COAI comments on TRAI Consultation Paper
on
RESERVE PRICE FOR AUCTION OF SPECTRUM IN 800 MHZ BAND
Released on December 30, 2013

BACKGROUND

1. COAI has made several representations to the Government and also a detailed representation to the TRAI vide its response RSM/COAI/2013/149 dated August 14, 2013 to TRAI Consultation Paper on ‘Valuation and Reserve price of Spectrum’ to reconfigure the existing 800 MHz band and offer it as E-GSM /E-900 MHz as:

   a. It will result in far more efficient utilization of spectrum in the 800 MHz band.
   b. This spectrum will be used for growth of broadband and will maximize overall revenue for the Exchequer in the long run.
   c. This would also be in line with international practices.

2. TRAI, in its recommendations on Spectrum Valuation and Reserve Price of 1800 MHz and 900 MHz, has itself acknowledged the diminishing interest in CDMA and the fact that the revenues, minutes of usage and the subscriber count of CDMA operators are continuously declining over the last few years. Further, in the auction held in November 2012, there was no bidder for spectrum in the 800 MHz band and only one TSP bought spectrum in March 2013 auction.

   Chart 1: Proportion of GSM and CDMA subscriber connections

   ![Chart showing the proportion of GSM and CDMA subscriber connections from FY09 to FY13]

   Source: TRAI
Table 1: Utilization of 800 MHz band as compared to 900/1800 MHz

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Parameter</th>
<th>GSM (1800 MHz/900 MHz)</th>
<th>CDMA (800 MHz)</th>
<th>Present Utilization of CDMA as compared to GSM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Subscriber per MHz</td>
<td>744,097</td>
<td>283,760</td>
<td>38%</td>
</tr>
<tr>
<td>2.</td>
<td>Revenue in crores per MHz</td>
<td>93.76</td>
<td>32.35</td>
<td>34%</td>
</tr>
<tr>
<td>3.</td>
<td>Annual spectrum usage charge in crores per MHz</td>
<td>4.58</td>
<td>0.65</td>
<td>14%</td>
</tr>
</tbody>
</table>

Note: 1. The figures have been derived from the TRAI PMR report for March 2013
      2. The spectrum usage charge has been derived on the basis of Q4 2012-13.

3. It is submitted that given the diminishing interest in CDMA, the lack of interest in this band in the last auction, it would be most undesirable to lock up this valuable sub 1GHz band in a less efficient use.

4. Given the higher appetite/demand for 900 MHz, the reconfiguration of the available 800 MHz spectrum will not only increase the availability of spectrum in the 900 MHz band but will also lead to more efficient use of spectrum. It will also benefit the Government through revenue generation and also help increase the broadband penetration in the country. This exercise may be carried out by the Government after mutual discussions with all stakeholders and on a case to case basis.

5. Given the sharply declining minutes of use in CDMA, we believe that there will be no impact on the existing CDMA operations as they can continue providing the services with the allocated spectrum.

6. Vide our earlier submission to TRAI referred to above, we have already suggested how the rearrangements in the uplink and downlink can be made to make E-GSM available for auction.
7. Since, the demand for 900 MHz is admittedly much higher than 800 MHz and CDMA operators also aspire to acquire 900 MHz, it will be a sensible decision, both technically and economically, to:

a. harmonize the vacant 800 MHz spectrum,
b. refarm it to E-GSM band and
c. auction it as 900 MHz band.

8. The true value of spectrum in the 800 MHz band will be recognized when, and only when it is auctioned as EGSM 900 MHz.

In fact, the Authority in its recommendations dated 9th September, 2013, agreed with this approach, and proposed the following:

2.98 Therefore, the Authority recommends that the feasibility of adoption of E-GSM should be explored in a time-bound manner. The Authority also recommends that the auction in the 800 MHz band should not be carried out now.”

9. The auction of 800 MHz spectrum as E-GSM is a win-win for all stakeholders as it:

a. Presents equal opportunity to all, including CDMA operators, to acquire spectrum in the 900 MHz band
b. Aids in the discovery of market price for 900 MHz, which can be used for extension of existing licenses and spectrum
c. Unlocks the precious 800 MHz band from the diminishing and the declining use of CDMA technology so this spectrum is utilized most optimally and efficiently.
d. Brings in more revenues to the exchequer due to the higher demand for 900 MHz
e. Ensures continuity of services to CDMA subscribers in the existing allocations, thereby, protecting the interests of CDMA subscribers and the investments made by CDMA operators.

10. We, thus, once again request TRAI to recommend auction of 800 MHz band for E-GSM.

Without prejudice to our above submissions, we would like to respond to the issues raised by TRAI on the auction of 800 MHz spectrum for CDMA/3G-EVDO services.
ISSUE WISE RESPONSE

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

COAI Comments:

a. As a matter of principle, we believe that all available spectrum should be put to auction.

b. This spectrum should include the 800 MHz spectrum returned by one large private CDMA operator.

c. In addition, we believe that administratively allocated spectrum held by CDMA operators, in excess of what is permissible under the subscriber link criteria of 17 January 2008, can also be taken back and put for auction.

d. We believe that the above will not only ensure that adequate quantum of 800 MHz is put to auction, but also safeguard that there is no adverse effect on the continuity of services to the CDMA subscribers.

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

COAI Comments:

a. In respect of block size and the eligibility to bid, the following is proposed:

   1. The block size should be 1.25 MHz.

   2. New Entrants or existing operators who do not currently hold spectrum in 800 MHz will have to bid for at least 4 blocks (i.e. 5 MHz) of spectrum.

   3. Existing operators who currently hold spectrum in 800 MHz can bid for a minimum of 1 block (i.e. 1.25 MHz).

Q.3. Should the value of 800 MHz spectrum be derived on the basis of the value of 1800 MHz spectrum using technical efficiency factors?

a. It is reiterated that 880 – 890 MHz in this band should be considered for auction as E-GSM band. The rest of the band should be auctioned as 800 MHz band for other usage.

b. TRAI should adopt a uniform approach for determining the valuation of 800 MHz as has been used for valuing spectrum in 900 MHz for auctions slated to take place in February 2014.
c. In this regard, it is submitted that the better propagation characteristics of 800 MHz band, over both 1800 MHz as well as 900 MHz bands, could be one of the factors in estimating the valuation of 800 MHz spectrum.

d. COAI is of the view that the valuation of E-GSM band and rest of 800 MHz band should be at least equal to valuation of 900 MHz for LSAs where the valuation has been calculated for auctions to be held in February 2014. In LSAs where valuation is not available, the same approach that has been used for valuing 900 MHz in TRAI’s Recommendations on ‘Valuation and Reserve price of Spectrum’ dated September 09, 2013, can be used.

Q.4. Is there any case for application of a lower efficiency factor (1.3) over the valuation of 1800 MHz spectrum, for determining the valuation of 800 MHz, as was done in the previous auction? If yes, give detailed reasons for the same.

COAI Comments:

a. It is submitted that the multiple of 1.3 recommended by TRAI in 2012, was not on account of lower technical efficiency, but rather based on an erroneous view that with less than 5 MHz it was not possible to offer all services that a “truly liberalised” spectrum can.

b. It is not clear how this view was taken, as COAI had told both TRAI and DoT, as far back as in 2009 that CDMA operators were offering 3G EVDO services in 800 MHz.

c. Further, this incorrect understanding has clearly been belied as the operator who acquired 800 MHz in the March 2013 auctions is openly offering 3G plus services. Some recent media advertisements released by the operator are enclosed as Annexure-1.

d. COAI thus is not clear on the ‘liberalization’ argument– on one hand it is stated that existing spectrum allocations are not ‘liberalized’ and the price for 800 MHz is reduced because less than 5MHz, cannot be used in a ‘truly liberalized’ manner, however, on the other, the 3G plus offerings of all the existing 800 MHz operators, including the new entrant in March 2013 are being disregarded.

e. Even assuming that less than 5MHz in 800 MHz cannot be used in a ‘liberalized’ manner, what if the operator acquires additional 1.25 /2.5MHz to make the holding 5MHz – the Government position is that existing allocations cannot be combined with fresh allocations and used in a ‘liberalized’ manner until auction determined price is paid!

f. COAI would like to understand whether the 800 MHz acquired in March 2013 is non liberalized spectrum, if yes; how is the operator offering 3G plus services; what if it acquires additional spectrum in the proposed 800 MHz auctions to add up to 5MHz; will
its existing allocations be held to be non-liberalized; will it have to pay an auction determined price for its existing allocations before it can offer 3G plus services. COAI requests that the TRAI address these concerns in its recommendations on 800 MHz. As per position taken by TRAI and DoT, there is a need to ensure that the operator pays the price for its 3.75 MHz spectrum acquired in the March 2013 auction based on the next auction determined price for 800 MHz. Only then will it become eligible to provide LTE services.

**g.** In view of the above, we submit that the “lower efficiency factor (1.3) over the valuation of 1800 MHz spectrum”, for determining the valuation of 800 MHz should not be applied.

**h.** It is reiterated that TRAI should adopt a uniform approach for determining the valuation of 800 MHz as has been used for valuing spectrum in 900 MHz for auctions slated to take place in February 2014 and that the valuation of E-GSM band and rest of 800 MHz band should be at least equal to valuation of 900 MHz for LSAs where the valuation has been calculated for auctions to be held in February 2014. In LSAs where valuation is not available, the same approach that has been used for valuing 900 MHz in TRAI’s Recommendations on ‘Valuation and Reserve price of Spectrum’ dated September 09, 2013, can be used.

**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.

**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.

**COAI Comments:**

**a.** TRAI, in its recommendations dated 09.09.2013, has stated:

“The Authority is clear that there is no single correct and precise valuation of the spectrum or the reserve price. There are different ways of arriving at the value of the spectrum, all of which have their merits as well as their drawbacks. Rather than count on one method, prudence suggests it would be better to rely on a number of such models to arrive at a final reasonable valuation and then to base a reserve price on such valuation. The valuation has to be based on clear and cogent reasoning, transparency, logic, and the scientific method.”

**b.** TRAI should adopt the same approach for determining the valuation of 800 MHz as has been used for valuing spectrum in 900 MHz for auctions slated to happen in February
2013 and that the valuation should be at least equal to a valuation of 900 MHz for LSAs where the valuation has been calculated for auctions to be held in February 2014. In LSAs where valuation is not available, the same approach can be used that has been used for valuing 900 MHz for auction in February 2014.

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?**

**COAI Comments:**

a. Valuation of spectrum in India cannot be done on the basis of international prices alone. It can be used as one of the methods to derive the valuation.

b. We wish to reiterate that TRAI should adopt the same approach for determining the valuation of 800 MHz as has been used for valuing spectrum in 900 MHz for auctions slated to happen in February 2014. The technical efficiency factor can be one of the factors to derive the valuation of 800 MHz.

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.**

**COAI Comments**

a. 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?**

**COAI Comments:**

a. Auctions are useful when there is uncertainty around the value of the good for sale. As far as setting the reserve prices is concerned, the following are the objectives, in order of preference.

1. Ensure sale
2. Induce participation
3. Determine optimal value
4. Avoid collusion
b. There is a need to maintain parity between the reserve price to valuation ratio for 800 MHz band and other bands such as 1800 MHz and 900 MHz.

c. TRAI, in its recommendations 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. Thus, the same approach should be used for determining the reserve price to valuation ratio for 800 MHz.

d. Therefore, we recommend that the reserve price for 800 MHz spectrum should be pegged at 80% of the valuation of 800 MHz spectrum arrived at by the Authority.

Note: Our response is without prejudice to our existing and future submissions on various related issues in various present and future legal proceedings.