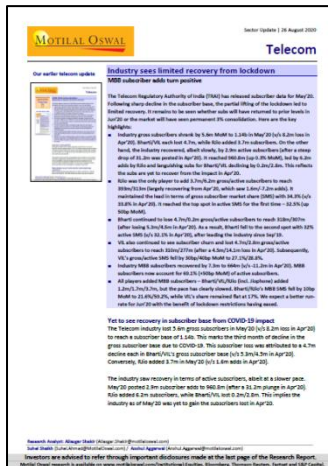


## Our earlier telecom update



## Spectrum auction begins on aggressive note

The much anticipated telecom spectrum auction commenced today with much aggressive response than expected from telcos. The key highlights are as follows:

- The Department of Telecom (DoT) received a total bid of INR770b v/s the government expectation of INR450b. This is already ~70% higher than the renewal spectrum requirement across the three telcos.
- The 800MHz band has seen the highest interest, with the bid amount at INR375b. 1800MHz/2300MHz saw bid amounts of 182b/71b, while 900MHz of INR51b. The remaining bands (700MHz/2100MHz/2500MHz) understandably saw lukewarm or no response.
- RJio will have spent the highest, with 800MHz renewals and 2300MHz capacity spectrum investments. On the other hand, Bharti will have spent on 1800MHz renewals, 2300MHz capacity, and some top-up in the 900MHz spectrum. VIL is estimated to have had minimal participation.
- Based on the earnest money deposits (EMDs) as well, RJio and Bharti are expected to have spent the highest.
- Four rounds of auction have been completed today; the auction is expected to be concluded tomorrow after 1–2 more rounds, as per government release. Thus, an additional 15–20% higher bid is possible.

## Auctions receive better interest than expected

- The Department of Telecom (DoT) received a total bid of INR770b v/s the government expectation of INR450b. This was led by huge interest in 800MHz, 1800MHz, and 2300MHz.
- Of the total spectrum of 2308.8MHz, bids were received for 849.2MHz. Excluding 700MHz and 2500MHz, this amounts to 60% of the auctioned spectrum.
- In the 2016 auctions, 41%/12% of spectrum was sold by quantity/value with seven bidders. Conversely, in this auction, 37%/19% was sold even with three participants.
- Spectrum would be assigned for 20 years to the winner, with a 25% upfront payment in the 700MHz/800MHz/900MHz band and 50% upfront payment in the other bands. The remaining amount would be payable in 16 equal annual installments after a moratorium of two years.
- Four rounds of auction have been completed today; the auction is expected to be concluded tomorrow after 1–2 more rounds, as per government release.

## Spectrum renewal and capacity top-up see high interest in 800MHz, 1800MHz, and 2300MHz

- In line with our expectations, the 800MHz band generated the highest interest, with the bidding amount at INR375b. This was primarily attributable to the upcoming renewal of RJio's existing spectrum in this band in 19 circles. Furthermore, the company renewed the spectrum only in the expiring circles. However, the bidding spectrum quantity is higher, as evident from the INR375b bid amount at reserve price v/s INR280b required for spectrum renewal.

- The 1800MHz band also generated significant interest, with bidding at over INR180b. The higher interest was on account of both Bharti and VIL's expiring spectrum in this band. Furthermore, RJio's presence in this band could increase the interest. The cumulative renewal amount was ~INR200b in this band, with Bharti/VIL's renewal at INR130b/INR68b. The lower bid amount may be attributable to lower bidding by VIL due to its liquidity crunch.
- The mid-GHz band of 2300MHz also generated substantial interest, with demands received in six circles – Andhra Pradesh, Delhi, Karnataka, Kolkata, Mumbai, and Tamil Nadu. The higher interest in this band was the result of both Bharti and RJio's presence in this band with decent revenue/subscriber market share (lower for Bharti in Mumbai and Kolkata and lower for RJio in Karnataka). Furthermore, this band could be re-farmed to 5G in later stages. Thus, it saw higher demand in the metro and tier 1 circles, which would see an earlier transition to 5G.
- The 900MHz band generated decent interest, with the bid amount at INR51b. Interest in the Tamil Nadu circle may be attributable to VIL's expiring band in this circle. Surprisingly, there has been no bid for Haryana, UP (West), Maharashtra, Gujarat, Kerala, and Madhya Pradesh, where Bharti has no sub-GHz spectrum.
- Lastly, the 2100MHz band generated lackluster response, with bids only in three circles – Assam, North East, and West Bengal.

#### No bids for 700MHz and 2500MHz

- Similar to the 2016 auctions, no bids were received for the 700MHz band, potentially due to its higher pricing (in line with expectations).
- Similar to the 700MHz band, the 2500MHz band also failed to receive any bids from the telcos – as both RJio and Bharti have no presence in this band, and none of VIL's spectrum is upcoming for renewal in this band.

#### Exhibit 1: 800MHz band spectrum auction bidding (INR m)

Circles	Aggregate Demand (No of blocks)	Provisional Winning Price/Block (INR m)	Total spectrum value
AP	5	4875	24,375
Bihar	4	1700	6,800
Delhi	7	8000	56,000
Gujarat	4	4812.5	19,250
Haryana	7	712.5	4,988
HP	4	300	1,200
Karnataka	8	2400	19,200
Kerala	8	1962.5	15,700
Kolkata	8	2000	16,000
MP	8	1787.5	14,300
Maharashtra	10	6375	63,750
Mumbai	6	9087.5	54,525
Odisha	4	587.5	2,350
Punjab	5	1962.5	9,813
Rajasthan	4	3325	13,300
Tamil Nadu	8	2175	17,400
UP (East)	4	3137.5	12,550
UP (West)	8	2012.5	16,100
West Bengal	8	925	7,400
<b>Total</b>			<b>375000</b>

Source: MOFSL, DoT

**Exhibit 2: 1800MHz band spectrum auction bidding (INR m)**

Circles	Aggregate Demand (No of blocks)	Provisional Winning Price/Block (INR m)	Total spectrum value
AP	21	558	11,718
Assam	23	92	2,116
Bihar	39	176	6,864
Delhi	23	914	21,022
Gujarat	20	546	10,920
Haryana	25	114	2,850
HP	24	36	864
J&K	50	34	1,700
Karnataka	101	218	22,018
Kerala	50	190	9,500
Kolkata	5	346	1,730
MP	39	190	7,410
Maharashtra	25	730	18,250
Mumbai	17	1122	19,074
North East	18	34	612
Punjab	49	176	8,624
Tamil Nadu	66	200	13,200
UP (East)	41	306	12,546
UP (West)	40	230	9,200
West Bengal	19	106	2,014
<b>Total</b>			<b>182232</b>

Source: MOFSL, DoT

**Exhibit 3: 2300MHz band spectrum auction bidding (INR m)**

Circles	Aggregate Demand (No of blocks)	Provisional Winning Price/Block (INR m)	Total spectrum value
AP	1	7800	7,800
Delhi	1	16400	16,400
Karnataka	1	11200	11,200
Kolkata	1	3800	3,800
Mumbai	1	16700	16,700
Tamil Nadu	1	15100	15,100
<b>Total</b>			<b>71000</b>

Source: MOFSL, DoT

**Exhibit 4: 900MHz band spectrum auction bidding (INR m)**

Circles	Aggregate Demand (No of blocks)	Provisional Winning Price/Block (INR m)	Total spectrum value
Bihar	17	402	6,834
HP	13	74	962
North East	6	46	276
Odisha	19	172	3,268
Tamil Nadu	50	470	23,500
UP (East)	25	524	13,100
West Bengal	14	248	3,472
<b>Total</b>			<b>51412</b>

Source: MOFSL, DoT

## NOTES

Explanation of Investment Rating	
Investment Rating	Expected return (over 12-month)
BUY	>=15%
SELL	< - 10%
NEUTRAL	< - 10 % to 15%
UNDER REVIEW	Rating may undergo a change
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation

\*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

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