# valuejunction™

# AUCTION OF SPECTRUM FOR DEPARTMENT OF TELECOM (DOT), GOVERNMENT OF INDIA IN THE MONTH OF MARCH 2015

| INDUSTRY | GEOGRAPHY | CHALLENGE | BIDDING STRATEGY | RESULTS |
|---|---|---|---|---|
| Telecommunication | Pan India | Identify, tailor and implement an auction methodology that will ensure efficient use of spectrum and avoid hoarding; stimulate competition and maximize revenue proceeds | SMRA (Simultaneous Multiple Round Ascending) Clock Auction | The spectrum auction fetched the DOT about $16 Bn, equivalent of INR 1.09 lakh crores |

## THE BUSINESS CHALLENGE

Radio spectrum is a limited natural resource and the spectrum carrier waves constitute a vital input necessary to all telecom operators to provide quality voice and data connectivity services to customers.

The Government of India through DoT wanted to auction spectrum in the bandwidths of 800/900/1800/2100 MHZ through the SMRA clock auction methodology. The requirement was to conduct auctions for all the four bands together and not sequentially. Due to fiscal deficit constraints GoI wanted the revenue proceeds to be realized in the same financial year. So the time available was less than 70 days.

## THE SOLUTION & STRATEGY

The SMRA auction mode is globally popular for selling multiple lots of similar items that are not identical.

Multiple rounds of auctions were held and in each round every bidder was allowed to make only one bid for each item by accepting or rejecting the price determined by the auction software. In case of a 'Yes' response, the bidder was also required to mention the quantity sought for the item.

Since bidders were not quoting any price and were only accepting or rejecting the price determined by the auction software, elaborate ranking rules were needed to decide the winner and the quantity allotted. Ranking rules were prudentially designed to determine allocation when demand exceeded supply and vice-versa.

Conducting multiple rounds gave bidders the option to switch at any time between any of the offerings if the price became unaffordable.

## RESULTS AND ACHIEVEMENTS

The complex software used for this auction was developed by the technology team of mjunction within the deadline of 70 days.

The spectrum auction fetched the DOT about $16 Bn, equivalent of INR 1.09 lakh crores through a transparent pricing mechanism.