



ONGC TRIPURA POWER COMPANY LIMITED

TECHNICAL SPECIFICATION

**OPERATION AND MAINTENANCE
OF
SAP ERP SYSTEM
AT
DELHI OFFICE AND PALATANA PLANT**

(This document is meant for the exclusive purpose of bidding against this specification and shall not be transferred, reproduced or otherwise used for purposes other than that for which it is specifically issued).

1.0 BACKGROUND

1.1 ONGC Tripura Power Company Limited (hereinafter referred as "**OTPC**" or "**Owner**"), a joint venture company promoted by Oil and Natural Gas Corporation Limited ("**ONGC**"), Infrastructure Leasing and Financial Services Limited ("**IL&FS**"), **IDFC** and Government of Tripura, is a public limited company incorporated under the Indian Companies Act, 1956 and having its registered office at Udaipur-Kakraban Road, P.O. Palatana, District Gomati, Tripura - 799105 (India) and one of its office at 6th Floor, IFCI Tower, 61, Nehru Place, New Delhi-110019 (India). OTPC has set up a 2 x 363.3 MW gas based combined cycle power plant at Palatana, which is located about 60 (sixty) km from the capital city of Agartala in the State of Tripura. The Plant is located about 9 (nine) km from nearest town Udaipur.

1.2 OTPC has implemented SAP Enterprise Resource Planning (ERP) system at Delhi office and Palatana plant, which is about 60 (sixty) km from the capital city of Agartala in the State of Tripura.

2.0 SAP ERP SYSTEM

2.1 OTPC has implemented three tier SAP system landscape i.e. Development, Test / Quality and Production Systems. Following are the details of current SAP system landscape and system configuration:

2.1.1 SAP ERP Central Component (ECC) 6.0, Enhancement Package (EHP) 7.0, Service Pack (SP) 14

2.1.2 Database: Oracle 12C

2.1.3 Tax Procedure: TAXINN

2.1.4 Enterprise structure is One Company Code and Two Plants

2.2 Following are the details of SAP functional and technical modules:

2.2.1 SAP - Financial Accounting & Controlling (FICO) Module

2.2.2 SAP - Material Management (MM) Module

2.2.3 SAP - Human Capital Management Module (HCM) including Payroll and Employee Self Service / Manager Self Service (ESS/MSS)

2.2.4 SAP - Plant Maintenance

2.3 SAP - Solution Manager

2.4 SAP - Enterprise portal for Internet / Intranet applications

2.5 SAP – Advanced Business Application Programming (ABAP) & Business Application Software Information System (BASIS)

2.6 Following are the details of SAP Licenses:

- 2.6.1 SAP Application Developer User - 1 No.
- 2.6.2 SAP Application Professional User - 61 No.
- 2.6.3 SAP Application Employee User - 100 No.
- 2.6.4 SAP Enterprise Foundation Package - 1 No.
- 2.6.5 SAP Payroll Processing - 1 (500 Master Records)
- 2.6.6 Oracle Database (DB) Run Time License

3.0 **SCOPE OF SERVICES**

- 3.1 Operation and Maintenance Services: Contractor shall provide operation and maintenance for successful and uninterrupted operation of SAP ERP system including Oracle Database. Detailed scope of services for Maintenance Phase services for SAP ERP system is defined in SECTION – 3.0 of this Technical Specifications.
- 3.2 Documentation, training and change management
- 3.3 Preparation / updation of system design, installation and maintenance manuals and procedures for SAP suite of applications
- 3.4 Preparation / updation of SAP user manuals
- 3.5 Preparation of test cases for application testing and obtain acceptance testing and Go-Live approvals.
- 3.6 Updation of Business Blueprint with industry best practices in consultation with Business Process Owners.
- 3.7 Customization and development of SAP ERP system, development of objects i.e. RICEFW (Reports, Interface, Conversion, Forms, and Workflows) as per Owner’s requirement. Scope shall also include modification of existing RICEFW objects. Details of existing custom developments (RICEFW) are attached as Annexure-10 to the Implementation and Maintenance Services Contract as a reference for the Contractor.
- 3.8 Providing L-1, L-2 & L-3 support to end users and ensure coordination with OEM (SAP) for support wherever required.
- 3.9 Change management.
- 3.10 Objects (Reports, Interface, Conversion, Enhancement, Forms, and Workflow) shall be developed as per the requirement without having any limitation on number of object under any category and under any complexity.

- 3.11 SAP system update and upgrade including Enhancement Pack (EHP), service pack, database, technical and functional update / upgrade, implementing SAP Notes during the period of Contract.
- 3.12 Correction, collection and validation of data with assistance of owner prior to uploading the same in ERP system.
- 3.13 Provide procedure for SAP application and database administration, performance tuning including backup and restoration process.
- 3.14 Performance tuning of SAP application, Operating System and Database. Contractor shall do performance monitoring of system during project lifecycle including the maintenance period.
- 3.15 Details of service desk tickets logged in Solution Manager (from 16th May 2016 till 31st December 2020) are attached as Annexure-11 to the Operation and Maintenance Services Contract as a reference for the Contractor.

4.0 **KEY SUPPORT & MAINTENANCE SERVICES**

4.1 Project Management Services:

- 4.1.1 Deployment of competent team of experts in the area of the SAP ERP, specific functional areas and in project management.
- 4.1.2 Deployment of resources to ensure that the project activities are carried out as per plan.
- 4.1.3 Deployment of a project structure for effective monitoring, review and risk mitigation.

4.2 Project Quality Services:

- 4.2.1 Deployment of experts with deep knowledge of the business processes, the specific solution modules, for review.
- 4.2.2 Deployment of templates and standard accepting mechanisms for the project deliverables.
- 4.2.3 Use of native tool like solution manager for managing project repository, and project activities.

4.3 Feedback, Monitoring and Adoption:

- 4.3.1 OTPC shall use the services of independent third party expertise to assess, review and quality control of the project artifacts and deliverables.
- 4.3.2 Contractor shall institutionalize mechanisms to adopt the feedback and ensure quality of work, etc.

4.3.3 The Contractor shall put together a structure and mechanism for ensuring that all the key functional areas, users are consulted, feedback adopted and key differences identified, so as to facilitate standardization as well as user adoption.

4.4 Training and Documentation

4.4.1 Training the end users

4.4.2 Preparation of user manuals

4.4.3 Documentation of processes

4.4.4 Training the key executives for monitoring the performance and using the reports effectively

4.5 Support Services

4.5.1 Facilitating user adoption

4.5.2 Continuous improvement and refinement of the processes, reports etc.

4.5.3 Operations of help desk and refresher training

4.5.4 Institutionalizing structure and processes for management of SLA, strategic control

5.0 **SUPPORT SERVICES**

5.1 Help desk operations: Initial response immediate telephonic response and support for usage related and other minor problems, support for handholding, bug fix etc.

5.2 Onsite Support: On-site support for hand holding the users, database administration & database recovery and data synchronization after crash, SAP application support including both technical and functional, performance tuning, bug fix, update for all functions.

5.3 OEM Support: Ensuring the OEM services for system performance, performance tuning, upgrades etc.

5.4 Documentation: Upgrade the documentation system on any new releases and provide any update of technical and functional manuals.

6.0 **MAINTENANCE SERVICES**

6.1 During this phase, Contractor shall take up tasks related to bug fixing in customization made in the system, maintain backups of the implemented system, operation & maintenance of existing SAP ERP system and coordinating with ERP OEM for any base ERP solution related issues. Some of the other activities in this period will include but not limited to:

6.1.1 support strategy

6.1.2 Hand holding the users

- 6.1.3 monitoring
- 6.1.4 review
- 6.1.5 Monitoring and fine tuning system response
- 6.2 The Contractor shall be responsible for managing the Users and maintenance services for SAP ERP system to users.
- 6.3 The scope for SAP ERP system support shall include the entire SAP landscape at OTPC and shall include all routine support (Incidents / Requests / Problem Management), system, users and database administration, production monitoring, troubleshooting and addressing the functionality, availability and performance issues, database & application administration, backup and restore management, OEM coordination and other necessary routine support tasks and activities required to ensure that SAP system operates in OTPC production environment as per business requirements.
- 6.4 Perform changes and software upgrades & updates and patches and resolution of software bugs.
- 6.5 Provide handholding support to end users in carrying out the business process transactions.
- 6.6 Provide object enhancements / modifications with respect to new / enhanced enriched objects functionality. Ensure the desired functioning of the interfaces / integration/ objects.
- 6.7 Establish change control procedure and implement all changes required in the SAP system either due to change in the business process or requirement for legal or statutory compliance.
- 7.0 **SERVICES BY CONTRACTOR ON EXPIRATION OR TERMINATION OF CONTRACT**
- 7.1 Upon expiration or termination of the Contract, the Contractor shall take following action:
 - 7.1.1 Leave the SAP ERP system in as good condition as it was at the time of taking over from existing O&M Contractor.
 - 7.1.2 Prepare and hand over an updated inventory list of all processes implemented, custom developments (RICEFW), standard developments, source codes, configurations, master data templates, equipment, computers and any other material forming a part of the SAP ERP system which are the property of the Owner.
 - 7.1.3 Deliver to the Owner all drawings, documents, O&M Manuals, O&M Plan and Procedures, logs, reports, records, etc. of the SAP ERP system including those developed by the Contractor while performing Services under the Contract.

- 7.1.4 Remove all of the Contractor's tools, equipment and materials brought by Contractor from the Site with Owner's approval.
- 7.1.5 Remove all the Contractor's Staff except as otherwise instructed by Owner. Contractor shall solely be liable for resettlement, compensation or any other obligations towards Contractor's Staff. Contractor shall keep Owner indemnified against claims, if any pertaining to Contractor's Staff.
- 7.1.6 Settle all dues, recoveries relevant to Contractor, if any with the Owner.
- 7.1.7 Use all reasonable efforts to cooperate with Owner or a Successor Contractor to assure that the operation, maintenance, repair and management of the SAP ERP system is not disrupted.

A. MAINTENANCE SERVICES

- 8.0 Owner has engaged Sify Technology Limited as its Application Management Service (AMS) support provider.
- 9.0 Maintenance services consists of two (02) parts: (a) Takeover Phase – operate & maintain the SAP ERP system along with existing Contractor during Takeover Phase and taking over of the SAP ERP system from existing Contractor during Takeover Phase (b) upon taking over, Contractor shall be responsible for Operations and Maintenance of the SAP ERP system implemented for a period of two (02) year.
- 10.0 **Maintenance Phase services shall consist of following services:**
- 10.1 Initial Service set-up:
 - 10.1.1 Initial service setup shall include set-up of solution manager, performance monitoring, call tracking tool, establishing call management processes, service desk tool, monitoring tool, change management tool, modes and channels of communication
- 10.2 Administration and Maintenance
- 10.3 Responding to direct request for assistance for technical and functional support of implemented system as provided in stabilization period.
- 10.4 Continuous application monitoring, support, testing and training services
- 10.5 Deploying appropriate manpower to cover all activities
- 10.6 Helpdesk for OTPC users at Delhi and Palatana, Tripura
- 10.7 On-site and Off-site support services for OTPC users
- 10.8 Generating monthly MIS reports and incident reports summarizing SAP's AMS for the prior month covering history of service calls, type, priority etc.
- 10.9 Transition Services:

10.9.1 Transition services shall include planning, documenting and executing the knowledge transfer.

11.0 **Administration and Maintenance:**

11.1 The Contractor shall provide application maintenance and support services, including request based services (problem requests/defect fixes), enhancements, configuration management and post release support. As part of these services, Contractor shall provide support for bug fixes, enhancements, operational support and maintenance.

11.2 Contractor shall provide all necessary resources and expertise to resolve issues and carry out required changes, optimizations and modifications so that complete system as a whole works according to the specified requirements.

11.3 Contractor shall ensure that the entire solution as a whole is operational and run according to stipulated performance standards.

11.4 Contractor shall provide knowledge transfer on a continuous basis.

11.5 The broad activities that shall be covered under the Operation & Maintenance support services are:

11.5.1 **End User Support:**

11.5.1.1 The end user support shall include all activities related to resolving the bugs / defects reported by application users. Every bug / defect should be logged.

11.5.1.2 Contractor should identify the solution and take approvals from OTPC and release the patch for UAT (User Acceptance Test) after fixing the defects.

11.5.1.3 Contractor shall document defects / bugs encountered as well as document the resolution of the same. Contractor shall also update the consolidated list of common errors and their resolution document.

11.5.1.4 Contractor's activity shall be monitored as per SLAs defined.

11.5.2 **Application enhancement / New Development**

11.5.2.1 The SAP ERP system may require modifications or enhancements in the implemented functionality. The enhancements or new development may also be required to fix some complex problem request or defect fixes and upgrade the application performance. Contractor shall undertake such requests for modifications or enhancements or new developments as per the requirements. Contractor shall undertake testing and modification of custom developments when SAP system is upgraded due to release of system updates, EHP releases, SAP Notes etc without any additional cost to Owner.

11.5.2.2 Contractor shall ensure that the correct versions of the application / program units are being considered to carry out application enhancements / new development.

11.5.2.3 Contractor shall follow the configuration management plan for configuration management and version control as described in clause 11.5.3 below.

11.5.2.4 Contractor shall support OTPC in carrying out the UAT (User Acceptance Test) for the modifications / enhancements /new developments.

11.5.3 **Configuration Management and Version Control**

11.5.3.1 Contractor shall keep the source code under version control and the system under configuration management as the application undergoes enhancements and modifications due to problem requests, defect fixes and change requests.

11.5.3.2 Contractor shall be required to assist OTPC personnel in ensuring that a copy of the production environment is backed up and stored in the repository before the new / modified components are copied to production. Contractor shall be required to assist OTPC personnel in restoring the backed up application versions for testing purpose.

11.5.4 **Release Management (Transport Management)**

11.5.4.1 Contractor shall define release management procedure in consultation with OTPC to ensure smooth transition of the application changes from release environment to production environment.

11.5.4.2 As part of the release management, following shall be performed:

11.5.4.3 Group the related change requests, assess their development progress and accordingly prepare a schedule for their release.

11.5.4.4 Prepare a detailed release plan for every release. This plan shall include the release number, date of release and details about the change request to be released.

12.0 **Support for Maintenance Phase shall be provided through Helpdesk:**
Helpdesk support is comprised of Levels 1, 2 and 3. Where:

12.1 Level -1 support are call center services, shall be comprised of answering, logging and assisting users for problem resolution. OTPC shall filter the calls and forward to Contractor teams for operation support to end users.

12.2 Level-2 support comprise of providing additional assistance for end-user questions. Contractor shall respond to calls routed to it by the Level 1 Support or trouble tickets in the call tracking system in accordance with the Priority levels defined under this Contract. The scope of this service includes the receipt, documentation, classification and dispatching of queries and requests, monitors progress towards resolution, initiates escalation where necessary and provides direct response on the phone, fax or e-mail to simple questions or problems from end users. These are typically questions or problems in connection with using the application Software in daily business operations. Level 2 Support covers SAP system landscape covering Development, Quality and production Systems.

- 12.3 Level-3 support shall also cover application technical and functional problems. Includes minor enhancements, customizations and configuration. Issues remain unresolved by Level-2 support shall be handled under this category of support.
- 12.4 Helpdesk services shall be provided both on-site and off-site / remotely.
- 12.5 Helpdesk shall be provided for the resolution of technical and functional queries by users. Technical and functional helpdesk activities shall include but not limited to:
- 12.6 Supporting users with regard to technical problems in using and operating component functionality and business processes.
- 12.7 Supporting users when they have problems about functional related issues regarding individual business processes.
- 12.8 Help desk shall accept error messages, service requests and change requests.
- 12.9 Deployment of sufficient manpower during Operation and Maintenance Phase. Five (05) on-site resources shall be provided by the Contractor and remaining resources will be on off-site basis required for operation and maintenance services for SAP ERP system. Contractor shall provide on-site resources for SAP FICO, SAP HCM (including payroll, ESS& MSS), SAP MM, SAP BASIS and MM module data entry operator.
- 12.10 Provide helpdesk facility for agreed SLAs for reporting and resolving technical and functional incidents/issues/ problems with the system.
- 12.11 Shall implement call logging system in line with the severity levels as per the SLAs. The helpdesk shall log user calls related to system and assign an incident/ call ID number. Severity/level of the call shall be decided by OTPC and it shall be assigned by Contractor to each call as per the SLAs.
- 12.12 Track each incident/call to resolution.
- 12.13 Escalate the calls, to the appropriate levels, if necessary as per the escalation matrix agreed upon and developed by the Contractor and OTPC.
- 12.14 Analyze the incident / call statistics and provide monthly reports including but not limited to:
 - 12.14.1 Type of incidents / calls logged
 - 12.14.2 Incidents / calls resolved
 - 12.14.3 Incidents / calls open
 - 12.14.4 Shall provide and update the frequently asked questions on OTPC portal to assist end users in resolving basic issues themselves.
- 13.0 **Problem Management:**

- 13.1 Processing fault reports in the components and processes supported, developing solution proposal
- 13.2 Perform root cause analysis
- 13.3 Implementing the solution proposals in the system
- 13.4 Final testing post configuration changes and prior to move to production as per defined tests
- 13.5 Work with end users in user acceptance testing of the configuration change
- 13.6 Migrate to production as per transport policy
- 13.7 Document test results
- 14.0 **SAPNet (OSS) Ticket Management**
- 14.1 Research OSS Notes database software related problems escalated as issues and find the right fix for the problem.
- 14.2 Apply the relevant OSS note in the development system and test the solution
- 14.3 Coordinate with end users to validate the solution and carry out the migration to quality and production systems as per system transport policy
- 14.4 Forwarding product support messages to SAP active global support
- 14.5 Monitoring the processing of product support messages in SAPNet, initiating necessary escalations, and reporting the result back to the ordering party.
- 14.6 Document OSS Notes applied
- 15.0 **Continuous Application Support:** Following services shall be required to keep system running for normal business transactions and operations:
 - 15.1 System Management / BASIS
 - 15.1.1 System Monitoring: Contractor shall monitor the system for critical terminations, repair of errors at critical terminations. The scope shall include:
 - 15.1.1.1 Monitoring and analysis of early watch alert, initiate necessary escalations reporting of the result
 - 15.1.1.2 Monitoring of system logs, dumps, work process traces and database logs with regard to critical terminations.
 - 15.1.1.3 Analyzing problems, providing information, and developing solution proposals in the case of critical terminations.
 - 15.1.1.4 Monitoring update terminations and informing

- 15.1.1.5 Monitoring hardware behavior and informing the concerned personnel from OTPC in the event of critical situation (e.g. hardware bottlenecks in the case of future load increase)
- 15.1.1.6 Creating, scheduling and monitoring system related jobs.
- 15.1.2 Update Management: Analyzing the update terminations and cleaning up updates terminations
- 15.1.3 Analyzing and optimizing system performance
 - 15.1.3.1 Monitoring and analyzing the load-critical database and developing the optimization recommendations
 - 15.1.3.2 Monitoring and analyzing load distribution and system utilization, developing optimizing recommendations
 - 15.1.3.3 Monitoring and analyzing load-intensive and/or non-high-performing programs, analyzing the associated source code and developing optimization recommendations.
 - 15.1.3.4 Implementing the optimizing proposals in the system.
 - 15.1.3.5 Monitoring the processes for periodic declarations (run times, job organization)
- 15.1.4 SAP Solution Manager Services
 - 15.1.4.1 Updating the system environments in SAP solution manager
 - 15.1.4.2 Updating the core business processes in SAP solution manager
 - 15.1.4.3 Support in service level reporting and necessary modifications
 - 15.1.4.4 Modifying threshold values, modifying system monitoring and using system monitoring
- 15.1.5 Print Management: Checking printer setup in SAP and spool request status
- 15.2 **Application Support**
 - 15.2.1 Application Monitoring: Monitoring data in the system e.g. master data, transaction data (quality check to assure smooth month closing processes)
 - 15.2.2 Support for programs and forms: Repair of errors in existing programs and change of forms with SAP script
 - 15.2.3 Workflow monitoring: Change and maintain existing workflows
 - 15.2.4 Batch job processing
 - 15.2.5 Support for periodic processes

- 15.2.5.1 Monitoring the processes for year-end closing
- 15.2.5.2 Monitoring the processes for month end closing
- 15.3 **Development object management**
- 15.3.1 Development object support
- 15.3.2 Analyze ABAP dumps
- 15.3.3 Apply new OSS notes and test for any disruption before migration to production
- 15.3.4 Build new match codes
- 15.3.5 Check for ABAP best practices
- 15.3.6 Check for performance
- 15.3.7 Debug ABAP
- 15.3.8 Maintain custom tables and indexes
- 15.3.9 Maintain existing SAP scripts
- 15.3.10 Manage z-objects
- 15.3.11 Modifying existing custom screens
- 15.3.12 Optimize reports
- 15.3.13 Test ABAP code for cross functional tests
- 15.3.14 Test ABAP code for cross integration tests
- 15.3.15 Trace ABAP
- 15.4 **Authorization Services:**
- 15.4.1 Configuring and maintaining audit logs, performing security audits
- 15.4.2 Identify need for new profiles as per changing roles and responsibilities
- 15.4.3 Create and modify roles and profiles
- 15.4.4 Testing of profiles created
- 15.4.5 Approval and sign off of created profiles
- 15.4.6 Create / delete users
- 15.4.7 Unlock users / reset password

- 15.4.8 Setup and maintain SAP user master data
- 15.4.9 Lock and delete SAP user master data
- 15.4.10 Release locked users
- 15.4.11 Define and change authorization profiles
- 15.4.12 Create and maintain groups
- 15.5 **Transport Management**
- 15.5.1 Create transport requests
- 15.5.2 Release transport requests
- 15.5.3 Import transport request into Quality system
- 15.5.4 Test of changes in Quality system
- 15.5.5 Release of changes for Production system
- 15.5.6 Import and test in Production system
- 15.6 **Documentation Service**
- 15.6.1 Maintaining documents for programs and interfaces
- 15.6.2 Maintaining documents for customizations
- 15.6.3 Maintaining documents for system settings / parameters
- 16.0 **Continuous Improvement:** Continuous improvement shall consist of adjustment and optimizations of implemented applications without changing the essential functionality.
- 16.1 **System Management / Basis:**
- 16.1.1 Individual performance optimizations for individual functions, components, interfaces and processes.
- 16.1.2 Individual performance optimization for in-house developments
- 16.1.3 Individual performance optimization for system environments
- 16.1.4 Implementing optimization proposals in system environment
- 16.1.5 Developing recommendations for optimum system parameterization (front-end, SAP, database, operating system)
- 16.1.6 Implementing parameter proposals in system environment

16.2 **Improvement of business processes:**

- 16.2.1 Identifying new business processes required by business and doing feasibility study and value assessment
- 16.2.2 Evaluate new business process / functionality requirements
- 16.2.3 Gap analysis
- 16.2.4 Customize the system and build proof of concept with custom scenarios
- 16.2.5 Business process optimization involving re-engineering and organizational change management
- 16.2.6 Following all the steps from project preparation, blueprint, realization, final preparation and go-live as in a project
- 16.2.7 Create, maintain and modify workflow elements

16.3 **Development:**

- 16.3.1 Programming of enhancements to existing solutions such as new reports and transactions
- 16.3.2 Create new screens
- 16.3.3 Create ABAP query
- 16.3.4 Create and change reports
- 16.3.5 Create and change forms
- 16.3.6 Write data migration programs

16.4 **Testing:**

- 16.4.1 Formulate a testing strategy
- 16.4.2 Finalize test tools and test schedules
- 16.4.3 Create test plans for test sequences after applying support packages / changes
- 16.4.4 Support and organization of tests after applying support packages / changes
- 16.4.5 Performing of test sequences
- 16.4.6 Updating of existing user and program documentation after functional extensions
- 16.4.7 Organizing user workshops, training seminars for users.
- 16.4.8 Conducting training sessions and workshops on service and support processes

- 17.0 **MIS reports and Incident reporting:**
- 17.1 Following is the indicative list of MIS reports to be submitted by the Contractor. The Contractor shall also draw an exhaustive list of reports.
- 17.2 Consolidated SLA / non-conformance report
- 17.3 Summary of incidents reported like application down, overall downtime etc.
- 17.4 Call history, call summary, status, support level providing assistance and the nature of assistance.
- 17.5 Feedback report from users for the services rendered.
- 17.6 Bug / defect resolution reports including the analysis of bugs / defects resolved, pending, completion time, responsiveness, concern areas etc.
- 17.7 Change request logs with their resolution status.
- 17.8 Log of break fix and preventive maintenance undertaken.
- 17.9 System landscape and improvement suggestions.
- 18.0 **Facilities Management:** The facilities management shall include but not limited to:
- 18.1 Software license management
- 18.2 Software maintenance
- 18.3 Updates / upgrades / new releases / new versions
- 18.4 Operations management
- 18.5 Warranty
- 18.6 Application management
- 19.0 Contractor should arrange for necessary tools for bug tracking, defect logging, application performance monitoring, automatic testing etc. to deliver the complete software development and maintenance services.
- 20.0 **SERVICE LEVEL AGREEMENT (SLA)**
- 20.1 Contractor shall give operational guarantees covered in the contract. This includes SAP application availability.
- 20.2 Data center infrastructure shall be supported by OTPC and the Contractor assigned by OTPC.

- 20.3 Uptime will be computed based on availability of the ERP application to the OTPC users. WAN/LAN link failure and hardware failure shall not be considered for the purpose of calculation of ERP application uptime.
- 20.4 Response may be telephonic or onsite. In case the issue cannot be resolved telephonically, the Contractor shall need to provide onsite assistance within response resolution window.
- 20.5 Service levels should be complied with irrespective of the customizations that the applications would undergo during the tenor of the contract.
- 20.6 Typical resolution time will be applicable if systems are not available to the OTPC's users.
- 20.7 A monthly report shall be submitted at the end of every month containing the summary of all incidents reported and associated Contractor's performance measurement for that period.
- 20.8 Performance measurement would be assessed through audits or reports, as appropriate to be provided by the Contractor. The reports shall cover utilization reports, response time measurements reports etc.
- 20.9 The tools to perform the measurement/audit will need to be provided by the Contractor.

20.10 **Availability Measurements:**

	Priority	Measurement / Criteria	Response time	Maximum Resolution Time
20.10.1	Priority 1	The defect results in the failure of the complete SAP ERP software system, and/or of a sub-system, and/or of a software unit (program or module) within the system where impact on business is severe; there is an interruption of an important business process for one or several business units that cannot be remedied by a manual workaround.	Up to thirty (30) minutes	Four (08) Hours
20.10..2	Priority 2	The defect results in the failure of the complete software system, and/or of a sub-system, and/or of a software unit (program or module) within the system. There is no way to make the failed component(s) work completely. However, there are acceptable processing alternatives which will yield the desired result.	Within one (01) hour	Eight (16) Hours

20.10..3	Priority 3	The defect does not result in a failure, but causes the system to produce incorrect, incomplete, or inconsistent results, or the defect impairs the system usability. No significant effect on the business is expected and a manual workaround is available. A general improvement in the system is required.	Within four (04) hours	Twenty Four (24) Hours
----------	------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------	------------------------

B. CAPACITY BUILDING & TRAINING REQUIREMENTS

21.0 Contractor is required to describe their capacity building program and Training methodology for optimum utilization of the ERP system in the technical proposal. The proposed capacity building and training programs detailed by the Contractor must address organizational benefits as well as benefits to the employees of OTPC.

21.1 The proposed capacity building plan program must include at least the following:

21.1.1 Change readiness and training needs assessment of various stakeholders in OTPC.

21.1.2 Change management and communication workshop for all levels of stakeholders.

21.1.3 Identify the training issues covering business processes, technology, roles / responsibilities, key Benefits for each role, organization structure / working group (proposed Capacity Building Strategy and Plan).

21.1.4 Identify and design capacity building programs.

21.1.5 Design training modules, prepare and supply training materials including audio-visual content of the training and impart training at various levels (training curriculum and training schedule).

21.1.6 Educate management and employees at all levels of the proposed changes and their benefits to the organization through presentations, training sessions etc. preparation of system and user manuals in adequate detail.

21.1.7 Creation of desired understanding among employees about what is expected of them and the relevance of the activities that they carry out.

22.0 TRAINING

22.1 Contractor shall impart training both at Delhi Office and Palatana Plant as per Training Schedule given at Annexure-8 to Part-B of Operation and Maintenance Services Contract.

22.2 Training would be in the form of hands-on training on the ERP solution.

22.3 The Contractor shall dedicate specific functional trainers to provide classroom based hands on training to the identified users.

- 22.4 Contractor shall provide detailed training manuals in each functional area of ERP solution.
- 22.5 Impart SAP standard training to end users in respective modules.
- 22.6 Impart SAP system administrator training to designated users.
- 22.7 Contractor shall organize at least following training sessions during operation and maintenance of the SAP ERP System:
 - 22.7.1 Functional User Training: Contractor shall provide training to ERP project team members as per the requirement, so as to enable them to SAP ERP system maintenance including configuration, master data maintenance and other administrative works of the system and address future functional queries of user.
 - 22.7.2 Technical Training: Detailed training with necessary tools and documentation shall be given to the technical team responsible for carrying out technical activities related to the ERP System programming, maintenance/administration of database and operating system, backups, BASIS etc.
- 23.0 **RE-TRAININGS / REFRESHER TRAINING**
 - 23.1 The Contractor shall be responsible for re-training the users whenever any changes are made in the system and/or changes happen with personnel (because of fresh recruitment, promotion, transfer) during the Term of the Contract.
 - 23.2 Contractor shall prepare a detailed training plan, including the proposed curriculum, the locations, and the audience for each such refresher training programs.
 - 23.3 Duration of each such training program will be approved by OTPC before commencement of the actual trainings.
 - 23.4 In addition to the trainings that are to be given for any change in the ERP application or change in OTPC manpower, there shall be the need for delivering refresher trainings to the same staff, time and again.
- C. DOCUMENTATION REQUIREMENTS**
 - 24.0 The Contractor shall provide detailed system documentation to OTPC.
 - 24.1 Contractor shall update existing documents and prepare new documents including but not limited to the following:
 - 24.1.1 Configuration document consisting of system setting and parameters for each functional module.
 - 24.1.2 Standard Operational Procedure (SOP) manuals.

- 24.1.3 Document related to data structure / tables.
- 24.1.4 On-line help manual.
- 24.1.5 Technical manuals.
- 24.1.6 Installation guides.
- 24.1.7 System administration manuals.
- 24.1.8 Toolkit guides and troubleshooting guides.
- 24.1.9 User manuals including system instructions and use cases, how to run a program to perform specific task in the system with sample reports, screen formats etc.
- 24.1.10 Program flow and descriptions.
- 24.1.11 Upgrade the documentation system on any new releases and provide any update of technical and functional manual.
- 24.1.12 Any other document required for usage of implemented solution.