

## INDIAN TELECOM INDUSTRY

Healthy participation in spectrum auctions; industry debt levels to increase

AUGUST 2022



## Highlights





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The recently concluded spectrum auctions witnessed the highest ever spends by the telecom industry, wherein it bought spectrum worth Rs. 1.5 lakh crore across various bands including new 5G bands – 700 MHz, 3300 MHz and 26 GHz. While the payment terms remain relaxed, the industry debt levels are estimated to elevate to around Rs. 6 lakh crore with the addition of the deferred liabilities. Moreover, ICRA expects the industry capex to be around Rs. 3 lakh crore over the next 4-5 years.





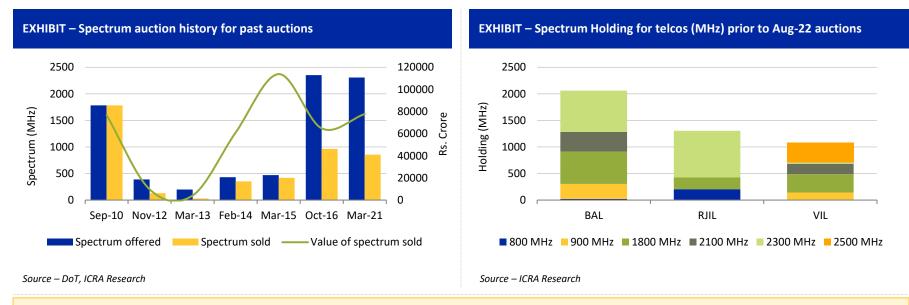




- The telecom industry has witnessed seven rounds of auctions before the July/Aug 2022 auctions, in which the industry spent around Rs. 4.1 lakh crore for around 4500 MHz of spectrum.
- The recently-concluded auctions witnessed the highest ever participation. Telcos bought around 51,236 MHz spectrum for a total value of Rs. 1.5 lakh crore.
- Among the three telcos, RJIL was the most aggressive with a total spend of Rs. 88,078 crore for 24,740 MHz spectrum, followed by BAL, which shelled out Rs. 43,084 crore for 19,868 MHz spectrum and VIL, which bought 6,228 MHz spectrum for Rs. 18,799 crore.
- 700 MHz band, which went unsold in the last two auctions, witnessed participation and RJIL bought 10 MHz pan India in this spectrum. This is likely to provide superior indoor coverage at low network cost. Other bands which witnessed telco-wide participation were 3300 MHz and 26 GHz.
- This spectrum auction provided relaxed payment terms, in which the telcos are allowed to make payments over 20 years at 7.2% interest rate. This translates into annual payments of only Rs. 13,400 crore and will take total annual payments to Rs. 19,600 crore for FY2024 and FY2025.
- The 5G rollout is expected to be in a phased manner starting with some select pockets. The low fiberisation level of around 30-35% necessitates fibre rollout by the telcos. Thus, ICRA expects a capex of around Rs. 3 lakh crore for the industry over the next 4-5 years.
- As per ICRA estimates, the total debt of the industry is expected to rise to Rs. 6.0 lakh crore by FY2023. Going forward also, debt levels are expected to remain elevated with debt of Rs. 5.7 lakh crore by FY2025, translating into weak debt coverage metrics for the industry.

#### **Spectrum auction history**





- India has witnessed seven rounds of auctions before July 2022, in which telcos have spent more than Rs. 4.08 lakh crore and acquired around 4500 MHz of spectrum across various bands
- In terms of spectrum holding, BAL has the highest spectrum market share at around 40%, vis-à-vis 26% for RJIL and 21% for VIL. Spectrum holding for BAL and VIL is spread across 900 MHz, 1800 MHz, 2100 MHz and 2300-2500 MHz bands, while for RJIL, the holding is primarily in 800 MHz, 1800 MHz and 2300 MHz bands

#### 5G spectrum auctions – Aug 2022





	600 MHz	700 MHz	800 MHz	900 MHz	1800 MHz	2100 MHz	2300 MHz	2500 MHz	3300 MHz	26 GHz
Spectrum on offer (MHz)	660	550	136	74	267	160	60	230	7,260	62,700
Spectrum sold (MHz)	0	220	20	13	88	35	0	20	5,490	45,350
Value at reserve price (Rs. Crore)	117,810	98,175	22,351	11,085	27,697	14,585	4,430	10,940	104,610	19,922
Sales Value (Rs. Crore)	0	39,720	1,050	349	10,374	3,180	0	650	80,590	14,709
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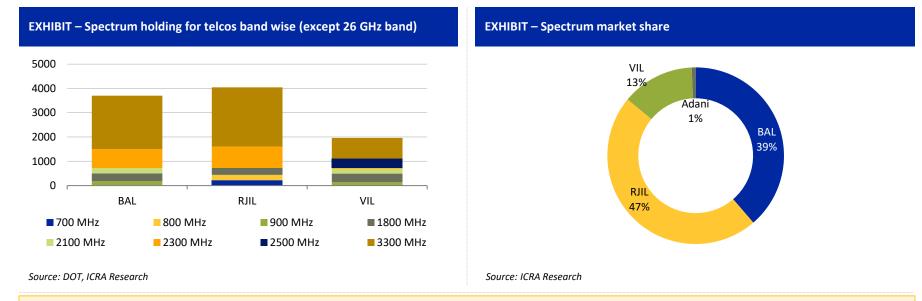
### **Telco-wise purchases**



	Bharti Airtel Ltd		Reliance Jio Infocomm Ltd		Vodafone Idea Ltd		Adani Data Networks Ltd	
	Spectrum Bought (MHz)	Value (Rs. Crore)	Spectrum Bought (MHz)	Value (Rs. Crore)	Spectrum Bought (MHz)	Value (Rs. Crore)	Spectrum Bought (MHz)	Value (Rs. Crore)
600 MHz	0	0	0	0	0	0	0	0
700 MHz	0	0	220	39,270	0	0	0	0
800 MHz	0	0	20	1,050	0	0	0	0
900 MHz	13	349	0	0	0	0	0	0
1800 MHz	25	2,763	60	7,026	3	585	0	0
2100 MHz	30	2,680	0	0	5	500	0	0
2300 MHz	0	0	0	0	0	0	0	0
2500 MHz	0	0	0	0	20	650	0	0
3300 MHz	2,200	31,700	2,440	33,740	850	15,150	0	0
26 GHz	17,600	5,592	22,000	6,990	5,350	1,915	400	212
Total	19,868	43,084	24,740	88,076	6,228	18,799	400	212

#### Spectrum holding post August 2022 auctions





- The telcos acquired a sizeable spectrum in the current auctions, largely in the 3300 MHz and 26GHz bands to develop 5G capabilities.
- The 700 MHz band which saw no participation in the last 2 auctions, witnessed buying from RJIL across all 22 circles. There was no interest in 600 MHz band which went for auctions for the first time, while 2300 MHz band also did not attract any further participation.
- Barring one circle in 1800 MHz band, the entire spectrum was sold at reserve prices

#### **Auction cash flows**



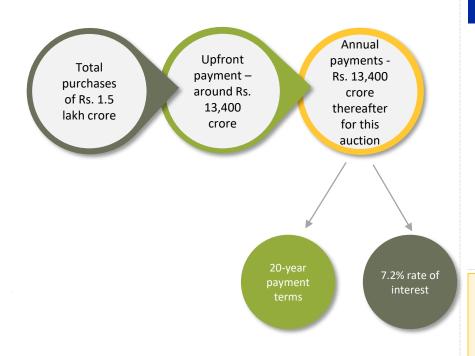
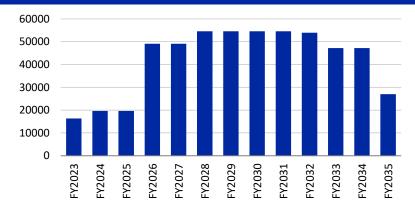


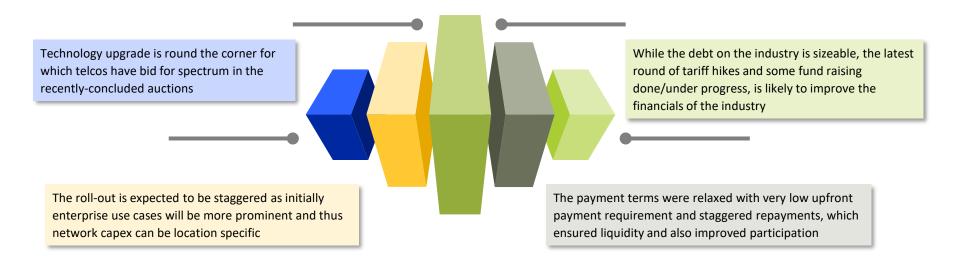
EXHIBIT – Expected outflow towards deferred liabilities



#### Source – ICRA Research

- Even with participation in the upcoming spectrum auction, the annual outflow for the industry is around Rs. 16,000 crore for FY2023, followed by Rs. 19,600 crore for FY2024 and FY2025, which is likely to increase to more than Rs. 50,000 crore when the moratorium ends.
- This auction with relaxed payment terms will not pinch the cash flows of the operators immediately, although the debt levels will increase further, with the addition of deferred liabilities.





Some telcos bid for pan India purchases of 700 MHz, 3300 MHz and 26 GHz bands along selective purchases in other bands. This led to a total participation of around Rs. 1.5 lakh crore for a duration of 20 years. Moreover, at 7.2% interest rate, the instalments for 20year repayments come at around Rs. 13,400 crore annually.

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5G



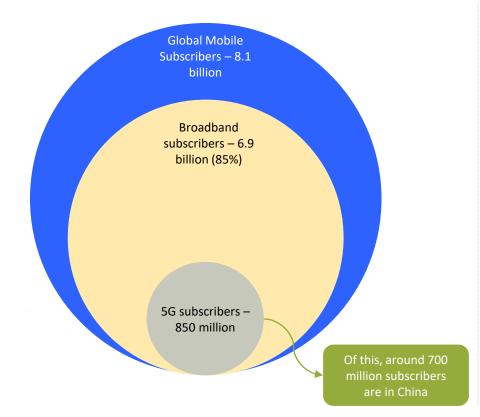
Fibre roll-out and infrastructure development will be the key for 5G penetration. Small cells, in-building solutions and dense network of fiberised towers will aid in a robust network, which will entail additional capex.

Telcos acquired spectrum worth Rs. 1.5 lakh crore, as a whole, including spectrum in 700 MHz, 3300 MHz and 26 GHz bands which will enable them to launch 5G services.

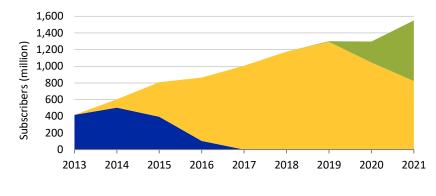
The level of fiberisation is low in India vis-à-vis other countries. It is estimated that only 30-35% of the towers are fiberised and a lot of fibre layout will be required for 5G launch.

While fibre roll-out will be needed, ICRA expects that it will not be carpet-bombing, rather a phased launch in specific pockets. With this the industry capex is likely to be around Rs. 3 lakh crore over the next 4-5 years





**EXHIBIT – Subscriber movement across technologies in China** 



■ 3G Subs ■ 4G Subs ■ 5G Subs

- China has witnessed healthy adoption of new technologies. The 4G conversion rate was quite fast and 3G was almost phased out by 2016-17. Even now, 5G package customer base has increased rapidly and the three telcos in China had around 700 million such subscribers in Dec 2021.
- 5G penetration rate in China was around 44%, while the same in Korea was 29% in December 2021.

Source – ICRA Research

#### **Government collections**



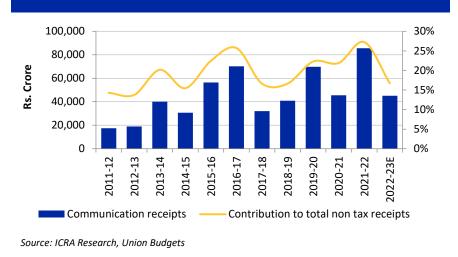
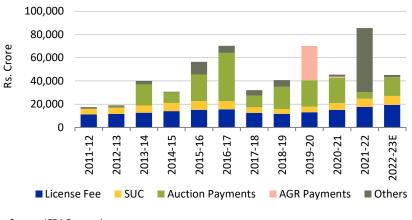


EXHIBIT – Trend in non-tax receipts from communications sector

EXHIBIT - Trend in item wise movement in non-tax receipts

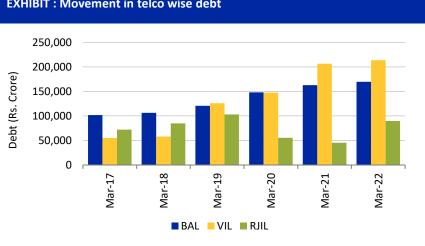


Source: ICRA Research

- Over the years, the telecom sector has contributed significantly to the non-tax receipts of Government of India. There have been spikes in the years which have witnessed spectrum auctions, where there has been a requirement of upfront payment. Further, FY2020 witnessed upfront AGR payments made by a few telcos resulting in elevated receipts from the sector.
- In terms of individual components, licence fee and spectrum usage charges form a regular feature every year, which have been on an increasing trend over the last few years. With a moratorium on payment of deferred liabilities, the auction payments have been low, however, in FY2022, telcos (BAL and RJIL) prepaid some of their deferred liabilities resulting in higher collections for the Government.

#### Debt levels continue to remain elevated





**EXHIBIT : Movement in telco wise debt** 

Source: Annual Report of Telcos, ICRA Research

Source: ICRA Research; Consolidated for BAL, VIL and RJIL

- The debt levels continue to trend northwards and the same has been exacerbated by addition of deferred debt, first owing to AGR liabilities and in FY2022 and • FY2023 on account of deferred spectrum liabilities. ICRA expects industry debt to increase to Rs. 6 lakh crore by end of FY2023.
- While the external debt has largely remained stagnated, the overall debt levels are expected to moderate to some extent going forward, although at elevated • levels. As per ICRA estimates, industry debt will remain at around Rs. 5.7 lakh crore by the end of FY2025.

**EXHIBIT : Movement in Consolidated Debt** 







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