



GOVERNMENT OF INDIA  
MINISTRY OF POWER



# WORKSHOP ON IT ENABLEMENT UNDER IPDS

9<sup>th</sup> March 2016



## Presentation Outline

- Background
- Status: RAPDRP
- Additional Scope under IPDS
- Activity matrix: RAPDRP Vs IPDS
- Guidelines on IT and ERP applications under IPDS: Scope, Exclusions
- Benefits of IT enablement across entire urban area
- Project Formulation (DPR)
- Project Implementation Strategy
- Suggestions for improvement in Model RFP document



## IT Enablement under IPDS: Background

- IPDS guideline envisages implementation of ERP and IT enablement in non-RAPDRP towns.
- IT system under RAPDRP has adequate provision though design of DC and DR to meet requirement of entire state Utilities with incremental up-gradation.
- To extend coverage to additional towns, only incremental expenditure shall be required and benefit of IT system can be derived.
- In spite of these provisions, most of the states prioritized IPDS scheme with Distribution strengthening works.



# IT Enablement Status: RAPDRP

No of towns: 1405

Scheme coverage:  
Population >30000  
(10000 for sp. cat. states)

RAPDRP

11 KV Feeder coverage:  
30000

No of Go-Live towns: 1188



# Additional IT Enablement Scope: IPDS

No of towns: 2600

Coverage: All towns

IPDS

11 KV Feeder coverage: 12000

No of Data Centre under RAPDRP: 21



# Activity Matrix: RAPDRP Vs IPDS

SI	DC/DR Activity for IT Enablement	RAPDRP	IPDS
1	Data/DR Centre/CCC Building	√	X
2	Hardware and network devices	√	\$
3	Software Development and Customization	√	\$
4	Integration of all applications	√	X
5	Data Migration	√	√
6	Functionality tests for applications	√	X
7	User Acceptance test / performance test	√	X
8	Project Management	√	√

\$ - Only Up-gradation envisaged



# Activity Matrix: RAPDRP Vs IPDS

SI	Town Activity for IT Enablement	RAPDRP	IPDS
1	HW to access RAPDRP Applications	√	√
2	DGPS based GIS Survey of Assets with sub-meter resolution map	√	X
3	GPS based GIS Survey of Assets with 2.5 m resolution map	X	√
4	GIS based Consumer Indexing	√	X
5	Preparation of Feeder wise consumer database and linking in GIS (List by Utility)	X	√
6	AMR of System meters	√	√
7	Connectivity with DC and access of applications by town users as per utility defined access right	√	√
8	Declaration of Go-Live of towns	√	√



# Key highlights of Guidelines on IT and ERP applications under IPDS





# Scope of work: IT enablement under IPDS

Additional hardware in towns to access RAPDRP Applications

- Router, Switches, UPS
- PC, Printer

Calculation of Feeder wise and Town wise AT&C loss

- Ring fencing of towns
- Feeder wise database of consumers

Remote reading of meters

- Modems at Feeders and Boundary points



# Scope of work: IT enablement under IPDS

## GIS Survey of Electrical Assets

- GPS based survey in lieu of DGPS
- 2.5m resolution map in lieu of 1m

## Incremental up-gradation of DC/DR (after utilizing existing infrastructure under RAPDRP)

- Hardware
- Software

## Integration of town with DC/DR and Customer Care Centre

- Go-Live of towns



# Scope of work: ERP implementation under IPDS

## ERP Functionalities

- HR function including Emp. Self Service
- Finance and Accounts
- Materials (Purchase and Stores)

Minimal servers to host ERP applications after utilizing existing IT infrastructure under RAPDRP

- Hardware
- Software

IT infrastructure in stores (if not covered under RAPDRP)

- Router, Switches, UPS
- PC, Printer



## Suggestive No. of Licenses for ERP implementation under IPDS

### ERP Application Users

- Corporate office - 100 to 300
- Circle office - 20
- Division office & store- 10
- Subdivision office - 3

### Self Service users

- Up to Officer level

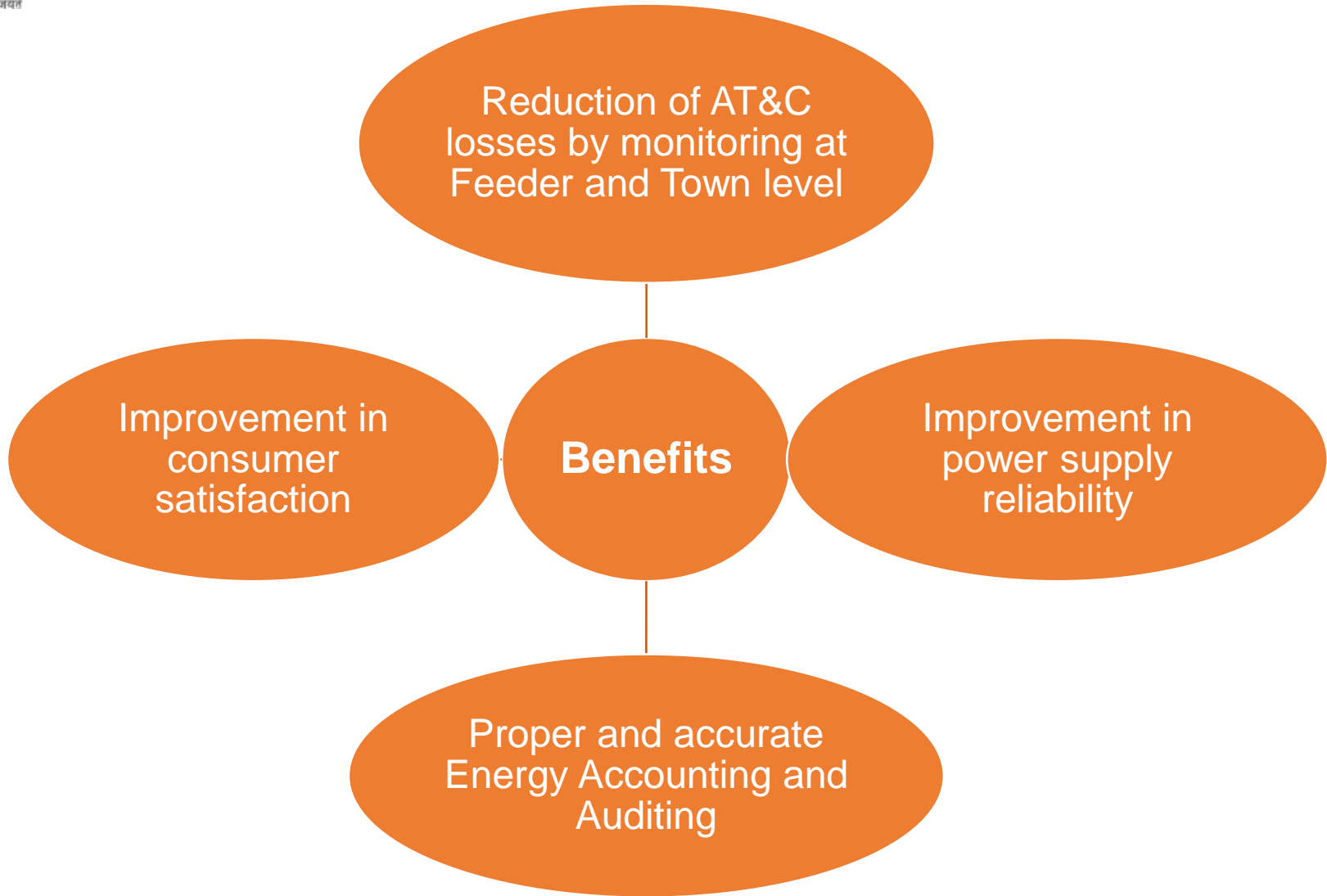
### Payroll users

- All employees in the organization



## Specific exclusions: IT and ERP under IPDS

- Revenue expenditure (such as Post implementation support, Annual Technical Support, Annual Maintenance Charges, Facility Management Services etc.)
- Bandwidth charges for running of Applications
- GIS based Consumer Indexing
- Any up-gradation of existing ERP or any add on modules
- IT infrastructure in field for ERP implementation
- ERP for Power depts., as their business process involves approvals from various Govt. depts. (their finance is with state treasury)



**MONITORING OF FEEDERS THROUGH NPP**



# Project Formulation (DPR) for IT and ERP applications under IPDS



## DPR for IT and ERP under IPDS

- Model DPR Format shall be issued to Utilities after approval of Guidelines
- Single consolidated DPR for IT Applications and ERP to be prepared by respective Utility
- IT consultant not envisaged
- Utility has to create a dedicated IT Cell
- Utility to complete As Is Study of project area and collect data on Assets, Consumers, Metering status, IT infrastructure required etc. for collating in the DPR
- Utility to provide complete IT landscape existing under RAPDRP or developed on their own
- Funding shall be governed as per existing IPDS guidelines and conditionality





## Expectations from Utility for DPR preparation

- Ensure Meter and Modem of each Feeder and Boundary points for calculation of Feeder wise & Town wise AT&C loss
- While proposing any incremental requirement / up-gradation in the Hardware at DC/DR center to provide detailed justification of items (Servers/RAM/CPU etc.) along with Server sizing calculation
- Due to Enterprise licenses procured under R-APDRP, Application Software license may be considered only to the extent required subject to certification by Utility for not procuring Enterprise license for the same under RAPDRP



# Project Implementation Strategy



# Implementation of IT and ERP projects under IPDS

- Utilities who have completed Part-A IT including verification by TPIEA-IT shall be considered for IT in smaller towns.
- Project shall be executed through inviting fresh NIT and awarding separate contracts through competitive bidding process.
- There shall not be any agency empaneled by PFC for implementation.
- Utilities may invite bids from agencies qualified to execute such projects as per their approved procurement policy.



# Suggestions for improvement in Model RFP Document



## Areas for suggesting changes for improvements

- Suggest methodology to handle the difficulties faced during RAPDRP implementation in light of experience and learning gained so far.
- SRS Document (technical specification for Part-A IT project) was prepared in year 2008-09 and many technological changes have taken place in the field of IT and communication, technical specification needs a review. **Suggest and finalize any modification required in specification**, which shall improve the IPDS implementation and should be cost effective.
- As DC/DR/CCC already established, scope of work in the additional towns has reduced to many fold, the requirement of agencies to handle IPDS work in these additional towns may be with **different Competency level**.



## Areas for suggesting changes for improvements

- Condition to have seamless integration of these additional towns with existing DC/DR/CCC.
- The SLA for the new implementing agency should be defined clearly in the RFP, so that there is seamless SLA between new and present implementation agency.
- Qualifying requirements, Evaluation criteria, Performance and User acceptance test criteria, Payment terms etc. also need a review due to reduced scope.
- Model RFP may be used after customization as per specific needs of respective States/Utilities with prior approval of State DRC constituted for IPDS in view of principles of transparency, financial propriety, fair competition etc.



Any suggestion for improvement  
in the Model RFP Document may  
please be sent on following  
email Id within one week-  
[ipds@pfcindia.com](mailto:ipds@pfcindia.com)



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