

No. MTNL/CO/RA/CP on Spectrum Mgmt &  
Review of License terms and conditions  
Dated: 12.11.2009.

To,  
The Advisor (MN)  
TRAI, New Delhi.

Subject: Comments on TRAI consultation paper No. 6/2009 dated 16<sup>th</sup> October 2009 on  
“Overall spectrum Management & review of license terms and conditions”

TRAI vide its Press Release No. 6/2009 dated 16.10.2009 called views of stake holders on TRAI Consultation paper on “Overall spectrum Management & review of license terms and conditions”. The issue wise response of MTNL on TRAI consultation paper is as below:

### Chapter 1

#### **(A) Spectrum requirement and availability:**

**Q1. Do you agree with the subscriber base projections? If not, please provide the reasons for disagreement and your projection estimates along with their basis?**

**Ans.** Any future planning is based on projections, which in turn is based on assumptions. We do agree with the method of subscriber base projections to predict the mobile density in the coming years which we believe is based on the past growth.

**Q2. Do you agree with the spectrum requirement projected in ¶ 1.7 to ¶1.12? Please give your assessment (service-area wise).**

**Ans.** Spectrum requirement assessment needs detailed study of future growth trend for various wireless services. In addition, past experience and present conditions also play a vital and supporting role in the process. We do agree with the spectrum requirements projected in the referred para's which has used past experience as well as scope for availability of new services in future.

**Q3. How can the spectrum required for Telecommunication purposes and currently available with the Government agencies be re-farmed?**

**Ans.** It is very clear that the required spectrum is more than the spectrum already available in hand for allotment and to meet future requirement. The government agencies may be asked to furnish the deployment plan against the already allotted spectrum in various bands for various services. In case, if the allotted spectrum is not being utilized by them presently, the agencies may be requested to immediately release the spectrum, if possible. However, the Security and technological development aspect both need to be equally weighted while doing so. Further, wherever possible, the agencies may be encouraged to vacate the spectrum and as

a substitute an alternative access networks may be created for such agencies. The cost of such alternative network can be recovered from the spectrum auctioning.

**Q4. In view of the policy of technology and service neutrality licenses, should any restriction be placed on these bands (800,900 and 1800 MHz) for providing a specific service and secondly, after the expiry of present licenses, how will the spectrum in the 800/900 MHz band be assigned to the operators?**

**Ans.** Theoretically speaking, for efficient and effective utilization of spectrum, no restriction should be imposed on to any band for any specific technology or service usage. However, the availability of economical equipments cannot not be overlooked. Even though, the present restriction of particular technology in particular service is lifter, for some time to come, the utilization of bands would continue to be as at the present. However, the size of Indian market can facilitate economy of scales in any band for any technology. As first step, it would be good not to keep any restriction on any band for any particular technology.

Considering very large number of subscribers being served by any operator at the time of expiry of present license, it would become imperative to renew the license for continuous and uninterrupted services to the subscribers. Perhaps, it would not be possible to withdraw the already allotted spectrum in 800/900 MHz band from the operators as it will adversely affect the capacity and coverage of the network. Also the network can not be shifted to other frequency band as it will cost very huge CAPEX to the operators. The more feasible solution is to look for feasible bands for re-farming.

**Q5. How and when should spectrum in 700 MHz band be allocated between competitive services?**

**Ans.** As mentioned in the consultation paper that the 700 MHz band has been identified for IMT services for India. In India, this band is largely unused. Considering the fact that lower frequencies transmit over greater distances and penetrate better indoors leading to fewer cell sites cover greater areas, saving considerable rollout and operating costs, 700 MHz is definitely better suited for deployment of wireless services. Though, competitive wireless equipments/ handsets may not be available at present, size of Indian telecom market will certainly facilitate manufacturing of economical equipment in future. Further, in order to avoid any mismanagement in this band and future hassles, the spectrum for various services may be allotted after careful detailed planning.

**Q6. What is the impact of digital dividend on 3G and BWA?**

**Ans.** 3G and BWA services support very high data speeds and are bandwidth hungry services. Considering the scarcity of spectrum in the presently identified bands for these services, the identification & re-farming of new bands for these services would be must. Digital dividend will certainly facilitate availability of new bands for these services.

## Chapter 2

### **(A) Licensing issues:**

**Q7. Should the spectrum be delinked from the UAS License? Please provide the reasons for your response.**

**Ans.** Considering the fact that presently UASL is the only license which permits the licensee to provide Basic and /or Cellular Services using any technology in a defined service area, it is suggested not to delink the spectrum from the UAS license. Without spectrum, UASL license may not have any meaning. Technology neutrality will certainly help in better management of scarce spectrum.

**Q8. In case it is decided not to delink spectrum from UAS license, then should there be a limit on minimum and maximum number of access service providers in a service area? If yes, what should be the number of operators?**

**Ans.** It is a well known proverb that large number of cooks spoil the food. In any service area the quantum of available spectrum is fixed which can be allotted to limited number of players only. As per UAS license each new entrant is initially allotted 2X4.4 MHz spectrum and based on subscriber base attainment criteria, additional spectrums are allotted to the operators. If unlimited numbers of operators are given license to operate in any license area, there will be no spectrum available for further expansion of the networks by any operator, which will badly affect the quality of services offered to the end customers. Moreover, there will be no spectrum available for future induction of new technologies in the market. Further, from the customer perspective more number of operators will certainly confuse the customers in operator and plan selection.

In view of above, it is suggested that there should be a limit on minimum and maximum number of access service providers in a service area. In our opinion there should be minimum 3 operators in a service area to have healthy competition and maximum 5 operators to avoid any scarcity of spectrum in the near future and to avoid any customer confusion in operator selection. However, in the present scenario these minimum & maximum numbers have lost their significance as the no. of UASL licensees in almost all the service areas is more than 10. In our view, no further licenses be issued except in the service areas where the existing no. of licensees is less than 10. The limited number of operators will be easy to control and monitor by the regulator and security agencies.

**Q9. What should be the considerations to determine maximum spectrum per entity?**

**Ans.** In case, if each of the service area is having limited number of operators either in 2G or 3G / BWA, there will not be any need to decide any capping on the spectrum allotted to each entity. The subscriber base criteria for allotment of additional spectrum is already in place. The additional spectrum may continue to be allotted based on this criteria which is revised from time to time. However, the allotted spectrum should not be withdrawn from the existing operators. Further any change in criteria should be based on a consultative process.

**Q10. Is there a need to put a limit on the maximum spectrum one licensee can hold? If yes, then what should be the limit? Should operators having more than the maximum limit, if determined, be assigned any more spectrums?**

**Ans.** There should not be any limit to the maximum spectrum one licensee can hold. Depending upon the performance i.e. subscriber additions, the operators may be allotted additional spectrum whenever due. The good performer i.e. the operator adding more and more subscribers and offering competitive services to the end customers should be rewarded by providing more spectrum.

**Q11. If an existing licensee has more spectrum than the specified limit, then how this spectrum should be treated? Should such spectrum be taken back or should it be subjected to higher charging regime?**

**Ans.** It would not be fair to withdraw the already allotted spectrum to any licensee as they must have designed their network keeping in view the availability of the spectrum. As such, slab wise annual spectrum charges are already being levied.

**Q12. In the event fresh licenses are to be granted, what should be the Entry fee for the license?**

**Ans.** In our view, no further licenses be issued except in the service areas where the existing no. of licensees is less than 10. The entry fee should be a fair price to be fixed through suitable mechanism.

**Q13. In case it is decided that the spectrum is to be delinked from the license then what should be the entry fee for such a license and should there be any roll out condition?**

**Ans.** In our opinion the spectrum should not be delinked from the license due to the reasons mentioned under reply to Q8 above.

**Q14. Is there a need to do spectrum audit? If it is found in the audit that an Operator is not using the spectrum efficiently what is the suggested course of action? Can penalties be imposed?**

**Ans.** Though, spectrum audit can be an effective tool in determining whether the allotted spectrum being efficiently utilized by the operators or not, it would be very difficult to keep all the older, old, new & newer players on par from spectrum audit angle. The utilization of spectrum also depends heavily on the number of sites deployed. For the first two operators, it was very easy to deploy more sites. However, with time, it has become extremely difficult to acquire & deploy more sites by subsequent operators at least in metro service areas due to apprehension of impact of radiation on the human health. If the spectrum audit is resorted to, the authority should devise the assumption parameters so as to normalize the impact as discussed above. In case if it is found that any operator has failed to utilize the spectrum efficiently, it should be definitely penalized for non performance.

**Q15. Can spectrum be assigned based on metro, urban and rural areas separately? If yes, what issues do you foresee in this method?**

**Ans.** Yes, the spectrum should be assigned based on metro, urban and rural areas separately. It is due to the fact that the usage pattern of the services by the end

customer is quite different in these areas e.g. in the metro service area the data users may be more as compare to other areas which needs more spectrum and in the rural areas the spectrum is mainly used for voice services. We do not see much issues in this as at present, the additional spectrum allocation criterion is different for different service areas.

**Q16. Since the amount of spectrum and the investment required for its utilization in metro and large cities is higher than in rural areas, can asymmetric pricing of telecom services be a feasible proposition?**

**Ans.** Though, such kind of pricing looks theoretically good, it would be highly difficult to implement. It may lead to the unfair loading of revenue to profit centre & will have scope for arbitrage.

**(B) M&A issues:**

**Q17. Whether the existing license conditions and guidelines related to M&A restrict consolidation in the telecom sector? If yes, what should be the alternative framework for M&A in the telecom sector?**

**Ans.** We feel that the present license conditions are quite balanced one which allows M&A and at the same time ensures that the competition is not hampered. Thus, there is no need to change the existing license terms in this respect.

**Q18. Whether lock-in clause in UASL agreement is a barrier to consolidation in telecom sector? If yes, what modifications may be considered in the clause to facilitate consolidation?**

**Ans.** No.

**Q19. Whether market share in terms of subscriber base / AGR should continue to regulate M&A activity in addition to the restriction on spectrum holding?**

**Ans.** We feel that the present license conditions are quite balanced one which allows M&A and at the same time ensures that the competition is not hampered. Thus, there is no need to change the existing license terms in this respect.

**Q20. Whether there should be a transfer charge on spectrum upon merger and acquisition? If yes, whether such charges should be same in case of M&A/transfer/sharing of spectrum?**

**Ans.** There should not be any transfer charges on spectrum upon M&A. It is because the one time spectrum charges has already been paid by the licensee and recurring charges based on certain percentage of AGR will be paid by the new entity. Only change of title is taking place. If felt necessary, certain administrative charges may be levied, but it should not be very high.

**Q21. Whether the transfer charges should be one-time only for first such M&A or should they be levied each time an M&A takes place?**

**Ans.** There should not be any transfer charges on spectrum upon M&A. However, if decided to impose transfer charges, it would be charged each time an M&A takes place.

**Q22. Whether transfer charges should be levied on the lesser or higher of the 2G spectrum holdings of the merging entities?**

**Ans.** Ideally there should not be any transfer charges on spectrum upon M&A. However, if it is decided to impose transfer charges, it should be imposed onto the spectrum being held by the merging entity irrespective of the spectrum being held by the main entity.

**Q23. Whether the spectrum held consequent upon M&A be subjected to a Maximum limit?**

**Ans.** The maximum spectrum limit that could be held by the merged entity should be specified. The limit should be 15 MHz for GSM spectrum and 10 MHz for CDMA spectrum. However, the consolidated subscriber base after merger will determine the quantum of spectrum to be held by the new entity.

**(C) Spectrum Trading:**

**Q24. Is spectrum trading required to encourage spectrum consolidation and improve spectrum utilization efficiency?**

**Ans.** Spectrum trading will certainly encourage the spectrum consolidation, however, the efficiency of spectrum utilization will be difficult to be ensured.

**Q25. Who all should be permitted to trade the spectrum?**

**Ans.** In our opinion the trading of spectrum should not be permitted freely as it may result into malpractices instead of service orientation. However, spectrum is a scarce national resource and should be utilized economically and optimally. For this M&A route is cleaner & more acceptable.

In case spectrum trading is allowed, then it is better to allot licenses delinked from spectrum so that there are more licensees that can buy spectrum.

**Q26. Should the original allottee who has failed to fulfill “Roll out obligations” be allowed to do spectrum trading?**

**Ans.** The operator who fails to fulfill the rollout obligation as per terms and condition of license agreement should be penalized for non performance. Spectrum trading, if at all permitted, should be with roll-out obligations of the original allottee.

**Q27. Should transfer charges be levied in case of spectrum trading?**

**Ans.** In our opinion the trading of spectrum should not be permitted freely. However, in case, it is decided to allow the spectrum trading the transfer charges should be levied onto the traded spectrum.

**Q28. What should be the parameters and methodology to determine first time spectrum transfer charges payable to Government for trading of the spectrum? How should these charges be determined year after year?**

**Ans.** In case it is decided to allow the spectrum trading the spectrum transfer charges during trading of spectrum should be kept certain percentage of the amount of final deal between the parties similar to as made applicable in case of change of land titles.

**Q29. Should such capping be limited to 2G spectrum only or consider other bands of spectrum also? Give your suggestions with justification.**

**Ans.** In case the trading of spectrum is permitted, it should be made applicable to all the bands applicable in access service license.

**Q30. Should size of minimum tradable block of spectrum be defined or left to the market forces?**

**Ans.** If it is decided to allow the spectrum trading, there should be minimum tradable block of 1 MHz.

**Q31. Should the cost of spectrum trading be more than the spectrum assignment cost?**

**Ans.** Of course, it should be more than the spectrum assignment cost.

**(D) Spectrum sharing:**

**Q32. Should Spectrum sharing be allowed? If yes, what should be the regulatory framework for allowing spectrum sharing among the service providers?**

**Ans.** Spectrum sharing can be done in the situation where any operator is having excess spectrum than actually needed. In India, due to existence of large number of operators, there is very much scarcity of spectrum and hence, it is more irrelevant to talk about sharing of spectrum.

**Q33. What should be criteria to permit spectrum sharing?**

**Ans.** Please refer our comment at Q32 above.

**Q34. Should spectrum sharing charges be regulated? If yes then what parameters should be considered to derive spectrum sharing charges? Should such charges be prescribed per MHz or for total allocated spectrum to the entity in LSA?**

**Ans.** Allowing the spectrum sharing is somewhat similar to permitting an operator to hold more than the spectrum actually needed by him and trading the spectrum for his monetary gain. As the sharing of spectrum is short of temporary transfer of spectrum, the transfer charges can be defined as some percentage of the deal amount.

**Q35. Should there be any preconditions that rollout obligation be fulfilled by one or both service provider before allowing the sharing of spectrum?**

**Ans.** Roll out should be dealt separately as per terms & conditions of the license and spectrum sharing should not be linked to it.

**Q36. In case of spectrum sharing, who will have the rollout obligations? Giver or receiver?**

**Ans.** The roll-out obligations should be restricted to the original spectrum holders and should not be passed on to the sharing operator.

**(E) Perpetuity of licenses:**

**Q37. Should there be a time limit on license or should it be perpetual?**

**Ans.** In a service industry, any operator at the end of its license validity period will hold certain number of subscribers. It is not possible to terminate the license after expiry as it will cause trouble to millions of subscribers of that operator. Accordingly, it becomes mandatory to renew the license validity period to the best interest of the existing subscribers. However, at the same time, it is advisable to have a limit (may be 50 years) on license and it should not be perpetual.

**Q38. What should be the validity period of assigned spectrum in case it is delinked from the license? 20 years, as it exists, or any other period.**

**Ans.** As most of the initial operators would be completing almost 15 years for their initial allotted spectrum, the validity of spectrum can be increased to 25 years.

**Q39. What should be the validity period of spectrum if spectrum is allocated for a different technology under the same license midway during the life of the License?**

**Ans.** Validity period of spectrum can be kept as 25 years or end of license period (proposed as 50 years) whichever is earlier.

**Q40/41. If the spectrum assignment is for a defined period, then for what period and at what price should the extension of assigned spectrum be done? If the spectrum assignment is for a defined period, then after the expiry of the period should the same holder/licensee be given the first priority?**

**Ans.** Please refer our comment under Q39 above. The first right of refusal should be with the same licensee/holder.

**(F) Uniform License Fee:**

**Q42. What are the advantages and disadvantages of a uniform license fee?**

**Ans.** Uniform license fee across various licences will facilitate eventual convergence of all licences to single one under which all different services can be offered by the licensee. This will also curb the practice of loading of revenues from one licence to another having lower license fee structure.

However, special treatment is required to be given to the fixed line basic service operators to facilitate broadband penetration which is at present at a very low level and requires rapid growth. Uniform license fee will prohibit such concessions.

**Q43. Whether there should be a uniform License Fee across all telecom licenses and service areas including services covered under registrations?**



**Ans.** At present, predominantly broadband services are being provided through the wire-line and such operators should be encouraged by giving concessions in licence fee etc. To this effect, the license fee is required to be non-uniform. Further, different telecom circles, the subscriber behaviour/pattern is different resulting in different business perspective and challenges to the operators. Like in telecom circles having large number of rural areas will have predominantly voice users rather than data users. The situation is entirely different in urban areas. Accordingly, license fee should be different in different telecom circles and service area depending upon the target market and business potentials. The same is the case at the present.

**Q44. If introduced, what should be the rate of uniform License Fee?**

**Ans.** Please refer to comments on Q42 & Q43.

### Chapter 3

#### **(A) Spectrum assignment:**

**Q45. If the initial spectrum is de-linked from the license, then what should be the method for subsequent assignment?**

**Ans.** License and spectrum are two sides of the same coin one is useless in the absence of another. Accordingly, initial spectrum should not be de-linked from the license otherwise how a new licensee will rollout services without spectrum.

**Q46. If the initial spectrum continues to be linked with license then is there any need to change from SLC based assignment?**

**Ans.** Each new licensee needs spectrum to rollout its network, accordingly in our opinion the initial spectrum should be linked with license. Later on depending upon subscriber base criteria i.e. after attainment of certain subscriber base, additional spectrum may be allotted on the payment of upfront charges decided based on any of the methods i.e. either by beauty contest method, lottery or auction.

**Q47. In case a two-tier mechanism is adopted, then what should be the alternate method and the threshold beyond which it will be implemented?**

**Ans.** The spectrum beyond threshold may be allotted through a combination of beauty contest and auction in steps of 2x1 MHz. However, PSU operators should be allotted spectrum based on the subscriber base criterion on the rates as decided through auction process.

**Q48. Should the spectrum be assigned in trenches of 1 MHz for GSM technology? What is the optimum trenches for assignment?**

**Ans.** In the present condition of scarcity of spectrum and cut throat competition between the operators assignment of spectrum in trenches of 1 MHz can be a better solution.

**Q49. In case a market based mechanism (i.e. auction) is decided to be adopted, would there be the issue of level playing field amongst licensees who have different amount of spectrum holding? How should this be addressed?**

**Ans.** The spectrum may be auctioned in the trenches of 2x1 MHz to avoid any issue of level playing field.

**Q50. In case continuation of SLC criteria is considered appropriate then, what should be the subscriber numbers for assignment of additional spectrum?**

**Ans.** Subscriber base criterion as defined in DoT order dated 17.1.08 is very high which needs to be re-visited.

**Q51. In your opinion, what should be the method of assigning spectrum in bands other than 800, 900 and 1800 MHz for use other than commercial?**

**Ans.** Effort should be made not to assign spectrum to any new entity for use other than commercial. Rather the entity should be encouraged to build its own access network. If possible, government may extend help to such entity in terms of free consultation etc.

**(B) Spectrum pricing:**

**Q52. Should the service providers having spectrum above the committed threshold be charged a one time charge for the additional spectrum?**

**Ans.** Yes. Please refer to our answer to Q.47.

**Q53. In case it is decided to levy one time charge beyond a certain amount then what in your opinion should be the date from which the charge should be calculated and why?**

**Ans.** The one time spectrum charges beyond threshold should be levied prospectively and should not be applicable to the operators already allotted additional spectrum beyond initial allotted spectrum.

**Q54. On what basis, this upfront charge be decided? Should it be benchmarked to the auction price of 3G spectrum or some other benchmark?**

**Ans.** Refer answer to Q.47.

**Q55. Should the annual spectrum charges be uniform irrespective of quantum of spectrum and technology?**

**Ans.** The annual spectrum should be linked to the amount of spectrum holding as at the present.

**Q56. Should there be regular review of spectrum charges? If so, at what interval and what should be the methodology?**

**Ans.** Due to dynamic characteristic of market and spectrum requirements by operators for network expansion and introduction of new technologies, it will be useful to review the spectrum charges at certain intervals. In our opinion the spectrum charges can be reviewed every five years.

**(C) Structure for spectrum management :**

**Q57. What in your opinion is the desired structure for efficient management of spectrum?**

**Ans.** In the past one decade, in view of exponential growth in the telecom sector especially in wireless segment, spectrum management has acquired greater significance. Effective management of spectrum has become more than a necessity. In view of its criticality, it needs to be much more transparent and better organized.

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