



# Auction of Spectrum in 1800MHz and 800MHz bands

## Auction Rules

e-Procurement Technologies Limited

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# Auction Format

- The winners of the number of Blocks for each Service Areas for 1800MHz and 800MHz auctions respectively will be determined through the Clock Stage.
- The Clock Stage determines a common winning price for each Service Areas where spectrum is available.



## General Information – 1800MHz Auction

- A minimum of 8 blocks each of 1.25MHz (10MHz) will be put to auction in all Service Areas.
- Provision will also be made for spectrum up to 3 blocks each of 1.25MHz (3.75MHz), wherever available, for topping up the 8 blocks put for auction to meet the requirement of New Entrants, if such an exigency arises.
- Bidders will be able to submit their bids for the number of blocks depending on their categorization as a “New Entrant” or an “Existing Telecom Operator” in the respective Service Areas.
- A New Entrant bidder can submit the bid for a minimum of 4 blocks with a permission to bid for an additional block of 1.25MHz.
- An Existing Telecom Operator will be allowed to take maximum 2 blocks of 1.25MHz each.



## General Information – 800MHz Auction

- A minimum of 3 blocks each of 1.25MHz (3.75MHz) will be put to auction in all Service Areas.
- Provision will also be made for spectrum up to 1 block of 1.25MHz, wherever available, for topping up the 3 blocks put for auction to meet the requirement of New Entrants, if such an exigency arises.
- Bidders will be able to submit their bids for the number of blocks depending on their categorization as a “New Entrant” or an “Existing Telecom Operator” in the respective Service Areas.
- A New Entrant bidder can submit the bid for a minimum of 2 blocks with a permission to bid for an additional block of 1.25MHz.
- An Existing Telecom Operator will be allowed to bid for 1 block of 1.25MHz.



# Clock Stage – Overview – I

- There will be simultaneous bidding for the total available blocks in each of the 22 Service Areas.
- The Clock Stage will consist of a number of Clock Rounds.
- The first Clock Round will begin with all blocks in a Service Area being offered at the Reserve Price.
- For each Service Area, the bidders can submit their bid for the number of blocks depending on their categorization.
- The ability to make bids is subject to the number of eligibility points held by bidders, deposit requirements and activity rules.

# Clock Stage – Overview – II

- After each clock round, the bidders in each Service Area will be ranked with respect to the Provisional Winning Blocks which they hold as per the tie rules.
- If **total demand** in a Service Area for a Clock Round Price is NOT less than the number of blocks available, in which case the Clock Round Price will be increased in the following clock round , with the **price increment** linked to the level of **excess demand**.
  - ***Total Demand will be calculated on basis of Number of Blocks for which Bids have been submitted for a particular Clock Round Price.***



## Clock Stage – Overview – III

- In the following round, bidders state whether they wish to bid at the new prevailing prices for the number of blocks which they are permitted to depending on their categorization.
- Clock rounds continue until there is no further activity in each Service Area at current clock price.
- Once the clock stage closes, the current Provisional Winning Bidders are declared Winning Bidders.
- The Provisional Winning Price will become the Winning Price for all winners in that Service Area.





# Top-up Blocks

- Allotment of top up blocks would be considered only to accommodate the demand of a New Entrant only.
- Top up will not be utilized for the New Entrant if he is not a Provisional Winning Bidder in that Service Area.
- Top up will be utilized in the case where the New Entrant becomes a Provisional Winning Bidder for the number of blocks which is Greater than Zero but less than Four in case of 1800MHz band.
- The actual number of top up blocks used will be known at the end of the Auction.
- Topping up facility will be used to make a minimum allotment of 4 blocks only even if the bidder might have submitted his bid for 5 blocks.

# Top-up Blocks

## 3 blocks used for Top up

Round No. 1 , CRP=100

Rank	Bidder Name	No. of Blocks for which Bid Submitted	No. of Blocks allotted as a Provisional winning Bidder
1	Existing Bidder-1	2	2
2	New Bidder-1	4	4
3	Existing Bidder-2	1	1
4	New Bidder-2	4	1 + 3 top up

Total Demand = 11, Excess Demand = 3

# Top-up Blocks

**3 blocks used for Top up**  
**R2, CRP=110 (Due to +ve demand in R1)**

Rank	Bidder Name	No. of Blocks for which Bid Submitted	No. of Blocks allotted as a Provisional winning Bidder
1	Existing Bidder-3	1	1
2	Existing Bidder-1	0	2
3	New Bidder-1	0	4
4	Existing Bidder-2	0	1
5	New Bidder-2	0	0

**PWP = 100 (With top up being available for subsequent rounds)**

# Top-up Blocks

## 1 block used for Top up

Rank	Bidder Name	No. of Blocks for which Bid Submitted	No. of Blocks allotted as a Provisional winning Bidder
1	Existing Bidder-1	1	1
2	New Bidder-1	4	4
3	New Bidder-2	4	3 + 1 top up
4	Existing Bidder-2	2	0

Total Demand = 11, Excess Demand = 3



# Total Demand & Excess Demand

- Total Demand is calculated based on the Total Number of Blocks for which bids have been submitted.
- Excess Demand is calculated based on the Total Demand *minus* the Number of Blocks put up for Auction (8 in case of 1800MHz and 3 in case of 800MHz)
- If Excess Demand is –ve, the Clock Round Price in the subsequent Round will remain same as the last completed Clock Round.
- If Excess Demand is Zero or +ve, the Clock Round Price in subsequent Round will be the Clock Round Price of last completed Clock Round plus a strictly positive price increment.



## Eligibility to make bids

- Each block in a Service Area has been assigned a specific number of eligibility points.
- Each bidder has an initial number of eligibility points in the first round based on the Earnest Money Deposit.
- A bidder will maintain or lose part or all of its eligibility to bid in subsequent clock rounds depending on its bid in the current clock round and on the auction activity rules.
- These rules allow bidders flexibility to switch between Service Areas (except if they are currently a provisional winner in any Service Area, in which case, they can switch from that Service Area only after they are overbid).



# Earnest Money Deposit Requirements

- Each block in a Service Area has a deposit requirement.
- In any round, any bid for a combination of service areas must have a total deposit requirement less than the Earnest Money Deposit made.
- Initial eligibility will be determined by the Earnest Money Deposit .
- The Notice will contain full details of these rules.



## Activity Rules – I

- A bidder's activity in a clock round is the sum of:
  - the number of eligibility points associated with the block(s) in the Service Areas in which the bidder has been determined to be a provisional winner at the end of the last completed clock round; and
  - the eligibility points associated with the block(s) in the Service Areas where the bidder has made new bids (i.e. bids where it was not a provisional winner in the previous round)





## Activity Rules – II

- A bidder must demonstrate bid activity in each clock round that equals or exceeds a certain percentage of its eligibility, otherwise its eligibility will be reduced proportionately in the following round
- The percentage (Auction Activity Requirement) will increase over the duration of the clock stage from 80% to 90% and then finally to 100%.
- These increases will be made by the auctioneer as overall bidding activity declines across all circles.

# Auction Activity Requirement

- Depending on AAR set for a clock round, bidder will be required to maintain a minimum BAR (Bidder Activity Requirement)
- If the Activity is maintained, for the subsequent round;
  - The eligibility will be equal to original eligibility \*
  - If not, will be reduced accordingly (rounded to nearest whole number) as per below given formula \*\*

$$\text{Bidder's Eligibility Points in Clock Round (R+1)} = \frac{\text{Activity Level in Clock Round R}}{\text{Auction Activity Requirement in Round R}}$$

# Auction Activity Requirement

AAR %	Initial Eligibility	Min. Eligibility points to bid for	If bid eligibility is more	Eligibility for next round *	If Bid eligibility is less	Eligibility for Next Round**
80%	70	56	60	70	50	63
90%	70	63	70	70	60	67
100%	70	70	70	End of Auction		

- If bidder is not a provisional bidder in any service area in last completed round, and fails to submit a new bid in the subsequent round, then Eligibility points for subsequent round will become zero and hence will not be able to participate further.

## Bid Submission – New Entrant – I

- Can Submit bid for 4/5 blocks
- If has submitted for 4 blocks in Round ***R*** and is a Provisional Winning Bidder for 4 block, following scenarios will be applicable in the subsequent Round, ***R+1***:
  - If the Clock Round Price is same in round ***R+1*** (i.e. equal to Round ***R***), he will have the option to bid for 5 blocks only.
  - If the Clock Round Price is incremented in round ***R+1***, the bidder can submit fresh bid for 4/5 blocks.

## Bid Submission – New Entrant – II

- Can Submit bid for 4/5 blocks
- If has submitted for 5 blocks in Round ***R*** and is a Provisional Winning Bidder for 5 block, following scenarios will be applicable in the subsequent Round, ***R+1***:
  - If the Clock Round Price is same in round ***R+1*** (i.e. equal to Round ***R***), he will NOT have the option to submit the bid.
  - If the Clock Round Price is incremented in round ***R+1***, the bidder can submit fresh bid for 4/5 blocks.

## Bid Submission – Existing Service Provider – I

- Can Submit bid for 1/2 blocks
- If has submitted for 1 block in Round ***R*** and is a Provisional Winning Bidder for 1 block, following scenarios will be applicable in the subsequent Round, ***R+1***:
  - If the Clock Round Price is same in round ***R+1*** (i.e. equal to Round ***R***), he will have the option to bid for 2 blocks only.
  - If the Clock Round Price is incremented in round ***R+1***, the bidder can submit fresh bid for 1/2 blocks.

## Bid Submission – Existing Service Provider – II

- Can Submit bid for 1/2 blocks
- If has submitted for 2 blocks in Round ***R*** and is a Provisional Winning Bidder for 2 block, following scenarios will be applicable in the subsequent Round, ***R+1***:
  - If the Clock Round Price is same in round ***R+1*** (i.e. equal to Round ***R***), he will NOT have the option to submit the bid.
  - If the Clock Round Price is incremented in round ***R+1***, the bidder can submit fresh bid for 1/2 blocks.





## Tie Rules

- In descending order according to the Clock Round Price for that Service Area in the Clock Round when the Bid for the Blocks was made.
- In ascending order according to the Clock Round when the Bid was submitted for a particular Service Area
- Random Allocation (Random Index assigned to a Bid will be determined in the Clock Round when a Bid is made)





## Provisional Winning Bidders and Prices

- The Provisional Winning Price at the end of a Clock Round associated with these blocks will be equal to the lowest clock round price at which the provisional winning bidders submitted their bids for the Provisional Winning Blocks.
- The blocks which are determined as Provisional Winning Blocks carried over from previous rounds will be preserved until they are out bid.



## Closing Rule

- The final clock round will be the first clock round in which:
  - The Auction Activity Requirement is 100%; and
  - There is no activity in any of the Service Areas i.e. for every Service Area, there is no bid submitted by any of the bidders



## Round scheduling and Extensions

- Default timetable for clock rounds:
  - Clock Round schedules will be from Monday – Saturday, between 09.30 and 19.00 hrs.
  - Minimum round length will be for 1 hour.
  - Minimum time between rounds will be 20 minutes.
- Given this, bidders will have the ability to extend rounds
  - Extension budget of 240 minutes (4 hrs) held by each bidder.
  - Extension budget to be reduced in 10-minute intervals.
  - Bidders can extend any clock round by a maximum of 1 hour (subject to availability of extension budget).



## Contingency Measures – I

- Bids must be made through the Electronic Auction System (EAS)
- No other means of submission of bids will be accepted.
- Extensions are available to safe-guard against minor technical problems and bidders should consider carefully the implications of deliberately using the extension budget to buy time for their decisions.
- Bidders will be given opportunity to access the electronic auction system prior to the auction and check that their systems work.



## Contingency Measures – II

- In the event of any widespread technical problem affecting multiple bidders, the auctioneer may exceptionally:
  - Re-schedule the start of a Clock Round whose starting time has been announced provided that the Clock Round has not yet started;
  - Re-schedule the finishing time of a Clock Round in progress;
  - Cancel and re-run a round provided no results have been released.



## Information Policy

- Before the relevant auction the following information will be made public about each bidder:
  - Ownership structure
  - Amount of EMD submitted
- Limited transparency of bids during the auction.



## Information Policy for the Clock Rounds – I

- At the end of each clock round information circulated to all bidders will be confined to:
  - Clock Round Price per Block in each Service Area of the last completed Clock Round;
  - Aggregate demand at the last completed Clock Round Price;
  - Excess demand in the last completed Clock Round Price;
  - Price Increment to be applied in each Service Area;
  - Clock Round Price per Block in each Service Area to be applied for the following round;



## Information Policy for the Clock Rounds – II

- Eligibility Points available for following round;
- The Provisional Winning Price;
- The Number of Provisional Winning Blocks held by the respective bidder;
- Rank of the bidder in each of the Service Area, if he is a Provisional Winning Bidder.





## Information Policy for the Clock Rounds – III

- At the end of the Clock Round, the Auctioneer will announce the Provisional Winning Price (Common Winning Price) for each Service Areas.
- At no stage during the Clock Rounds, will the names of the bidders submitting their bids be announced.
- At the end of the Auction, all information about the bidders and the prices will be released.



## Security Measures – I

- Security of electronic auction system will be protected by SSL encryption, user-id / password and digital signature certificates.
- Qualified Bidders will be provided with a User-id (login-id) to access the EAS.
- Qualified bidders will have to procure a Digital Signature Certificate issued by any of the valid Certifying Authority approved by Controller of Certifying Authorities in India.



## Security Measures – II

- Maximum of two Digital Signature Certificates can be mapped with a User-Id.
- The bidders can access the EAS using the Single User-Id which is mapped with 2 Digital Signature Certificates and from a maximum of 4 different Public Static IP Address.
- If the Authorised Signatories of both the Auction are same, the same Digital Signature Certificates would suffice.



## IT Requirements – I

- The EAS supports the following Operating System:
  - Windows XP (Service Pack 3)
  - Windows Vista (Service Pack 3)
  - Windows 7 (Service Pack 1)
- Following web browsers will be supported:
  - Internet Explorer 9.0
  - Mozilla Firefox 13.x
  - Google Chrome 20.x
- Latest version of Java
- Strongly recommend a clean installation guaranteed free from viruses and trojans and that computer is not used to access other websites.



## IT Requirements – II

- Recommend that any computer with digital certificates installed is kept physically secure.
- Bidders should have a reliable Internet connection.
- Essential backup systems.
- Pre-qualified bidders are strongly recommended to ensure that their respective passwords and Digital Signature Certificates are not compromised in any way.
- Full requirements will be specified in software manual for bidders



**Thank you**

