



ODISHA POWER TRANSMISSION CORPORATION LIMITED
(A Govt. Of Odisha Undertaking)
Regd. Office, Janpath, Bhubaneswar -751022

TECHNICAL REQUIREMENT SPECIFICATION (TRS)

TENDER NOTICE NO. TW-IT/OT/06/2021-22

TRS - Finance Module

Sl. No.	Broad Requirement	SHORT TITLE
1	General Ledger	GL
2	Accounts Receivable	AR
3	Accounts Payable	AP
4	Cash Management	CM
5	Budget And Monitoring	BUDGET
6	Fixed Assets	FA
7	Auditing Process	IA
8	Project And CWIP Accounting	PROJECT
9	Loan Management (HQ)	LOAN
10	Consolidation And Finalisation Of Accounts	Accounts
11	Cost Management	Cost Mgt.
12	Regulatory and Tariff Requirement	Energy
13	Trust accounts	Trust
14	Investment	Investment
15	Interunit Accounts	Int Unit
16	Taxation	Taxation
17	Inventory	Inventory
18	Payroll	Payroll
19	Others	Others
20	Work Flow	Work Flow
Detail Requirement		
1	General Ledger	GL
1.1	Facilitate multiple, independent general ledgers and subsidiary ledgers.	GL
1.2	Facilitation of automatic posting (Postings to sub-ledgers should result in automatic postings to the control accounts in the general ledger)	GL
1.3	Option to have centralized maintenance of master chart of account	GL
1.4	Addition /deletion to master chart of accounts by authorised person.	GL
1.5	Facility to amend and delete the entities (e.g.: Capture short as well as long description of accounts)	GL
1.6	Facility to display GL account balance unit wise	GL
1.7	Facility to hold balances for multiple ledger types such as:	GL
	i) Actual	GL
	ii) Taxation	GL
	iii) Tariff &	GL
	As per requirement	GL
1.8	Facilitate Breakdown of balances by drilling down to source document	GL
1.9	Facilitate to:-	GL
	i) Assign an activity status to accounts (e.g. - active/inactive)	GL
	ii) Retrieve an account master record via account alias	GL
1.10	Facility to provide audit trail to log the creation, amendments and deletion of each GL account code	GL
1.11	Alert for action for vouchers pending at different level	GL
1.12	Facility to assign unique number to journal entry	GL

1.13	Facilitate to suspend and resume, at a later time, entry of journal that are incomplete or imbalance	GL
1.14	Facilitate to allow for multiple accounting entries (debits and/ or credits) for each transaction type	GL
1.15	Facility to ensure that all necessary postings from various other modules are posted to the ledger starting the closing runbefore	GL
1.16	Facility to automatically generate the provisions for administrative expenses, materials/ services but invoice not received	GL
1.17	Facility to automatically carry forward balances at the end of the year to the balance sheet and reset all profit and loss account	GL
1.18	Facility to prevent inactive accounts from appearing on reports and financial statements	GL
1.19	Facilitate to integrate with payroll	GL
1.20	Facilitate to automatically initiate a new financial year	GL
1.21	Facility to :	GL
	i) Consolidate at multi levels	GL
	ii) Consolidate actual and budget at balance sheet, profit/ loss account, cash flow statement, expenses and revenue account levels	GL
1.22	Facility to change consolidation logic from time to time	GL
1.23	Provide flexible Report generation	GL
1.24	Facility to produce user defined statutory Reports	GL
1.25	Facility to support computation of various financial ratios as defined by users and Facilitate to compare the same with the previous year and year to date	GL
1.26	Provisional closing of the previous financial year and record & maintain transactions for the current financial year.	GL
1.27	Ensuring MIS based on simulation of scenarios and Profit & Loss / Balance Sheet projections for a longer period (say 1/ 20 years)	GL
1.28	Automatic generation of different schedules required for the generation of Balance Sheet as per IND AS	Cons
1.29	Generation of Balance Sheet and Profit & Loss Account, both for the purpose of financial accounting as well as for the purpose of Income Tax.	Cons
1.30	Accounting of opening balance sheet	GL
1.31	Accounting of Salary/Employee/Retirement benefits	GL
1.32	Standard reports as under:	GL
	i) Journal Book	GL
	ii) General Ledger	GL
	iii) Subsidiary Ledger	GL
	iv) Cash / Bank Book	GL
	v) Trial Balance	GL
1.33	Project-wise and year wise Capital Expenditure Report	GL
2	Accounts Receivable	AR
	The system should record the receivables not limited to the following	AR
	i) Headquarters fund receipts	AR
	ii) Other cash / DD receipts from employees or Vendors	AR
	iii) Transmission Charges (LTOA and STOA)	AR

	iv) SLDC Charges (SoC, MoC,Scheduling Charges,Registration fees, Application fees)	AR
	v) EMD and SD collection	AR
	vi) Supervision Charges	AR
	vii) Scrap collection	AR
	viii) Rent from Optic Fibre Cable	AR
	ix)Security Deposit	AR
	x) Other Misc. collection	AR
2.1	Facility to fully integrate account receivables to the general ledger and the cash book	AR
2.2	Facility to provide audit trail for each receivable.	AR
2.3	Facility to generate periodic billing reports based on different parameters and consolidated report on total receivables at any point of time	AR
2.4	Facility to create debit and credit memos into customer account	AR
2.5	Facility to reference multiple invoices in single debit/ credit memos	AR
2.6	Supporting the manual as well as system-generated serial numbers for receipts.	AR
2.7	Enabling the ageing of dues, overdues, etc.	AR
2.8	Customer outstanding report.	AR
3	Accounts Payable	AP
3.1	Invoice submission & approval	AP
	All Bills and approval as per delegation of power relating to invoices for the following types orders.	AP
	i) Material Invoice	AP
	ii) P1 Agreement Bills (Civil work bills)	AP
	iii) Works (Turnkey agreement)	AP
	iv) Hire vehicles payment	AP
	v) AMC Payment bill	AP
	vi) Manpower Supply i.e security guard, jhula person etc	AP
	vii) Audit fees	AP
	viii) Retainers and consultancy fees	AP
	ix) Payments for invoices without purchase order	AP
	x) Payment to all HR related bill (Employee Related)	AP
	xi) Imprest & Temporary Advance	AP
	xii) Others	AP
3.2	Payment to vendor as per the Budget allocation as follows.	AP
	i) Full payment	AP
	ii) Part payment/ milestone base payment as per payment terms	AP
	iii) Advance Payment to Vendor (Down Payment - AP)	AP
	iv) Payment made centrally/unitwise as per DoP	AP
3.3	Cheque updation	AP
	i) Cheque information	AP
	ii) Cheque Register	AP
	iii) Cancel Cheque	AP
3.4	EMD & SD Refund (AP)	AP
	i) EMD and SD Refund	AP
	ii) Retention Amount Refund	AP

	iii) SD Receipt in form of Bank Guarantee	AP
	iv) Forfeiture of EMD,SD	AP
3.5	Facility to control the creation and change of vendor master data	AP
3.6	Facility to provide audit trail for all types of transactions.	AP
3.7	Facility to provide invoice register by which the invoices could be logged prior to entry into the ledgers	AP
3.8	Facility to automatically generate debit/ credit memos based on PO, GRN, Quality, Inspections and acceptance tests as per OPTCL purchase regulation norms	AP
3.9	Facility to provide for entering invoices for prepaid expenses and apportion the amount between prepaid accounts on periodic basis	AP
3.10	Facility to produce payable reports on demand within the system	AP
3.11	Facility to trigger a warning if invoice amount exceeds budget balance	AP
3.12	Facility to make payment via methods such as:	AP
	i) Cash	AP
	ii) Cheque - manual and pre-printed	AP
	iii) Direct payment by 3rd Parties like lenders	AP
	iv) Bank transfers/ Electronic Fund Transfer	AP
	v) Payment to vendor through Letter of Credit	AP
3.13	Facility to generate recurring payment voucher	AP
3.14	Facility to match single payment with multiple invoices	AP
3.15	Facility to split payment to more than one payee (e.g.:- payment involving withholding tax)	AP
3.16	Facility to post transactions such as debit and credit memos into vendor account	AP
3.17	Facility to provide for automatic integration with cash book, general ledger, bank ledger, penalties/ LD account, GST account, purchasing, Material management system, TDS account, expense accounts	AP
3.18	Facility to credit all payments first to the bank Clearing Account. Post confirmation from the bank the same will be updated to the books	AP
3.19	Facility to view the account balances:-	AP
	i) In summary (opening balance, transaction per posting period and closing balances)	AP
	ii) By line items (drill down from summary)	AP
	iii) Drill down to document detail (e.g. purchase requisition, purchase order, invoice, expected delivery date)	AP
3.20	Facility to produce the following payable reports, but should not be restricted to:	AP
	i) Invoices selected for payment by period, bank, payment method	AP
	ii) List of approved invoices	AP
	iii) AP Liabilities Listing	AP
	iv) Invoices under retention	AP
	v) Outstanding Cheques which are overdue	AP

	vi) List of cancelled and void cheques	AP
	vii) Details of unpaid invoices	AP
	viii) Number of invoices and vendors processed within a payment run	AP
	ix) Payble aging report	AP
	x) List of payable to statutory vendors with reports. Eg. GST, LIC, PIL, Govt. Dept., IT, Telephone, Etc.	AP
3.21	Supporting a 3-way match between the invoice and corresponding transactions like P.O and Stores Receipt & Inspection Note (SRIN) / Measurement Book (MB).	AP
3.22	Recording asset related information from invoices relating to capital purchases.	FA
3.23	Recording all the advances made to a vendor w.r.t a general reference, multiple P.O's or multiple Proforma Invoices.	AP
3.24	Generating reports for unadjusted advances to a supplier / contractor, beyond a stipulated, pre-defined period. (Scheduled back ground running shall be possible for regular generation of reports)	AP
3.25	Making payment to vendors after adjustment of advances or debit notes against the single / multiple invoices.	AP
3.26	Providing automatic alerts in cases where	AP
3.27	i) The final bill has not been processed	AP
3.28	ii) Advance remains un-adjusted beyond some stipulated period, at each defaulting centre	AP
3.29	Supporting on-line pay particulars, dues, issuance of Final No Demand Certificate, Demand statement on License fees, Electric charges, Water charges, etc. for retaining quarters & other service particulars from user department / Accounts office / HRD	AP
3.30	Supporting payment in multiple foreign currencies.	AP
3.31	Auto calculation of foreign exchange differences and accounting there of.	AP
4	Cash Management	CM
4.1	Cash Requisition	CM
	i) Fund indent to HQ	CM
	ii) Consolidating all fund requirement at HO	CM
	iii) Fund allotment from HQ	CM
	iv) Bank Reconciliation for all accounts	CM
4.2	Manage Cash Book with daily balance update.	CM
4.3	Facility of the cash book to receive automatic postings from the accounts payable and accounts receivables together with manual postings of other payments and receipts	CM
4.4	Facility to generate daily/ weekly/ monthly cash flow report	CM
4.5	Facility to perform automatic bank reconciliation	CM
4.6	Facility to enter bank statement details:-	CM
	i) manually	CM
	ii) by electronic means to match bank transaction information with receipts and payments in the system to produce an electronic bank reconciliation	CM

4.7	Facility to post automatically to the respective bank accounts in the general ledger	CM
4.8	Creating recurring journal vouchers.	FINANCE
4.9	Generation of adjustment entries like interest earned from bank deposits, service charges deducted by bank, etc., for information.	FINANCE
4.10	Generating adjustment entries for year-end closing during reconciliation of the revenue expenditure with other accounts balances.	FINANCE
5	Budgeting/Analysis	BUDGET
5.1	i) Preparation of Budget (Budget estimate and Revised Estimate)	BUDGET
	ii) Budget proposal received from all units	BUDGET
	iii) Consolidation of proposals received from units at head quarter level.	BUDGET
	iii) Approval of Budget	BUDGET
	iv) Allocation of budget to all units	BUDGET
5.2	Manage Budget Preparation	BUDGET
	Facility to create the following budgets but not limited to:	BUDGET
	i) Revenue Budget	BUDGET
	ii) Capital Budget	BUDGET
	iii) Performance Budget	BUDGET
5.3	i) Forecast Balance Sheet for 15 years	BUDGET
	ii) Forecast Profit & Loss for 15 years	BUDGET
	iii) Forecast Cash Flow for 15 years	BUDGET
	iv) Forecast Financial Ratio	BUDGET
	v) Forecast Retained Income	BUDGET
5.4	Facility to import/export budget details from / to external systems electronically (e.g. Spreadsheet -Excel)	BUDGET
5.5	Facility to provide Windows-based spreadsheets for budget preparation	BUDGET
5.6	Facility to calculate and compare budget vs. actual in:	BUDGET
	i) Amount variance	BUDGET
	ii) Percentage variance	BUDGET
5.7	Facility to provide text facility to document any changes made and reasons of amendments within each version of budget	BUDGET
5.8	Flexibility to: Maintain the original budget version and the revised budget version	BUDGET
5.9	Update the original budget by	BUDGET
	i) Increasing the budget amounts	BUDGET
	ii) Reducing the budget amounts	BUDGET
	iii) Transferring budget amounts. E.g. transfer budget from circle Office to other circle Office	BUDGET
5.10	Facility to aggregate the inputs from the different accounting units and prepare a draft consolidated budget	BUDGET
5.11	Facility to segregate the final consolidated approved budget accounting unit wise.	BUDGET
5.12	Facility to classify revenue and expenditure items by means of a hierarchy. For example, personnel costs may consist of salary, wages, overtime, bonus etc.	BUDGET

5.13	Facility to provide edit functions to create, insert, copy, and delete responsible area or revenue /expenditure item within the hierarchy	BUDGET
5.14	Facility to allow posting into a GL account after approval of budget	BUDGET
5.15	Facility 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	BUDGET
5.16	Facility to record budgets at all levels of the chart of accounts (all views of account number up to lowest level of the accounts and all levels of organization)	BUDGET
5.17	Facility to check and highlight missing, incomplete budget items prior to consolidation (for example, a department missing from a set of departments defined for consolidation)	BUDGET
5.18	Deprecation budget should be based on existing assets and budgeted capital expenditure	BUDGET
5.19	Facility to send periodic Management Information System (MIS) as & when required	BUDGET
5.20	Facility to prepare reports for AG & CAG Audit and provision for editing and preparing other reports as required	BUDGET
5.21	Facility to perform comparison of actual budget with tariff set by the Regulator	BUDGET
6	Fixed Asset Accounting	FA
	Work order closing	FA
	i) Capitalisation of Asset	FA
	ii) Depreciation of Asset	FA
	iii) Transfer of Asset	FA
6.1	Manage Fixed Asset Register with the following descriptions but not limited to	FA
	I. Description	FA
	II. Account code	FA
	III. Compl Date	FA
	IV. opening balance (Gross Block)	FA
	V. opening balance (Gross Block as per Ind-AS)	FA
	VI. Addition	FA
	VII. Sales/ Inter Trans.(Gross Block)	FA
	VIII. Sales/ Inter trans.(Gross Block as per IND AS)	FA
	IX. Date of sale/Transfer	FA
	X. Total Closing Balance (Gross Block)	FA
	XI. Total Closing Balance (Gross Block as per Ind-AS)	FA
	XII. Rate of Depn.(%)	FA
	XIII. OB Accumulated Depn	FA
	XIV. Depn on Addition during the year	FA
	XV. Accumulated Depn on sale/Transfer (Gross)	FA
	XVI. Accumulated Depn on sale/Transfer (Gross as per Ind-AS)	FA
	XVII. Depreciation during the year on OB asset	FA
	XVIII. Total CB Depreciation (Gross)	FA
	XIX. Total CB Depreciation (Gross as per Ind- AS)	FA
	XX. Net Block	FA

	XXI. Net Block (as per Ind-AS)	FA
	XXII. Location	FA
6.2	Asset register should be maintained unit wise and consolidated	FA
6.3	Asset register shall be maintained for own asset, deposit work asset, beneficiary asset, Grant asset separately	FA
6.4	Depreciation should not cross 90% of Gross Asset value	FA
6.5	Provide audit trail for creation, amendments, transfer and deletion for all asset group and sub groups	FA
6.6	Facility to maintain parent - child asset relationships	FA
6.7	Facility to merge multiple fixed assets into one fixed asset	FA
6.8	Facility to record number of units against each fixed assets e.g. chairs - 10 units	FA
6.9	Facility to record fixed assets taken on lease, assets on other's property etc.	FA
6.10	Facility to generate Fixed Assets schedule in accordance with the Companies Act	FA
6.11	Facility to generate Fixed Assets schedule in accordance with the Income Tax Act	FA
6.12	Facility to generate Fixed Assets schedule in accordance with the Regulatory requirements	FA
6.13	Facility to maintain asset componentwise like transformer, conductor etc.	FA
6.14	Facility to automatically or manually allocate a unique asset number upon creation of the asset master record	FA
6.15	Facility to transfer from CWIP to respective Asset Account on completion of work	FA
6.16	Facility to capitalize asset via:	FA
	i) Integration with Accounts Payable	FA
	ii) Post the asset acquisition and the corresponding vendor in one transaction Integration with Purchasing/ Inventory	FA
6.17	Facility to process a credit memo, which reduces the acquisition and production costs of an asset	FA
6.18	Manage Fixed Asset Disposal/ Retirement	FA
6.19	Facility 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:	FA
	I. General master data - location, description, make/ model, acquisition date	FA
	II. Asset history	FA
	III. Asset values (book value)	FA
6.20	Facility to perform the following within the Fixed Asset system:	FA
	I. Perform complete/ partial retirement	FA
	II. Provide simple method of retiring low value assets	FA
	III. Perform mass retirement	FA
	IV. Capture cost of retirement (e.g. removal cost)	FA
6.21	Facility to capture disposal information such as:	FA
	I. Date of retirement	FA
	II. Cost, accumulated depreciation and net book values written off	FA

	III. Sales proceeds	FA
	IV. Gain/ loss on disposal	FA
	V. Reasons for retirement	FA
	VI. Mode of retirement e.g. sold, scrapped, donated etc.	FA
6.22	Facility to post automatically or manually to the respective account codes in the General Ledger:	FA
	I. Gain or loss on disposal;	FA
	II. Sales proceeds;	FA
	III. Capitalization cost; and	FA
	IV. Accumulated depreciation	FA
6.23	Facility to automatically determine the corresponding depreciation charge for the partial disposal.	FA
6.24	Facility to post automatically or manually to issue invoice in the Account Receivable	FA
6.25	Manage Depreciation of Fixed Assets	FA
6.26	Support change of useful life and effective rate of depreciation	FA
6.27	Facility to maintain multiple depreciation rates vis-à-vis the periods to which they apply and Facility to calculate depreciation with retrospective effect wherever required	FA
6.28	Facility to keep the original asset cost details separated from the revaluated amounts and a history of revaluation for each asset over time	FA
6.29	Facility to automatically post revaluation transaction to update relevant accounts in the General Ledger (allowance for revaluation (surplus/deficit), allowance for diminution)	FA
6.30	Automatic generation of depreciation schedules.	FA
6.31	Linkage of an asset account with the maintenance module, in order to keep a track of all the activities against an asset and the revenue expenditure related to the asset.maintenance	FA
6.32	Maintaining all the insurance related details of an asset.	FA
6.33	Handling financial lease as well as operating lease of asset and their accounting & payments.	FA
6.34	calculation of depreciation on deposit work asset, beneficiary work asset and grant asset for the purpose of transferring to income.	
7	Auditing Process	AUDITING
7.1	System should allow User (Auditor) creation with access Limited to viewing of the Customer Transaction data etc.	AUDITING
7.2	System should have the facility to provide Ad-hoc report writing facility for the auditors	AUDITING
7.3	System should have the facility to provide Interface enabling the data to be downloaded to the audit software for analysis of data for audit purpose	AUDITING
7.4	System should have the facility to Concurrent audit whereby transactions/activities deviating from business rules are diverted on real-time basis to concurrent auditors	AUDITING
7.5	System should have the facility to provide Internal Audit Report Template for writing of Reports	AUDITING
7.6	System should have the facility to provide Monitoring & Scheduling of Internal Audits, Statutory Audits etc.	AUDITING

7.7	Facility to generate any statutory report as required for compliance	AUDITING
7.8	Facility to generate pending audit paras unit wise or as required by OPTCL	AUDITING
8	Project And CWIP Accounting	PROJECT
	i) Accounting of CWIP ProjectWise	PROJECT
	ii) Age wise analysis of each project	PROJECT
	iii) details of amount received for deposit work and amount spent towards deposit work	PROJECT
	iv) warning if amount spent on deposit work exceeds deposit received from the party	PROJECT
	v) Report on unspent amount of deposit work	PROJECT
	vi) Amount of supervision charges transferred to income on deposit work executed by OPTCL	PROJECT
	vii) Capitalisation of CWIP	PROJECT
	viii) Calculation of amount to be transferred to deferred tax liability	PROJECT
9	Loan Management (HQ)	LOAN
9.1	Loan management for the following type of loans.	LOAN
	i) State Govt. Loans	LOAN
	ii) Central Govt Loans	LOAN
	iii) State Govt Loan Bonds	LOAN
	iv) Project Loans (REC and PFC)	LOAN
	v) Loans from Commercial Banks	LOAN
	vi) Servicing of Pension Trust Bond	LOAN
	vii) Infrastructure Loan	LOAN
9.2	Loan statements showing principal received, principal due, principal paid, principal not due, overdue, total interest due, interest paid, interest outstanding and total closing of both principal and interest.	LOAN
9.3	Calculation and accounting of interest	LOAN
9.4	Loan repayments	LOAN
9.5	Closure of loan	LOAN
9.6	Accounting of the above	LOAN
10	Consolidation And Finalisation Of Accounts	Accounts
	i) Monthly Statement of Accounts(Month end Closing)	Accounts
	ii) Year-end Inter Unit closure	Accounts
	iv) Audit Trial	Accounts
	v) Current and Non- Current classification	Accounts
	vi) Preparation of Age wise analysis of Trade Receivable, Trade Payable, CWIP etc. as per revised Schedule-III.	Accounts
	vii) Calculation of different ratios as per Schedule III	Accounts
	viii) Year-end closure process	Accounts
	ix) Automatic incorporation of opening balances in next year accounts	Accounts
10.1	Facilitate to produce the following financial reports in multiple levels (e.g. whole organization, reporting should not Limited. To:such as Area Office, zones, departments) and for a user defined period (for the month, year to date), but units	Accounts
	i) Statement Profit and loss account (As per Ind-AS)	Accounts

	ii) Balance sheet (As per IND-AS)	Accounts
	iii) Unit Wise Trial Balance, Head Office Trial Balance and Consolidated Trial Balance	Accounts
	iv) Preparation of Cash flow Statement and Statement of Changes in Equity.	Accounts
	v) Notes to the financial accounts (account breakdowns)	Accounts
	vi) All functionalities must display, calculate and transmit data in Indian currency format Eg. 4,20,30,000.00/-	Accounts
10.3	Facilitate to automatically update the closing balance of the previous period and opening balance of the current period	Accounts
10.4	All the year end adjustments as follows shall be provided in the accounts.	Accounts
	i) Capitalisation of Interest on project funded through funding agencies	Accounts
	ii) Work in Progress- Transfer of completed CWIPs to Fixed Assets	Accounts
	iii) Depreciation and Fixed Asset Adjustments	Accounts
	iv) Reserve for Bad and Doubtful Debts	Accounts
	v) Adjustments for loss/theft of materials	Accounts
	vi) Provision for pension, gratuity & leave encashment as per Actuary Report & PF Adjustments	Accounts
	vii) MAS Acct Adjustments at unit level	Accounts
	viii) Provision for Bonus/DA	Accounts
	ix) Audit fees	Accounts
	x) Intangible assets written off	Accounts
	xi) Notes on Account- Significant Accounts policies for proper disclosure	Accounts
	xii) Interest accrued/ received on Employee related advances	Accounts
	xiii) Provision for prior period expenses	Accounts
	xiv) Cash lost pending investigation	Accounts
	Reporting Requirements	Accounts
	The following statutory reports have to be generated by OPTCL:	Accounts
	I. Depreciation details as per Income Tax requirements	Accounts
	II. Statement of Opening Balance	Accounts
	III. Statement of provision for liability towards employees cost	Accounts
	IV. Statement of bonus liabilities	Accounts
	V. Statement of Provision for liabilities for O& M, Capital and expenses	Accounts
	VI. Statement of Work in Progress and completion reports	Accounts
	VII. Replacement [Transformer / other Asset] Statement	Accounts
	VIII. Statement of income accrued and due	Accounts
	IX. Statement of O& M materials at site	Accounts
	X. Statement of surplus materials (capital) at site	Accounts
	XI. Statement of unutilized/spares (capital) against ongoing works	Accounts
	XII. Statement scrap / Un-serviceable / Damaged stores	Accounts
	XIII. Statement of materials in transit / material pending inspection / verification	Accounts
	XIV. Statement of loss of stores materials	Accounts

	XV. Statement of loss of cash	Accounts
	XVI. Statement of miscellaneous advances with staff and other	Accounts
	XVII. Statement of pre-paid expenses, telephone rent charges, postage stamp / other stamps Proforma	Accounts
	XVIII. Statement of prior period expenditure adjustment account Proforma	Accounts
	XIX. Statement of Deposit Work carried out during the year	Accounts
	XX. Statement of estimated amount of contract remained to be executed on capital account as on 31st March	Accounts
	XXI. Statement of Addition to Fixed Assets including furniture and fixtures and office equipments etc.(A/c Code 10.1 to 10.9) during the FY purchases/ constructed assets transferred from CWIP	Accounts
	XXII. Statement of receipt of Fixed Assets including furniture and fixtures and office equipments etc. from Other Units (A/c Code 10.1 to 10.9) during the FY	Accounts
	XXIII. Statement of Transfer of Fixed Assets including furniture and fixtures and office equipments etc. to Other Units (A/c Code 10.1 to 10.9) during the FY	Accounts
	XXIV. Statement of Sale of Fixed Assets including furniture and fixtures and office equipments etc. to outside parties (A/c Code 10.1 to 10.9) during the FY	Accounts
	XXV. Statement of Stock as on 31st March (Account Code 22.610, 22.611,22.640 and 22.650)	Accounts
	XXVI. Statement of transformers held as inventory	Accounts
	XXVII. Statement of Deposits (Party wise and Account Wise detail to be submitted)	Accounts
	XXVIII. Statement of interest on Loans & Advances given to staffs as on 31st March	Accounts
	XXIX. Statement of complete Principal recovery and interest due on Loans & Advances to staff.	Accounts
	XXX. Details of R & M Expenses incurred from PSDF.	Accounts
	XXXI. Statement of Provision (Party Wise and Account Wise detail to be submitted as on 31st March).	Accounts
	XXXII. Statement of Reversal entries passed during the previous F.Y. for withdrawal of liability / provision created at the end of 31st March	Accounts
	XXXIII. Statement of contingent liability as on 31st March.	Accounts
	XXXIV. Statement of outstanding dues for more than 30 days exceeding Rs. 1 lakh to MSME units as on 31 st March previous year to 31st March current year	Accounts
11	Cost Management	Cost Management
	Maintaining cost-center wise or profit-center wise accounts for the organization.	Cost Management
	i) Preparation of Cost records as per CRA-1 Pursuant to rule 5(1) of the Companies (Cost Records and Audit) Rule, 2014.	Cost Management
	ii) The cost records shall be maintained at each of the accounting units.	Cost Management

	iii) The EHT O&M Divisions are operation cost centres	Cost Management
	iv) Other units are Service Cost Centres whose costs are apportioned as per rules to Operation Cost Centres.	Cost Management
	v) SLDC is treated as separate Cost centre	Cost Management
	vi) The records maintained at unit level is to be consolidated at Hqrs level.	Cost Management
	vii) Computation of profit/loss as per Cost Record along with per unit cost and profit/loss.	Cost Management
	viii) Reconciliation of Cost and Financial statements.	Cost Management
	ix) Generation of various reports following Cost Accounting Standards.	Cost Management
	x) Preparation of Annexures to Cost Audit Report	Cost Management
12	Energy	Energy
12.1	Invoice Entry to Receipt process: Enter and maintain invoices, Receive funds from customers	Energy
12.2	Accounting and Period End process: Create accounting for Invoices and Payments and transfer to GL,	Energy
12.3	Creation of new Customer	Energy
12.4	Generate Transmission charges invoice – Invoices for revenue from transmission charges to Distribution Companies, Interstate customers etc linking with GST invoice portal	Energy
12.5	Calculation of rebate allowed or Late payment surcharges	Energy
12.6	Accounting of invoices, payment receipts from customer, rebate allowed or Late payment surcharges etc.	Energy
12.7	There could be multiple reasons for adjustments to invoice once issued. This can be regularized by issuing Debit/ Credit notes	Energy
12.8	If required , revise invoices are to be generated in compliance to the Transmission Service Agreements.	Energy
12.9	Reconciliations with the customers in respect of units as well as values.	Energy
12.10	Different sources of revenue collection are as follows :-	Energy
	i) Transmission Charges from four DISCOMs	Energy
	ii) Transmission Charges from CGPs	Energy
	iii) Transmission Charges from Intrastate Open Access Customer(through SLDC)	Energy
	iv) Transmission Charges from Interstate Open Access Customer(through RLDC)	Energy
	v) Transmission Charges from IEX users	Energy
	vi) Transmission Charges from Power Grid Corporation Ltd(Through POC Mechanism)	Energy
12.11	Generation of different reports for Tariff filing.	Energy
13	Trust accounts	Trust
	OPTCL has five different trusts namely Pension Trust, Provident Fund Trust, Gratuity Trust, Rehabilitation Trust and Leave Encashment Trust. These Trusts are independent and separate from OPTCL and they maintain their accounts Trustwise.Separate master data like chart of accounts, vendors etc. shall be maintained for each trust. The requirements of the different Trusts are as follows	Trust

13.1	Gridco Pension Trust	Trust
	I. Preparation of Cash Book, General Ledger and subsidiary Ledger	Trust
	II. Preparation of the Annual Financial Statement	Trust
	III. Interface with pension preparation software for accounting entries of pension payment & arrear pension payment.	Trust
	IV. Accounting Entries for Investment under category I,II, III & IV .	Trust
	V. Interest Forecast statement monthly/quarterly/yearly for investments under Category I & II.	Trust
	VI. Investment details at the end of financial year	Trust
	VII. Accrued interest details at the end of financial year	Trust
	VIII. Preparation of TDS return	Trust
13.2	Provident Fund Trust:	Trust
	I. Preparation of Cash Book, General Ledger and subsidiary Ledger.	Trust
	II. Preparation of the Annual Financial Statement.	Trust
	III. Accounting Entries for Investment under category I, II, III & IV	Trust
	IV. Interest Forecast statement monthly/quarterly/yearly for investments under Category I & II	Trust
	V. Investment details at the end of financial year	Trust
	VI. Accrued interest details at the end of financial year	Trust
	VII. Preparation of TDS return	Trust
	VIII. Providing different types of advances such as Temporary Advance, Special Temporary Advance, Non-Refundable advance and Special Non-Refundable Advance to employees and recovery of the temporary advances	Trust
	IX. Final settlement of the dues of the employees in case of superannuation, death, VRS and resignation	Trust
	X. Calculation of Interest on the PF balance of the employees	Trust
	XI. Accounting of the above with cash book, ledger and subsidiary ledger	Trust
	XII. Preparation of the Annual Financial Statement	Trust
	XIII. Ledgers of the subscribers for calculation of interest. There are two types of Subscribers viz. Pensionary and Non pensionary	Trust
	XIV. Unit wise PF Subscriber Ledger for Pensioners	Trust
	XV. Unit wise PF Subscriber Ledger for Non-Pensioners	Trust
	XVI. PF code wise PF Subscriber Ledger for Pensioners	Trust
	XVII. PF code wise PF Subscriber Ledger for Non-Pensioners	Trust
	XVIII. Employee code wise PF Subscriber Ledger for Pensioners	Trust
	XIX. Employee code wise PF Subscriber Ledger for Non-Pensioners	Trust
	XX. PF account slip for Pensioners Subscribers	Trust
	XXI. PF account slip for Non-Pensioners Subscribers	Trust
13.3	Gridco Gratuity Trust:	Trust

	I. Preparation of Cash Book, General Ledger and subsidiary Ledger	Trust
	II. Preparation of the Annual Financial Statement	Trust
	III. Accounting Entries for Investment under category I, II, III & IV	Trust
	IV. Interest Forecast statement monthly/quarterly/yearly for investments under Category I & II	Trust
	V. Investment details at the end of financial year	Trust
	VI. Accrued interest details at the end of financial year	Trust
	VII. Preparation of TDS return	Trust
13.4	Gridco Rehabilitation Trust:	Trust
	I. Preparation of Cash Book, General Ledger and subsidiary Ledger	Trust
	II. Preparation of the Annual Financial Statement	Trust
13.5	OPTCL Leave Encashment Benefit Trust:	Trust
	I. Preparation of Cash Book, General Ledger and subsidiary Ledger	Trust
	II. Preparation of the Annual Financial Statement	Trust
	III. Accounting Entries for Investment under category I, II, III & IV	Trust
	IV. Interest Forecast statement monthly/quarterly/yearly for investments under Category I & II	Trust
	V. Investment details at the end of financial year	Trust
	VI. Accrued interest details at the end of financial year	Trust
14	Investment	Trust
	I. To manage investment in different types of securities	Trust
	II. Auto calculation of interest and accounting thereof	Trust
15	Interunit Accounts	IU
15.1	Inter unit transactions are transactions between field unit with head office and one field unit with another relating to the following transactions.	IU
	i) Bank Transfer from H.O to field unit	IU
	ii) Bank transfer from field units to H.O	IU
	iii) Payment by H.O on behalf of field units relating to party payment, tax payment, insurance payment etc.	IU
	iv) Material/ inventory transferred from one unit to another unit	IU
	v) Asset Transferred from one unit to other unit	IU
	vi) Transfer of personnel from one unit to other unit	IU
	vii) Receipts by H.O on behalf of field units	IU
15.2	Transaction created by one unit shall be reflected in the books of responding unit in a clearing box.	IU
15.3	After clearing by the responding unit the transaction shall appear in the books of the responding units.	IU
15.4	The inter unit accounts shall be nil after each reporting period say monthly/quarterly, half yearly, yearly etc.	IU
15.5	Facility to generate a report of pending, responded and un-responded Inter Unit Transfers (IUTs)	IU

15.6	Facilitate to automatically create relevant accounting entries at both units on acceptance of the inter- unit accounting by the recipient unit	IU
16	Taxation	Taxation
16.1	Creation of GST Invoices/Credit Note in E-invoice portal for B2B Sale	Taxation
16.2	Creation of GST invoices in QR code format for B2C sale	Taxation
16.3	Creation of Bill of Supply in OPTCL internal portal.	Taxation
16.4	Creation of Payment Vouchers for payment under Reverse Charge Mechanism	Taxation
16.5	Creation of E-waybill in case of transfer of material from OPTCL to OPTCL	Taxation
16.6	Filing of GSTR-1	Taxation
16.7	Filing of GSTR-3B	Taxation
16.8	Verification and availing /Reversal of ITC credit from GSTR – 2B	Taxation
16.9	Payment and Filing of GST TDS return	Taxation
16.10	Filing of IT TDS/ TCS return (NSDL designed format)	Taxation
16.11	Generation of Tax Audit Report	Taxation
16.12	Calculation of TDS/TCS in system at applicable rates	Taxation
16.13	Generation of income tax returns as required	Taxation
16.14	Calculation of Advance Income Tax to be paid in each quarter	Taxation
16.15	Facilitate to comply with all tax related statutory requirements in force in India and applicable to the company. The tax laws in the system should be upgraded with the latest tax laws on a regular basis.	Taxation
16.16	Facility to trigger automatic alerts prior to due dates of statutory lenders and posting related accounting entries requirements like tax payments/ return filings etc.	Taxation
16.17	Facility to print TDS certificates and print Income Tax ,GST and TDS report compliant with regulations, in file-formats which support e-filing.	Taxation
17	Inventory	Inventory
	I. Sub-division wise weighted average may be incorporated for issue of stores and valuation thereon.	Inventory
	II. Every purchase order should be classified whether Capital or O& M items to be procured for accounting of inventories and to track budgetary provision thereon.	Inventory
	III. All items to be procured which are in pipeline, the PO has to be segregated into prior to and after implementation of erp(SAP) for tracking of payment of materials PO wise as well as accounting thereon.	Inventory
	IV. All tower materials are to be classified in complete Set/MT considering different size and makes. Material Codes both in Complete set items as well as in Part are to be classified as per requirement of user units.	Inventory
	V. In case of Tower materials, cables, conductors etc., there must be tolerance limit (+)/(-) 5% in PO for acceptance of materials & for payment & accounting thereon.	Inventory

	VI. In case of Price variation of clause in PO covering items i.e. Transformers, Tower Materials, Conductors etc. are to be taken care of at the time of payment and accounting of materials.	Inventory
	VII. All materials supplied and delivered at site, the receiving officer, consignee and paying authority will be that unit/Cost center for online processing inventory transaction and payment and accounting thereon.	Inventory
	VIII. Service related transactions in connection with materials are to be dealt with separately for payment and store accounting thereon.	Inventory
	IX. Cost reduction (Penalty) for delay in supply of materials is to be taken care of for accounting of materials as well as to avoid future compliance of GST.	Inventory
	X. Issue of materials to third parties are to be taken care of.	Inventory
	XI. Age-wise information of present materials are to be incorporated in the system in order to generate report for further classification and control over materials.	Inventory
	XII. Sub-division wise and division wise price Store Ledgers to be generated.	Inventory
	XIII. Purchase Order wise report towards payment and receipt of materials are to be generated for better control.	Inventory
	XIV. ABC Analysis report also to be generated.	Inventory
18	Payroll	Payroll
	i) Details of PF deduction unit-wise	Payroll
	ii) Details of NPS deduction unit-wise	Payroll
	iii) Reports of all types of recoveries from employees separately	Payroll
	iv) Amount of Income Tax, Professional Tax etc to be deposited monthly.	Payroll
	v) Other recoveries to be deposited monthly.	Payroll
	vi) Component wise accounting of payroll at unit level.	Payroll
	vii) Generation of payslip for all the employees.	Payroll
	viii) System should update original payment entries after salary disbursement	Payroll
	ix) Unit-wise and bank wise payment report for salary.	Payroll
	x) Auto reflection of advances in payslip.	Payroll
	xi) Payment of arrear salary/arrear DA etc. during a month.	Payroll
	xi) Calculation of interest on interest bearing advances.	Payroll
	xii) Issuance of no-due certificate against interest bearing advances.	Payroll
	xiii) System should configure various tax rules (e.g. Income tax, Professional taxes, etc.) on basis, method of calculation, Default percentage rates, General accounts to which tax effects may be posted, Applicable State etc.	Payroll
	xiv) System should maintain details of Loans & Advances of each employee on the payroll	Payroll

	xv) System should compute all statutory deductions from salary such as Income Tax,EPF/GPF contributions, HBA, Insurance premium etc. (details to be finalized) and deduct the same from the Payout figure	Payroll
	xvi) System should maintain the tax slabs, rates and surcharges and compute the tax automatically as per prevailing tax rate.	Payroll
	xvii) System should post the salary details to General Ledger classified under appropriate HoA (Head of	Payroll
	xviii) System should be able to prepare quarterly and annual tax returns	Payroll
	xix) System should support generation of Form 16 and other statutory documents	Payroll
19	Account)	OTHERS
19.1	Defining security for all accounting activities at each level as under:	OTHERS
	i) User level	OTHERS
	ii) Account level	OTHERS
	iii) Transaction level etc.	OTHERS
19.2	Defining different locations.	OTHERS
19.3	Maintaining the accounting details for all defined locations.	OTHERS
19.4	Extension of the master data across all defined locations.	OTHERS
19.5	Ensuring that all pending activities are carried out before the closure of any transaction.	OTHERS
19.6	Recording the relevant account codes and cost centers.	OTHERS
19.7	Retrieving appropriate cost-center details vis-à-vis the given parameters.	OTHERS
19.8	Recording all organizational details.	OTHERS
19.9	Defining a mandatory check-list to be satisfied before creation of any claim (employee / supplier / contractor, etc.).	OTHERS
19.10	Listing the accounting years, accounting periods, cost-centers / cost-units, cost-elements, profit- unit structure, cost-element structure, etc.centers,	OTHERS
19.11	Providing variance analysis reporting (cost-center variance).	OTHERS
19.12	Monthly MIS & costing on the basis of actual monthly accounting figures.	OTHERS
19.13	Facility to interface or File format so as to interface with Govt. Portal to generate E-WAY bill.	OTHERS
19.14	Facility to generate invoices with taxes and record automatic accounting for consumers.	OTHERS
19.15	Facility to generate dashboard reports (MIS) as per OPTCL requirement in all modules.	OTHERS
19.16	Any other process relevant and necessary to FICO process that are not mentioned also to be covered.	OTHERS
Anything not mentioned above which may arise during implementation may be taken care of.		

TRS - Procurement Module	
1.0	Procurement Planning
1.1	Provision for annual procurement planning and budgeting.
1.2	Provision for annual material plan for different offices individually and as a whole.
1.3	Provision to optimize different requirements/requisitions coming from different offices before generating procurement plan.
1.4	Provision to categorise products and services after analyzing the optimized requirements.
1.5	Provision to do procurement plan for Individual vendor, Plan for Individual Item/Item Group etc...
1.6	Provision to keep inputs from different supplier/vendors regarding products and service in procurement planning.
2.0	Purchase Requisition
2.1	Provision to check the availability of budgets during purchase requisition.
2.2	Provision to track and display lead time for purchasing material by material number / material group before creating purchase requisition.
2.3	Provision to create purchase requisition for various types of purchases e.g. stock materials, non-stock materials, services, assets, contract labour etc. Provision to check the current stock and On hand stock of any store.
2.4	Provision to configure the approval hierarchy for different purchase requisition. Provision to update the approval hierarchy as and when required.
2.5	Provision to set up approvals levels based on norms recommended by OPTCL like items classifications, procurement value, designation, office type etc.
2.6	Provision to provide/revoke purchasing rights to the employees of OPTCL as and when required.
2.7	Provision to add user defined instructions for bidders, approver, purchaser etc...in the purchase requisition.
2.8	Provision to generate unique purchase requisition number as per OPTCL standard and restrict to create duplicate purchase requisition.
2.9	Provision to check the status of purchase requisition at any point of time and notification/alert to be sent for the purchase requisition those are awaited for approval.
2.10	provision to configure requisitions based on predefined criteria e.g. value, department, type of purchase etc.
2.11	Provision to modify update requisitions and resubmit for approval.
2.12	Provision to cancel/reject/reassign purchase requisition or return to the creator for more information/correction and resubmit. Provision for comments during approval.
2.13	Provision to track the status of the requisition based on status
2.14	Provision to filter/search Purchase requisitions based on different input parameters.
2.15	Provision to link the purchase requisition to a valid project or cost center
2.16	Provision 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.
2.17	Provision to track changes of purchase requisitions and generate audit trail history.
2.18	Provision to generate different reports of the purchase requisitions created over a period for a department /Office.
2.19	Provision to generate report based on status of purchase requisitions
2.20	Provision to search and generate reports based on user defined criteria e.g. requisition number, status, date, material number, description, originator etc.
2.21	Provision to display report on search results on purchase requisition details based on key fields like purchase requisition numbers/Item Name/Item Id etc...
2.22	Provision to generate exception report on purchase requisitions rejected, not approved cancelled etc.
2.23	Provision to ensure that unutilized budget gets added back to main budget at the time of generation of relevant Purchase Requisitions/PO.
2.24	Provision to receive requisition from different offices/employees for IT Items including consumable items.
3.0	Procurement of Materials
3.1	Budget Provisions / Allocation & controlling.
3.2	Integration with eTender Portal
3.3	Draft Purchase Order.
3.4	Purchase Order generation with unique number as per OPTCL practice.
3.5	Drawing design approval and issue of manufacturing clearance. Approval of Schedule Delivery timeline
3.6	Management of Security Deposit and Bank Guarantee Details.

3.7	Inspection Details / Check measurement / Quality checking / Sample materials.
3.8	Approval of test reports, Joint Verification Report, issue of Dispatch Instruction.
3.9	Material Accounting / Delivery at Stores. (SRV)/Return to Vendor
3.10	Bill Passing / Passing of Materials
3.11	Liquidated Damages – Automatic Calculation and deduction while payment.
3.12	Amendment of Qty. variation, time extension, change in destination, Change of Vendor Address, Change of Consignee, Paying officer etc...
3.13	Updation of unit price as per Price variation.
3.14	Purchase Order Closing.
3.15	Automatic Reminders for Bank Guarantee during expiration or closing of PO.
3.16	Major master records to be maintained
3.17	MIS Reports to be maintained
3.18	Vendor rating.
	1. Head office Procurement Processes.
	2. Zone Office Procurement processes
	3. Circle office Procurement Processes
	4. Division office Procurement Processes
	Each level contains Master Data, Purchase Order, Types of Tender, Terms of Payment, Billing, Inventory and Reports.
	Provision to setup the approval flow of Purchase Order as per the OPTCL practice.
	Provision to cancel/reject/reassign purchase requisition or return to the creator for more information/correction and resubmit. Provision for comments during approval.
4.0	Procurement of works / Services Contracts
4.1	Rate Contract for supplying of materials.
4.2	Rate Contract for Execution of works.
4.3	Rate Contract for services.
4.4	Tender finalisation with all details and process flow.
4.5	Estimate submission, approval, tender call for, tender opening, lowest rate arrival. Impanelment of firms for 4.1 and 4.2. Award of W.O for 4.3
4.6	Sending service acceptance order (PO order), agreement signing.
4.7	Work completion progress, payment Rate contract with price variance for components as per Central Statistical Organisation / Material Index provided by Appropriate authorities. (Govt. of India, Central Statistical Organisation)
5.0	Purchase Order Management
5.1	Provision to create purchase order (PO) directly or with reference to a Bid/Tender document, a contract, purchase requisition, or another purchase order.
5.2	Provision to create PO for different types of purchases e.g. stock materials, non-stock materials, services, assets, contract labour etc.
5.3	Provision to create PO automatically based on preset conditions in the application.
5.4	Auto Suggestion for PO incase material reached Min Qty level in the Store (As specified configuration)
5.5	Provision to create PO with multiple delivery addresses and staggered delivery.
5.6	Provision to have the following as part of the PO:
5.7	Auto numbering of PO as per OPTCL practice.
5.8	Requisition originators name and details as applicable
5.9	Item details with document attachment options to enable viewing item details both in Header and Line section of the PO.
5.10	Text fields for user defined special instructions for Supplier/Approver etc...
5.11	Provision to record Reference Old PO No.
5.12	Provision to add ship-to address, bill-to address, Consignee, invoice-sent-to address in the Purchase order.
5.13	Provision to apply same Delivery location/Consignee etc... to multiple line in one go on selection if the delivery location is same for multiple lines.
5.14	Provision to maintain shipment-from, bill-by/payment to be released, report- to, vendor address etc... in PO
5.15	Provision to capture payment terms in distinct parametric form e.g. full/part/advance, mode of payment, etc./address to release the payment
5.16	Provision to capture inspection requirements, acceptance criteria, etc. in PO
5.17	Provision to specify packing, shipping, scheduling instruction against item for PO (if desired unit wise packing may be asked for)
5.18	Provision to record standard documents of latest version like Standard Terms and Conditions of Indigenous/Import procurement, PBG, Bankers List, EMD etc which can be attached to a PO.

5.19	Provision for multiple UOM for items for inventory and for placing order
5.20	Provision to track the authorization status and generate alerts based on PO awaiting approval
5.21	Notification to stakeholders on deviation in Delivery schedule.
5.22	Provision of updation of PO and resubmit for approval
5.23	Provision for consolidataion of multiple purchase requisitions into single PO for the same vendor.
5.24	Provision to create multiple PO s from single requisitions for different vendors
5.25	Provision to split PO between vendors based on user defined parameters
5.26	Provision 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
5.27	Provision to display budget available for the purchase and generate alert if no budget is available or PO value exceeds budget during PO creation.
5.28	Provision to refer 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 :
	Requires a material number
	Requires an account assignment (i.e. whether you are required to enter an account assignment category)
	Needs to be kept in stock
	Requires a material receipt and/or invoice receipt etc.
5.29	Provision to get the preferred vendor list for the items selected in the PO
5.30	Provision to refer to previously existing contracts with the selected vendors while creating PO and check their status/deviaion on execution the contract.
5.31	Provision to record and uplaod the PO acknowledgement against the PO from vendors in the system.
5.32	Provision to capture Purchase Order receipt/ Acceptance,Planned delivery date, delivery Instruction etc... given by the vendor in the system.
5.33	Provision to follow up on the vendor for delivery by sending reminders/ risk & cost notice through email. System shpould suggest the reminder automatically and track the updates.
5.34	Provision to amend Purchase Order with user's approval/ financial concurrence and approval of Competent Authority and to keep track of all past amendments.
5.35	Provision to attach documents and specifications to PO (Both in Header and Line of the PO)
5.36	Provision to record delivery and shipping information related to a PO
5.37	Provision to record vendor performance data for deliveries against a PO upon inspection.
5.38	Provision to enable three/ four way matching of PO, Material Receipt, Quality Inspection Report and Invoice generated in the system
5.39	Provision to release schedules against a Purchase order for staggered delivery.
5.40	Provision to provide for GST/taxes and duties for various/individual items with respect to HSN Code in the Purchase order.
5.41	Provision to apply same GST/Taxes to multiple line on selection, if Taxes for multiple line is same.
5.42	Provision to record specific terms of trade or payment in a PO e.g. Payment Terms and Due Dates etc.
5.43	Provision to record vendor discounts in the PO details
5.44	Provision to search and display previously created PO by User,for vendor,by item code, PO number etc...
5.45	Provision to generate alerts to the stakeholders for PO about to become due.
5.46	Provision to track PO due dates and produce generate report to originators on overdue Pos.
5.47	Provision for PO creation based on standard templates for regular purchase items
5.48	Provision to follow-up on the vendor through email for order delivery
5.49	Provision to display transactions history against the PO
5.50	Provision to automatically calculate LD based on PO terms and with respect to material receipt date and Service entry sheet (M.Book)
5.51	Provision to generate report on purchase order history for an item
5.52	Provision to generate report on change history for a particular PO
5.53	Provision to generate reports on PO by user defined criteria e.g. PO numbers, Vendors, Material numbers, originator, Area Offices
5.54	Provision to generate report on POs due or overdue
5.55	Provision to generate report on PO outstanding payment history
5.56	Provision to generate report PO based on status
5.57	Provision to generate report on user defined exceptions on PO e.g. Delivery exceptions, payment exceptions etc.
5.58	Provision to create note on "Time Extension" approval with LD or without LD
5.59	Provision to create PO with multiple currency and maintain exchange rate while processing invoice
5.60	Provision to maintain various payment terms and automatic adoption while processing invoice
5.61	Provision to maintain technical and commercial terms and auto check while processing invoice.

5.62	Provision to calculate SD, EMD,PBG/CPBG.
5.63	Provision to generate PO closure report and report as required by OPTCL.
5.64	Auto reminder for extension to Bank/Vendor. Validation Letter etc...
5.65	Import from Excel Or Copy from Excel.
5.66	Comparision between two revision before approval. Heighlights the Modified fields for quick revision.
5.67	BG Reports based on PO/Amount/Bank/Expire Date etc...
6.0	Service Procurement
6.1	Provision to support procurement of services through recording details of list of service items, bill of services, estimated rates etc.
6.2	Provision to make detailed estimates for civil, mechanical, electrical, instrumentation works,IT,Telecom etc.
6.3	Provisiom to revise estimates, if required, during the execution of the order
6.4	Provision to support multiple type/modes of tendering for service procurement like RFQ, direct PO etc.
6.5	Provision to create a schedule of rates for various service items that would be used for all cost estimation for service procurement.
6.6	Provision to create a service requisition/ proposal from an existing requisition
6.7	Provision to add terms and conditions information for each contract proposal or Execution Order (EO, also referred as Order in OPTCL)
6.8	Provision to direct the tender to the appropriate authority fund allocation/ approval as per defined hierarchy.
6.9	Provision to generate Execution orders from the tender and the services chosen
6.10	Provision to create multiple execution orders from one requisition
6.11	Provision to compare the current offer with previous offers on another Execution Order
6.12	Provision to record execution order receipt confirmation from the vendor
6.13	Provision to auto generate unique execution order number as per OPTCL practice.
6.14	Ability to specify staggered job completion pattern
6.15	Provision to create a blanket execution order/ rate contracts with or without quantity commitment and with or without schedule
6.16	Provision to generate automatic alerts/ reminders when a contract is about to be expired or requires renewal
6.17	Provision to generate a work schedule for various activities along with service item number, description, completion date, status updation, etc.
6.18	Provision to monitor the order execution with respect to time and cost budgeted vs. the time and cost left
6.19	Provision to track the payments are made to the workers by the Contractor as per the statutory requirements
6.20	Provision to record acceptance/ rejection/ partial acceptance of the service provided
6.21	Provision to monitor the order execution with respect to materials issued, payments made to the Contractor, materials returned by the Contractor
6.22	Provision to evaluate the Contractor performance based on pre- defined parameters, record and provide feedback
6.23	Provision to calculate deviations in scope and time and levy penalties/ liquidated damages and deduct the same from final payment to Contractor
6.24	Provision to provide a source list of various jobs with job codes and the related list of vendors attached to it
6.25	Provision 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.
6.26	Provision to amend proposals and resubmit for approval.
6.27	Provision to amend/cancel execution orders/offloading of contracts
6.28	Provision to track execution order wise performance guarantee, Bank Guarantee expiry dates etc...
6.29	Auto reminder on expire of Bank Guarantee, Provision for updation of Bank Guarantee
6.30	Provision to track execution order history, search execution orders by Contractors, nature of job, etc
6.31	Provision to add payment terms and actual payments made
6.32	Provision to link material issues, returns against an execution order(including recovery against Free Issue of Material not returned/used) with material reconciliation contract wise.
6.33	Provision to track execution order status in terms of time and cost budgeted
6.34	Provision to track execution order wise material and manpower usage versus the budgeted quantity and highlight any deviations

6.35	Provision to link payment to the Contractor with the status of the contract execution for real-time monitoring.
6.36	Provision to send alerts/notifications at defined period/status for a contract when specified parameter value is reached.
6.37	Provision to generate report on status of a service execution order
6.38	Provision to generate report on service execution orders for OPTCL.
6.39	Provision to generate report to evaluate vendor performance on user defined dynamic criteria.
6.40	Provision to generate report on exceptions based on delivery slippages, deviations, time overrun and cost overruns
6.41	Provision to generate reports on service procurement execution order status e.g. completed, vendor acknowledged
6.42	Provision to generate estimate, work order, Workorder closure, Settlement of cost and other process as per OPTCL procedures.
6.43	Provision to fetch the cost data value automatically in estimate preparation process.
07	Estimate & Work Order
7.1	In principle approval for the project.
7.2	Survey, soil testing, preparation of DPR and Estimate for the work. (Capital and R&M works).
7.3	Technical sanction to estimate (as per delegation of power)
7.4	Integration of eTender Portal.
7.5	Generation of work Order approval (Technical and financial).
7.6	Provision to enter Tender Details in the PO/WO/SO.
7.7	Approval of PERT chart linking to payment and progress schedule.
7.8	Amendment of Work order related to quantity variation, time extension, updating unit price after PV, rescheduling of destination, shipment.
7.9	Work Order Closure (Technical and Financial).
7.10	Work Order – Issue of Materials against work order, Devolution of Materials against work order, agreement claim against work order. Work Order for Maintenance (Breakdown, Preventive, Corrective, Annual Maintenance, etc.)
7.11	Functional Location, Maintenance Plant (Section or Circle or area), Planning Plant, Equipment Master, BOM, etc.
7.12	Warranty Claim, Work Clearance Management (Line Clearance)
7.13	Capital Estimate and Capital Work-order
	1) Schedule of turnkey project such as Substation, Buildings, Projects etc...
	2) physical progress. Milestone activities, external activities, start date, end date, critical path analysis, etc.
	3) Annual overhauling schedule, activity, external service, internal service, material requirement, etc.
8	Purchase/Procurement Management System
8.1	Vendor Management
8.2	Provision of centralized vendor master records management which will be available across the Organisation.
8.3	Provision to record vendor records including alternate / short name for vendor, Contact person for each vendor address, Vendor Site, vendors bank account information etc...
8.4	Provision to record TDS details, PAN number and GSTN number, Tax details required for ensuring compliance with Indian Tax laws considering both direct & Indirect taxes, Default currency for invoice/payment
8.5	Provision 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...
8.6	Provision to support multiple site/addresses against each vendor.
8.7	Provision to support automatic vendor numbering
8.8	Provision to define different vendor types e.g. domestic vendors, international vendors
8.9	Provision to maintain vendor list details e.g. company history, saleable model, shipment, payment method.
8.10	Provision to maintain vendor lists for OEM vendors and trade vendors
8.11	Provision to update vendor records e.g. bank account information and support authorization of changes made
8.12	Provision 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.

8.13	Provision to classify vendors with regards to: supplier, Contractor, sub-Contractor, transporter, approved/registered, blacklisted/active/not active, dormant, under trial, etc.
8.14	Provision to support all kinds of sub-contracting activities like material issue, material receipt etc.
8.15	Provision to display vendors based on vendor grouping/ classification
8.16	Provision 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
8.17	Provision to record vendor transactions history including purchasing history, payment history etc.
8.18	Provision to record evaluation of vendor credentials to qualify vendors as preferred vendors for specific items
8.19	Provision to maintain a preferred vendor listing for specific item e.g. item A has 3 preferred vendors A1, A2 and A3
8.20	Provision to generate vendor registration certificate indicating eligible item groups online.
8.21	Provision to restrict creation of purchase orders for items only for its preferred vendors.
8.22	Provision to verify existence of vendor rate contracts at indenting stage and display alerts for sourcing.
8.23	Provision 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 and other user defined parameters
8.24	Availability of vendor rating system based on configurable user defined weightages on multiple parameters (in accordance with Vendor Rating Policy adopted by OPTCL and subsequent amendment thereof)
8.25	Ability to restrict maintenance / access to vendor master record to specific users
8.26	Provision to merge / correlate vendor details (e.g. one vendor taking over another vendor). Enabling tracking change of status from a date
8.27	Provision to pay each invoice individually or multiple invoices together for same vendor and manage outstanding balances accordingly by linking payment to invoices.
8.28	Provision to link every payment to invoice(s) and manage outstanding balances for individual vendors
8.29	Provision to generate alert for predefined vendors/POs/WOs before payment
8.30	Provision to prioritize payments based on pre-defined criteria e.g. due date, vendor category etc.
8.31	Provision to support Third Party payment options (Bank attachment cases, Power of attorney cases, etc.)
8.32	Provision to print cheques as per payment instruction
8.33	Provision to support payment through Letter of Credits
8.34	Provision to support predefined approval hierarchy and authorization workflow for payment to vendors based on amount, vendor category
8.35	Provision to appropriate / adjust advance payments against multiple contracts/invoices
8.36	Provision to allow vendor's request for addition of new items.
8.37	provision to display period-to-date, quarter-to-date, year-to-date vendor balances.
8.38	Provision to block payments to vendors
8.39	Provision to integrate with finance functions e.g. accounts payable, general ledger
8.40	Provision to track vendor/ supplier performance against pre-defined parameters set by OPTCL or regulator.
8.41	Provision to support different business rules and policies for each Vendor class/category/type
8.42	Provision to generate periodic report on vendor alterations to vendor master
8.43	Provision to generate vendor account statement to be sent to the vendors
8.44	Provision 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 OPTCL.
8.45	Provision to generate Vendor analysis reports for spend analysis, performance in terms of on-time in-full delivery, rejections, etc. Ability to generate reports by outstanding orders, orders shipped but not received, overdue outstanding orders, orders not fulfilled on time etc.
8.46	Provision to generate report on material returned to vendor that shows the items returned to supplier by Location, Vendor, PO, Category, Product Code, Reasons for return, Value of Material return etc.
8.47	Provision to generate timeline based communication history with the vendor regarding various services like delivery, payment, field service, etc.
8.48	Provision to generate ageing report, outstanding balance report i.e. balance due to / from vendors
8.49	Track exceptions, In case error in approval flow, provisions to be given to authorised user to correct the flow and reinitiate the approval.
8.50	Authorise employee to PO/Requisition creation.(Buyer Creation)
8.51	Purchasing Period Management.Open/Close purchasing periods.
8.52	Provision for JV
8.53	Provision for Sub-contracting

TRS - Inventory Module	
1	Item Master / Material Master (Master Data Management)
1.01	Item creation / item assignment, linking to finance account code based on Asset, Expense(consumable)/ T&P/ Inventory materials
1.02	Provision to end user to request to create new Master Item Creation and implementation of approval flow to approve the request. Provision to validate the duplicate creation of new Item and Item Code.
1.03	Proper access for verification of Inventory materials and transactions to be provided to the concerned officers of the o/o Division/Circle/Zone/CGM.
1.04	LOV to be restricted only for the materials available in the Inventory (stock materials) not for assets Miscellaneous issue / Receipt not for whole list.
1.05	Provision to search Material based on their status Active/Scrap/Scrap Under Process/Un Serviceable etc...
1.06	Provision to record and maintain item master list with availability of Material Number/HSN Code/Part Code as primary identifier for various material types including spares and consumables
1.07	Provision to generate material code automatically for item entry to item master as well as support manual entry
1.08	Provision to support alphanumeric material codes
1.09	Provision to capture detailed material information including the categories of data to support core material management transactions like material receipt, material issue etc.
1.10	Basic data like Material No., Item Description, Unit of Measurement, status, origin, type, conversion factors, ownership details etc.
1.11	Inventory management data i.e. material history, MRP data, ABC classification, inventory location, safety stock, Re order level etc.
1.12	Purchasing data i.e. purchase rule, tax/duties rule, ordering batch size etc.
1.13	Costing data i.e. standard price, moving average price etc.
1.14	Provision to support item groups or categorization of material into material groups, type and location etc.
1.15	Provision to support approval workflow and automatically trigger material data authorization upon material data entry
1.16	Provision to modify material details and resubmit for approval
1.17	Provision to track material authorization status pre and post approval
1.18	Provision to track changes made to material record with details of changes made, changing entity and approver of changes
1.19	Provision to reject material record and update material record status with reasons
1.20	Provision to record whether material is moving or non-moving or obsolete delete a material record which are non-moving, obsolete
1.21	Provision to link material to vendor / supplier details
1.22	Provision of search functionality based on material numbers, partial item description, shelf life, warranty period, specifications etc...
1.23	Provision 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
1.24	Provision to support multiple Units of Measure(UoM) for an item
1.25	Provision to create catalogues for different material types, spares and miscellaneous items
1.26	Provision to capture details regarding insurance of the materials
1.27	Provision to generate detailed item wise report of material information
1.28	Provision to generate report on revaluation materials and display valuation history
1.29	Provision to generate report on material performance e.g. material history report, material blacklist report, damage during warranty period
1.30	Provision to generate material reports for separate material type, material group, location etc.
1.31	Provision to create necessary provisions for slow moving/non-moving inventory as per business rules
1.32	Provision to maintain material Valuation for R&M(O&M), Capital, Scrap, Obsolete, etc.
1.33	Provision to maintain the Cost of material as per the cost data determined by OPTCL.
2	Inventory Management & Inventory Transaction
2.01	Provision for attachment in different Material transaction process(Indent/Move Order/Misc Transaction/PO Receipt etc..) for reference.
2.02	Provision to add Transaction type, Sub-inventory (source/Destination) etc...in each line item. Provision to Manage proper approval flow for all type of Material transaction as per OPTCL's requirement.
2.03	Provision to capture transportation details(like Vehicle No) in the Material Transaction form which needs to be reflected in the gate pass report.

2.04	In case of Reassignment in the approval flow, issued by column in the gate pass report should change over to the officer being re- assigned to issue the materials.
2.05	While doing Transaction on Misc. Receipt category, the Price of the item should not change (Due to Cost Averaging of the Division, it changes finally). The price of the Item should remain same as received and should be confined to the concerned Sub-Division only. Its cost will be calculated on the basis of Store wise Weighted average.
2.06	Provision for displaying the history of the Item during issue of materials in inter-org, move order & Misc trans.
2.07	Editing option for qty. and sub-inv(location source/dest.) in requisition (indent /Po req.) and move order during approval
2.08	Provision to manage the Approval flow dynamically, So as and when required by management the work flow can be defined by OPTCL.
2.09	Configuration to be done as per the requirement of OPTCL so the standard reports being prepared periodically for MIS or the statutory reports required by Auditors / Commission / Govt. maybe incorporated. These inputs may be collected from Finance and Stores Wings.
2.10	Provision to download the reports in PDF format with proper page setup.
2.11	Intra-division transaction (Move order) history should show with name with whom it is pending.
2.12	Proper Form Validation needs to be incorporated for all Material Transaction w.r.t Material Issue and Receipt.
2.13	Dropped
2.14	Dropped
2.15	Dropped
2.16	Dropped / Duplicate
2.17	Notification needs to go all the stake holders each events of Material Transactions.
2.18	Item status / on hand qty. with change status (active / unserviceable / scrap) are to be shown with price and store name properly.
2.19	Material issued to third party on loan/ hire and on payment / sale basis through move order issue where only the required finance accounts to be displayed in LOV.
2.20	System should restrict the before date transaction based on the history of date & time transaction made in the system (the item and quantity of the materials) in material transaction
2.21	Provision of Edit/Delete of Items in the transaction forms.
2.22	Provision of Update/Delete after Submit/Approval for all transaction including Misc. Transaction.
2.23	Provision for updating the Tax as per tax rate during delivery.
2.24	The freight was allowed in lump sum in purchase order, whereas materials were received partly from time to time as per instruction of Despatch Instruction. As a result the freight was calculated by the system was not tallied with actual value which was allowed for payment on unit basis. The actual freight which is to be allowed in the bill may be rectified at the division level.
2.25	The materials are received under the Capital scheme, O&M scheme, RGGBY, PSDF etc and inventory module may flexible for incorporation of all the material for different purpose
2.26	Configuration to be done implement the weighted Average costing Method at store wise & accounting at division level for inventory items.
2.27	Facility in ERP to export consolidated & line wise in excel format for PO, Material transaction etc.
2.28	System should validate the transaction form and notify if entered quantity is more than the available quantity.
2.29	Provision to update the variation in duties & taxes towards the material cost to substantiate the actual cost of the materials instead of the P.O Cost.
2.30	Process for Inventory Scrap & a report in form – 18 for declaring serviceable to scrap to be guided by providing help manual in the form.
2.31	For Stores Verification Changes after the physical verification, 'Physical Inventory Analysis Report ' to Include and Stores Owner,Store Verification Party Representative Signature will be taken After the report is signed off by both the parties adjustments will be posted.
2.32	Issues related to Invoice / passing bills are to be taken care...
2.33	Purchase cost/ Landing cost is to be properly matched with the inventory cost in the SPL reports and Penalty/ price variation will be booked to a revenue account.
2.34	Service related expenses (like supervision charges of firm, type test charges of firm, inspection charges of Transformer paid to M/s CPRI transformers and price variation of Transformers are dealt with manually for issue of ATDs to the concerned units for capitalization of the same. We may develop the existing system of erp or separate module may be designed in order to handle the service related expenditure. And also PV(price variation to be linked to PO module with payables at Divn. level access.

2.35	Provision to record multiple physical store locations, capturing individual store physical description details
2.36	Provision to support multiple inventory status for individual items including the following:
	Active
	Scrapped
	Obsolete
	In Transfer
	Blocked / Scrap Under Process
	Restricted Use
	Under Repair
	Special Project Stock
	Reserved Stock
	Any other as per requirement
2.37	Ability to track material movement for each store including:
	Receipts
	Issues
	Intra Store Transfers
	Assigned to Employees
	Inter Store Transfers
	MiscIssues / MiscReceipt
	3rd Party Issue & Receipt
	Transfer to Scrapped Stock
	Transfer to Obsolete Stock
	Quarantines Stock/Reserved Stock
	Returns
	Under Repair
	Any other as per requirement
2.38	Provision to track and monitor stock at various store locations, Central Stores , Area Stores, Sub-station Stores, at individual store level and at aggregate level
2.39	Provision to plan for inventory based on consumption pattern, present stock, procurement lead times, projected requirements etc.
2.40	Provision to perform various kinds of inventory analysis like ABC analysis, XYZ analysis, Fast/Slow/Non-moving analysis, Min-Max analysis, etc.
2.41	Provision 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
2.42	Provision to store shelf life details for items and display alerts when items reach end of life (user defined) and remains un-used
2.43	Provision to store material movement history in each store and for each item e.g. fast, slow moving and non-moving
2.44	Provision to classify inventory under bulk material, finished material, capital items, job work and disposables
2.45	Provision to assign a service level to an inventory item e.g. 100% for critical items and this will be linked to reorder levels
2.46	Provision to schedule evaluation as per predefined business rules e.g. A Level Items will be counted once every month and freeze inventory for evaluation
2.47	Provision to support in stock replenishment for all stock items based on parameters like re-order point, safety stock level, consumptions patterns etc. The system should estimate ordering quantity and delivering schedule which can be converted automatically into purchase requisitions
2.48	Provision to trigger stock replenishment for all stock items on the basis of various parameters like reorder level, safety stock level, material consumption
2.49	Provision to estimate suggested ordering quantity and delivering schedule for individual items for stock replenishment
2.50	Provision to generate purchase requisitions based on re-orders automatically for items based on predefined system configurations
2.51	Provision to support inventory valuation methods like Weighted Average etc.
2.52	Provision to estimate total inventory carrying cost based on inventory valuation method
2.53	Provision 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)
2.54	Provision to generate item wise stock status reports on current inventory status based on material receipt, material issue and stock balances on a daily/weekly basis.

2.55	Provision to generate consolidated YTD/MTD inventory report on receipts, issues, stock adjustments, scrap inventory, material returned to suppliers, etc.
2.56	Provision to consolidate and generate report on item wise total inventory levels for all stores
2.57	Provision to generate stock-out reports
2.58	Provision to generate report on inventory analysis e.g. material consumption pattern across stores
2.59	Provision to generate report on availProvision of inventory during requisitioned and actual service level for items
2.60	Provision to generate report on age analysis and shelf life evaluation
2.61	Provision to generate report on un-used materials procured for a specific purpose
2.62	Provision to do quantity reconciliation between procurement, consumption, dispatch, shortages and closing stocks
2.63	Provision to generate Asset Code as per requirement of OPTCL.
3	Within the Store & Inter Store Transactions
3.01	Central Stores / Sub-Stores
3.02	Inter Stores Transaction
3.03	Inter Circle Transaction
3.04	Inter Zone Transaction
3.05	External / Internal Fabricator / Contractor / Third party / Loan basis to vendor
3.06	Cost Methods:- All the sub-divisions will use the Average costing Method & accounting at division level
3.07	Sale / Scrap with values (scrapping procedure documents given separately)
3.08	Adjustment Receipt / Issue
3.09	Material for Testing Issue / Receipt
3.10	Supplier Receipt
3.11	Field Officers Requisition / Devolution
3.12	IT Store Transaction
3.13	General Branch Store Transaction
3.14	Provision to support physical movement of stock between stores i.e. inter-store transfers
3.15	Provision to record order for inter-store transfer by pre-configured authorized entity in the system
3.16	Provision to generate material issue request/store indent form/ store transfer note (STN) based on order for inter-store transfer from the material requesting store to the material issuing store
3.17	Availability of configurable approval workflow for approval for inter-store transfer
3.18	Provision to modify workflow on approver update
3.19	Provision to issue material and generate Material Issue Note for inter-store transfer
3.20	Provision to post material transfer and update inventory status of issuing store
3.21	Provision to generate delivery details/Issue notes and Gate Pass based on Material Issue note for inter-store transfer
3.22	Provision to record receipt of material at receiving store and generate Store Receipt Voucher (SRV)
3.23	Provision to display updated inventory status after material receipt in receiving store
3.24	Availability of material control functionality to check material issued from issuing store with material received in receiving store and post transfer of material
3.25	Availability of capture the Rate Contracts for Inter Store Transfer and rationalize the transportation linkage to Finance Module
3.26	Provision to generate report on item wise inter-store transfer consolidated across stores
3.27	Provision to generate report on all items received and issued for inter- store transfer for a storage location as and when required
3.28	Provision to generate exceptions and item quantity mismatches arising out of inter- store transfer
3.29	Provision to report on trends of regular item shortages in a store resulting in inter- store transfers
4	Receipts of Materials
4.01	Inter Stores Receipts
4.02	Receipts from other division / Circle stores
4.03	Receipts from Field Officers (Works)
4.04	Receipts from Test
4.05	Receipts from External Fabricator
4.06	Receipts from Internal Fabricator
4.07	Receipts from Contractor or Vendors (With reference to PO or Contract)
4.08	Adjustment Receipts
4.09	Receipts from Suppliers
4.10	List of Material receipt through PO Report
4.11	List of Material receipt through indent from other division Report
4.12	List of Material receipt from own work Report

4.13	Devolution(Return) of retrieved materials
4.14	Return of material as Scrap or Second Hand Value after utilization
4.15	Accounting and Calculation of depreciation value.
4.16	3rd Party receipt
4.17	Provision to record receipt of inventory items received from vendors/suppliers and generate Material receipt Voucher (MRV)/JVR including record of place/location of receipt and material details (unit, weight, specifications etc.)
4.18	Provision to record receipt of commercial documents received with material like excise invoice duplicate for transport copy along with material
4.19	provision to record receipt of technical documents like quality certification report received along with material
4.20	Availability of control functionality for material receipt i.e. receiving in excess/shortfall of Purchase Order (PO) quantity, quantity tolerance functionality or PO revision functionality.
4.21	Provision to support quality inspection after material receipt and before delivery of material to inventory and generate quality/quantity inspection report and record the inspection results for the material
4.22	Availability of workflow based inspection notification to quality control on receipt on parts at store and return notification to store on completion of inspection for posting the item to inventory.
4.23	Provision to support three-way matching of Material receipt Voucher(MRV) with Purchase Order (PO), Quality Inspection Report (QC) and Dispatch Instruction Report
4.24	Provision to club multiple lorry receipts (LRs)/Waybill / consignments etc...into single MRV
4.25	Provision to record partial delivery of items and track different lots of supply from suppliers for the same PO
4.26	Provision to automatically trigger evaluation of material receipt and initiate payment process
4.27	Provision to raise bill for payment with workflow based approval hierarchy for evaluation of payment
4.28	Provision to record receipt of material and track inter/Intra store transfers
4.29	Provision to receive material without P.O. or without proper documents and subsequent adjustment/regularization
4.30	Provision to display updated inventory status after material receipt for individual items, item groups and across stores
4.31	Provision to receive advance shipment notice and attach scanned documents
4.32	Provision to record receipt of inventory items purchased at different levels of hierarchy like Head Office Purchase and Area Office Purchase
4.33	Provision to generate intimation notice to purchasing authority in case of return of rejected material
4.34	Provision to generate report on all MRV created over a period i.e. weekly/monthly for a storage location
4.35	Provision to generate inventory status report based on material received over time opening balance, material received, material issued, closing balance at an item level and at an aggregate level on a periodic basis i.e.daily, weekly and monthly status report.
4.36	Provision to generate report for all MRV and bill payments against individual PO
4.37	Provision to generate exceptions during Material Receipt including rejected quantity, items not as per P.O etc.
4.38	Provision to generate report on bills raised against MRV over a periodic basis in a store
4.39	Provision to generate list of items with guarantee clauses, in particular guarantee period along with Delivery Instruction (DI) date
4.40	Provision to support adjustment of VAT/GST credit taken at the time of issue/inventory valuation
4.41	Provision to link Material receipt Voucher (MRV) raised on receipt of materials with issue note when materials have been sent out on repair
5	Issue of Materials
5.01	Inter Stores issues
5.02	Issues to other division / Circle stores
5.03	Issues to Field Officers (Against Work Order, Requisition, T.note, etc.)
5.04	Issues for Testing
5.05	Issues to External Fabricator
5.06	Issues to Internal Fabricator
5.07	Adjustment Issue
5.08	Issues to Contractor
5.09	Scrap Sale
5.10	Misc. Issue
5.11	Move Order Issue.
5.12	Tower Materials/Diclaration of Scrap/ Auction there after

5.13	List of Material Transaction Accounting Reports
5.14	List of Material Stock Reports
5.15	List of Material issued through PO Report
5.16	List of Material issued through indent from other division Report
5.17	List of Material receipt from own work Report
5.18	One item quantity availability at different store/location List Report
5.19	Provision to create material issue request/indent 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.
5.20	Provision to generate indent based on maintenance work orders, capital works project requirements estimated in system
5.21	AvailProvision of control functionality for material issue i.e. issuing in excess/shortfall of indent quantity, quantity tolerance functionality or indent revision functionality
5.22	Provision to modify material issue requests/ indent based on approver update
5.23	Provision to track changes made to indents and display reservation history
5.24	Provision to Cancel/Reject indents automatically based on cancellations in work orders, capital works project etc. and record reasons for cancellation
5.25	AvailProvision of configurable approval workflow for indent approval
5.26	Provision to display material issue requests awaiting approval
5.27	AvailProvision of material control functionality to check against indent, available inventory and approval status for issue of material
5.28	Provision to display availProvision of issuing material in each store before material issue
5.29	Provision to issue material and generate material issue slip
5.30	Provision to support and create pick/BOQ/BOM lists for those items awaiting issue to a capital works project, planned/emergency maintenance job, customer job, transfer request or over the counter issue
5.31	Provision to configure the information details in the pick/BOQ/BOM lists based on item details
5.32	Provision to display updated store inventory status based on material issued and available inventory at the store
5.33	Provision to consolidate pick/BOQ/BOM lists for items to be supplied to the same destination, user or job
5.34	Provision to track that the pick/BOQ/BOM list has been picked packed and issued and display the status of the pick list e.g. being picked, being packed, issued etc.
5.35	Provision to capture delivery information within the system e.g. transportation type, carrier details, dimensions, weight etc.
5.36	Provision to generate Gate Pass for material movement based on Material Issue note
5.37	Provision to modify material issue information details e.g. quantity, material number if required and track modification history
5.38	Provision 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 unable to issue exact quantity as requested in issue slip.
5.39	Provision to record issue of material without reference document or store requisition e.g. material issue for scrap
5.40	Provision to generate record on material issued against approved indents on an item wise and generate exceptions on a periodic basis
5.41	Provision to generate report on the material issued per store over a configurable periodic basis i.e. weekly/monthly/between two dates as and when required
5.42	Provision to generate report on aggregated material issued for a particular item over a periodic basis i.e. weekly/monthly/between two dates as and when required
5.43	Provision to generate stock overview report showing material received, material issued and inventory status for all items in a store
5.44	Provision to generate stock consumption statistics based on material issue for the items over time
5.45	Provision to view material available in all stores to concerned as per rules defined
6	Physical Inventory of Stores & Its Verification
6.01	Damaged / Un-usable Material
6.02	Theft of Materials to be recorded
6.03	Physical Inventory Event Report
6.04	Physical Inventory monthly / Yearly Planning / Report
6.05	Provision to support periodic physical stock verification process and update inventory status in system based on stock verification
6.06	Provision to schedule physical stock verification in the system

6.07	Provision to freeze inventory in the system for physical stock verification
6.08	Provision to generate item master list for physical stock verification
6.09	Provision 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
6.10	Provision to record the results of stock count in the system and record stock verification details
6.11	Provision to analyze of stock count i.e. compare system stored inventory with physical count and generate exception report
6.12	Provision to record recount of the stock items which are at variance in the system prior to correcting system values
6.13	Provision to record possible reason for variance in the system and record root-cause analysis
6.14	Provision 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
6.15	Provision to update and modify inventory status, material master information based on physical stock verification
6.16	Provision to and generate stock verification report with quantity and value information
6.17	Provision to generate report on discrepancy for inventory items counted
6.18	Provision to generate trend for variance items
6.19	Provision to generate exception report for those items not counted in a storage location
6.20	Provision to obtain details of book balances of inventory to facilitate physical verification
6.21	Provision to update physical verification details in case of inventories for the system to list out excess/shortage report
6.22	Provision to account for differences arising on account of physical verification
6.23	Any other process relevant and necessary to MM process that are not mentioned also to be covered.
7	Check Measurement / Quality Inspection
7.01	Receiving goods from vendor/supplier at stores. It will be entered in unaccounted materials register (Challan Register)
7.02	Check measurement / Quantity checking done by concerned Consignee
7.03	Quantity count / compared with PO
7.04	Accepted Qty / Damaged/rejected Goods return
7.05	Check measurement report and SRB entry
7.06	Accepted qty of materials are taken in to stock.
7.07	Material inspection before delivery at vendors site
7.08	Master Inspection Characteristics per Material (Material Specification)
7.09	Inspection Method
7.10	Sampling
7.11	Inspection Plan
7.12	Result Recording
7.13	Quality Info Record
7.14	Lot Inspection
7.15	Usage Decision (Accept or Reject)
7.16	Listing Inspection Lot
7.17	In-Process Inspection in Vendor Workshop
7.18	Defect Recording
8	Sale order (Scrap, Burnt trf oil, battery, etc.) Defining the Material for sale and pricing Customer Group (SSI, Hazardous, Indian, etc.)
8.01	Creation of sale Order
8.02	Release Strategy or Approval Creation of Customer
8.03	Terms & Condition in Sale Order
8.04	Issue of Material with respect of Sale Order
8.05	Generation of Invoice with GST details Receipt of Payments for Invoice Receipt of advance against Sale Order
8.06	Generation of Gate pass & Delivery Note Automatic Accounting against sale Reports for GST and Sale
8.07	Any other forms required by Customer
8.08	Sale Order Closing
8.09	Integration of online auction Portal
8.10	Provision to create Customer with categories
8.11	Provision to record details of customer
8.12	Provision to create Sale Order with approval and authorization
8.13	Provision to Issue material (Scrap, Spares, Raw materials, Finished Goods, or any product)
8.14	Provision to interface Weigh Bridge for issue of material from storage location
8.15	Provision to generate report on sale

8.16	Provision to generate tax collected report on customer and plant
8.17	Provision to generate Sale order Closing Report
9	Maintain Asset and its Performance
9.01	Provision to allow user to enter / define / view / modify and classify assets using OPTCL's nomenclature or regulator defined codes.
9.02	Provision to classify / store / retrieve / update details about assets based on 1) Hierarchy of asset in the system 2) Location where it is present
9.03	Provision to develop and maintain a location based Grid network for Asset mapping
9.04	Provision to classify the locations with sub classification and specifications for an asset.
9.05	Provision to associate a single location with single or multiple assets
9.06	Provision to graphically display a productive unit hierarchy displaying the parent and child relationship in the system multiple parents for network systems parent to another parent.
9.07	Provision to move the asset from one productive unit of the hierarchy to the other along with all the details of the asset
9.08	Provision to keep track of history of location changes done on an asset or a part of the system
9.09	Provision to track the location of asset as it is moved between stores, repair shops and vendors
9.10	Provision to classify assets as operating assets and in-store assets
9.11	Provision to search for a particular asset by providing minimal criteria of the same
9.12	Provision to graphically locate and display / map equipment / asset meeting a specific criteria.
9.13	Provision 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.
9.14	Provision to access detail information of Asset from the Procurement and Materials Management System
9.15	Provision to assign inventory to General Ledger by a respective account code and cross reference of an asset / component / equipment to the Financial and Accounting Management System
9.16	Provision to define and retrieve an asset by specifying a problem class or a problem cause with links to its current location
9.17	Provision to track life-to-death accountability for assets
9.18	Provision to allow / disallow multiple asset grouping and ungrouping
9.19	Provision 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)
9.20	Provision to roll-up maintenance costs across hierarchical systems, sub systems, and locations
9.21	Provision to maintain real-time information associated with lines/equipment
9.22	Provision to generate reports by assimilating the data manually logged in from control-room registers
9.23	Provision to record the asset usage statistics
9.24	Provision to define asset criticality factor for fault and maintenance management
9.25	Ability to define failure classes and failure hierarchies to record equipment problems for immediate analysis
9.26	Provision to maintain a track for reasons of asset failure (Root Cause Failure Analysis)
9.27	Provision to exchange information for system study for maintenance planning purpose
9.28	Provision to view & update records related to any environmental issues or regulations to be followed in maintaining the asset
9.29	Provision to record and maintain useful life of equipment for the purpose of repair and replace decisions along with the previous history of the equipment's
9.30	Provision to maintain asset manuals, technical drawings, operating instructions, safety instructions, schematics in a document library and ability to retrieve as and when required
9.31	Provision to view the warranty details of an asset by any authorized user with ease
9.32	Provision 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
9.33	Provision to track & locate the real estate / land assets pertaining to OPTCL.
9.34	Provision to retrieve details about the performance of an equipment over a period of time
9.35	Provision to generate a report on the asset usage statistics such as operating hours, number of operations, etc. against the standard conditions
9.36	Provision to generate a report detailing the outage hours of an equipment or an asset over a period of time
9.37	Provision to list a report detailing the idle assets in a location in specific period of time
9.38	Ability to generate report on an asset based on user defined criteria like asset class, location, etc.
9.39	Provision to do Fatigue Analysis of various assets, Material & Inventory as per need and ability to use results for further analysis

9.40	Provision to maintain various asset like Land, Buildings etc. (Own, Lease, Let out, under dispute, etc.)
10	Manage Bill of Material / Tools & Plants / Spares
10.01	Provision to maintain the list of parts of equipment
10.02	Provision to maintain the details of real time quantities of parts available in the stores
10.03	Provision to maintain history of changes to part list of equipment.
10.04	Provision to maintain the drawings of equipment parts along with the recent changes or modifications done on it. Ability to maintain details of individuals who made modifications for reference
10.05	Provision to review the tools and equipment available
10.06	Provision to set the ROL (Re Order Level) and ROQ (Re Order Quantity) of various spares required for the equipment
10.07	Provision to notify to the concerned personnel once the spares' count reaches ROL (Re Order Level)
10.08	Provision 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
10.09	Provision to escalate the issue to higher Officials if the tools are not received from the concerned even after sending them the reminders
10.10	Provision to generate a report detailing the list of tools and tackles available with various Sub-Stations / Sub-Area Offices, etc. at any point of time
10.11	Provision to maintain licenses and expiry date and to notify to the concerned personnel from time to time.
11	Cost Control of Assets
11.01	Provision 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
11.02	Provision to display detailed description about the account code assigned to the asset or equipment to the concerned Official
11.03	Facility to capture information about resources such as description of work, unit, location and other fields as required
11.04	Provision to update the standard labour / Contractor rates for a particular work to be done
11.05	Provision 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
11.06	Facility to allow manual keying in of minor project expenses like transport, petty cash, etc.
11.07	Provision to drill down costs from projects to source transactions
11.08	Provision to break down project cost by resource type
11.09	Provision to track project expenditures and compare it against the budget allocations
11.10	Provision to raise a trigger if the actual expenditure has exceeded budgeted allocation
11.11	Provision to list the total cost incurred due to usage of equipment or tools during work
11.12	Provision to list the total cost incurred due to work performed by a Contractor
11.13	Provision to approve the work performed by the Contractor by the concerned Official before payment of dues to them by the finance department
11.14	Provision to establish costing limitations against a piece of asset / equipment or a productive unit
11.15	Provision to capture cost expenditure against an asset including procurement, maintenance and disposal
11.16	Provision to track asset expenditures and evaluate this against the budget allocations
11.17	Provision to track costs / expenditures against an individual asset or a defined group of assets
11.18	Provision to estimate cost to be incurred for a maintenance activity and send it to work order management system for invoice generation.
11.19	Facility to allow the user to project the cash flow for a user defined time period
11.20	Allow changes in project expenditures and aid in preparation of revised cash flows
11.21	Provision to roll all work order costs to the proper asset
11.22	Provision to maintain cost history by location
11.23	Provision to generate Sub-Station wise material allotment
11.24	Provision to generate Purchase Orders and track their status
11.25	Provision to display as a report all the maintenance cost incurred during the life of an asset including the labour, material and Contractor costs, etc.
11.26	Provision to simulate the life cycle maintenance cost for an item of equipment when different operational conditions and maintenance strategies are entered as parameters.
11.27	Provision to generate report detailing the total internal labour cost incurred due to maintenance of an asset /equipment or a cost center
11.28	Provision to generate report detailing the total external labour cost incurred due to maintenance of an asset /equipment or a cost center

11.29	Provision to generate report detailing the total equipment usage cost incurred due to maintenance of an asset/ equipment or a cost center
11.30	Provision to generate report for material requirement of decentralized items
11.31	Provision to generate report for material requirement for centrally purchased items
12	Return Material to Store
12.01	Provision to record and support workflow for return of un-used or excess material from field/sub-station/plant to stores.
12.02	Provision to record and segregate dismantled material into scrap,active and unserviceable.
12.03	Provision to generate Store Return Note on material to be returned from field
12.04	Provision to record receipt of material at receiving store, generate Material Receipt note and track its indent when material are returned to store
12.05	Provision to display updated inventory status after material receipt in receiving store
12.06	Provision to generate accounting adjustments on a consolidated basis at Area Office level for all the Store Return Notes generated for that period
12.07	Provision to generate report on materials returned to a store between two dates as and when required.
12.08	Provision to generate summary report of Store Return Notes generated by the system between two dates or location wise
13	Material Disposal
13.01	Provision to record and support workflow for material disposal of scrap/obsolete items (as declared by appropriate authority) returned to the store from the field operations in OPTCL.
13.02	Provision to compile report of scrap material returned to the stores
13.03	Availability of configurable approval workflow for scrap approval and capture the recommendation of the scrap committee. Provision for file attachment
13.04	Provision to display scrap requests awaiting approval
13.05	Provision to generate alert to initiate material disposal workflow with the scrap material report completion as the trigger
13.06	Provision to generate material list for auction/sale by Stores based on material disposal report
13.07	Provision to record auction/ sale result for scrap disposal including buyer information and material disposal details
13.08	Availability of workflow to support configurable payment norms for scrap disposal and generate material issue based on buyer compliance to payment norms
13.09	Provision to generate Material Disposal note (MDN) after checking against payment information
13.10	Provision to generate accounting adjustments on a consolidated basis at Area Office level for all the disposals generated for that period
13.11	Provision to generate report on scrap items available in a storage location.
13.12	Provision to generate exception report for material disposal process i.e. Material which are not being disposed on time, auctions not as held planned
13.13	Provision to generate report on auction results and record auction sale information
13.14	Provision to consolidate Material Disposal note and generate completion report of sale based on material disposed and payment terms
14	IT Store / General Branch Store
14.01	All the IT Items (Capital/Consumable) needs to be maintained through the IT Store.
14.02	Request for IT equipment needs to be raised by different offices/employees.
14.03	Issue of IT Items to different offices/employees.
14.04	Return the Items by the Employee /Office to IT Store for NDC.
14.05	Re-allotment of Items.
14.06	Tracking of Item Issue history
14.07	Tracking of Employee/Office Allotment entry.
14.08	Buy back of Old Items for new Purchase.
14.09	Provision to Track/Issue/Receipt of General Branch Items to Employees/Offices etc..
15	INVENTORY REPORTS
15.01	Date of transaction to be checked for resolving parent-child order date during Inspection form after PO receipt.
15.02	Report for One item stock available at all respective units (Stores)
15.03	Monthly Report of site materials for submission to respective division office containing data like item code, Description, UOM, Opening balance, receipt, issue, closing balance, unit price, total price & Remarks... and can add Indent and move order in the source and Destination sub-inventory field.

15.04	While issuing through ERP a column for requisitions / indented qty. should appear in the transaction line. Also the indented qty. should be reflected and after issue qty. (remaining stock) should appear in a new column of the gate pass report. So it can help for entry the actual qty. of issue against the indented qty.
15.05	Store price ledger report- unit name from whom receipt & to whom issued to be displayed.
15.06	Particular item with code should be available in sub-inv/location wise report.
15.07	list of Materials issued against approved indents of all units in report
15.08	List of Material issued through PO Report
15.09	List of Material issued through indent from other division Report
15.10	Report on List of Material issued through indent approved by Hd qrs. / Zonal head / Circle head / Division head
15.11	Approved indent list report
15.12	Report for Division Closing balance report, the item sl no., Desc., UoM, qty, unit price, total price and remark column are to be shown.
15.13	Report on stock available for category wise like Inventory, scrap, Consumables, T&P and Asset etc...
15.14	OPTCL all unit transaction (OB,receipt, issue, CB) report
15.15	Report for One item transacted to show for all unit
15.16	Inventory STOREWISE SUMMARY REPORT
15.17	Inventory IT Consumables / General office stationary Report

TRS - Project Module

Department: CONSTRUCTION WING

Power Transmission being the core activity of OPTCL, this Dept. plays a vital role. The Dept. is headed by one Chief Engineer and the activities are managed by Circle Heads (G.M.), Divisional Heads (DGM) apart from other technical & non-technical executives & staff. The Dept. basically takes up the construction projects for EHT Grid Sub-stations and Extra High Tension Power lines. These transmission power lines transmit power from State owned power stations, share power from Central power, and Captive Power Plants (CPPs) located within the State through point to point 440 KV, 220 KV lines and 132 KV lines.

The Dept. takes up construction projects based on the following requirement/criteria.

- 1) New power requirement/demand specified by DISCOMs.
- 2) Requirement from O&M Dept. of OPTCL.
- 3) As per the budget approved by the Board of Directors.
- 4) Approved by OERC/CEA

For this they interact with O&M Dept. for handing over a completed project, input for taking up new Projects. They interact with Central Procurement Cell and Stores Dept. at the time of construction of a new project other than turnkey project. They execute all these works with guidelines/help from Finance Dept., interacting with HR Dept. for manpower allocation and state Forest Dept. for Forest clearance. Starting from inception, execution, monitoring and till the completion of the project they also interact with State Load Dispatch Centre (SLDC) and OERC.

ERP Requirements

The ERP system should provide support for all stages of a construction project. This includes:

- **In-principle approval (Initiated by Corporate Planning in the approval hierarchy.**
ATTACHMENT SHALL BE ALLOWED TO BE HOSTED BY ALL THE MEMBERS OF WORK FLOW)
- Project Template
- Creation of New Project (Project Numbering)
- Detailed estimation
- **Administrative Approval** (By construction wing in the approval hierarchy.)
ATTACHMENT SHALL BE ALLOWED TO BE HOSTED BY ALL THE MEMBERS OF WORK FLOW
- Work Plan
- Detailed Project Report
- Project Funding (**Project Level Budget**)
- **Land Acquisition**
 - Government Land Alienation/Lease**
 - Submission of Proposal with Tahasildar for lease of Govt. Land
 - Issue of Demand note by Tahasildar for Land Premium, Ground rent and cess
 - Deposit of Amount with the Tahasildar for Govt. Land
 - Advance Possession of Govt. Land
 - Sanction of Lease by competent authority of Revenue Dept
 - After sanction of lease of Govt. land, Lease Agreement shall be executed and ROR shall be obtained infavour of OPTCL

Private Land Acquisition.

- Proposal Submission
 - In case of urgency deposit of 20% establishment charges
 - Preliminary Publication U/S 4 (1) of the LA act
 - Hearing of Objections U/S 5 (1) of the LA act
 - Declarations U/S 6
 - Order for Acquisition from Govt. by the Collector
 - Notice to Persons interested U/S 9 of the LA act
 - Determination of Compensation to be paid to the Land Owners
 - Award by Collector U/S 11 and 12
 - Payment of Compensation to the Land Owners by the L.A.O after deposit of Compensation amount by OPTCL
 - To take Possession U/S 16
- **Statutory Clearances**
- Forest Clearance
 - Railway Clearance
 - NHAI clearance
- **Procurement Activities**
- **Requisition to CPC for Tendering Action (By construction wing) in system**
 - Tendering Action by CPC (through e-tender wizard)
 - **Issue of Supply Order/Turnkey Project Order by CPC (In System)**
 - Signing of Contract
 - **Details of work plan (ASSIGN DOCUMENT DELIVERABLE TO WORK PLAN. ATTACHMENT INDICATION SHOULD BE AVAILABLE IN THE WORK PLAN AGAINST TASK NO)**
 - Submission of Project Schedule by Contractor
 - Approval of Project schedule
- Handing Over of Land to Contractor
- Mobilisation Advance
- Levelling of Land
- Soil Investigation
- **Drawing Approval (Through System)**
- Master Plan Preparation
 - Sub-station Lay Out
 - Foundation Lay Out
 - Design and Drawing Approval
- Construction Power Supply
- Construction of Site Store and Site Office
- Check Survey
- **BOQ freezing (In approval hierarchy)**
- **Supply of Materials**
- **Receive of Material in System at field level**
- Issued to Work
 - Quantity Consumed
 - Surplus material available
- **Erection Activities (SUB-STATION)**
- Foundation of Equipment
 - Erection of Equipment structure

- Erection of Equipment
- Earthing
 - Earth Mat Laying
 - Earth Pit and Connection
- Bus Bar Stringing, Jumpering, Equipment Connection
- Cable Trench
- Cable Laying and Termination
- Erection of Station Transformer
- Sand & Metal spreading
- **Transformer**
 - Transformer Foundation
 - Erection of Transformer
- Supply & Erection of Fire fighting system
- Switch Yard Illumination
- Switch Yard Fencing
- **Control Room with Office Building**
 - Civil Works
 - Foundation
 - Super Structure
 - Roof
 - Finishing
 - Sanitation and Water Supply
 - Electrical Works
 - A/C System
 - Erection of C.R. Panel
 - Installation of Battery with Charger
 - Erection of A.C.D.B
 - Installation of PLCC Equipment
 - Illumination of Control Room

Construction of Associated Infrastructure

- Construction of Boundary Wall, Gate and Security Shed
 - Road
 - Quarter
 - Foundation
 - Super structure
 - Roof
 - Finishing
 - Electrification, Sanitation and Water Supply
 - Drainage System
- **ERECTION Activities (TRANSMISSION LINES)**
 - Tower Foundation
 - Earthing
 - Erection of Towers
 - Punching/Welding of Nut & Bolt
 - Tower Accessories Fitting
 - Stringing of Conductor with Earth wire
 - Support for maintaining records for: measurements, delay registers, hindrance registers and other statutory registers
 - Inspection
 - Testing

- Deposit of Electrical Inspection Fee along with Check List and other required Drawings
- Inspection by CEI
- Clearance from C.E.I for Commissioning
- Commissioning
- Material Reconciliation and Tracking of Surplus Materials
- Bill preparation based on measurements recorded. This is to include features for deductions such as security deposits, taxes of various kinds, forest royalties, etc.
- Final Bill
- Final BoQ amendment
- **Generation of interim progress reports giving details of works progress, of payments made, of hindrances and delays, deviations, all from existing data.**
- Project Closing
- Handing over to O&M
- Capitalization.

NOTES:

- ALLOCATION OF KEY MEMBER
- **Assign document deliverable to work plan**
- Request for information should include attachment provisions by which one meet the queries by attaching the documents
- ATTACHMENT INDICATION SHOULD BE AVAILABLE IN THE WORK PLAN AGAINST TASK NO
- INTEGRATION OF MS PROJECT WITH SAP
- REPOSITORY FOR DRAWINGS & DOCUMENTS

REPORTS

ASSIGNING OF WEIGHTAGE TO THE WBS AND TRACKING OF PROGRESS ACCORDINGLY.

- **SUB-STATION:**
 - Substation Construction Progress Report(Summary)
 - Detailed Progress Report for Construction of Associated Infrastructure
 - Detailed Progress Report for Construction of Switchyard
 - Detailed Progress Report for Construction of Control Room
 - CONSOLIDATED PROGRESS REPORT FOR SUB-STATION
- **TRANSMISSION LINE:**
 - Detailed Tower-wise Erection Activities Progress
 - Transmission Line Construction Progress Report(Summary)
 - CONSOLIDATED PROGRESS REPORT FOR TRANSMISSION LINE
- PRE AWARD STATUS REPORT
- LAND ACQUISITION STATUS REPORT
- PHYSICAL & FINANCIAL PROGRESS OF PROJECTS
- SUPPLY STATUS REPORT
- CLOSURE STATUS OF THE PROJECT
- STATUTORY CLEARANCES

Dept: TELECOMMUNICATION Wing

Telecom. Dept. plays a supporting function, which provides Power Line Carrier Communication (PLCC/DPLC) and OPGW communication for establishing the voice and real time data communication between the SLDC with 200(Two hundred approx.)nos. of RTUs of OPTCL and industries located throughout the State. The dept. is headed by a Chief General Manager (Telecom) and the activities are managed by two circles (Headed by GM & SGM) and eight (8) Divisional Heads (DGM) apart from other technical & non-technical executives & staff.

The core business of Telecom department is to manage a state of art centralized SCADA operating at SLDC and Back up Control Center, Meramundali, Bhubaneswar and protection of EHV circuits. All field data are coming through OPGW network which is expanding every year. OPGW has been laid in 6000KM and leasing of fiber is extended up to 4000KM. Telecom wing is also earning a revenue of Rs.4 crore per annum presently by way of leasing dark fibers to different telecom operators. ERP and all IT enabled services like webmail, AMI, video conferencing, CCTV applications are now running over this dedicated OPGW network. As per the recent trends, OPTCL is planning for remote Grid management for which the dependence on high speed reliable OPGW network will be increased.

The day-to-day operation and maintenance of the telecom network, real time SCADA and execution of new projects are the main activities of Telecom dept.

SAP Requirements

1. Telecom Department of OPTCL executed installation of Chemtrol make SCADA (Supervisory Control and Data Acquisition) equipment in the year 2016 in a three-tier architecture, viz., ERLDC, MCC/ BCC and Remote Terminal Unit. The system uses EMS software and provides master display of instantaneous GRID parameters and also logs historical data into Oracle Database. **A provision has to be made to interconnect SCADA with proposed corporate SAP of OPTCL in a secure manner to provide access to GRID operational information on a continuing basis to support Decision Support and Day-to-Day operational needs.**
2. Features for monitoring different projects for their completion on daily basis. (The Telecom is currently handling Stringing of OPGW under PSDF, supply, commissioning of 78 ABB make RTUs and BHARATNET project PHASE-2.)
3. Operation and Maintenance of Telecom Network also need to be covered under SAP.
4. Interfaces with Finance, Stores and HR are felt necessary for efficient working.

Dept: CIVIL Wing

	Civil Department
	Civil department is responsible for
	Construction of Roads in residential and Office complexes, including Grids.
	Construction of buildings (residential/Office Complexes) and maintenance of them
	Maintenance of Civil Part of Grids Like Control rooms, boundary walls, PH services etc.
	Construction and maintenance of PH Lines Overhead Tank
	Construction of Control room
	Connecting roads and drains inside the grid.
	Process followed by Civil Department:
	· Requisition received by Civil department for works from user Dept.
	· Estimate prepared by Civil department Section Engineer.
	· Administrative approval is required for new works and sanctioned as per DOP.
	· Technical sanction is given as per DOP.
	· The final estimate is then placed before different committee as per DOP.
	· Concerned Civil Wing Engineer sanctions the estimate as per DOP
	· Tender process is initiated either in the form of Limited Tender , Open tender or Expression of Interest as per the requirement.
	· Tender is accepted by the concerned civil dept. officer.
	· It is then submitted to another suitable committee followed by approval of the competent authority.
	· The authorization is then given to the Divisional head to draw an agreement with the lowest (L1) bidder.
	· Work is awarded to L1 bidder.
	· Work is done by the Contractor
	· Supervision is done by Divisional Head and he also sends his representatives like SDO, Section Engineer to monitor activities at site.
	· Contractor/Bidder is advised to work according to the specifications led down in the agreement.
	· Divisional Head checks the progress of the work
	· After the project is completed, it is handed over to concerned departments from where the requisition was received.
	· When building is completed, it is handed over to concerned department and the same is recorded to Inventory Register
	· Inventory Register also maintains records all fittings and fixtures, sanitary fittings present in buildings
	· Money is disbursed by OPTCL to the contractor as and when bills are generated.
	· Section engineer at site prepares a bill and it is recommended for payment post verification by SDO and Divisional Head. after receiving a request from the contractor

	· If the bill amount is above certain limit, the bill goes for PreAudit
	· After Preaudit, the bill is sent to Corporate Finance for Disbursement of funds.
	· Inspection and certification is given by OPTCL
	· After the project is completed, the assets are taken to Fixed Assets and are recorded in the books of OPTCL.
	Other Associated Works
	· Concerned Authorities/DDOs (drawing and Disbursement officers) collect rent which is actually deducted from salary of the concerned staff who is residing in the quarters.
	· Inventory Register also maintains Name of employees or allottees, when and who is vacating the premises in case of residential quarters.

	REQUIREMENT FOR CIVIL WING
1	Schedule of Rate Standardisation for entire Odisha (each location) and time to time addition of new item.
2	Standardising items list and thereby generation of estimate abstract.
3	Generation of reports like deviation statements, Bill forms.
4	Generation of Agreement and Work order from sanctioned estimate.
5	Generation of Extension of Time forms.
6	Rent roll preparation.
7	Centralised inventory register for residential quarters.
8	Portal for Requisition.
9	Portal for Work completion and handing over.
10	System based expenditure & progress monitoring.

Dept: INFORMATION TECHNOLOGY Wing

	IT Department
	IT department is responsible for software and hardware projects.
	They generally execute Turnkey based projects.
	Process followed by IT department
	· A proposal is conceived
	· Budgetary provisions are made for current year and incoming years
	· In Principle approval is obtained from the competent authority as per DOP
	· An estimate is prepared
	· Administrative approval is obtained from the competent authority.
	· e-Tender is floated as per DOP
	· The tech/price bid is placed to the competent committee as per the DOP followed by approval of the competent authority.
	· Successful bidder is awarded the contract
	· Schedule the work and allocate manpower
	· Since SLA has to be maintained, IT monitors SLA
	· There can be 2 tenders –one for Service and one for Procurement of hardware
	· Vendor submits the bills as per the terms of payment to IT,IT then sends the bills to Finance for Pre audit and money is then disbursed
	· Pre audit is necessary to assess whether bill is correct and money is available with Finance.
	· IT is also responsible for procurement of materials required for its operations (need not be project wise) like Printers, desktops, VC equipments, Training equipments, CCTV and Smart Devices etc.
	· Gantt charts is used for scheduling of work and allocation of resources
	· Payment is done either monthly/quarterly to contractors in case of service contract.
	· Some of the ongoing projects of IT Dept. like GIS, AMI, helpdesk, FMS etc. that may be integrated with the SAP.

TRS – O&M Module

Preparation of Asset Database:

- The categories of Substation and Line Assets along with Code Structure, Parameters and Entry Forms have been defined in the earlier version of ERP, though data compilation has been partially done. Some additional asset categories / parameters with provision for attachment of documents, images etc. to be incorporated on the basis of inputs during implementation of the New ERP system. Geo-tagging of Assets has been the norm under the Ministry of Power, Govt. of India. This aspect is to be addressed while freezing the parameters of the Assets.
- The earlier available structures and forms can be taken for reference.
- The New System should facilitate migration of the existing data to the new platform.
- The New System needs to be integrated with the Geographical Information System implemented under OPTCL that captures static / dynamic data in respect of Substations / EHT Towers.

E-Log Books

- Mostly defined in the earlier version of ERP. These documents can be taken for reference.
- These E-Log Books cover Operation, Maintenance, Testing, Inspection, Safety Audit, Quality Audit functions and need to have provision for upload of documents, graphs, images etc.. Logging under Operation function is hourly or event-driven and logging under other functions is either scheduled or based upon requirement.
- Hourly logging of data in Operation Log Books is tedious. Provision to be made to capture the hourly data from the installed Substation Automation Systems (SAS). However, this is subject to clearance from the User Department and scrutiny of the parameters, formats, images etc. being generated in the SAS.

Permit to Work (PTW)

- In addition to the Form(s) designed with the earlier version of ERP, the modules developed by the Safety Deptt. of OPTCL need to be referred / integrated.
- Links to Substation specific Standard Operating Procedures (SOP), Safety Manuals etc. to be available.

- Code from SLDC to be fetched through notification in ERP and messaging to CUG Phone. Similar notifications / messages may be for SDO, Divisional Head, Circle Head, Zonal Head, Safety Deptt., subject to approval of Head of the User Deptt.
- The New System needs to be integrated with the CCTV Surveillance System installed at Substations for capturing the images / streaming videos from the maintenance site and transmitting the same for remote monitoring of maintenance works by different offices mentioned above.

MIS Reports

- On the basis of E-Log Books on different functions, the ERP System may generate MIS Reports as defined earlier plus new proposals during implementation of the System. The System should be able to generate periodical reports on %Availability of Feeders / Transformers, Trend of Loading, Voltage Profile (in graphical form) etc.
- The MIS Reports should cover, inter alia, the reports prescribed by Govt., Regulatory Commission, Electrical Inspectorate and other Govt. Agencies.
- The ERP System should maintain a library of threshold values, periodicities etc. (as per applicability) against different parameters of Substation and Line Assets, for exercising artificial intelligence in reporting like listing of stressed Transmission Lines / Transformers, listing of low voltage (33kV Bus Voltage) pockets, listing of assets those have completed useful life, listing of equipment those need immediate attention on the basis of test values, scheduling of routine maintenances / tests (maintenance calendar / test calendar) etc.. Such reporting may be coupled with notification to the defined offices through ERP / Webmail / Messaging.
- On the basis of data compiled under different E-Log Books, the ERP System should be able to generate Event History (w.e.f. date of purchase) in respect of each Asset defined in the Database.
- MIS Reports will be required to be filtered for Division / Circle / Zone / Organisation Level.

Sharing with Other Modules of ERP for common processes

- Management of Emergency Inventory, Mandatory Spares, Testing Kits, Tools & Plants, Furniture & Fixture etc.
- Purchase / Works Contract
- Additional Processes as per the requisition from the User Deptt.

Online Tips and Links to Reference Documents

The ERP System should have this provision in all Entry Forms.

Outage Management:

- i) Load management as per instruction SLDC to keep power demand within limit and L/R is imposed as and when required to keep area load within s/s capacity.
- ii) ADMs is under process through SLDC.
- iii) In case of fault tripping of a line, priority is given for early restoration of line, in case of major fault, alternative power supply is arranged if there is other source is available.
- iv) Maintenance work carried out as per O&M procedure by strictly following the SOP.

Emergency Restoration Management:

- i) There is an Emergency Restoration Division. It is having ERS Towers (54 nos.) stored at different strategic Locations (Grid S/s & Stores). In case of any eventuality (i.e. Cyclone, flood, earth-quack or any natural calamity) these materials can be utilized for early restoration of damaged power lines.
- ii) Spare equipment for Substation & Lines made available at different EHT Stores and Grid S/s for early restoration of damaged assets due to natural calamities.
- iii) Emergency Restoration gangs (Man Power through R/C holder Firms of OPTCL) with required T&P is being alerted/ arranged considering the IMD Bulletin/ Weather forecast by Central Govt./State Govt. agency.
- iv) Preventive measures/ Preparations are carried out in tandem with NDRF & ODRAF teams available at locations.

Work Assignment:

- i) Different works (day to day works) related to Sub-station & Line maintenance works are assigned to different personnel i.e. from level of Technician, JMOT, Line man, Operator, JM, AM, Manager, SDO etc.
- ii) Every individual has different responsibilities.

Work order management / Contract management: As per ERP

Document Management: As per ERP (Drawings, estimates, Work order & Specifications)

Asset Management / Asset condition & performance:

- i) Equipment History data sheet { Name(Element wise), capacity/rating/class, make, Model, YOM, YOC, Guarantee period, schedule maintenance done, break

down maintenance/ repair work done, service life expectancy, condition monitoring (healthiness)}.

Tools & Plants Management:

- i) Requirement of T&P including testing equipment.
- ii) History data sheet for each as above

Planning & Scheduling O&M activities:

- i) Preventive maintenance is scheduled as per O&M manual/ instruction of OEM (Original Equipment Manufacturer) for different equipment i.e. inspection/ testing/ cleaning/ maintenance of equipment on weekly/ monthly/ Quarterly/ Half yearly/ Yearly basis.

Safety & inspection Management:

- i) For every maintenance work a Standard Operating Procedure (SOP) is followed for safety of men & machine.
- ii) The safety wing of OPTCL & external agencies conduct inspection of installations and organization time to time as per IE Rule/ CEA guidelines.

Proactive maintenance management:

Breakdown maintenance, Operations management: same as planning & scheduling of O&M activities

Setting up KPIs & Dash Board Functionalities

Line Performance Measurement:

(Line Rating Index)

- i) % loading of line with reference to its age.
- ii) No. of tripping/ duration of faulty condition/ system availability)
- iii) Right of way/ condition of line corridor/ Teran & cleaning/ cutting of trees in under line.

Sub-stations Performance Measurement:

(Substation Rating Index)

- i) Category of Sub-station
 - a) Voltage level 400/220/132/33kV
 - b) Type AIS, GIS
 - c) Implementation of SAS
 - d) Load condition/ Capacity

- e) Age of S/s, equipment (Condition monitoring report) and replacement/renovation work taken up).

Module to manage and deploy manpower as per needs; keeping track of location of manpower with a particular skill, and assigning jobs based on proximity & availability.

Estimation of maintenance cost using cash equipment of manpower and material used. Same as Document management

Load-Flow analysis data and break down status of various equipment at Grid S/s should be made available for better planning of maintenance activities of S/s, Line/ equipment.

- Corporate Planning Wing of OPTCL conducts system study considering present & future load in the line/ Sub-station.

A Database for existing and new equipment along with commercial details, installation and warranty & maintenance history is to be maintained.

- Database of equipment
 - a) Name / details of P.O
 - b) Make / model/rating
 - c) YOM/ YOC and warranty period.
 - d) Maintenance history/ Log book/ Condition monitoring etc.

Sub-station Automation Management & Test result of different equipment management.

Transmission Loss (Both Grids & Line) Management:

Transmission Loss due to line (I^2R Loss) and Grid S/s transformer, other equipment and axillary consumption. Loss can be minimize by adopting load management, construction of Grid S/s near load centers and transmission through higher voltage level (i.e 220kV & 400kV and HV DC instead of 132kV level).

Statutory Govt. dues management:

- i) Land revenue & cess for Lease land (Grid S/s).
- ii) ED on power generated through DG sets.

Future Load growth including renovation and modernization management:

- As per load forecast of industrial growth by concerned Govt. department/ industries system study planning is being carried by corporate planning wing of OPTCL. After Feasibility & system study report survey & estimate (cost estimate) is prepared and the proposal is approved by BoD.

Seamless integration with all other Departments

OVERALL OPERATION AND MAINTENANCE MANAGEMENT PROCESS

- Entry of logbook and detailed status and healthiness of switchyard, control room and handover thereof.
- Identification of fault (feeder/line/equipment etc.) and remedial action/rectification thereof in consultation with E&MR and SLDC (element specific)
- Provision for creation of maintenance register/activity (scheduled maintenance, preventive maintenance, breakdown maintenance)
- Provision for estimation of maintenance/repair work, execution of work and processing of bills.
- Preparation of site account
- Assignment of work to sub-ordinate staffs
- Provision for maintenance of various accounts assigned to that office (TA, imprest etc.)
- Assignment of work to sub-ordinate staffs
- Material requisition through indent / move order
- Provision to maintain patrolling information of a line and action thereof.
- Provision for creation of maintenance register/activity (scheduled maintenance, preventive maintenance, breakdown maintenance, predictive maintenance)
- Provision for estimation of maintenance/repair work, execution of work and processing of bills.
- Facility for rate contract work

OPERATION AND MAINTENANCE PROCESS DESCRIPTION

- Co-ordinate and maintain data from connected utilities(Generators, plants & DISCOMs)
- Movement/purchase/central procurement of materials for Grid/Line/Project
- Forecasting and Load-flow analysis in consultation with Corporate Planning
- Information related to details of lines and towers to be maintained
- Healthiness of tower to be maintained
- Healthiness of transformer to be maintained considering various parts.
- Provision of diagnostic testing needs to be maintained

- Healthiness of transformer to be maintained considering various parts.
- Healthiness of Switch gear be maintained considering various parts.
- Provision of healthiness of Grid to be maintained
- Provision to report identification of faults of various equipments and subsequent action thereof
- Provision to integrate with SCADA
- Information related to various types of testing needs to be maintained
- Facility to maintain asset hierarchy and asset attributes

TELECOMMUNICATION WING:

- Provision for Installation and commissioning of Telecom equipment like DPLC, DTPC, SDH, RTU, EPABX for voice and data communication.
- Integration of SAS/RTUs with SCADA system.
- Features for monitoring different projects for their completion on daily basis. (The Telecom is currently handling Stringing of OPGW under PSDF, supply, commissioning of 78 ABB make RTUs and BHARATNET project PHASE-2.)
- Facility for Operation and Maintenance of Telecom Network
- Maintenance of EPABX which provides 400 intercom subscribers to the executives of OPTCL Headqtrs.
- Leasing of spare dark fiber to different companies.
- AMC of Telecom equipment like SDH, RTU, APS, PMU, EPAX, DPLC & also SCADA at SLDC, Bhubaneswar and Meramundali
- Interfaces with Finance, Stores and HR.

SAFETY WING:

- Facility to upload various document
- Provision of discussion forum (various department with safety cell)
- Facility for information on Safety training (In Consultation with HRD)
- Provision of safety audit (Grid, Line, Building, Construction sites etc.)
- Incorporation of e-LC(detail procedure shall be communicated during requirement gathering)
- Incident reporting and accident reporting
- Reporting requirement based on maintenance of equipment and accordingly notification following escalation matrix and SLA.
- Database of PPE and other safety equipment needs to be maintained
- Format of Safety norms followed by contractor
- Inclusion of safety norms during tendering stage for all work / purchase orders (made by CPC / Field Units)
- Safety clearance before charging and hand over by construction wing to O&M wing in case of new / expansion projects
- Employee Profile related to Safety aspects and activities to be tagged up with EPAR and for any incentive / punishment.