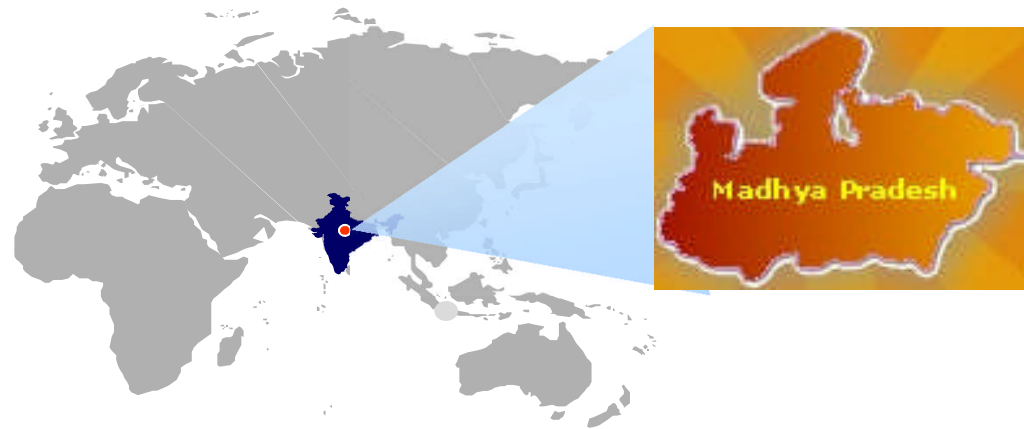


# Outsourcing of Metering and Billing



14<sup>th</sup> September 2015



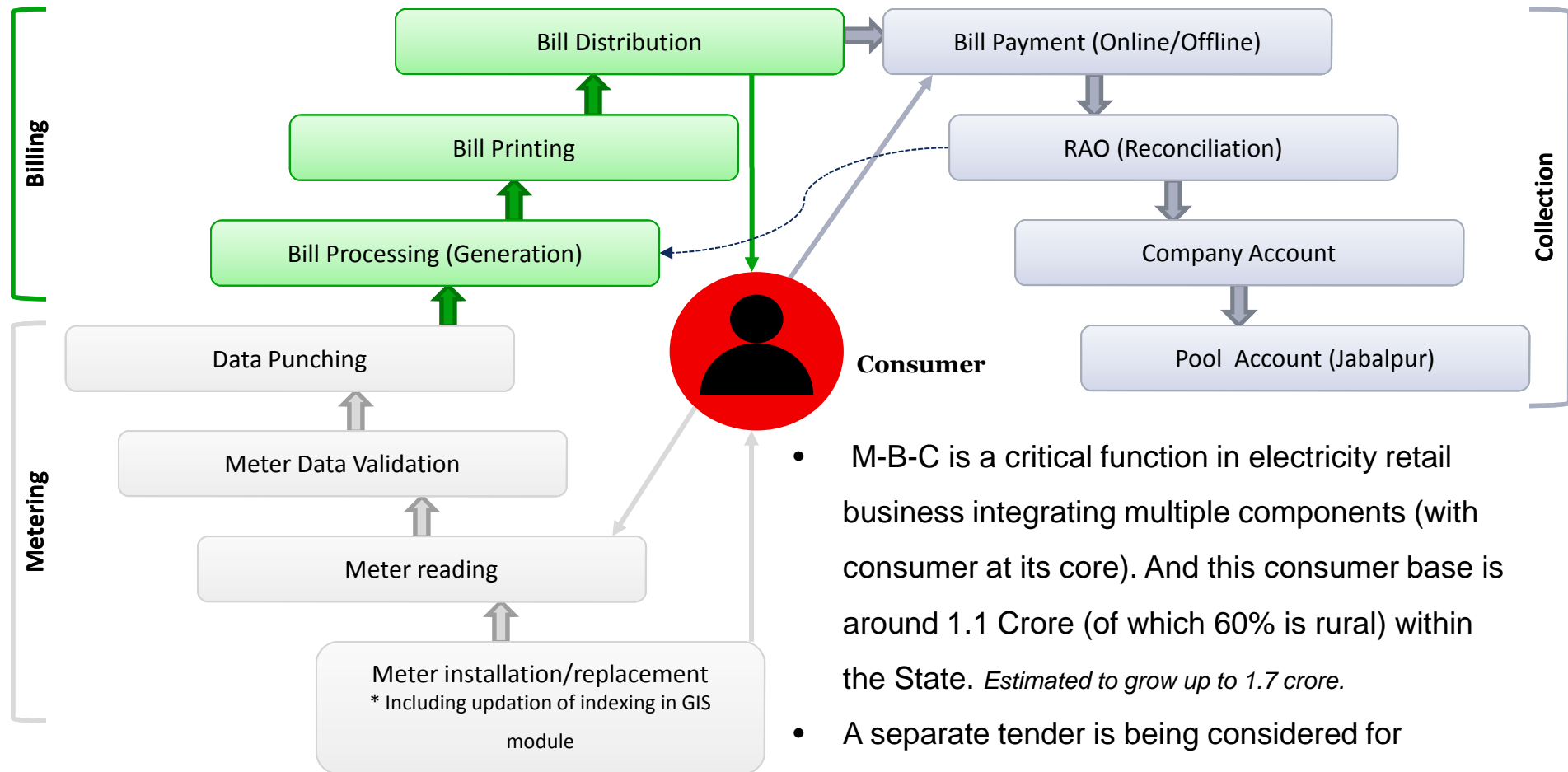
# Objective for today meeting



- To discuss Scope Of Work for outsourcing of parts of Metering and Billing activities for the 3 Discoms
- To discuss any questions / suggestions you may have around the scope.
- To introduce the draft QR and Payment terms.
- There will be no discussion or questions on the QR today.
- All participants are requested to send their feedback on QR to the email address listed towards the end.

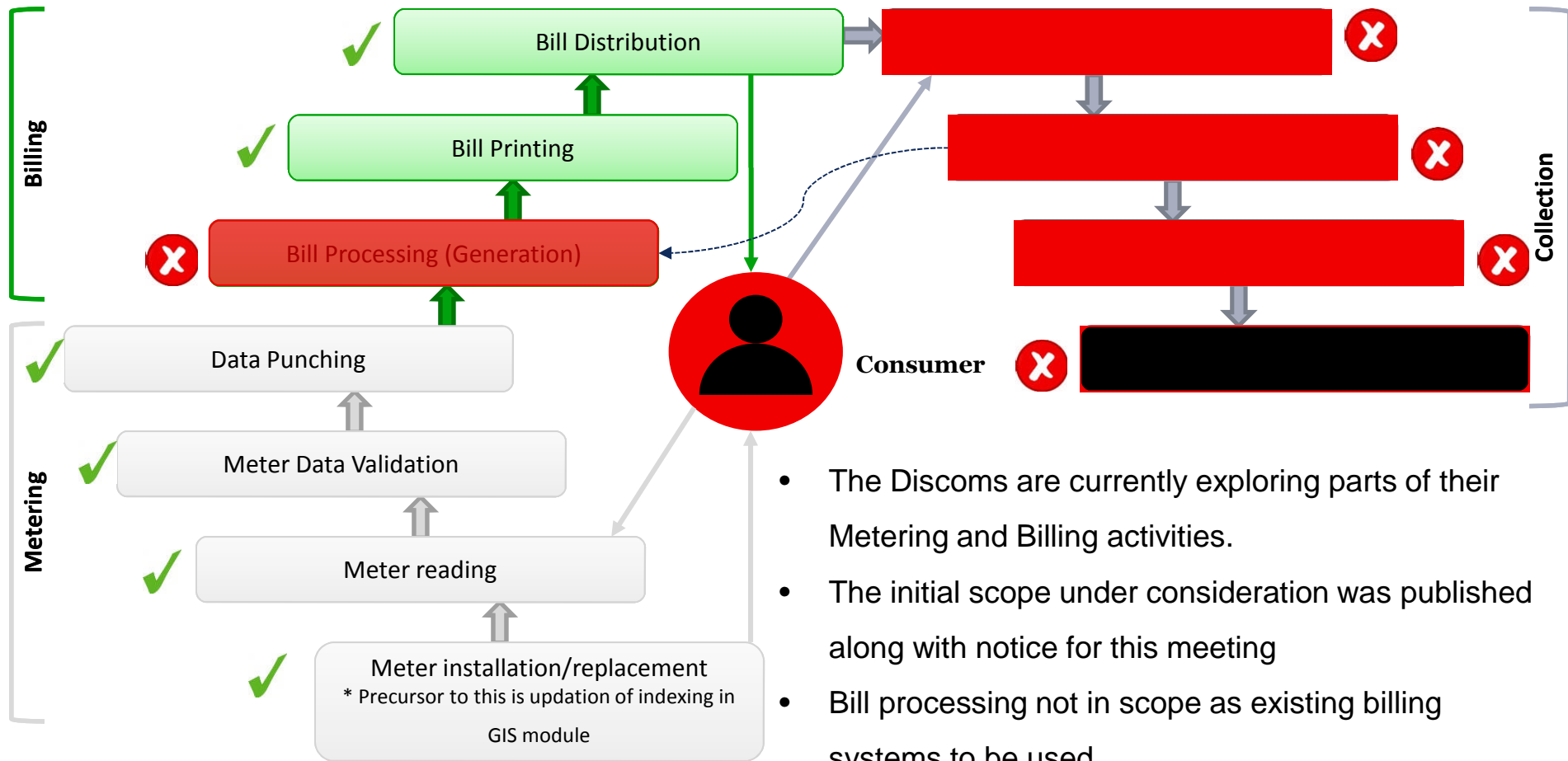
# Metering-Billing-Collection: Process Overview

## Step by step overview of the process



- M-B-C is a critical function in electricity retail business integrating multiple components (with consumer at its core). And this consumer base is around 1.1 Crore (of which 60% is rural) within the State. *Estimated to grow up to 1.7 crore.*
- A separate tender is being considered for Energy Accounting.

# Metering-Billing-Collection: Scope in the current tender



- The Discoms are currently exploring parts of their Metering and Billing activities.
- The initial scope under consideration was published along with notice for this meeting
- Bill processing not in scope as existing billing systems to be used.
- Collection process is also out of scope.

# Objective for outsourcing Metering and Billing



- **The guiding principle behind this exercise is to achieve measurable curtailment of losses in distribution system.**
- **The intention is to take advantage of technological advancements and aim for 100% metering and regular accurate meter reading in the state.**
- **Provision of this service will enable in streamlining of 100% bill generation and distribution.**
- It is the intent of the 3 Discoms to aggregate all these services in a single tender and allot service providers to perform these services **Region wide.**
- There are **7 Regions** in the state of MP. We wish to float separate tenders for them
- At every step (Meter reading, Bill generation & distribution )the Discoms wish to utilize technologies like SMS alerts to enable consumer information.
- Appropriate back end arrangements need to be delivered to achieve this.

# Existing number of consumers



Discom	Regions	No. of Circles	LT					HT	Total	Total Excl. Agriculture
			Domestic	Non-Domestic	Industry	Agriculture	Others			
Central Discom	Bhopal Region	7	14,55,594	1,44,279	15,874	2,53,022	6033	1266	18,76,068	<b>1,623,046</b>
	Gwalior Region	7	9,14,267	96,112	15,719	1,56,681	5460	616	11,88,855	<b>1,032,174</b>
West Discom	Indore Region	9	17,49,350	1,95,710	27,503	4,11,274	12,574	2095	23,98,506	<b>1,987,232</b>
	Ujjain Region	6	12,38,328	1,26,175	15,042	4,88,464	10,397	615	18,79,021	<b>1,390,557</b>
East Discom	Jabalpur Region	7	15,95,908	1,41,008	18,209	3,12,575	7,783	804	20,76,287	<b>1,763,712</b>
	Rewa Region	4	8,81,479	70,395	9,286	1,98,450	2,998	250	11,62,858	<b>964,408</b>
	Sagar Region	4	7,45,318	57,045	11,343	1,82,385	3,869	166	10,00,126	<b>817,741</b>
	<b>Total</b>	<b>43</b>	<b>85,80,244</b>	<b>8,30,724</b>	<b>1,12,976</b>	<b>20,02,851</b>	<b>49,114</b>	<b>5812</b>	<b>1,15,81,721</b>	<b>95,78,870</b>

Note:- After implementation of various ongoing and upcoming schemes , the total number of consumers may increase and therefore the target number is likely to be between 1.5 to 1.7 Crore.

# Tender Details

# Highlights of tender



## General

- Contract shall be awarded at Regional Level. Circle wise phasing will be done during handing over, however the entire region must be taken over by **6 months**.
- Initial contract period shall be for **60 months** (5 Years) which can be further extended by 3 years at each instance , on mutual agreement between both the parties on same terms and conditions as specified in bid documents.
- Commencement period of **45 days** shall be given successful bidder to understand the present process and to arrange the necessary resource to carryout the assignment.
- The Agency shall submit the detail work plan before starting of work.
- Only one region per Discom shall be awarded to one agency.

## Necessary Compliances

- The Agency shall pay the Minimum Wages (as applicable) and other payments as notified by the Government from time to time to his employees;
- The Agency shall provide their prescribed uniforms, identity card, name badges and safety items/kits etc. to his employees, as required under law;
- Police verification of all the persons engaged is to be ensured by the Agency.
- The Agency will ensure all its employees are covered under national Accidental Insurance and National Life Insurance (Govt. of India Schemes)



## Survey and Updation of consumers in existing GIS module (for R-APDRP towns only)

- The Agency shall be required to make sure that data pertaining to consumers is regularly up to date in the GIS module of Discom's R-APDRP systems.
- As part of the initial Updation exercise, the Agency shall collect mobile phone numbers (mandatory) and email addresses (where available) for the entire customer base, amongst the other fields.

## Procurement of meter and quality checks

- The agency will purchase meters, whereas Meter specifications , vendor empanelment shall be done by the Discoms
- The meter specifications are a minimum to what must be complied with . The vendor is free to install a superior quality meter, after getting prior approval from Discoms.
- All meters shall be tested at Company's Laboratory

### Installation of new meter, replacement of failed meter (burnt/stop/defective) and shifting of meters located inside consumer premise to call-bell location

- The agency shall ensure 100% AMR metering of HT and LT high value consumers (>10kW).
- The Agency shall install new meters after being tested successfully (and after due approval of Company for the connections so identified) on the premises of:
  - consumers with unmetered connections (excluding those falling under agricultural category)
  - consumers with burnt/stop/defective meter
  - consumers seeking new service connection
- Shifting of meters located inside consumer premise to call-bell location - where not present

## Reading of meter

- Agency shall read **all Consumers**; All HT and LT High value customers (>10kW) shall be read remotely.
- The count of meters read in a month shall never be less than 98% of the total meter count or the previous month's meter readings' count, whichever is higher.
- Meter reading shall be done with hand held device and all readings should have time, date and location stamp (GPS coordinates of consumer location) along with the reading.
- If consumer meter has an optical port then manual reading is not allowed and meter shall be read through MRI/IR etc.
- If consumer meter is non communicable, than meter reading shall be manually punch in hand held device with photo of meter reading.
- The agency shall create a Management Dashboard for Company to monitor the progress of billing carried out by the agency.

## Validation of meter data

- Agency shall develop robust internal validation system.
- Appropriate logics for data validation shall be finalized in tandem with Company;
- The Agency shall carry out 1st level data validation with the help of associated software systems of different meter technologies.
- Agency shall provide reading data to Discom in electronic form in the compatible format to existing billing system.

## Bill Printing

- The Company shall process and generate bill files via existing systems like CC&B, RMS, Sybase, etc. and provide the same (in the mutually agreed format) to the Agency for printing and distribution work.
- The agency shall ensure printing of 100% bills against consumer data provided by Company.
- Within 48 hours of the bills being generated, they should be available to view online.

## Bill Distribution

- The Agency shall ensure distribution of bills as per schedule decided by the Company – timelines shall be strictly adhered to.
- The Agency shall take acknowledgements (dated signatures) from consumers at the time of delivery of bills. The minimum percentage of such acknowledgements shall be fixed at 95 % in urban area and 75% in rural area (of total bills printed in a particular month) so as to ensure proof of delivery.

# Manpower Requirement (Estimated)



No.	Requirement at following Levels	Minimum Qualification Required	Minimum Experience Required	Minimum Count Required	Age Limit (in years) at the time of award.	
					Min.	Max.
1.	<u>Region Level:</u> Regional Head	Degree in Electrical Engineering	10 years of experience in electricity distribution sector	1 at regional level and will report to Company counterpart at regional level	30	50/55
2.	<u>Circle Level:</u> Circle-in-charge	Degree in Electrical Engineering	5 years of experience in electricity distribution sector	1 at circle level and will report to Company counterpart at circle level	25	50/55
3.	<u>Division Level:</u> Division in-charge	Degree in Electrical Engineering	5 years of experience in electricity distribution sector	1 at division level and will report to Company counterpart at circle level	25	50/55
4.	<u>Division Level:</u> Field staff	Diploma / ITI certificate in Electrical Trade (2 year course)	1 year of experience in electricity consumer meter reading, replacement or similar works	<u>In urban areas:</u> 1 field staff on every 1,500 consumers  <u>In rural areas:</u> 1 field staff on every 1,000 consumers	20	45/50

**\*Agency shall maintain 15% additional manpower ,above the minimum man power requirement.**

# Service level agreement (1/3)



## Shall be effective after 4 months of start of work by agency

No.	Description	Mandatory compliance required		Penalty (in case of non-compliance)	
		Urban	Rural	Urban	Rural
<b>A</b>	Minimum stock level maintenance				
<b>1</b>	Inventory of meters at Circle level to be maintained (which shall be checked monthly by Company)	Stock to be 2 times the average failure rate of meters /per month (to be provided by Company for last 3 years slab-wise for different types of meters)		INR 10,000/- per default, If repetitive defaults (more than twice) in maintaining minimum stock level is found.	
<b>B</b>	Norms of manpower deployment				
<b>1</b>	Field Staff	1 Meter reader per 1500 Consumers (However, this count shall not exceed 1600)	1 Meter reader per 1000 Consumers (However, this count shall not exceed 1100)	If readings per meter reader are found to be more than 1600, then readings submitted in extra of 1600 shall not be considered for payment purpose.	If readings per meter reader are found to be more than 1100, then readings submitted in extra of 1100 shall not be considered for payment purpose.
<b>C</b>	Meter replacement (from the date of written instruction issued by Company to the Agency)				
<b>1</b>	(a) Unmetered connections	Within 3 days	Within 5 days	Company shall carry out replacement work at risk and cost of the Agency (2 times of the quoted material and labour costs shall be recovered from Agency's bills)	
<b>2</b>	(a) Stop/Burnt/Defective Meters	Within 3 days	Within 5 days		
<b>3</b>	(a) New service connections	Within 3 days	Within 5 days		
<b>4</b>	(a) Shifting of meters to call-bell location	Within 3 days	Within 5 days		

Note:-conditions and numbers shown in SLA are indicative and should not be construed as final.

# Service level agreement (2/3)



## Shall be effective after 4 months of start of work by agency

No.	Description	Mandatory compliance required		Penalty (in case of non-compliance)	
		Urban	Rural	Urban	Rural
<b>D</b>	MIS reporting				
<b>1</b>	MIS reports (duly approved by the Agency counterpart) shall be provided to Company in agreed formats (online/offline) and timelines	Weekly/Monthly	Weekly/Monthly	INR 1000 per day of delay	INR 1000 per day of delay
<b>E</b>	Meter Reading				
<b>1</b>	(a) Timeline	At least 23 days before payment due date		INR 500 per instance	
<b>2</b>	(a) Quantum				
<b>F</b>	Meter data validation and punching				
	(a) Timeline	At least 21 days before payment due date		INR 500 per instance	
	(b) Quantum	100% of meters read		INR 500 per instance	
<b>G</b>	Bill Printing				
	(a) Timeline	At least 17 days before payment due date		INR 500 per bill	
	(b) Quantum	100% of bills processed (files to be provided by Company)		INR 500 per bill	
<b>H</b>	Bill Distribution				
	(a) Timeline	At least 15 days before payment due date		INR 500 per bill	
	(b) Quantum	100% of bills printed		INR 500 per bill	

# Service level agreement (3/3)



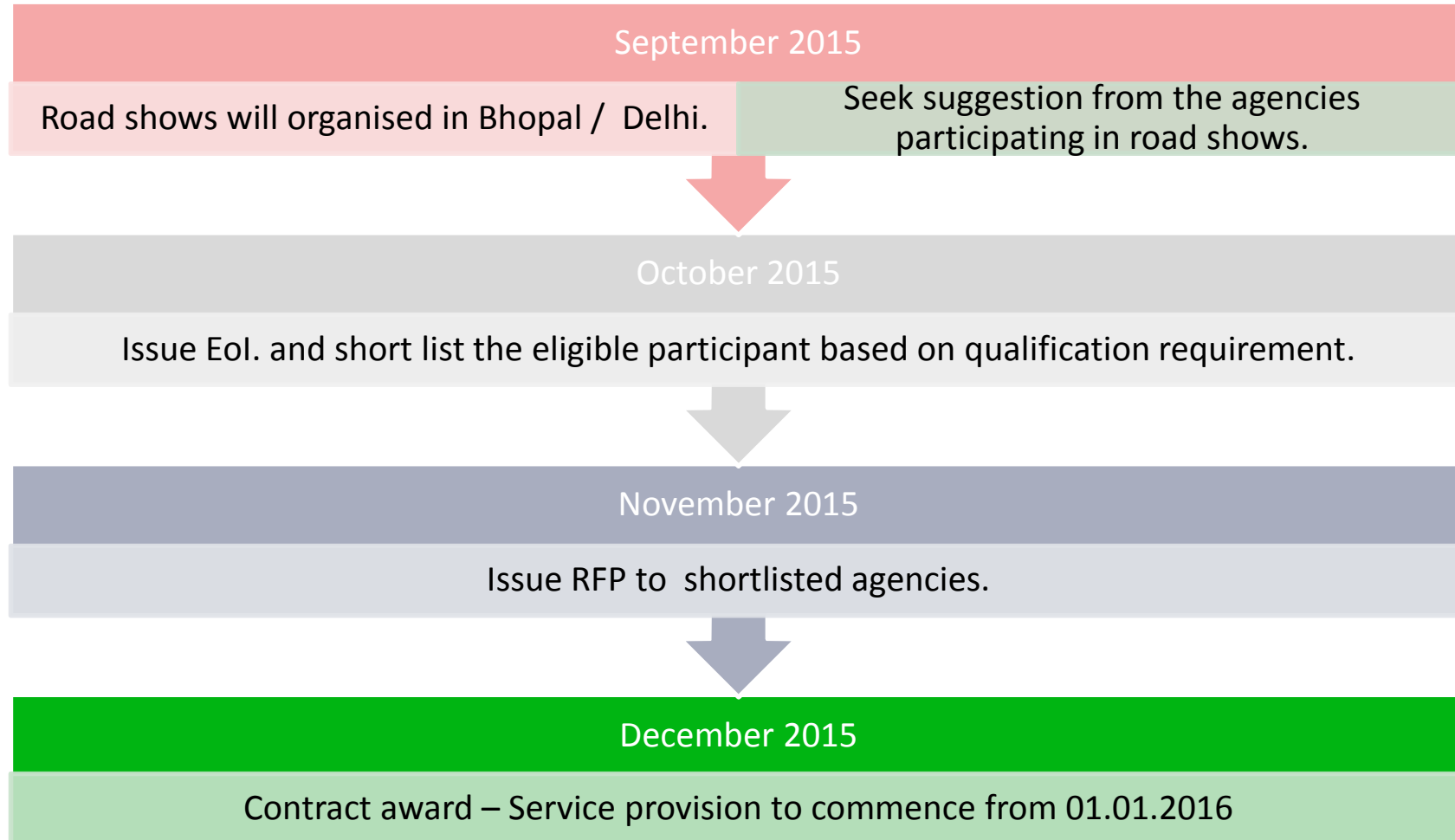
## Shall be effective after 4 months of start of work by agency

No.	Description	Mandatory compliance required		Penalty (in case of non-compliance)	
		Urban	Rural	Urban	Rural
1	Miscellaneous				
1	Consumer complaints regarding bill printing (and if found correct by Company on investigation)	Zero consumer complaints regarding bill printing		INR 1000 per complaint after 100 complaints	
2	Consumer complaints regarding non-receipt of bills (and if found correct by Company on investigation)	Zero consumer complaints regarding non-receipt of bills		INR. 1000 per complaint after 100 complaints	
3	Consumer complaints regarding receipt of bills after payment due date (and if found correct by Company on investigation)	Zero consumer complaints regarding receipt of bills after payment due date		INR. 1000 per complaint after 100 complaints	
4	Consumer complaints registered against agency personnel for any kind of misconduct (and if found correct by Company on investigation)	Zero consumer complaints to be registered against agency personnel for any kind of misconduct		INR. 1000 per complaint	
5	Possession of Photo-ID card by all Agency personnel (and if found correct by Company on investigation)	Agency personnel shall necessarily carry their own valid Photo-ID card at all the time while working		INR. 1000 per instance of carrying expired ID card, others' ID card or no-ID card	
6	No malpractices by the Agency personnel	Zero case of agency personnel being involved in malpractices like reversal of meter, bypassing of meter, etc.		INR. 50,000 per such case	
7	Incentive to the Agency on identification of electricity theft cases	-		<ul style="list-style-type: none"> <li>- Incentive of INR 10 per case on reporting of theft case</li> <li>- Incentive of INR 500 per case on subsequent establishment of case by vigilance cell</li> <li>- Incentive of INR 1000 per case on assessment bill paid by consumer</li> </ul>	



# Timelines

# Way Forward



# Stakeholder's Suggestions

Comments on  
Scope of Work

Please e-mail your suggestions on the scope of work at the following email id [mbc.tor@mppmcl.com](mailto:mbc.tor@mppmcl.com) by 22<sup>nd</sup> September, 2015

# Discussion on Scope (Q&A)

# Bid Eligibility and Payment terms (*Draft*)

# DRAFT - Minimum Techno-commercial eligibility criteria for qualification



S. No.	Activity	Minimum requirement
1	The Bidder shall be in the business of providing similar type of services in any Board/ Power Utility/Electricity distribution company in India.  (In case of JV, all parties shall meet minimum requirement individually.)	Minimum For the last 3 years
2	The Bidder should have provided “similar” type of services in any Electricity Utility in India. Here, “similar” refers to the activities specified in the scope of work. (In case of JV, at least one party should meet minimum requirement) Supporting document required - The bidder shall furnish performance certificates (issued by past employers) of all projects done during last 3 years.	Meter reading and bill distribution for Minimum one lakh consumers per month for a period of one year. Also the company should have installed at least 50,000 meters in any one year in last three years.
3	The Bidder shall have Annual Turnover during any one year of the last three financial years. (Copies of Audited statements like Balance Sheet, P&L statement and Income tax return) along with audit report certified by their appointed Statutory Auditor must be provided)  (In case of JV, lead partner should meet minimum requirement)	INR 50.0 Crore
4	The Bidder shall have Cash Credit or Overdraft facilities allowed by any bank (valid certificate from their Bank which is not less than 6 months should be submitted).	For a minimum of INR. 5.0 Crore
5	The bidder should have minimum working persons enrolled under EPF act at least for last one year. (In case of JV all parties shall together meet the minimum eligible criteria)	500 (Five hundred)

**If any of the bidder submits bids for all regions, then bidder has to meet out the aggregate requirement of annual turnover, cash credit or over draft facilities, minimum working persons enrolled for all region wise floated bids.**

## Single Payment per consumer

- The bidder will quote a single amount per customer to be paid monthly. Irrespective of the customer and meter type.
- This price will cover all asset replacement, infrastructure creation and transactions (meter reading – bill printing – bill distribution)
- The bidder will be paid the amount for the number of meter reads received and verified.



# Stakeholder's Suggestions

Comments on  
Scope of Work

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Comments on  
Eligibility and  
Payment terms

Please e-mail your suggestions on Eligibility and Payment terms at the following email id [mbc.qr@mppmcl.com](mailto:mbc.qr@mppmcl.com) by 22<sup>nd</sup> September, 2015

# Thank You

