



## Association of Unified Telecom Service Providers of India

AUSPI/12/2014/ 060

9<sup>th</sup> September 2014

Shri Arvind Kumar,  
Advisor (Networks, Spectrum & Licensing),  
Telecom Regulatory Authority of India,  
Mahanagar Doorsanchar Bhawan,  
Jawahar Lal Nehru Marg,  
New Delhi - 110002.

**Sub: AUSPI's Response to TRAI Consultation Paper No.10/ 2014 on "Valuation and Reserve Price of Spectrum: Licenses expiring in 2015-16".**

Dear Sir,

Attached please find AUSPI's Response to the TRAI Consultation Paper on "Valuation and Reserve Price of Spectrum: Licenses expiring in 2015-16".

We request the Authority to please take AUSPI's views into consideration.

Thanking you,

Yours faithfully,

**Ashok Sud**  
Secretary General

**Mob: 9312941515**

**Copy to :**

1. Dr. Rahul Khullar, Chairman, TRAI
2. Shri R K Arnold, Member, TRAI
3. Smt. Vijayalakshmy K Gupta, Member, TRAI
4. Shri Sudhir Gupta, Secretary, TRAI



AUSPI's Response to the TRAI Consultation Paper No. 10/2014 on Valuation and Reserve Price of Spectrum: Licences expiring on 2015-16

Q.1. *Please comment on the issue of making available additional spectrum in contiguous form (as discussed in para 2.5 and 2.13) in the 900 MHz and 1800 MHz band.*

AUSPI's Response:

In view of the fact that 29 licensees holding 211.8 MHz of spectrum are expiring in 2015-16, there is an urgent need to auction the spectrum in 900 MHz and 1800 MHz bands in a time bound manner. To ensure that these licensees are able to continue their operations, **it is essential to auction all spectrums becoming available on expiry of these licenses and also to make efforts to make available additional spectrum for auction.** DoT to coordinate with the non-commercial users of spectrum, who have been allocated spectrum in 900 MHz band out of the 25 MHz identified for commercial use, to make available more spectrum for commercial use.

An MoU was signed between the MoD and DoT to make available 55 MHz of spectrum in 1800 MHz for commercial usage, however the entire spectrum as agreed is yet to be released by Defence for telecom services. We, therefore, request that the remaining commercial spectrum out of the entire agreed 55 MHz should be made available at the earliest and put up for auction.

It is also desirable to make the spectrum contiguous, to the extent possible, to enable the operators to take maximum advantage of the liberalized spectrum acquired through auction as the liberalized but non-continuous spectrum cannot be used efficiently for deployment of next generation technologies. However, contiguity should not be the pre- requirement for auction of spectrum and all available spectrum (contiguous or non contiguous) should be put up/made available for the forthcoming auction.

To ensure continuity of services by the licensees expiring in 2015-16, adequate spectrum in 900 MHz and 1800 MHz bands should be made available in the proposed auction by ensuring vacation of 900 MHz and 1800 MHz spectrum by all non-commercial users including Defence in a time-bound manner before expiry of the licenses. This would give fair opportunity to operators whose licenses are expiring in 2015-16 and adequate spectrum is not available in some of the circles.



Q.2. *Please comment whether only contiguous blocks of minimum 5 MHz spectrum should be put for auction.*

**AUSPI's Response:**

We would like to mention that all spectrum becoming available with the Government on expiry of licenses in 2015-16 should be put to auction without any restriction like *only contiguous blocks of minimum 5 MHz*. In addition, Government should also try to make available additional spectrum, to the extent possible, for auction.

Q.3. *What should be the block size to auction the spectrum in (a) 900 MHz band and (b) 1800 MHz band?*

**AUSPI's Response:**

In view of the limited availability of spectrum especially in 1800 MHz band (and only 4.4 MHz is available in WB in 900 MHz), which is fragmented as well, AUSPI suggests a block size of 200 KHz to auction the spectrum in both 900 MHz and 1800 MHz bands. Any attempt to prescribe larger block size such as 1 MHz or 5 MHz may lead to a situation where in it will not be possible to auction all spectrums becoming available on expiry of licenses.

For instance, in 900 MHz band, if the block size is kept at 1 MHz, it would be practically impossible to put a total of 5 MHz (in 14 LSAs) of spectrum on auction. If the block size is kept at 5 MHz with this availability of 184 MHz in 18 circles, it would become impossible to auction around 44 MHz for these 17 LSAs. On the other hand, if a block size is kept at 200 KHz as suggested, entire 184 MHz may become available for auction.

Further, block size of 200 KHz is suitable for all kind of operators and will offer them the flexibility to deploy any kind of technology with it. It may be used for GSM and multiples of 200 KHz may be used for higher technologies.

Q.6. *Should the valuation exercise for 1800 MHz spectrum be undertaken afresh for all the 22 LSAs?*

**AUSPI's Response:**

Since most of the economic indicators like inflation, forex etc are still same since last one year, a fresh exercise may not yield the valuation that is



significantly different from the TRAI's recommendations of 11 months ago in September, 2013. We therefore do not see any reason to do the valuation exercise afresh.

*Q.7. Should the prices revealed in the February 2014 auction for 1800 MHz spectrum auction be taken as the value of 1800 MHz spectrum for the forthcoming auction in the respective LSA? Would the response be different depending on whether the forthcoming auction is conducted within one year of completion of last round of auction of February 2014 or later?*

**AUSPI's Response:**

Yes, we believe that the prices revealed in the February, 2014 auction for 1800 MHz should be taken as the valuation of 1800 MHz spectrum for the forthcoming auction in the respective LSAs.

DoT, vide its reference dated 17th April, 2014, has sought TRAI's recommendations on the applicable reserve price for all service areas within 2 months of concluding the February 2014 auction and only 6 months have lapsed from the last auction. Even if the auction takes place after completion of 1 year from the previous auction, due to procedural delays, we do not see any valid rationale which affects the value or reserve price of the spectrum in such a case.

TRAI has already recommended in its recommendations dated 23<sup>rd</sup> April, 2012 that the spectrum must be auctioned at least 18 months in advance so as to enable the winning bidders to be ready with the deployment plans.

*Q.8. If the prices revealed in the February 2014 auction for 1800 MHz spectrum are taken as the value of 1800 MHz for the forthcoming auction, would it be appropriate to index it for the time gap (even if this is less than one year) between the auction held in February 2014 and forthcoming auction? If yes, what rate should be adopted for the indexation?*

**AUSPI's Response:**

Indexation is not justified in case the auction takes place within one year of previous round of auction.

It may also be noted that while estimating the value of spectrum in September, 2013, TRAI indexed the February, 2011 prices for 3 years i.e. for a period of 2010-11 to 2012-13 however, it did not index November, 2012



auction price as one year had not lapsed till September, 2013 when the TRAI's recommendations came, inspite of the fact that auction took place in February 2014 i.e. after more than one year of previous auction in November, 2012.

- Q.9. *What should be the criteria for defining a 'market clearing price'? Can the auction determined price be considered as market clearing price, when (i) the demand for spectrum is greater than the supply and when (ii) the demand is greater than or equal to the supply? Can the auction determined price be considered as the market discovered price?*

**AUSPI's Response:**

In our view, if spectrum is sold at a given price in an auction that 'auction determined price' should qualify as the 'Market Clearing Price' for that service area and should be considered as market discovered price for that band in that LSA for all purposes, till a sufficient time expires.

The TRAI has opined at para-3.3 of the consultation paper that the Valuation of spectrum is thus determined to a large extent by its demand which, in turn, depends on the **willingness, requirement, and the ability** to pay of the spectrum users or TSPs who use it as an input in the production of telecom services.

If the entire spectrum in few service areas was not sold, it should not be construed that market price or the market clearing price is not discovered for that band in those LSAs. Demand in those service areas was low due to the reason that operators were not willing to pay the price of the spectrum fixed by the Government for those circles. We request TRAI to reduce the reserve price in those LSAs to ensure that the demand of the spectrum in all LSAs align with the willingness and the ability of the operators to pay for the spectrum.

- Q.10. *Should the valuation of spectrum and determination of reserve price be done only for those LSAs where market clearing price was not achieved for 1800 MHz spectrum in February 2014 auction?*  
&  
Q.11. *Should the auction determined price for LSAs where market clearing price was achieved in February 2014, be taken as equal to the value of spectrum?*  
&  
Q.12. *Should the market determined price be taken as the value of spectrum in all LSAs?*



**AUSPI's Response:**

In conjunction with our response to Q.9 above and the fact that the spectrum was sold in all LSAs as recently as in February 2014, a market determined price already exists for all 22 LSAs that can serve as a basis for any forthcoming auction. There is no need of any new exercise for valuation of spectrum again.

- Q.13. *Should the value of spectrum in the LSAs where market clearing price was not achieved be estimated by correlating the sale prices achieved in similar LSAs where market clearing price was achieved with known relevant variables (paragraph 3.19)? If yes, please suggest which single variable is best suited for this purpose?*
- &
- Q.14. *Can multiple regression analysis be gainfully employed for this purpose given the limited number of sample data points?*
- &
- Q.15. *Should the value of spectrum in 1800 MHz band be assessed on the basis of producer surplus on account of additional spectrum?*
- &
- Q.16. *Is there any need for a change/revision of any of the assumptions adopted by the Authority in producer surplus model in the Recommendations of September 2013? Justify with reasons.*
- &
- Q.17. *Should the production function model based on the assumption that spectrum and BTS are substitutable resources be used as a valuation approach (as was done in the earlier valuation exercise)? Please support your response with justification/calculations/relevant data and results.*
- &
- Q.18. *Should the revenue surplus approach be used to arrive at the value of 1800 MHz spectrum? Do you agree with the assumptions made?*
- &
- Q.19. *Should the values contained in the Report of 8th February 2011 for spectrum up to 6.2 MHz be incorporated after indexation in the calculation of the average value of the 1800 MHz spectrum in the current exercise?*
- &
- Q.20. *Should the prices revealed in the February 2014 auction for 1800 MHz spectrum auction be used as one of the values of 1800 MHz spectrum?*

&



Q.21. *Apart from the approaches discussed as above, is there any other approach for valuation of spectrum that you would suggest? Please support your answer with detailed data and methodology.*

&

Q.22. *Would it be appropriate to value 1800 MHz spectrum as the simple mean of the values thrown up in all the approaches? If no, please suggest with justification that which single approach should be adopted to value 1800 MHz spectrum?*

**AUSPI's Response:**

TRAI has already determined the value of the 1800 MHz spectrum as the simple mean of the values from different approaches mentioned above, in the last recommendations in September 2013. Basis that valuation and reserve price, market prices have already been determined for all 22 LSAs in February 2014 auction (less than a year ago). We recommend that this market determined price should be considered as the value of spectrum in 1800 MHz band for all 22 LSAs, for the forthcoming auction in this band.

Q.23. *Should the value of 900 MHz spectrum be derived on the basis of the value of 1800 MHz spectrum using technical efficiency factors (1.5 times and 2 times) as discussed above?*

**AUSPI's Response:**

*Yes, the value of 900 MHz spectrum should be derived on the basis of the value of 1800 MHz spectrum.*

Q.27. *Should the reserve price of 1800 MHz spectrum in the forthcoming auction be fixed equal to the realized price of 1800 MHz spectrum in the February 2014 auction? If not, what should be the ratio between the reserve price for the auction and the valuation of the spectrum?*

**AUSPI's Response:**

We suggest that the auction determined price of February 2014 auction should be considered as the value of spectrum in 1800 MHz band for all 22 LSAs, and reserve price should be fixed at 80% of that value of the spectrum in 1800 MHz band for the forthcoming auction.



Using the above methodology, service area-wise reserve prices would be as under:

S. No.	Service Area	Reserve Price per MHz (Feb'2014) (B)	Auction Price per MHz (Feb'2014)	Proposed Reserve Price per MHz (A)	Difference (A-B)	% sold of Spectrum put for sale (Feb'2014)
1	Andhra Pradesh	163	163.0	130.4	-33	100%
2	Assam	7	36.1	28.9	22	-
3	Bihar	37	43.1	34.5	-3	92%
4	Tamilnadu	208	208.0	166.4	-42	37%
5	Delhi	219	364.0	291.2	72	-
6	Gujarat	143	237.8	190.2	47	-
7	Himachal Pradesh	6	6.0	4.8	-1	50%
8	Haryana	27	27.0	21.6	-5	51%
9	J&K	5	6.1	4.9	0	-
10	Karnataka	155	155.0	124.0	-31	97%
11	Kolkata	73	73.0	58.4	-15	72%
12	Kerala	52	52.0	41.6	-10	96%
13	Maharashtra	173	290.4	232.3	59	-
14	Madhya Pradesh	43	50.4	40.3	-3	100%
15	Mumbai	207	272.0	217.6	11	-
16	North East	7	7.0	5.6	-1	81%
17	Orissa	16	16.0	12.8	-3	38%
18	Punjab	54	54.0	43.2	-11	91%
19	Rajasthan	26	26.0	20.8	-5	56%
20	UP-East	61	64.0	51.2	-10	95%
21	UP-West	62	95.0	76.0	14	-
22	West Bengal	21	24.6	19.7	-1	100%
<b>Total:</b>		<b>1765</b>	<b>2270.4</b>	<b>1816.3</b>		

In the above table, it may be observed that while the proposed pan-India reserve price of Rs. 1816 Crores per MHz, is higher than the previous





reserve price of Rs. 1765 Crores per MHz for 1800 MHz band spectrum, the proposed reserve price in around 15 LSAs is lower than the previous reserve price fixed by the Government for Feb'2014 auction. We would like the Authority to note that in almost all such LSAs, demand of the spectrum could not match the supply even i.e. all the spectrum put to auction in these LSAs could not be sold at the reserve price fixed by the Government perhaps due to the reason that even the reserve price set by the Government was not in line with the market realities for these LSAs and bidders did not see any value to buy the spectrum in these areas even at the reserve price itself. Therefore, the lower reserve price for these LSAs is strongly recommended for the forthcoming auction so that the spectrum put to auction is sold and a true market value is also discovered for these LSAs.

*Q.28. If the realized prices in the February 2014 auction for 1800 MHz spectrum is taken as the reserve price of 1800 MHz for forthcoming auction, would it be appropriate to index it for the time gap (even if less than one year) between the auction held in February 2014 and forthcoming auction? If yes, what rate should be adopted for the indexation?*

**AUSPI's Response:**

**As brought out in our response to earlier questions, it is recommended that the RP of 1800 MHz should be 80% of the winning price of Feb 2014 auction.**

Indexation is not justified in case the auction takes place within one year of previous round of auction as also explained in response to Q.8 above.

\*\*\*\*\*END\*\*\*\*\*