

**Aircel Group Comments to
TRAI's Consultation Paper on Valuation and
Reserve Price of Spectrum dated 23rd Jul'13**

Issue Wise Response

Refarming

Q.1. What method should be adopted for refarming of the 900 MHz band so that the TSPs whose licences are expiring in 2014 onwards get adequate spectrum in 900/1800 MHz band for continuity of services provided by them?

Q.2. In case spectrum is to be “reserved” for such TSPs, should it be restricted to licences expiring in 2014 (metros) or include licences expiring afterwards (LSAs other than metros)?

Aircel Response:

At the outset, we would like to state that internationally the refarming of spectrum has been undertaken in countries where there has been sufficient allocation of spectrum and Regulators ensured service continuity and operators survivability.

The Indian Telecom sector is currently embroiled in lot many uncertain Regulatory Policy matters, which are primarily an outcome of non-consultative and immediate implementation approach instead of a consultative and phased approach. In general, this has led to deterioration of financial health of the telecom sector, significantly impacted investor’s confidence as well as go-cautious/slow approach being adopted by operators.

With regard to the questions no 1 & 2 being put up for consultation, we would like to state as follows:-

- In its Recommendations dated 11-May-2010, under Summary of Recommendations, TRAI has recommended that :

6.3 Spectrum in 800 and 900 MHz bands should be refarmed at the time of renewal of the licenses. For holders of spectrum in 900 MHz band, substitute spectrum should only be assigned in 1800 MHz band and for licence holders of 800 MHz band, spectrum should be assigned in 450 /1900 MHz bands. (Para 1.73).

6.4 The Authority will carry out a separate consultation process on the issues involved in the refarming of 800/900 MHz spectrum and shall endeavour to give its recommendations before the licences come up for renewal. (Para 1.74).

In this regard, it is pertinent to highlight that while recommendations have been given on refarming of 900 MHz spectrum, allocated to existing operators; no further detailed consultation has been held in this regard on the issues involved with such refarming. In the recent Spectrum Auction conducted in Mar’13 as well, DoT has included the 900 MHz spectrum as available with existing operators in Delhi, Mumbai and Kolkata. This is despite no clear roadmap on the issues involved in the spectrum refarming, substitute clearly identified reserved spectrum and impact of such high spectrum charges on the financially starved operators.

Therefore, we would strongly urge TRAI to clearly recommend DoT that **‘Not to go ahead with auction of 900 MHz Spectrum’** refarmed from existing licensees due for renewal, till TRAI held

details consultative discussions with the operators and till there is a clear phased roadmap which takes care of all the issues.

- Further, we are also stating ahead some of the likely issues -with huge impacts, which may kindly be consulted upon in detail by TRAI, separately alongwith refarming.

a) Change in Active Equipment: There are thousands of BTSs which are presently spectrum agnostic and in many circles working primarily with 900 MHz spectrum band. In case Spectrum refarming is undertaken, these BTS would require replacement to work on 1800 MHz as well. It would further mean deploying of thousands of additional towers/BTS to regain the existing (pre-refarmed) level of network coverage. In nutshell, it would result into prohibitively expensive investment in CAPEX & OPEX.

b) Quality of Service (QoS): For replacing the 900 MHz with 1800 MHz, it would have severe adverse impact on coverage as well as QoS. If the existing coverage has to be maintained then not only the existing 900 active equipment (BTS) would need replacement but also need thousands of additional BTS. Such large scale disruption would lead to downfall in QoS, customer dissatisfaction as well as impact to service continuity and eventually having adverse impact on economy & productivity.

c) Financial impact : In the current times when revenues/profit of operators are falling, debt is at record high, regulatory cost is increasing (to meet guidelines of EMF, Green Telecom etc); it would be risk operator's survivability if their existing spectrum in 900 MHz is to be refarmed. The refarming, as being contemplated in Indian context, would need huge sums of money (in thousands of crores) to be invested into the network, just to regain the existing level of service coverage.

d) Equivalent Spectrum, if not more, in the 1800 MHz band :

If refarming is imminent due to whatsoever be the reason, (*which we do not believe is*), the Government should at the foremost ensure availability of sufficient spectrum in 1800 MHz band. The Authority should recommend that in case no direct reserve spectrum is available in 1800 MHz in lieu of 900 MHz, DoT should not even attempt to refarm the 900 MHz spectrum, directly or indirectly.

- As per Table 2.11 of the TRAI's Consultation Paper under response, 900 MHz spectrum which shall be available because of expiry of licensees given in 1994 is as follows:

Delhi: 16 MHz
Mumbai: 16 MHz
Kolkata: 14 MHz

- And the proposed spectrum to be auctioned in 1800 MHz as per table 2.6 is:

Delhi: 15 MHz
Mumbai: 15 MHz
Kolkata: 13.75

From the above data it is evident that sufficient spectrum is not available for refarming and if the spectrum available in 1800 MHz is reserved for refarming; spectrum for auction will not be available at all. **So we strongly urge TRAI for recommending that unless sufficient spectrum is available, DoT should refrain from refarming.**

- e) **Discarding current Active equipment for 900 MHz Spectrum band:** Refarming of 900 MHz spectrum would also lead to discarding of existing active equipment related to 900 MHz by virtue of a regulatory intervention. Huge cost would need to be written-off directly and severely impacting financial health of the telecom operators.
- f) **Mushrooming of Towers in cities:** It is pertinent to highlight that if 900 MHz spectrum is refarmed from the existing subscribers, then for service continuity to existing millions of subscribers, the operator would need to upkeep the existing levels of network coverage. This would straight away lead to demand of tremendous increase in towers which have to support 1800 MHz and for providing extended coverage. At a time when various sections of Central & State Government, Judicial forums, public at large are engaged on the concern of mushrooming of towers in cities, refarming would act as fuel to fire and would lead to increase in public concern on this matter.

Therefore, it is amply clear from above that there is a need of a comprehensive consultation process, in case 900 MHz refarming is to be conducted. Both short term as well as long term planning, with a clear phased roadmap is a 'Must-Have' prerequisite for the Telecom sector along with regulatory certainty as well as financial sustainability. The Regulatory regime must ensure that service continuity as well as financial health of the sector is always taken care off, to ensure India's telecom sector objectives are met.

- **Allocation of Contracted Spectrum:**

Most importantly, TRAI should recommend DoT to firstly allocate Spectrum till contracted spectrum (6.2 MHz) to the operators who have fulfilled its existing criteria for additional spectrum. In case of Aircel, DoT has not allocated Contracted Spectrum (i.e. upto 6.2 MHz) in 12 circles despite Aircel Group fulfilling DoT's criteria for the last upto 4 years, which DoT has been using in allocating the spectrum to other incumbent operators.

We strongly urge TRAI to recommend that DoT must allocate (if not, then reserve the same) the spectrum for Aircel like operators before going ahead in auctions.

(List of circles, date of Aircel eligibility and status enclosed at Annexure-A, for ready reference)

Eligibility Criteria

Q.3. Is any restriction required to be imposed on the eligibility for participation in the proposed auction?

Aircel Response:

The eligibility conditions as stipulated under the NIA dated 30.01.2013, should be continued with.

Extension of Adoption of Extended GSM (E-GSM) Band

Q.4. Should India adopt E-GSM band, in view of the diminishing interest in the CDMA services? If yes,

a) How much spectrum in the 800 MHz band should be retained for CDMA technology?

b) What are the issues that need to be addressed in the process?

c) What process should be adopted for migration considering the various issues involved?

Aircel Response:

We support that India should adopt E-GSM band. We strongly believe that E-GSM band will benefit the telecom sector, help improve optimum utilization, benefit Government with more availability of scarce resource (coupled by the fact of absence of bidders for spectrum in 800 MHz). Therefore, it should be a considerate approach to increase the 900 MHz spectrum band as per global GSM bands.

Response to sub-point a):

From available inputs, globally growth of CDMA v/s GSM is extremely lower and the interest in CDMA is indeed diminishing. In case of India, GSM subscribers have increased 2.5 % from Mar'12 to Mar'13 while CDMA subscribers have decreased by approx. 30% (source - TRAI Quarterly Performance Indicator report). Therefore, 800 MHz spectrum which is extremely valuable for rural & remote coverage should be freed up as much as possible considering the ongoing operations of existing CDMA players in India.

On the lines of global GSM bands & their harmonization, there is a need to harmonize GSM band in India to 880-915 and 925-960 MHz (35+35 MHz as compared to existing 25+25 MHz), which is globally considered as a part of 900MHz band and will enhance the 900 MHz band from present 25 MHz to 35 MHz.

Further, the Spectrum which has not been allocated or which is very poorly being used by the PSUs (i.e. for catering to miniscule subscribers) should be freed and put to auction.

Response to sub-point b) & c):

In this process, the interests of existing CDMA subscribers and operators need to be protected.

Roll Out Obligations

Q.5. Should roll out obligations for new/existing/renewal/quashed licenses be different? Please give justification in support of your answer.

Aircel Response:

- The Government anxiety to enforce Minimum roll-out obligation (MRO) arises out of fear that operators would not roll-out service in commercially unviable areas which are rural and remote in nature. To force operators to roll-out in these areas under the garb of MRO is not justifiable since, they are already contributing 5% of AGR towards USOF – whose prime purpose is to ensure infrastructure & service roll-out in such unviable rural/remote areas.
- As India has witnessed that private operators have already ingressed deeply into most of the rural/remote areas of the country on their own, based on the business case of acquiring new segments no sooner the urban and sub-urban have already been served. Infact the existing 2G UASL/CMTS roll-out have served the much desired purpose and therefore needs to be retained where 50% of DHQs are required to be covered in 3 years. Hence, DHQ as a block of coverage

should be retained instead of creating new entities like rural SDCAs/blocks etc, which have only generated more confusion. It is pertinent to highlight that even after 3 years of 3G & BWA auctions; DoT is yet to come out with the clear list & definitions of such places.

So prescribing MRO akin to existing 2G UASL/CMTS and leaving rest to the market forces are the most viable option to ensure desired coverage and teledensity. Therefore, the existing amendments for 3G & BWA spectrum need to be amended to bring at par with existing 2G UASL MRO i.e. keeping DHQ as a block for coverage in a LSA.

Q.6. Is there a need to prescribe additional roll-out obligations for a TSP who acquires spectrum in the auction even if it has already fulfilled the prescribed roll-out obligations earlier?

Aircel Response:

As a macro level economic principle, since the spectrum price is determined by the auction process, there should not be any rollout obligation linked with the auctioned spectrum. There is no justification in asking additional roll-out obligations.

- 1) Firstly, it would be nearly impossible if TRAI/DoT has to prescribe that for additional block of spectrum (if won through auction – say 1.25 MHz), separate roll-out conditions would apply on this spectrum.
- 2) Secondly, existing operators have already rolled-out their services with extensive coverage, which has been tested & certified by DoT/TERM cell itself, which has lead the growth story of telecom sector so far, therefore, no such additional roll-out obligations be imposed on the existing licensees.
- 3) Thirdly, wherever the coverage has been extended, getting it tested and certified would only lead to hassles and delays under administrative processes, without any corresponding gain.
- 4) Further, DoT has endorsed the completion of roll-out obligations of many of the existing licensees and has also returned the Performance Bank Guarantees to this effect. Therefore, there is no obligation on operators, licensing wise or from legal perspective, to meet any separate roll-out obligations.

Therefore, we would like to urge TRAI to recommend 'No separate roll-out obligation for existing/renewal licensees'; as such roadblocks only tend to discourage participations in the spectrum auctions.

Liberalization of Spectrum

Q.7. What should be the framework for conversion of existing spectrum holdings into liberalized spectrum?

Aircel Response:

We do not understand the exact meaning of 'Spectrum Liberalization' when existing licensees are already technology-neutral licensees wherein an operator can use any technology for rolling out its

services. This terminology was non-existent during 2010 3G/BWA spectrum auction wherein operators like Aircel had paid huge cost to the exchequer (close to USD 2 bn). Thus, we do not foresee any reason for separate framework of conversion of existing spectrum holding into a liberalized spectrum.

Spectrum Trading:

Q.8. Is it right time to permit spectrum trading in India? If yes, what should be the legal, regulatory and technical framework required for trading?

Aircel Response:

The concept of Spectrum Trading has to be deliberated in conjunction with the other associated factors such as spectrum sharing, liberalization, validity of license, the potential unlocked value of the spectrum held by the licensee in different bands, continuity of services, technological challenges, etc.,

The spectrum is now being allocated through auctions thus, trading, leasing and sharing should be allowed in India. The operator should have right to recover its investment through its unused spectrum. This will ensure optimal utilization of the scarce resource and also reduce the shortage of spectrum in the market.

Valuation of Spectrum

We would like to state that PwC India, an independent professional consulting firm has been commissioned by COAI to undertake a study & prepare response on certain aspects related to Valuation & Reserve Pricing of Spectrum of TRAI's present consultation paper. As a Member of COAI, we subscribe to the contents of the attached response document of PWC. We request the same may be referred for detailed views.

Q.9. Would it be appropriate to use prices obtained in the auction of 3G spectrum as the basis for the valuation in 2013? In case the prices obtained in the auction of 3G spectrum are to be used as the basis, what qualifications would be necessary?

Aircel response: No, the determination of prices should be done afresh. The prices obtained in auction of 3G spectrum can't be used for the auction of 1800 MHz in 2013 due to the following:

- a) Different factors governing price discovery:** During 3G auction, there was a significant demand for this new spectrum band, with a corresponding less supply of 15 to 20 MHz of spectrum per circle. This led to frantic bidding. Further, due to no future roadmap of more spectrum, there was a significant impression of first move advantage for the operators who would win the spectrum as well as fear of protecting existing 2G base.
- b) Deteriorating financial health of telecom operators:** As acknowledged by TRAI itself in its consultation paper, presently the Indian telecom sector is undergoing a bad financial health and debt is at record high.

Q.10. Should the value of spectrum for individual LSA be derived in a top-down manner starting with pan-India valuation or should valuation of spectrum for each LSA be done individually?

Aircel Response: The telecom license is circle-wise and there are different intrinsic geographic & socio-economic factors linked to each circle as such, the value of spectrum should be arrived at individually for each circle.

Q.11. Is indexation of 2001 prices of 1800 MHz spectrum an appropriate method for valuing spectrum in 2013? If yes, what is the indexation factor that should be used?

Aircel Response: We do not support valuation of 1800 MHz spectrum in 2013 to be based on indexation of 2001 prices since, the telecom market & socio-economic factors prevailing at that time (2001) are totally different from the present situation.

Q.12. Should the value of spectrum in the areas where spectrum was not sold in the latest auctions of November 2012 and March 2013 be estimated by correlating the sale prices achieved in similar LSAs with known relevant variables? Can multiple regression analysis be used for this purpose?

Aircel Response: We do not support correlating the auction sale prices (of Nov'12 & mar'13) for the value of spectrum in unsold areas, due to the following reasons:

- a) There were many operators whose license got quashed under Hon'ble Supreme Court Judgment and to continue operations, they were under 'compelled to buy' conditions.
- b) The money paid by these quashed licensees could be recovered by virtue of participating in the auction with setting-off the price.
- c) About 24% of total spectrum put to auction was sold in Nov'12 and 87% of this spectrum sold was actually paid to continue operations.
- d) 95% of the Spectrum was sold in Nov'12 at base price (exception of Bihar with marginal premium).
- e) 100% 1800 MHz spectrum unsold in Mar'2013.

Above clearly indicates high reserve prices set in Nov'12 and Mar'13 which can't be taken as market discovered price and there should be a constructive endeavour now to reduce the reserve prices to encourage participation. This is required for long term sustainability of the telecom operators and the sector as a whole.

Q.13. Should the value of spectrum be assessed on the basis of producer surplus on account of additional spectrum? Please support your response with justification. If you are in favour of this method, please furnish the calculation and relevant data along with results.

Aircel Response: We believe that the producer surplus approach is not applicable to determine spectrum value for the forthcoming auctions

Q.14. Should the value of spectrum in the 1800 MHz band be derived by estimating a production function on the assumption that spectrum and BTS are substitutable resources? Please support your

response with justification. If you are in favour of this method, please furnish the calculation and relevant data along with results.

Aircel Response: We believe that the value of spectrum in the 1800 MHz band cannot be derived using the production function approach.

Q.15. Apart from the approaches discussed in the foregoing section, is there any alternate approach for valuation of spectrum that you would suggest? Please support your answer with detailed data and methodology.

Aircel Response: Kindly refer to enclosed response document from PwC for our views.

Q.16. Should the premium to be paid for the 900 MHz and liberalized 800 MHz spectrum be based on the additional CAPEX and OPEX that would be incurred on a shift from these bands to the 1800 MHz band?

Aircel Response: It is practically challenging to derive premium for additional CAPEX & OPEX for shift of bands from 900 MHz to the 1800 MHz therefore 1.3 times which have been deliberated earlier, may be chosen.

Q.17. Should the valuation of spectrum and fixing of reserve price in the current exercise be restricted to the unsold LSAs in the 1800 MHz band, or should it apply to all LSAs?

Aircel Response: We would like to reiterate that the reserve price fixing exercise be done afresh since, there was no market price discovery in Nov'12 or Mar'13 auctions.

Spectrum Usage Charges

Q.18.

a) Should annual spectrum usage charges be a percentage of AGR or is there a need to adopt some other method for levying spectrum usage charges? If another method is suggested, all details may be furnished.

b) In case annual spectrum usage charges are levied as a percentage of AGR, should annual spectrum charges escalate with the amount of spectrum holding, as at present, or should a fixed percentage of AGR be applicable?

c) If your response favours a flat percentage of AGR, what should that percentage be?

Aircel Response:

Internationally, whenever the price of the spectrum is derived through auction, the recurring spectrum charge is levied only to recover the administrative cost. The auction of spectrum will generate huge amount of fixed revenue to the Government. Hence the annual spectrum usage charge should be completely dispensed with or as a token at a maximum of not more than 1% may be charged towards the administrative cost of auction similar to the international best practices.

Also, the spectrum usage charge should not be on the escalating rate basis and should be a fixed rate (percentage) primarily to take care of the admin cost of auction.

Reserve Price

Q.19. What should be the ratio adopted between the reserve price for the auction and the valuation of the spectrum?

Aircel Response:

Reserve price is that key determinant of spectrum for competitive auction. A very high reserve price would discourage participation of smaller players. The ideal base price for the 2G auction can be considered to be 'Zero' as was done in 2001 auctions, however, to ensure participation from serious bidders the base price for 2G auction may be fixed at some reasonable level like the last market determined price of pan India 2G Spectrum in 2001.

The reserve price should be service area specific. The reserve price of spectrum should be low as revenue maximization is not the objective of NTP 12.

Other Issues

Aircel Response:

CHANGE IN OWNERSHIP OF SPECTRUM

- The present M&A policies pertain only for merger of two entities along with the spectrum they have been allocated. However, there is no exit route available to an operator, having spectrum in multiple bands, to exit from business for the services which can be provided through a specific spectrum due to techno-commercial reasons.
- For instance, at present if an entity having both 3G and BWA spectrum, allocated via auction, intends to exit from either BWA or 3G business, the only option available to it is to get merged/acquired with its entire 3G and BWA spectrum or surrender the specified spectrum and forgo all investments made thereof.
- In the changed telecom scenario where operators are allocated spectrum in multiple bands, there may be a situation where the entity may not find it viable to continue with any spectrum band, say 3G or BWA, due to techno-commercial reasons; however it would like to continue with its other networks, then the policy should allow the entity to sell off its 3G or BWA spectrum along with the relevant assets to another entity. Thus change in ownership of such spectrum should be permissible.

Therefore, we strongly urge TRAI to recommend that change in ownership of spectrum be allowed, thus permitting the transfer of spectrum (allocated via auction) along with assets either directly or through the process of demerger/merger under the M&A policy so that M&A can take place for different spectrum bands separately between two licensed operators without anyone losing its license and spectrum in other bands.

Annexure-A

Sr. No	Circle Name	Date of Application
1	North East	17 Feb 2009
2	Bihar	17 Feb 2009
3	West Bengal	18 May 2009
4	J and K	30 Jul 2009
5	Orissa	02 Dec 2009
6	Kolkata	02 Dec 2009
7	Delhi	15 Feb 2010
8	Mumbai	10 Oct 2010
9	UP-East	13 Oct 2011
10	Rajasthan	21 May 2012
11	Andhra Pradesh	12 Sep 2012
12	Assam (left out 3 DHQs for 18.MHz+1.8 MHz)	01 Dec 2006