15th Jan, 2014



The Secretary,
Telecom Regulatory Authority of India,
Mahanagar Doorsanchar Bhawan,
Jawahar Lal Nehru Marg (Old Minto Road),
New Delhi-110002

Kind Attention: Advisor (NSL)

Sub: TRAI's Consultation on 'Reserve Price for Auction of Spectrum in the 800 MHz Band' dated the 30th Dec, 2013

Dear Sir,

At the outset, we welcome the Authority's initiative to release this detailed Consultation Paper.

Spectrum is a critical resource for mobile networks and the issue of "sufficient spectrum availability" for mobile services at the "right price" for the "right kind of usage" is central to the growth of these services in the country.

Please find enclosed herewith our submission as Annexure A in response to the Authority's Consultation Paper.

We are confident that the suggestions and comments given by us as part of our submission will merit indepth consideration from TRAI.

Should you require any clarifications or further information on the positions set out in this response, please do not hesitate to contact us.

Thanking You.

Yours faithfully,

For IDEA Cellular Ltd.

Rajat Mukarji

Chief Corporate Affairs Officer

Enclosed: As above



<u>Idea Cellular's Response to TRAI's Consultation on</u> <u>'Reserve Price for auction of Spectrum in the 800 MHz Band' dated 30th Dec,2013</u>

Preliminary Submission:

- 1. The NTP 2012 has in its Preamble clearly stated, "Given the continued predominant role of wireless technologies in delivery of services in ICT sector, NTP-2012 incorporates framework for increasing the availability of spectrum for telecom services including triple play services (voice, video and data) for which broadband is the key driver". Further, the NTP 12 also defines as one of its objectives, "Deliver high quality seamless voice, data, multimedia and broadcasting services on converged networks for enhanced service delivery to provide superior experience to users."
- Against the NTP's focus on expansion of data services in India, Idea Cellular compliments the Authority for bringing out a detailed consultation paper on the issue of valuation of 800 MHz spectrum and reemphasizing the criticality of this band for E-GSM and wide band CDMA / LTE, both of which have the potential to significantly alter the telecom data landscape of the country.
- 3. Idea Cellular believes that currently 700 MHz/ 800 MHz in the sub 1 GHz band and 1800 MHz / 2300 MHz in the frequency range above 1 GHz are most appropriate to build up coverage and capacity for the data services revolution taking place in the Country. It is thus critical for the TRAI to ensure that 5 MHz contiguous bands are made available for roll-out of data networks to enable the operators to help realize the vision of NTP 12.
- 4. It is our firm belief that rationalization of usage in the 800 MHz spectrum can lead to enhancement of spectrum availability for data services through either facilitating E-GSM / Wide band CDMA (i.e. 880-890 MHz paired with 925-935 MHz, which is globally considered to be a part of the 900 MHz band) on the 3G side or LTE on the 4G side.
- 5. It is widely acknowledged that the current usage of 800 MHz by existing users is inefficient and the TRAI's response to the back-reference from DoT (on its 9th Sep 2013 Recommendations) had also reaffirmed this when it suggested that the DoT explore the feasibility of adoption of E-GSM for "efficient utilization"

Public

of spectrum in the 800 MHz band". Further, the TRAI has correctly mentioned in the Consultation Paper that the usage of CDMA Technology has witnessed a decline the World over and its ecosystem is declining, whereas GSM Technology has flourished and its ecosystem has grown. The situation in the Indian market has also been grim with a continuously declining CDMA subscriber base over the course of last few years, a fact acknowledged by the Authority itself in its 9th Sep 2013 Recommendations.

6. In this regard, a comparison of the statistics for GSM and CDMA, as given below, makes it amply clear that the subscribers supported per MHz of CDMA is far below that for GSM, as a matter of fact nearly 1/3rd of GSM. Hence, it can easily be concluded that not only is the current utilization of 800 MHz by CDMA players inefficient, they also have much more spectrum than is required for all their subscribers combined. Also while the number of subscribers on GSM has grown 4.66 times from Dec'07 to Jun'13, the CDMA subscriber base has remained more or less static over the same period. Hence, no more spectrum in 800 MHz band needs to be allocated for CDMA technology.

	GSM	CDMA	
	Total	Total	Total
Subs Dec'2007	172.22	61.40	233.62
Spectrum	700.20	231.25	931.5
Subs/MHz	245,957	265,517	250,813
Subs June'2013	802.12	71.24	873.36
Spectrum	1,069.70	261.25	1,331.0
Subs/MHz	749,855	272,689	656,193

Growth of Subs. 466% 116%

Growth of Subs. / MHz 305% 103%

7. Further, it may also be worthwhile to mention here that in the auction held in Nov 2012, there was no bidder for spectrum in the 800 MHz band. Spectrum in this band was put up for auction again in Mar 2013,

after slashing the reserve price by 50%. This time, only one TSP (SSTL), whose licences in 20 LSAs were cancelled by the Hon'ble Supreme Court, participated and won spectrum in eight LSAs whereas in other LSAs the spectrum remained unsold. It is this apparent that the CDMA suffers from a clear lack of consumer interest and is thus is also not in a position to efficiently utilize the spectrum allocated to it.

- 8. Idea Cellular thus strongly recommends that there should be no further spectrum allocation made to the CDMA technology since even the currently allocated spectrum remains heavily under-utilized.
- Further, in view of the goals of NTP 2012 and the current inefficient usage of already allocated 800 MHz spectrum for CDMA technology, it is essential that contiguous bands are made available in the 850 MHz for rollout of E-GSM and WCDMA / LTE services.
- 10. Further, Idea Cellular would also like to submit that considering the technical characteristics and efficiency of 800 MHz band, it may be appropriate to peg the value of 800 MHz akin to the final auction price derived for 900 MHz band as per auctions of February 2014. Since the spectrum in 800 MHz band is equally efficient both in terms of coverage and the Data Services that can be offered in 800 MHz band to the Services currently offered in 900 MHz band, there is no reason for the value for 800 MHz to be any less than 900 MHz.
- 11. Finally, the Authority would recall its recommendation that all spectrum allocated through auction should henceforth be charged at flat rate. The Authority besides giving various reasons for the implementation of flat rate, noted that the opportunities that exist for arbitrage between different bands and technologies would cease to exist with implementation of flat rate. In view of the same, we request the TRAI to re-emphasize that the final adoption of flat SUC would equally apply to 800 MHz also.

Idea Cellular - Query wise response to TRAI consultation

Q.1. What should be the quantum of spectrum in the 800 MHz band that should be put up for auction?

Idea Cellular is of the firm opinion that auction for 800 MHz should be done only in cases where 5 MHz contiguous spectrum is currently available. In cases where that is not so, it may be better for DoT to first

reorganize the spectrum to get contiguous 5MH slots for auction and confirm the release of spectrum from various sources (TTSL, BSNL / MTNL etc.).

The TRAI Consultation shows that currently 17 blocks of 5 MHz (Table 2.2 on Pg 8 of TRAI consultation paper) are already available in 13 circles and there exists a potential for total availability of 26 blocks in 20 circles (Table 2.5 on Pg 11 of TRAI consultation paper). The increase in availability, as the TRAI consultation highlights is considering the TTSL offer to surrender spectrum beyond 3.75/2.5 MHz and on the assumption that MTNL vacates entire 800 MHz spectrum and BSNL retaining only one CDMA carrier. All these assumptions are fully in the realm of certainty.

The Authority had already expressed the view that considering the fact that there has been (i) a continuous decline in the subscriber base of both the PSUs, and, (ii) the combined CDMA subscriber base of both the PSUs is only 2% of the total CDMA subscribers, BSNL be allowed to retain a single carrier (of 1.25 MHz) in 800 MHz band so as to cater to its R-DEL subscribers and be asked to vacate other carrier(s) in all LSAs, whereas MTNL should vacate all the carriers of 800 MHz band assigned to it in both Delhi and Mumbai. Further, one of the CDMA operators is already in the process of surrendering spectrum holding (beyond 3.75 MHz in Metros and beyond 2.5 MHz in other LSAs) in all the circles.

We agree with the Authority's view to get all the excess spectrum vacated from various available sources and recommend that it be put it to efficient use through making available contiguous bands of atleast 5 MHz for E-GSM and Wide band CDMA /LTE.

Q.2. What should be the block size in the 800 MHz band?

Idea Cellular believes that the block size for auction should be 5 MHz, as this spectrum size is the most relevant block size for new technologies, which is the same as was the case in 2100 MHz band where too block size was 5 MHz. However, the spectrum sold should be contiguous for LTE as also opined by the TRAI in its Recommendations of 9th Sep 2013 ("It is pertinent to note that availability of contiguous blocks would be absolutely essential for deployment of advanced technologies like LTE in this band").

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While the quantum of spectrum to be auctioned is not yet known, we agree with the Authority's concern on the possible anomaly that may arise in case in the auction held in March 2013, one bidder acquired 3 blocks of spectrum of 800 MHz in 8 LSAs. As pointed out rightly by the TRAI, now, if spectrum is put up for sale in the 8 LSAs in which one of the TSPs (SSTL) was successful in acquiring 3 blocks of spectrum in the March 2013 auction, and the same TSP is able to acquire even a single block of spectrum (1.25 MHz) in any one of these LSAs, it will have a total holding of 5 MHz of spectrum in that LSA enabling it to provide all the services possible on truly liberalized spectrum. This would also imply that the 3.75 MHz CDMA won in Mar'13 auction would need to be liberalized by paying the applicable market price discovered in a new auction, if it is deployed for any technology other than CDMA.

Hence the situation is different now both in terms of the operative networks as well as the technology advancements that have made 850 MHz valuable for E-GSM/LTE and we are firmly of the opinion that the valuations for 800 MHz should not be less than those for 900 MHz.

Q.5. Should the value to be paid for 800 MHz spectrum be based upon the potential growth in data services? If yes, please state whether you agree with the assumptions made.

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Q.6. Should the value of spectrum in the 800 MHz band be assessed on the basis of producer surplus on account of additional spectrum? If you are in the favour of this method, please furnish the detailed calculations and relevant data along with results.

Further, Idea Cellular would also like to submit that considering the technical characteristics and efficiency of 800 MHz band, it may be appropriate to peg the value of 800 MHz akin to the final auction price derived for 900 MHz band as per auctions of February 2014. Since the spectrum in 800 MHz band is equally efficient both in terms of coverage and the Data Services that can be offered in 800 MHz band to the Services currently offered in 900 MHz band, there is no reason for the value for 800 MHz to be any less than 900 MHz.

The TRAI has already done an exercise for valuation of 900 MHz across 3 Circles of Delhi/Mumbai and Kolkata. We feel that the TRAI should adopt the same economic principles for computing the value of 900 MHz for the

balance LSAs (probabilistic average valuation obtained through the method of simple mean and using technical and economic efficiency parameters) and peg 800 MHz at parity with 900 MHz as considering the band characteristics and potential usage, the 800 MHz band value is akin to 900 MHz band value.

Q.7. Should the value of spectrum in the LSAs in India for 800 MHz be determined by utilizing the data on international prices? What other variables do you suggest for arriving at robust value estimates using the multiple regression approach? Is there any alternate approach for valuation of spectrum in 800 MHz using the data on international auctions?

We feel that the TRAI should adopt the same economic principles for computing the value of 900 MHz for the balance LSAs (probabilistic average valuation obtained through the method of simple mean and using technical and economic efficiency parameters) and peg 800 MHz at parity with 900 MHz since the spectrum in 800 MHz band is equally efficient both in terms of coverage and the Data Services that can be offered in 800 MHz band to the Services currently offered in 900 MHz band.

Idea Cellular feels that valuation of spectrum in India cannot be done on the basis of international prices alone. It can only be used as one of the inputs for validating the value derived by other methods.

Q.8. Apart from the approaches discussed in the paper, is there any alternate approach for valuation of spectrum in 800 MHz that you would suggest? Please support your answer with detailed data and methodology.

Idea Cellular Submission:

Please refer to our response to Q.5. And Q.6.

Q.9. What should be the ratio adopted between the reserve price for the auction and the valuation of the spectrum? Would it be optimal to fix reserve price equal to valuation of spectrum?

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We believe that the recommended ratio of 80% as per its 9th Sep 2013 Recommendations is fair and reasonable.

TRAI, in its recommendations of 9th Sep 2013 on spectrum value and reserve price of 900 MHz and 1800 MHZ, had decided that the reserve price can be pegged at 80% of the average valuation of spectrum. Subsequently the Telecom Commission amended it and pegged it at 100% of the valuation for Metro/ Category A LSAs for 1800 MHz and for the 3 metros for 900 MHz. However, we feel that the TRAI's earlier recommended ratio of 80% is fair and reasonable and a 100% value as reserve price is not right. Keeping a high percentage as reserve price has resulted in unsold spectrum being left with the government and the unfair consequence of that price being used as market price (which is actually applicable only when demand equals supply).