Advisor MN
Telecom Regulatory Authority of India,
Mahanagar Doorsanchar Bhavan,
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New Delhi - 110002.

Subject Response to TRAI Consultation Paper on "Overall

Spectrum Management and Review License Terms &

Conditions

Dear Sir,

ISPAI response to the specific questions mentioned in the consultation paper is enclosed herewith.

We sincerely believe that the Authority would consider our responses in the perspective and expect forward-looking recommendations on subject matter.

With best regards,

Yours truly, for Internet Service Providers Association of India

Naresh Ajwani Secretary

Encl: As above

TRAI Consultation Paper on Issues for Consultation Paper on Overall Spectrum Management and Review License Terms & Conditions Issues for Consultation

Chapter 1

Spectrum requirement and availability

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

Not applicable for ISPs

- 2. Do you agree with the spectrum requirement projected in ¶ 1.7 to ¶1.12? Please give your assessment (service-area wise).
- ISPAI is of the opinion that BWA belongs to ISPs and should be reserved for ISPs. It is primarily meant for data services. BWA Spectrum is desperately required for better broadband penetration in the country which is lowest amongst the in the world. BWA spectrum should not be linked with 3 G spectrum while auctioning.

We do not support spectrum requirement for BWA projected in the consultation paper as it pre-supposes number of operator in the market. The number of operators can best be decided in the market place.

The TRAI should try to make available complete commercial spectrum required to provide wireless internet services (BWA) especially in spectrum bands of 2.3 and 2.5 GHz. Sub-3 GHz spectrum bands are more efficient as frequency propagation is better and therefore all efforts should be made to make available complete 100 MHz in 2.3-2.4 GHz band, 170 MHz in 2.5-2.69 GHz band, 200 MHz in 3.4 - 3.6 GHz and 108 Mhz in 700 MHz band.

In view of above we suggest that maximum amount of spectrum be made available to provide BWA services for commercial deployment of internet/broadband by the ISPs and it should be left open for the market forces to decide optimum number of operators in the market.

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

NTP 99 has specifies policy pertaining to relocation of existing spectrum however not much progress have been made so far. The Government should create a dedicated fund or earmark budgetary support for relocation due to re-farming of spectrum. Thus Spectrum made available after re-farming from the government agencies, can be used for commercial purposes.

India has lacked in provisioning of advanced BWA services because Spectrum has not been made available for the service providers. After years of wait only two Spectrum Blocks have been made available for commercial deployment. Due to limited competition services are unlikely to be made available at affordable rates which would not be consistent with our Broadband objectives.

In views of the above, it is suggested that Spectrum held by Government Agencies should be re-farmed in a time bound manner and if required dedicated relocation fund be created for making available spectrum in a time bound manner. BWA Spectrum is primarily meant for data services and has been used by ISPs in many countries worldwide. Government should make it available to ISPs as early as possible to meet the Government's own objective of Broadband expansion in the country.

4. In view of the policy of technology and service neutrality licences, 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 licences, how will the spectrum in the 800/900 MHz band be assigned to the operators?

No comments

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

Networks on 700 MHz Spectrum promise to be most efficient and ubiquitous as cost of deployment is much less compared to 2.3 or 2.5 GHz spectrum bands.

The Government should make this band available for commercial deployment for BWA for pure ISPs as soon as possible as has been done in many countries including USA.

To avoid monopolistic situation, Operators who got the 3G spectrum should not be allowed to take BWA Spectrum 700 MHz. It will help in creating healthy competition in the market.

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

Digital dividend would make available sufficient Spectrum for commercial deployment of BWA services by the ISPs. This will help to meet our broadband objectives of increasing penetration of broadband services at affordable rates in semi urban and rural areas.

Chapter 2

Licensing issues

- 7. Should the spectrum be de-linked from the UAS Licence? Please provide the reasons for your response.
- Yes Spectrum should be de-linked and should be issued on non exclusive basis on payment of a nominal license fee and this will facilitate ISP operator to obtain UASL licenses and provide all IP based voice, non voice services in the country.
- 8. In case it is decided not to de-link 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?
- No there should not be any restrictions on number of UASL operators in any service area and we strongly support the de-linking of spectrum from UASL.
- 9. What should be the considerations to determine maximum spectrum per entity?
- There should be cap for BWA Spectrum obtained through auction route. Since only limited spectrum is available, it may be ensured that no operator takes more than one block. This will ensure enough competition in the market and consumer benefit.
- 10. 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 spectrum?

- There should be a limit on maximum spectrum that a service provider can hold. It can be determined by the market share of the service provider. As only two blocks of spectrum are allotted in each circle besides one Govt player, no further spectrum be allowed to the existing holder of the BWA spectrum. Service provider already having 33% of market domination, so no further spectrum should be allocated to them to avoid creating monolith.
- 11. If an existing licensee has more spectrum than the specified limit, then how should this spectrum be treated? Should such spectrum be taken back or should it be subjected to higher charging regime?
- No operators shall be awarded spectrum having more than one block in a service area. For additional spectrum they may enter in to spectrum sharing with other operators. No additional spectrum should be assigned to them.
- 12. In the event fresh licences are to be granted, what should be the Entry fee for the license?
- Fresh UASL without Spectrum should be available as per the current ISP Licenses guidelines with Internet Telephony. Existing ISPs should be allowed for free migration.
- 13. 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 Licence and should there be any roll out condition?
- There should not be any rollout obligation for UASL without spectrum. Rollout obligations should be attached to the spectrum as is applicable for the existing operator.
- 14. 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?
- Basic philosophy of auctioning ensures efficient utilization of spectrum as it is allocated to a bidder which values it most. Since the spectrum is brought through auction in the open market, service providers shall make optimum/efficient use of it. We fear that Audit may bring back Inspector raj which will be counter productive.
- 15. Can spectrum be assigned based on metro, urban and rural areas separately? If yes, what issues do you foresee in this method?

Since Spectrum would be available through auctioning, it should be auctioned as one block for complete service area for the ISPs.

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

TRAI continue with the policy of forbearance and prices should be allowed to be decided by the Market forces. Any asymmetric pricing should be supported by USO fund and not through a regulation.

M&A issues

- 17. Whether the existing licence 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?
- Internet is separate market and should not be compared to voice services provided by access providers. Merger & acquisitions for internet services should not be part of existing Merger & acquisition guidelines.
- 18. 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?
- UASL with de-linked spectrum should not have any lock in clause as there are no chances for any gains from unlinked spectrum.
- 19. Whether market share in terms of subscriber base/AGR should continue to regulate M&A activity in addition to the restriction on spectrum holding?

These M & A guidelines may be specified only for UASL with linked spectrum.

- 20. 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?
- There should not be any transfer charges on M & A for spectrum acquired through auctioning.
- 21. 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?

Same as question 20.

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

Same as question 20.

- 23. Whether the spectrum held consequent upon M&A be subjected to a maximum limit?
- Government should ensure that no operator holds spectrum through merger & acquisition route. It should not be more than 35 % of the market share.

Spectrum Trading

- 24. Is spectrum trading required to encourage spectrum consolidation and improve spectrum utilization efficiency?
- Yes Spectrum trading required as it provides the licensees an option of aligning the spectrum holding with its requirement for efficient utilization of this limited national resources. Globally, the trading is allowed so that the usage of spectrum generates latest value for the operators and provide affordable services to the end consumers.
- 25. Who all should be permitted to trade the spectrum?
- All the licensed operators having been allotted the spectrum through auction or by other means be allowed to trade the spectrum.
- 26. Should the original allottee who has failed to fulfill "Roll out obligations" be allowed to do spectrum trading?
- The objective of spectrum trading is to encourage efficient utilization of spectrum. Any operator who fails to fulfill rollout obligation is not efficiently utilizing spectrum and therefore should not be allowed to exploit the trading of spectrum.
- 27. Should transfer charges be levied in case of spectrum trading?
- Since BWA Spectrum is to be obtained at auction route i.e., at market value, there should not be any transfer charges.
- 28. 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?

Same as question 27.

- 29. Should capping be limited to 2G spectrum only or consider other bands of spectrum also? Give your suggestions with justification.
- Capping should also be applicable on BWA. 35% of the market share of the service providers should be the criteria for the same.
- 30. Should size of minimum tradable block of spectrum be defined or left to the market forces?

Spectrum tradable block should be left for the market forces to decide.

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

It should be left to the market forces to decide.

Spectrum sharing

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

Spectrum sharing should be allowed subject to cap 35% of market share of a service provider

- **33. What should be criteria to permit spectrum sharing?** Same as question 32.
- 34. 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?

There is no need to regulate spectrum sharing it should left open to market forces to decide.

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

Same as question 32.

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

Same as question 32.

Perpetuity of licences

- 37. Should there be a time limit on licence or should it be perpetual?

 Service providers have made huge investment for setting up of networks.

 Investor should have very high expectancy for continuation of business even beyond the validity of license. Therefore, operators should have first right to refusal for renewal of license.
- 38. What should be the validity period of assigned spectrum in case it is delinked from the licence? 20 years, as it exists, or any other period
- BWA Spectrum haven't taken under UASL has validity of 20 years. However, corresponding ISP license has validity of 15 years only. Therefore, a consistency is required between UASL license and ISP liceses. In view of this it is recommended that ISP liceses should also get spectrum validity of 20 years from the date of allocation of spectrum.
- 39. 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?

License should have perpetual validity. Only spectrum should have validity of 20 years. The spectrum should be renewed if licence meets the licensing conditions. Licencee should have first right of refusal for the allocated spectrum.

40. 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?

Same as above.

41. 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?

In view of the above N.A.

Uniform License Fee

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

Imposition of license fee on broadband/internet will have adverse impact. Internet is catalyst for economic and social development. Availability of broadband service at affordable rates would help expansion of service and bring about number of economic and social changes. It helps addressing most pressing problems like healthcare, education, job creation etc.

The broadband policy recognizes need of providing fiscal incentive for growth of broadband services. In line with the policy objective it is proposed that there should not be any license fee on pure (non-voice) internet and broadband services.

However, we understand that to usher in un-restricted Internet telephony, there may be a regulatory challenge because of the existing variations in the LF in the Access licenses (circle to circle). In this context, we welcome the uniformity in license fee between UASL/ and CMTS.

However, the proposed common Uniform License Fee should be pegged at 6% for Internet Telephony and not any higher amount. There should not be any levy of License fee for the Pure Internet and IP-1 services

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

Uniform License Fee should be applicable only on current licensed services except pure Internet and IP - I Services. It should also not be applicable on DoT Registered service providers like - other service providers (OSP) and tele-marketers, etc.

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

TRAI Recommendations on Unified License fee dated 13 Jan '05 states as under

Clause 3.4

- vi) License Fee:
- a. For Unified License, Class License and Niche operators the License fee shall be (contribution to USF (5%) + Administrative cost (1%)) i.e. 6% of Adjusted Gross Revenue (AGR). **The administrative cost is required for managing, licensing and regulating the sector.** It is recommended that with technological developments, flexibility in the licensing regime, deployment of more and more wireless technologies and the growth of telecom services even in backward areas from telecom point of view, the Government may consider reviewing the level of USO levy and Administrative fee.
- 3.4 The principles underlying the specification of the categories in the Unified License Regime include reducing entry costs and regulatory costs of operation (e.g. revenue share license fee) so as to promote price reduction and consequent growth, simplifying the applicable license regime, and facilitating the entry of operators while maintaining a level playing field.

In view of the same government should consider pegging license fee not more than 1% to cover the administrative cost.

Chapter 3 Spectrum assignment

- 45. If the initial spectrum is de-linked from the licence, then what should be the method for subsequent assignment?
- 46. If the initial spectrum continues to be linked with licence then is there any need to change from SLC based assignment?
- 47. In case a two-tier mechanism is adopted, then what should be the alternate method and the threshold beyond which it will be implemented?
- 48. Should the spectrum be assigned in tranches of 1 MHz for GSM technology? What is the optimum tranche for assignment?
- 49. 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?

- 50. In case continuation of SLC criteria is considered appropriate then, what should be the subscriber numbers for assignment of additional spectrum?
- 51. 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?

Spectrum pricing

- 52. Should the service providers having spectrum above the committed threshold be charged a one time charge for the additional spectrum?
- 53. 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?
- 54. On what basis, this upfront charge be decided? Should it be benchmarked to the auction price of 3G spectrum or some other benchmark?
- 55. Should the annual spectrum charges be uniform irrespective of quantum of spectrum and technology?
- 56. Should there be regular review of spectrum charges? If so, at what interval and what should be the methodology?

 Structure for spectrum management

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

The existing WPC structure for spectrum management may continue. However there is need to bring more transparency and therefore it is suggested that following information may be provided on WPC website:

- (i) Spectrums bands for commercial deployment;
- (ii) Spectrum available for auction;
- (iii) Spectrum likely to be available for auction;
- (iv) Likely dates for auction of spectrum;
- (v) Spectrum holders;
- (vi) Winning Auction bids
- (vii) Band plans
- (viii) Details of Spectrum trade etc.

ISPAI would also like to add that

BTS Charges - Royalty is charged on each BTS by WPC. For optimize use of scare spectrum and QoS with in the same city/circle the ISPs need to set up additional BTS. It is requested that for the first BTS in any city the charges be charged as presently but for additional BTS's in the same city/circle the fees be nominal e.g. Rs. 1000/-p.a.

CPE royalty of Rs. 1000 per annum for 3.3Ghz and the attendant procedures should be done away with; just like mobile phones.

5.1 GHz to 5.3 GHz is un-licenced band world-wide, however, in India it is only allowed for indoor use. This should be allowed for outdoor usage also.

Government must remember that 3 G spectrum is primarily for voice services whereas BWA band is primarily for Internet services which can used by the ISPs as per their license condition. An ISPs can't use BWA Spectrum beyond its scope of ISPs license, Accordingly, BWA Spectrum should not be linked with 3G Spectrum while auctioning.

Service Provider which got the 3G should not be allowed to take BWA spectrum to avoid monopolistic situation and to maintain healthy competition in the market.

Once any ISP wins the bid and gets the spectrum, there shall not be any limitation to do data only for him whereas UASL is allowed to do both.
