VOICE

VOICE comments on "Consultation Paper on Spectrum Related Issues"

Chapter 2: Current spectrum availability and requirement

(i) Should the 450 MHz or any other band be utilised particularly to meet the spectrum requirement of service providers using CDMA technology?

Yes

(ii) The consultation paper has discussed ITU method for assessment of spectrum requirement. Based upon the methodology submit your requirement of spectrum for next 5 years. While calculating the required spectrum, please give various assumptions and its basis.

Service Providers to reply

(iii) Whether IMT 2000 band should be expanded to cover whole or part of 1710 – 1785 MHz band paired with 1805 – 1880 MHz?

Yes

(iv) Should IMT 2000 spectrum be considered as extension of 2G mobile services and be treated in the same manner as 2G or should it be considered separately and provided to operators only for providing IMT 2000 services?

As extension of 2G

(v) Reorganisation of spot frequencies allotted to various service providers so as to ensure the availability of contiguous frequency band is desirable feature for efficient utilisation of spectrum. Please suggest the ways and means to achieve it.

Reorganisation of frequencies is a must.

(vi) Whether the band 1880 - 1900 MHz be made technology neutral for all BSOs / CMSPs / UASLs and be made available with the pair 1970 - 1990 MHz or should it be kept technology neutral but reserved for TDD operations only.

Technology neutral with 1970-1990 MHz

Chapter 3 Technical efficiency of spectrum utilisation

- (vii) Please offer your comments on the methodology outlined in this Chapter for determining the efficient utilisation of spectrum. Also provide your comments, if any, on the assumptions made.
- (viii) Please provide your perception of the likely use of data services on cellular mobile systems and its likely impact on the required spectrum including the timeframe when such requirements would develop?

Do not have technical expertise to comment on methodology used for determining the efficient utilization of spectrum

Chapter 4: Spectrum Pricing

(ix) Is there a necessity to change from the existing revenue share method for determining the annual spectrum charge?

Yes. With Unified License in vogue & merger and acquisitions, it is necessary that Spectrum available is justly utilized. This is only possible by working out new methodology.

(x) If yes, what methodology should be used to determine spectrum pricing for existing and new operators? (Please refer table in Section 4.8)

To begin with AIP only beyond 2x10 MHz . To be applicable to entire spectrum over a period.

(xi) In the event AIP is adopted as a means to price spectrum, would it be fair to choose GSM as a reference for determining the spectrum price?

Yes

(xii) Please provide your comments on the assumptions used in A.I.P.

It does not favour any one technology[GSM or CDMA]

(xiii) In case Auction methodology is used for pricing the spectrum, please give suggestions to ensure that spectrum pricing does not become very high and spectrum is available to those who need it.

Use Anglo-Dutch method

(xiv) Should the new pricing methodology, if adopted, be applicable for the entire spectrum or should we continue with revenue share mechanism till 10 + 10 MHz, and apply the new method only for spectrum beyond this?

Entire Spectrum

(xv) What incentives be introduced through pricing to encourage rural coverage and / or using alternative frequency bands like 450 MHz?

Use AIP. Discount or reduction in number of sectors used in calculation of urban fees.

(xvi) Does M X C X W formulae for fixed wireless spectrum pricing need a revision? If so, suggest the values for M, C, W?

No comments

(xvii) Should there be different pricing levels for shared spectrum versus spectrum that is allocated with protection? How should this be determined?

No comments

Chapter 5 Spectrum allocation

(xviii) How much minimum spectrum (refer approach (I) and (II)) in section 5.4) should each existing operator be provided? Give the basis for your comments.

Approach I is technology neutral and adequate spectrum will still be available for further allocation.

(xix) At what stage the amount of spectrum allocation to new entrants be considered in the $800 \, \text{MHz} / 900 \, \text{MHz} / 1800 \, \text{MHz}$ frequency bands?

For level playing field, it is essential that new entrants are considered for spectrum allocation.

(xx) Should spectrum be allocated in a service and technology neutral manner? Yes

(xxi) What should be the amount of cap on the spectrum assigned to each operator?

Based on utilsation

(xxii) What procedure for spectrum allocation be adopted for areas where there is no scarcity and in areas where there is scarcity?

No scarcity: Efficient use of spectrum Scarcity: Competitive mechanism

(xxiii) Which competitive spectrum allocation procedure (Auction / Beauty Contest) be adopted in cases where there are scarcity?

Auctions

(xxiv) Should we consider giving some spectrum in 900 MHz band to fourth CMSPs? **Yes**

(xxv) Comments of stakeholders are invited on the minimum blocks such as 2 X 2.5 MHz / 2 X 5 MHz of additional spectrum to be allocated to existing service providers in situations where IMT 2000 band is opened as well as in situation where it is not opened. Additionally, comments are also invited on the minimum allocation to new entrants.

No comments

(xxvi) In the event that IMT 2000 spectrum is treated as continuum to 2G, should existing operators using spectrum below the specified benchmark be treated as those eligible for IMT 2000 spectrum?

Yes

Chapter 6 Re-farming, Spectrum trading, M&A and Surrender

Re-farming of spectrum

(xxvii) What approach should be adopted to expedite the re-farming of 1800 MHz and IMT-2000 spectrum from existing users?

(xxviii) What approach should be adopted for re-farming of spectrum after expiry of license?

Refarming after expiry of license [20 years] is not a desirable solution. Migration to freq band within tuning range of equipment used OR other frequency bands needs to be traded base on technical and economic considerations with consultation of service providers.

Surrender of spectrum

(xxix) Should there be any refund for spectrum surrender in principle?

Yes

(xxx) Should there be refund for spectrum surrender consequent to Unified Access license policy? If yes, what should be the basis?**Yes**

(xxxi) How should the amount of refund be estimated?

No comments.

Spectrum trading

(xxxii) Should we open up the spectrum market for spectrum trading? If yes, what should be the time frame for doing so? **Yes. If efficient use of spectrum is achieved.**

(xxxiii) What are the pre-requisites to adopting spectrum trading? Needs to be studied

Mergers & Acquisitions

(xxxiv) Whether we should specify a cap higher than 2 X 15 MHz for Metros and Category "A" service area and 2 X 12.4 MHz for Category "B" and "C" service area in case of M&As or should it be retained? **Yes**

(xxxv) In case, IMT 2000 is considered as a continuum of 2G Services, is there a need to have a cap higher than that without IMT 2000 services? Should there be individual caps on 2G and 3G spectrum or a combined cap?

No

(xxxvi) In case of M&As where the merged entity gets spectrum exceeding the spectrum cap, what should be the time frame in which the service provider be required to surrender the additional spectrum? **Unable to comment**