

5G Spectrum Auctions

Why in news?

India's biggest ever spectrum auction ended with bids upwards of Rs 1.5 lakh crore.

How much spectrum was bought by the applicants?

- A total of 51.2 GHz of spectrum was sold of the total 72 GHz that was up for grabs - close to 71%.
- The total spectrum sold was good enough for covering all circles in the country, estimating good coverage of 5G in the next two-three years.
- At Rs 1.5 lakh crore, the final total bids have exceeded expectations, surpassing the government's internal estimates of receiving bids of around Rs 1 lakh crore.
- Reliance Jio emerged as the largest spender in the 5G spectrum auction, acquiring almost half of all the airwaves sold for more than Rs 88,000 crore.
- All the bands were sold at base price, except for the 1,800 MHz band.

Reason behind the auction fetching more cash than estimated

- The government anticipated that the 700 MHz band might not find any takers, since the band had gone unsold in the previous spectrum auctions (2016 and 2021), owing to high price.

To know more about 5G technology, click [here](#)

What about the different bands of spectrum?

- **700 MHz band**- It is best suited for coverage in high-density areas and is ideal for data networks and consumer-led services.
- It can provide a range of 6-10 kilometres.
- **26 Ghz millimetre band**- It is ideal for enterprise level 5G applications including setting up private 5G networks.
- **800 MHz-2500 GHz spectrum bands**- The bidders bought airwaves primarily to increase their coverage of 4G and fill gaps in circles where the 4G network had started to congest.
- In the latest auction, the 600 MHz band saw no takers.

What were the criticisms against the auction?

- There were concerns that 5G spectrum is being sold for less amount.
- The auction did not meet the expectation of up to Rs. 5 lakh crore, which was projected by the government as it has been auctioned for only Rs. 1.5 lakh crore.

What may happen post auction?

- Earlier this year, the government had abolished the spectrum usage charge (SUC) for the 5G spectrum auction.
- This will bring significant savings for the telecom companies and they wouldn't need to hike the tariff too much.
- There were also estimates that telecom service providers would require a modest 4% incremental tariff hike on their overall subscriber base or a 30% premium over 1.5 GB/day 4G plans.
- With potentially higher speed on offer and likely initial uptake from premium customers, there is a potential for telecom companies to charge a premium for 5G.

References

1. <https://indianexpress.com/article/explained/explained-economics/india-5g-spectrum-auction-explained-jio-airtel-vodafone-idea-adani-group-bidding-8065669/>
2. https://www.business-standard.com/article/companies/after-5g-auction-analysts-expect-telecom-firms-to-increase-rates-again-122080200590_1.html
3. <https://www.thehindu.com/news/national/vaishnav-dismisses-rajas-5g-scam-charge/article65720252.ece>

