

Benchmark rates and methodology for evaluation of ERP DRPs under IPDS

As per IPDS guidelines, schemes for ERP and IT enablement of distribution sector is covered. Further, guidelines for "Project formulation for IT Applications in non-RAPDRP towns and Enterprise Resource Planning (ERP) under IPDS" were approved by 7th meeting of IPDS Monitoring Committee held in April 2016. The following are the main features of guideline on ERP-

- ERP functions to be covered are- (a) Human Resource Management including Self Service for Employees (b) Finance and Accounts and (c) Materials (Purchase and Stores).
- Entire IT infrastructures created at DC/DR under RAPDRP are required to be utilized for implementation of Enterprise ERP. Only minimal number of additional hardware (servers etc.) required to host ERP applications may be covered in the DPR.
- All the revenue expenditure (such as product support post implementation, onsite implementation support, AMC, FMS, Bandwidth etc.) shall be borne by Utility.
- Any up-gradation of existing ERP or any additional modules may be considered later, in case of availability of fund after sanction of new ERP projects.
- ERP is not envisaged for Power departments, as their business process involves approvals from various Govt. departments and their finance is with state treasury.

Bill of Quantity and Cost Data – Enterprise Resources Planning (ERP) has been implemented only in a few Utilities long back and many of them were completed more than 6-7 years back. A few Utilities are hesitant in sharing their awarded cost data and BoQ. Also, no price list is available in the market for such type of Hardware/software solutions. Therefore, it is difficult to establish the Benchmark rates for sanction of ERP DPRs.

Various utilities with their own or with the help of some consultant have prepared and submitted Draft ERP DPR and wide variation among different components have been observed. Many a times abnormally higher rates were proposed. In order to restrict the abnormally higher cost and to maintain uniformity among various utilities, the DPR cost may be limited to the proposed benchmark rate of major items, which shall be used for appraisal of ERP DPRs. **However, the actual cost of the project shall depend upon the bids to be invited and awarded by the utility through competitive bidding process.**

Based on the BoQ items in the Model DPR template, IT/ERP guidelines approved by Monitoring committee, awarded cost data from a few Utilities, DGS&D rate contract and draft DPRs received from a few Utilities, uniform approach for appraisal of ERP DPR may be adopted for **new implementation of ERP in Utilities**, as mentioned below:

BoQ in the Model DPR template contains three major heads of cost-

- A) **Hardware-** For the hardware to be installed at Data centre/DR centre, unit rate available in awarded ITIA contract under RAPDRP with a cost escalation of 20% may be considered for the estimate purpose. Alternatively, unit rates of similar items may be taken as sanctioned recently under IT Phase-II DPR of respective State. For items, not available in the ITIA contract, assessment of Utility on the basis of market rates may be considered for the purpose of DPR appraisal. For PC/Printer etc., the bench mark cost approved by RAPDRP Steering Committee for Part-A IT projects may be used for appraisal of DPRs.
- B) **ERP Licenses-** Benchmark unit rate per user for three type of ERP licenses may be categorized in three slabs on the basis of volume of Full use ERP license (or Professional user license or Transactional user license) in the entire State used for appraisal of ERP DPR as below-

Sl. No.	License type	Small size	Mid size	Large size
		<1000 Transaction users	1000-2000 Transaction users	>2000 Transaction users
i)	License fees for Full use ERP Application users	Rs.85,000	Rs.72,000	Rs.60,000
ii)	License fees for employee Self-service users	Rs.3,500	Rs.3,000	Rs.2,500
iii)	License fees for Payroll users	Rs.400	Rs.350	Rs.300

The quantities of ERP Full use license provided in the guideline is only suggestive in nature, but the same is to be worked out by Utility as per their actual business requirements. However, quantities of ess license are to be restricted upto AE level officers and payroll licenses for all employees.

In case Utility proposes separate Number of licenses (in lieu of Full use License) for Finance, HR and Material Modules or its sub-component, then also the same Benchmark rate will be considered for each module for the purpose of estimation of cost.

ESS and payroll license for pensioners is not covered under IT/ERP guideline, which was finalized after wide consultation with Utilities and approved by Monitoring Committee. These licenses to give access to retired employees may be covered, in case proposed by Utility. However, considering that no benchmark rate is available for these licenses, which have

very limited functionality as compared with ess and payroll licenses for working employees, unit rate of 25% of ess and payroll licenses of working employees may be considered for the purpose of DPR cost estimation for ess and payroll license for pensioners.

- C) **Implementation cost-** The cost of implementing ERP across entire State may be categorized in three slabs considering size of state on the basis of total population of the state as per census 2011. The State wise implementation cost, thus arrived may be apportioned equally among all Discoms or in proportion to total cost of (Hardware+Software License) in each Discom.

Sl. No.	Size of state *	Name of the States	Implementation cost
i)	Large	AP, Gujarat, Karnataka, MP, Maharashtra, Rajasthan, TN, UP	30% of (Hw+Sw) cost or Rs.15 Cr, whichever is higher
ii)	Medium	Assam, Bihar, Chhattisgarh, Haryana, Jharkhand, Kerala, Odisha, Punjab, Uttarakhand, WB	30% of (Hw+Sw) cost, or Rs.9 Cr, whichever is higher
iii)	Small	HP, Manipur, Meghalaya, Tripura	30% of (Hw+Sw) cost, or Rs.6 Cr, whichever is higher

* Large States considered: Population>50 Million & Area>100000 Sq. Km.

Medium States considered: Population >10Million & <50 Million

Small States considered: Population <10 Million

Up-gradation proposals of existing ERP implemented by Utilities on their own – Since different utilities have different requirements w.r.t. up-gradation of existing ERP, no uniform benchmark rate can be applied and individual cases may be dealt by appraisal committee considering the requirements of utilities and provisions in the IT/ERP guidelines approved by Monitoring Committee. However, the below mentioned criteria w.r.t eligibility of major items (Hardware replacement, New Application modules etc.), may be adopted for appraisal of these DPRs-

a) Hardware items-

- Most of the Utilities (such as AP, Telangana, MP, Karnataka), who have implemented ERP, are having separate Data centre for ERP in each Utility instead of a common Data centre/DR centre at State level as established under R-APDRP for IT enablement. They may or may not have any DR centre for ERP.
- IT/ERP guidelines envisages only minimal number of additional servers required to host ERP applications after utilizing the existing IT infrastructure at R-APDRP Data centre/DR Centre to be covered in the DPR
- In above cases of up-gradation, since ERP is already hosted at Utility's own Data centre and not the R-APDRP Data centre, we may consider replacement/addition of Servers, Storage, UPS and associated accessories (unit rates as defined at para-A above) in ERP Data Centre of Utility, only in following cases-
 - i) More than 5 Years have elapsed since completion of the existing ERP project.
 - ii) Hardware required to host additional ERP Application from only three ERP modules: HR, Finance and Materials, as envisaged in the guideline
- Replacement of any other hardware/Software item (such as Tape Library, Switches, router, back up devices, EMS/NMS, helpdesk monitoring etc.) shall not be considered in the ERP up-gradation DPR and cost of replacement of any such items may be borne by Utility themselves, if required.
- Creation of any new DR Centre by such Utilities for ERP system is not envisaged in the DPR and Utility may create DR at their own cost, in case required. In case Utility is already having DR Centre for ERP or using R-APDRP DC/DR, replacement/addition of Hardware shall be governed by similar guideline as mentioned above for Data Centre.

b) Software Licenses-

- The proposal to up-grade SAP (ERP Applications) from existing version ECC6.0 to SoH Hana / S/4 Hana, will be a single vendor (proprietary) solution, as proposed in

the DPR as well RFP. The matter may be put up to Monitoring Committee for consideration.

- Additional Number of licenses (restricted to only 3 modules of ERP), if required by Utilities may be considered in line with IT/ERP guidelines, as per defined benchmark rates depending upon Number of additional licenses to be procured as mentioned at para-B above. For any other license, if required, Utility shall bear the cost.
- Utilities, who wish to upgrade ERP solution from existing SAP ECC6.0 to SoH or S4/HANA, no Database, shall be sanctioned in the DPR, since only HANA Database will be used. The existing licenses shall be valid, however only about 15% value of existing License cost may be considered for migration to new version of ERP system (about 8% for migration of only BW on HANA)

c) M,B,C and any other Hw/Sw requirement (if not covered under RAPDRP)-

- MBC or any other module is not envisaged under ERP DPR. Any such Module or licenses etc. not covered under R-APDRP can be put up to Monitoring Committee for their consideration under IT Phase-II additionally. However, replacement of entire Hardware installed under R-APDRP cannot be permitted, as already decided by MoP from time to time.
- Further, only three Nos. of ERP modules (HR, Finance, Materials) are envisaged and replacement/addition of any other Software item (such as Backup software, EMS/NMS, GRC, Document Management system, mobility solution etc.) shall not be considered in the ERP up-gradation DPR and cost towards any such items may be borne by Utility themselves, if required

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Note:-

This is only a draft procedure cum benchmark rate document, on the basis of which ERP DPRs are being appraised. However, the same is subject to approval by Monitoring Committee.