

ICRA COMMENTS ON TELECOM INDUSTRY

ICRA: Spectrum auctions to fetch Rs. 55,000-60,000 crore to the exchequer



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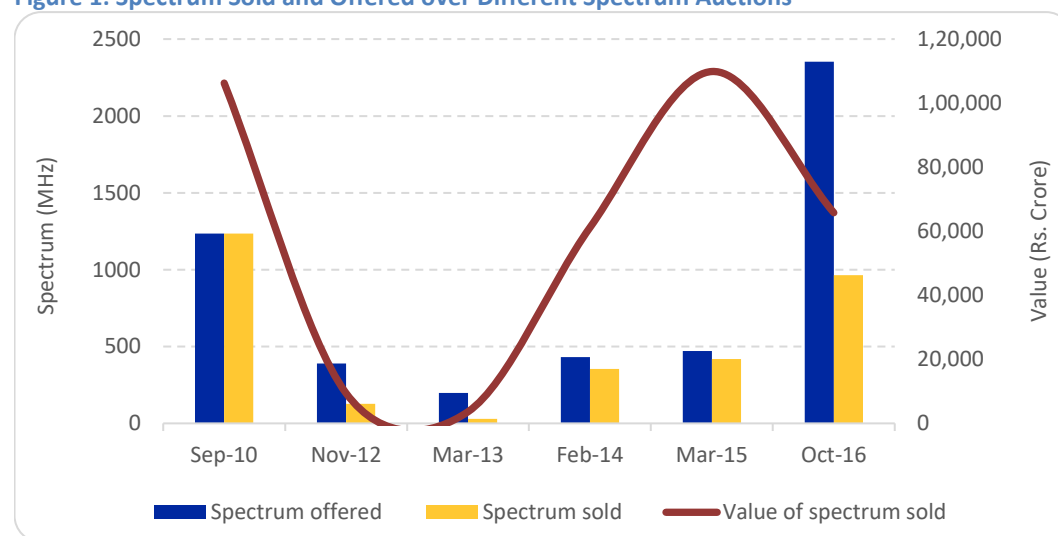
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History of spectrum auctions in the country

Spectrum, owned by Government of India, is the key raw material for the telecom companies, which is given to the telecom operators for a period of 20 years through auction process. However, the spectrum allocation process in India has evolved over the years. Initially in 1994-95, the spectrum was auctioned for private players for the first time in the 900 MHz band for providing 2G services on GSM (Global System for Mobile Communications) technology. After multiple rounds of auction in 1997 and 2001, the spectrum was administratively allocated in 2004-08 at much lower prices than before. This marked the entry of new players in India – Etisalat, Loop, STel, Videocon, etc. Till this time, services were provided on 900 MHz and 1800 MHz bands for 2G GSM and 800 MHz band for CDMA (Code Division Multiple Access).

Thereafter in February 2012, the Honorable Supreme Court of India (SC) cancelled 122 licenses allotted administratively resulting in exit of a lot of players which entered the market during 2004-08 period. The SC also mandated auctions to be the mode of spectrum allocation going forward. Thus, auctions became a regular feature in the industry since 2012.

Figure 1: Spectrum Sold and Offered over Different Spectrum Auctions



Source: ICRA research

India has witnessed six rounds of auctions since 2010, which have fetched a total of more than Rs. 3.5 lakh crore to the exchequer and has added a sizeable debt on the industry (deferred spectrum debt as on March 2020 stood at Rs. 1.5 lakh crore). While some auctions have witnessed aggressive participation as it was a matter of continuation of services for the telcos on account of expiries; however, in 2010 auction new bands were offered for provision of 3G/4G services. Although 2016 auction introduced the 700 MHz band, there were no takers for the same given the high price and limited ecosystem around the band. The forth coming spectrum auction was to feature new bands – 3300-3600 MHz bands for 5G services, which is likely to be dropped as of now.

BRIEF BACKGROUND OF AUCTIONS



1994-95

First auctions ever which led to entry of private players in telecom. More than 15 players entered the market and grabbed the 900 MHz spectrum across 23 circles for 2G GSM services



2004-08

Administrative allocation of spectrum was done for the 900 MHz band in 2004 and for 1800 MHz in 2008. This led to entry of new players like Etisalat, Telenor, Videocon, Loop, etc



2012

The Supreme Court cancelled 122 licenses allocated in 2008, paving way for exit of Loop, Etisalat, STel, etc from India thereby reducing the number of players to 14

2001



1800 MHz band was introduced and private players were allowed to bid for the 800 MHz CDMA band

2010



First time proper auctions were conducted for the 3G and 4G waves in the 2100 MHz and 2300 MHz bands fetching more than Rs. 106,000 crore to the exchequer. Many new players entered which later traded their spectrum holdings to existing operators

AUCTIONS BECOME REGULAR FEATURE



2012

Bands on offer - 800 MHz, 1800 MHz

This auction was the result of licence cancellation by the Supreme Court and saw modest participation

Total outlay - Rs. 9,400 crore



2014

Bands on offer - 900 MHz, 1800 MHz

Triggered by expiries in 2014; saw healthy participation post reduction in reserve prices

Total outlay - Rs. 61,100 crore



2016

Bands on offer - 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz and 2500 MHz

Triggered by expiries in 2015 and 2016 and was a matter of survival; saw aggressive participation

Total outlay - Rs. 65,700 crore

2013



Bands on offer - 800 MHz, 900 MHz, 1800 MHz

Spectrum re-offered at reduced prices, again minimal participation

Total outlay - Rs. 3,600 crore

2015



Bands on offer - 800 MHz, 900 MHz, 1800 MHz and 2100 MHz

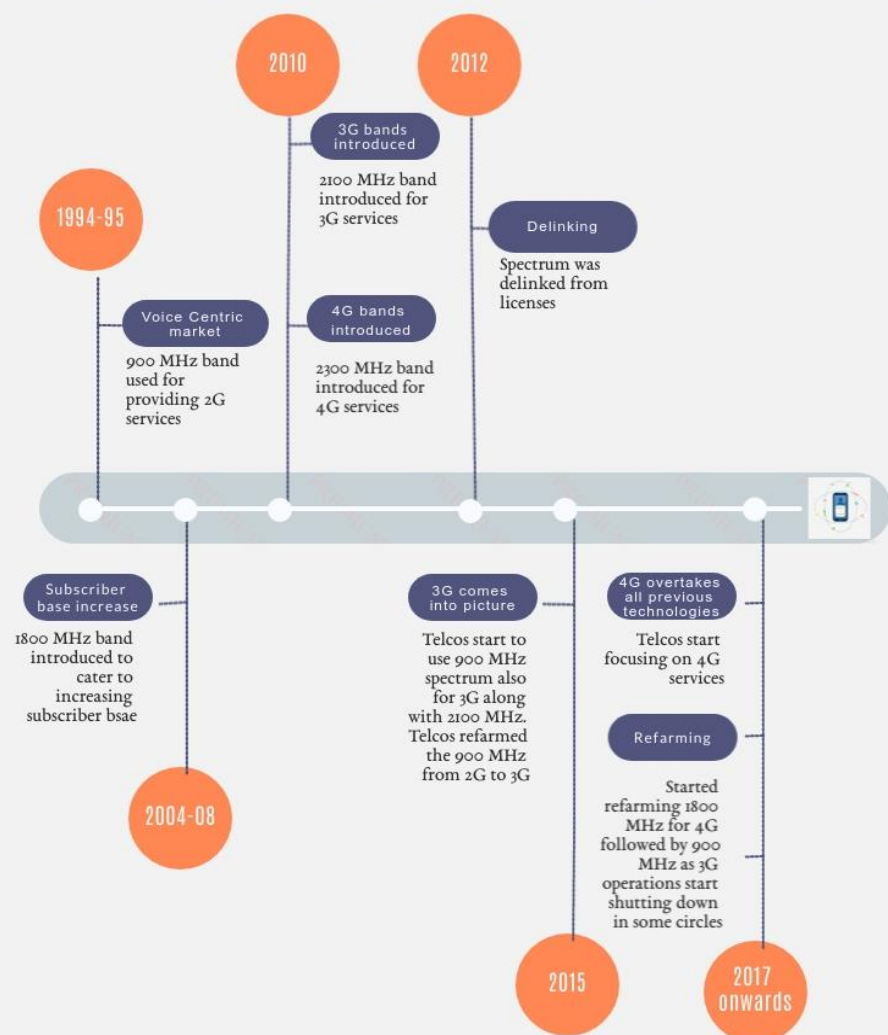
Triggered by expiries in 2015 and 2016 and was a matter of survival; saw aggressive participation

Total outlay - Rs. 109,800 crore

Source: ICRA research

Spectrum bands

1994-2020



Source: ICRA research

TRAI recommended another large spectrum auction

TRAI came out with recommendations on the quantum of spectrum to be auctioned and the pricing for each spectrum band in 2019. According to the recommendations, this auction would have the largest quantum of spectrum offered. The spectrum is proposed to be auctioned across all the existing bands, namely, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz and 2500 MHz, along with 700 MHz band which was put to auctions in October 2016 but remained unsold. Additionally, the new band, 3300-3600 MHz, is being made available for auction for the first time.

This auction was to be driven by the following factors: (a) unsold spectrum being available in the existing bands - 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz and 2500 MHz bands; (b) introduction of auction of spectrum in the 700 MHz and 3300-3600 MHz bands; and now (c) spectrum expiries due in 2021. The 700 MHz band, which is also called the Digital Dividend band, was put to auction during the October 2016 auctions also, however, no participation was witnessed. The 3300-3600 MHz bands have been identified globally as recommended bands for 5G and this will be the first time these bands will be put to auction. The 700 MHz and 3300-3600 MHz bands are primarily to be used for data services and these are being offered to address the industry's concern over spectrum constraint following increasing data usage.

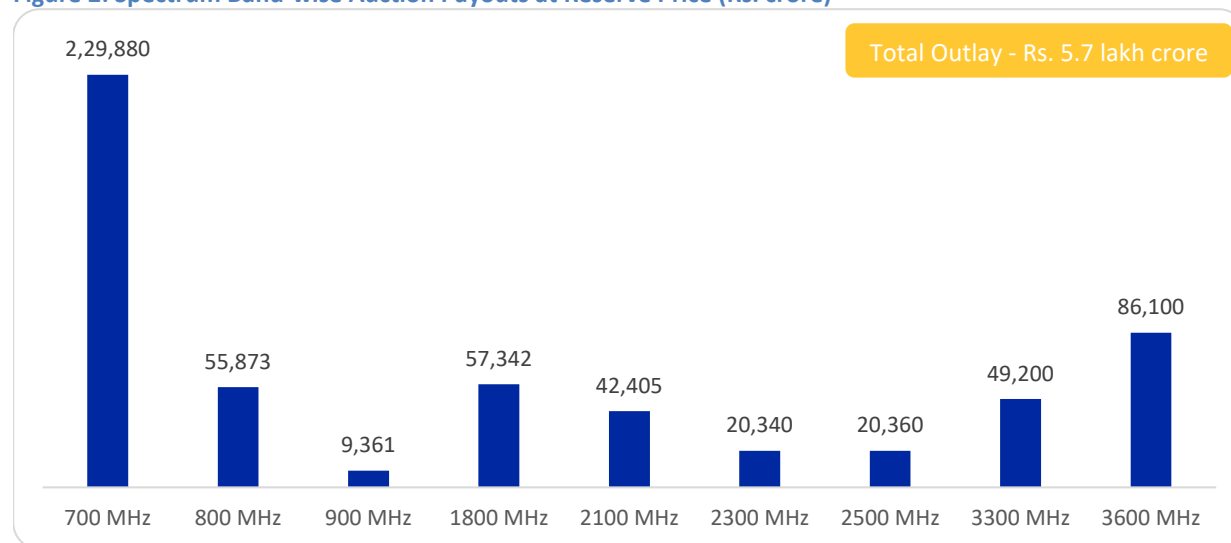
Assuming the entire spectrum is sold at the reserve price, this auction would fetch Rs. 570,861-crore with the largest contribution coming from the sale of 700 MHz spectrum.

Table 1: Spectrum Proposed for Forthcoming Auction as per TRAI

Circle	700 MHz	800 MHz	900 MHz	1800 MHz	2100 MHz	2300 MHz	2500 MHz	3300 MHz	3600 MHz
Andhra Pradesh	35	13.75	3	12.6	20	20	30	100	175
Assam	35	2.5	4.6	3	15	20		100	175
Bihar	35	12.5	9.2	8.6	10	20	10	100	175
Delhi	35	12.5	1	25.4	15	20	20	100	175
Gujarat	35	6.25	3	17.8	15	20	10	100	175
Haryana	35	10	0.2	19.4	10	40		100	175
Himachal Pradesh	35	10	4.6	19	20	20	10	100	175
Jammu & Kashmir	35	2.5		14	10	40	10	100	175
Karnataka	35	13.75	3.2	21	15	20	40	100	175
Kerala	35	13.75	4.6	16.4	10	20		100	175
Kolkata	35	12.5	3	14.4	15	20	20	100	175
Madhya Pradesh	35	12.5	4.6	15	15	20		100	175
Maharashtra	35	15	3	22.2	10	20	10	100	175
Mumbai	35	10	1	15.6	15	20	20	100	175
North East	35	2.5	3.8	0	15	20		100	175
Orissa	35	11.25	4.6	5.8	15	20		100	175
Punjab	35	11.25		19.4	10	40	10	100	175
Rajasthan	35	12.5		16.8		40		100	175
Tamil Nadu	35	13.75	17	17.6	5	20	40	100	175
UP (E)	35	12.5	5.2	15	5	40		100	175
UP (W)	35	12.5	1.2	19.4	15	40		100	175
West Bengal	35	12.5	4.6	5.2	15	20		100	175
Total	770	236.25	81.4	323.6	275	560	230	2200	3850
% of Total	9%	3%	1%	4%	3%	7%	3%	26%	45%

Past Auction Track Record	2016; unsold	Regular	Regular	Regular	Regular	2010 & 2016	2016	To be introduced in the forthcoming auctions	
Last Auction Participation	-	Moderate	-	Robust	Moderate	Robust	Robust	-	-
Total value at reserve price (Rs. Crore)	229,880	55,872	9,361	57,342	42,405	20,340	20,360	49,200	86,100

Source: TRAI recommendations of August 2018 and ICRA Research (figures in MHz)

Figure 2: Spectrum Band-wise Auction Payouts at Reserve Price (Rs. crore)


Source: ICRA Research

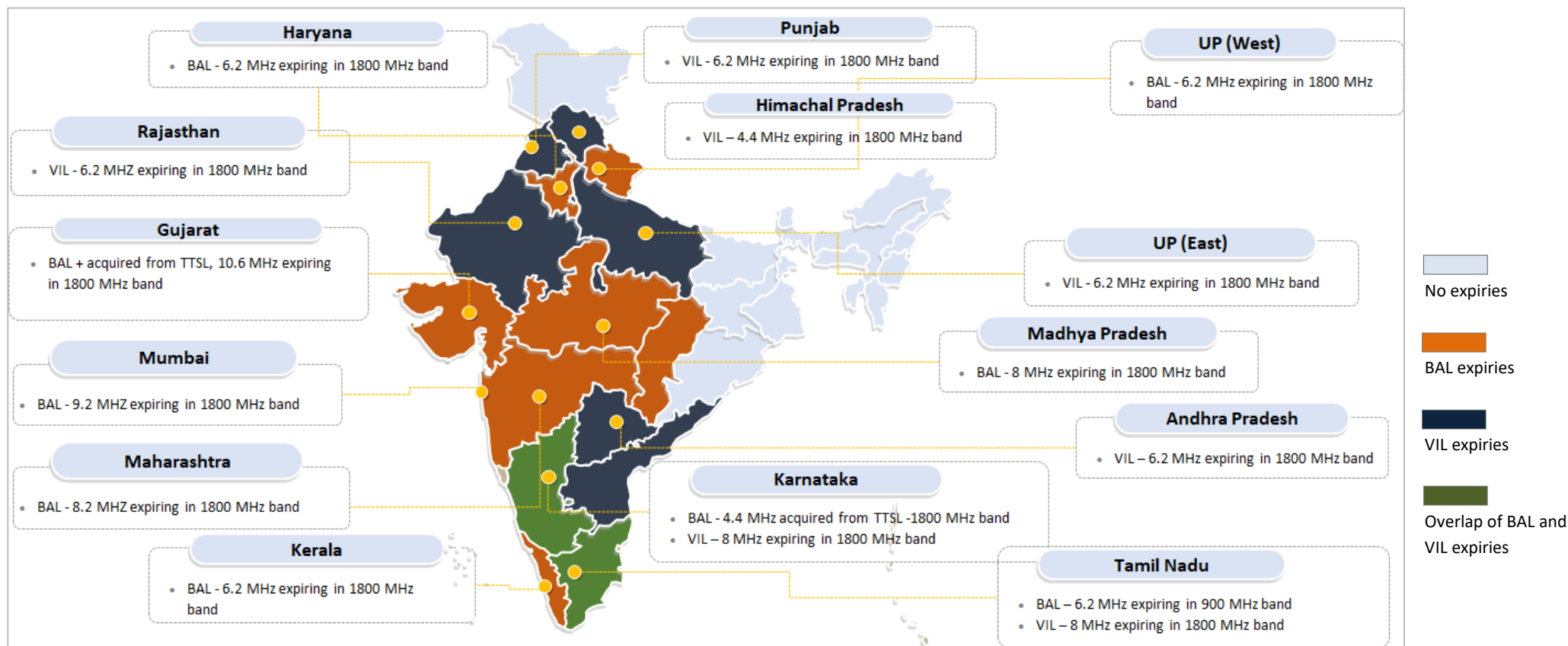
TRAI proposed to auction more than 8500 MHz of spectrum, of which around 75% belonged to the 3300-3600 MHz bands. For all the active spectrum bands, the recommended reserve prices are kept higher than the last auction determined prices (in October 2016) as these have been indexed with the SBI MCLR. On the other hand, the financial health of the industry has continued to remain fragile led by pressure on revenues and profit generation coupled with elevated debt levels. Moreover, the pricing for the 700 MHz and 3300-3600 MHz bands has been high, especially in the context that these are largely untested bands and may require a higher capex. These factors coupled with nascent stage of the ecosystem around these bands, led to ICRA earlier predicting limited participation in these bands.

Now, given the recent developments in terms of the AGR judgement and its impending payments, and the Covid-19 situation, there is a possibility that the Digital Communications Commission (DCC), might delink the 3300-3600 MHz band from the upcoming auctions. Hence the auctions will be primarily for renewal of the expiries coming up in 2021.

Expected participation

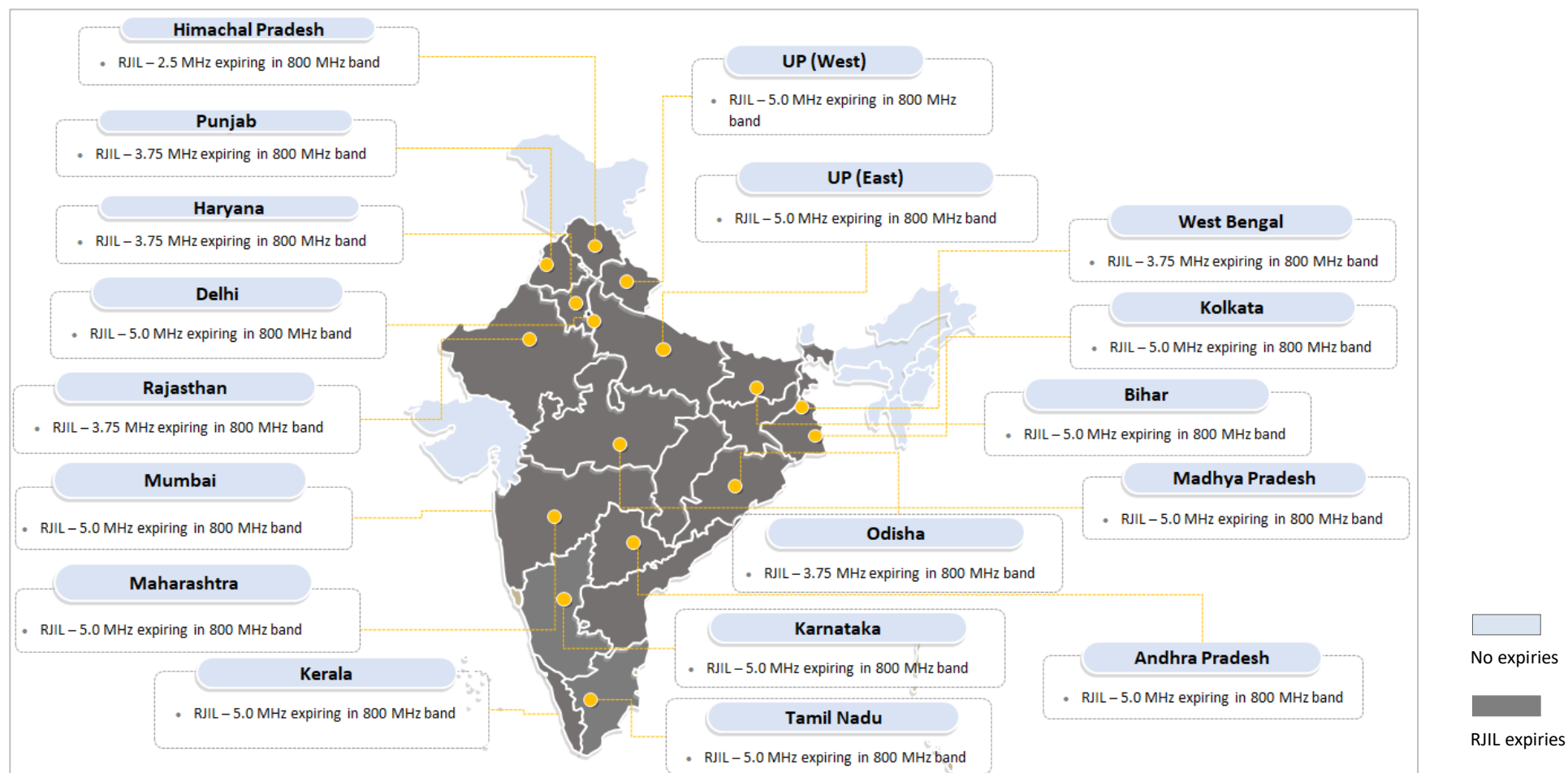
ICRA expects that the telcos will not be bidding for the 700 MHz spectrum and this auction will be primarily used for maintaining the continuity of their operations in the 4G bands, wherever the spectrum is expiring along with minor additions/enhancement in capacities, if needed. For BAL and VIL, there are expiries coming up largely in 1800 MHz bands for the administratively assigned spectrum, while for RJIL, the maturities are in the 800 MHz band, which it had traded/shared with Reliance Communications Limited in 18 circles. Thus, it is necessary for the operators to rebid for the expiring spectrum in order to maintain continuity of operations with sufficient capacity.

Figure 3: Circle wise band wise expiries – VIL and BAL – Majority of the expiries in 1800 MHz band



Source: ICRA research

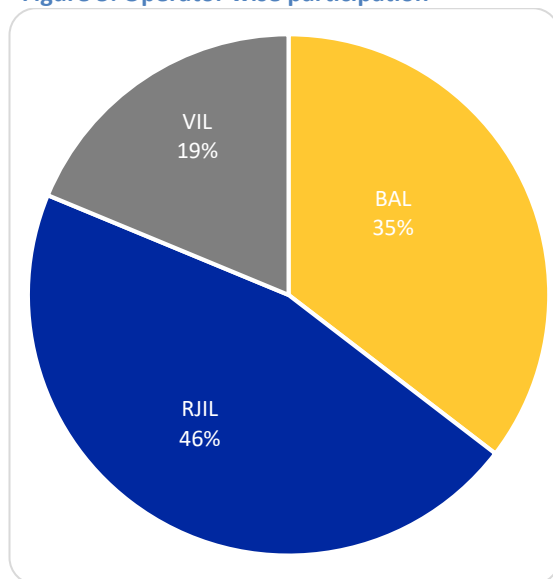
Figure 4: Circle wise band wise expiries – RJIL – Majority of the expiries in 800 MHz band for spectrum shared/traded with RCom



Source: ICRA research

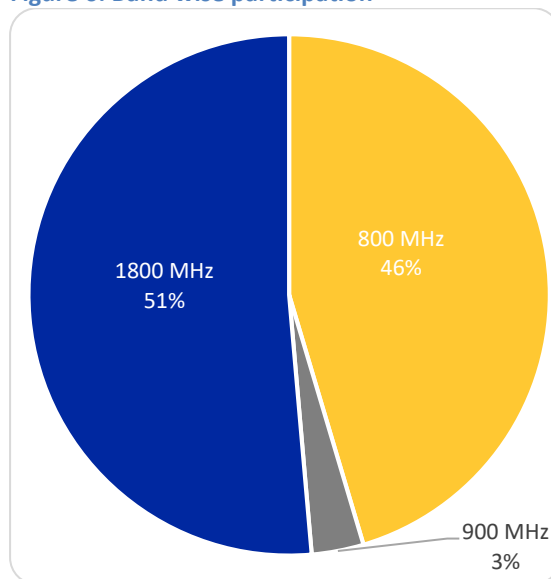
Since, there are no overlaps as far as the expiries are concerned and the telcos already have stretched balance sheets, ICRA does not expect the telcos to bid aggressively and thus the final prices are not anticipated to go beyond the reserve price in any of the expiring circles. Except for the expiries, ICRA expects some participation for consolidation of the spectrum holdings to cater to the increased demand in some of the circles by the operators. Thus, if we account for these, the total participation in the spectrum is estimated at around Rs. 55,000 - 60,000 crore, of which the telcos will have to pay Rs. 20,000 – 25,000 crore upfront and the balance will be payable in 16 years. The telco-wise and band-wise participation is as below:

Figure 5: Operator wise participation



Source: ICRA research

Figure 6: Band wise participation



Conclusion

ICRA expects the participation in the upcoming spectrum auctions is expected to remain muted. No participation is expected in the 5G bands or the new 700 MHz band, primarily on account of limited ecosystem around these bands and high reserve prices for these. Moreover, the main priority of the telcos as of now is to upgrade more and more customers to 4G and increase 4G's penetration. Given the Indian demographics and spending power, customers are not expected to opt for high priced 5G services only for speed. A good application system is required and post that also, the adoption rate is expected to remain slow given the high upfront cost in the form of expensive handsets. Similar pattern was observed during the 4G regime as well. Moreover, given the pressure on the balance sheets of the telcos, any aggressive bidding at this stage is ruled out.

Thus, ICRA expects telcos to primarily bid for renewal of their expiring spectrum so as to maintain continuity of operations. As per ICRA expectations, the participation in the upcoming spectrum auctions would be to the tune of Rs. 55,000-60,000 crore, primarily in the 800 MHz and 1800 MHz bands, where the administratively assigned spectrum is slated to mature in 2021. Of this, around Rs. 20,000-25,000 crore has to be paid upfront. Thus, this adds to the debt burden of the telecom industry, which is already reeling under the pressure of elevated debt levels amid the uncertainties around the AGR payouts.

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