Considering the requirement of Key personnel identification & EMD requirements, the time given for submission is not sufficient and hence request for an extension of at least Three (3) weeks from the date of Response to the queries.	Tender condition prevails
75	Pre-Qualification criteria Si No 8	53	Bidder should provide detailed information on any litigation or arbitration arising out of contracts completed or under execution by it over the last five years with any Govt/corporation/PSU.	Bidder should provide detailed information on any litigation or arbitration arising out of contracts completed or under execution by it over the last five years with any Govt/ corporation/PSU which if adversely determined will impact the capabilities of the bidder to provide the services required to be undertaken	Tender condition prevails
76	4.15 Liquidated Damages (LD)	69	The charges levied on the Implementing Agency on account of Liquidated Damages shall be capped at 10% of the total contract value	Please note as per the GFR Rules the cap on LD(s) is 5%. Requesting to consider the changes suggested.	Tender condition prevails
77	4.16 Termination of Contract	69	The Implementing Agency may also terminate the contract in the following circumstances: A. If the Purchaser is in breach of a material term of this Agreement B. If the Implementing Agency's fees are not paid within the contractually agreed period by providing a prior written notice of 15 days.	The Implementing Agency may also terminate the contract in the following circumstances: A. If the Purchaser is in breach of a material term of this Agreement B. If the Implementing Agency's fees are not paid within the contractually agreed period by providing a prior written notice of 15 days.	Tender condition prevails
78	4.17 Patent Rights & Royalties	71	Indemnities should be mutual. Please include the following clause: The Purchaser shall indemnify and hold harmless the Consultant/ Bidder/Firm/Service Provider/Contractor/Agency for any losses incurred or damages suffered due to: i. Third party claims ii. Any fraud, misrepresentation, or omission of facts by the Client/Purchaser or its personnel	Indemnities should be mutual. Please include the following clause: The Purchaser shall indemnify and hold harmless the Consultant/ Bidder/Firm/Service Provider/Contractor/Agency for any losses incurred or damages suffered due to: i. Third party claims ii. Any fraud, misrepresentation, or omission of facts by the Client/Purchaser or its personnel	Tender condition prevails
79	4.2 Performance Security/ Contract PerformanceGuranatee		4.2 Performance Security/ Contract PerformanceGuranatee	Not Applicable	Clause 4.2 Deleted