Dated at Palakkad the 12th day of July 2004. Ref.no. 12/trai/spectrum.

Comments & Suggestions submitted on

Spectrum Related Issues (Paper No 11/2004).

Efficient Utilization, Spectrum Allocation, Spectrum Pricing...

BEFORE THE HONBLE CHAIRMAN &

Copy to Secretary & Advisor (MN),

Telecom Regulatory Authority of India New Delhi

by PA. Surendran (CAG Member, No. TRAI/CO/NGO/O1/2003)

General Secretary, Palakkad District Consumers' Association, Kits College

Court Road Palakkad - 678001, Kerala State.

Respected Sir,

I have the honour to bring before you the comments & Suggestions on On Consultation Paper on Spectrum Related Issues (Paper No 11/2004). Efficient Utilization, Spectrum Allocation, Spectrum Pricing..

Chapter 2. (page no.21)

- (i) Yes, the 450 MHz or any other band should be utilized to meet the spectrum requirement of CDMA technology, subject to being pricing-neutral too.
 - (ii) Not applicable (applicable for service providers requiring the spectrum only)
- (iii) IMT-2000 band should cover the whole of 1710-1785 MHz band paired with 1805-1880 MHz.
- (iv) IMT 2000 spectrum should be considered separately for providing IMT 2000 services only.
- (v) Whenever present allotee goes for technology change, the spot frequency allotted to him should revert for fresh allotment. Incentives may be given for going for technology change.
- (vi) The band 1880-1900 along with 1970-1990 MHz should be kept technology neutral but necessarily reserved for TDD operations only.

Chapter 3. . (page no.42)

- (vii) The traffic density, in Erlang per MHz per Sq Kms, is a reasonable parameter for measuring the efficient utilisation of the spectrum. Assumptions made, based on international bench marks, would apply for our urban areas as of now. It may not be so for our rural areas.
- (vii) Use of data services on cellular mobile systems is likely to remain negligible for the next 10 years in our country.

Chapter 4. (page no. 59)

- (viii) There is a need to change from the existing revenue share method for determining the annual spectrum charges.
- (ix) The methodology suggested for determining the spectrum pricing for existing (when they renew) and new operators is the same and it should be Anglo Dutch (modified). In the current
- AD system the open auction precedes sealed bids. This should be reversed by having sealed bids first followed by open auction amongst the acceptable high bidders. The advantage here is that while submitting the sealed bids the potential operators would have given serious consideration to the economic viability of their proposal and the practical maximum limits that they can go to in offering their bids.
- (x) No, it would not be fair to use GSM as a reference for determining the spectrum price when using AIP.
- (xi) The basic assumption should be that those who use efficient technology should gain over those using less efficient technology.
- (xii) Anglo Dutch (modified) method ensures that applicants offer their affordable price only. The only related issue that needs to be taken care of is preventing monopoly.
- (xiv) New pricing methodology, if adopted, should apply to the entire spectrum, available for allocation.
- (xiii) No incentive is needed to encourage rural coverage or use of alternate frequency bands. Market forces will decide when an operator has to turn to rural areas for sustaining their operations and at what cost.
- (xiv) No suggestions can be given without knowing 'market based benchmarks'. It will depend on the area where the clearance is being sought, the demand for the frequency being allocated and the number of channels already being used in that area.
- (xv) Yes. There should be different pricing levels for shared spectrum and spectrum allocated with protection. It will be determined by the income that would have accrued had the spectrum been shared optimally. Also there could be an additional 'luxury tax' proportionate to the income being made up for non-optimal use.

Chapter 5 . (page no.77)

- (xvi) Minimum spectrum to be provided to each existing operator should be 2 x 4.4 M Hz for TDMA and 2 x 2.5 for CDMA. The logic is that only minimum should be allotted always and the maximum available should be available with the allotting authority to have efficient and dynamic management of the spectrum.
- (xix) Spectrum in the 800/900/1800 MHz bands may be allotted to new entrants straight away.
- (xx) Spectrum should be allotted in a service and technology neutral manner but priority should be to allot the spectrum to the better and efficient ones.
- (xxi) There need not be any cap on the spectrum assigned to any operator so long as there is competition.
- (xxi) The procedure for spectrum allotment in areas where there is no scarcity should be based on reserve price and in areas where there is scarcity there should be auction.
- (xxii) In areas where there is scarcity of spectrum, allotment may be based on auctions like Anglo-Dutch (modified) or beauty contest.
 - (xxiv) Yes, we should consider giving some spectrum in 900 MHz band to fourth CMSPs.
- (xxv) Any allotment of any available spectrum should be based on auction keeping in mind the need to prevent monopoly, its efficient use and the quality of service.

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(xxvi) Existing operators using spectrum below the specified benchmark should not be treated as eligible for IMT 2000 spectrum.

Chapter 6. (page no.84)

- (xxvii) To expedite re- farming of 1800 MHz and IMT 2000 spectrum from existing users, one should resort to immediate cancellation of their license if they have not fulfilled the conditions of roll out, usage etc.
- (xxviii) For re-farming spectrum after expiry of license it should be allotted afresh using the Anglo Dutch or beauty contest methods of auction.
 - (xxix) No. There need not be any refund for spectrum surrender in principle.
- (xxix) No. There need not be any refund for spectrum surrender consequent to UALP. (One really cannot see how spectrum will become available for surrender when migrating to UALP. As I understand it the UALP facilitates efficient use by the operator of the allotted spectrum only. In case of conflict between two operators on use of certain parts of the spectrum in certain areas, the issue may have to be addressed on a case by case basis.)

- (xxx) No case for refund is suggested, hence no methodology is suggested for working out the amount of refund.
- (xxxii) Yes, spectrum trading may be permitted provided the trade is being affected (1) after 50% period of the license is over and/or (2) there is a change in technology available and the new technology is proposed to be inducted consequent to the trade.
 - (xxxiii) The prerequisites for spectrum trading should be:
 - (1) No middlemen/brokers to effect the trade and
- (2) No change in terms of existing license including period of validity, area of operation and such factors like monopoly.
 - (xxxiv) There need not be any area-wise cap, except to prevent monopoly.
- (xxxv) In principle there need not be any cap except to prevent monopoly by any operator in any area or in any band of the spectrum.
- (xxxvi) In case of M & A, if any entity gets spectrum exceeding the cap, the additional spectrum should be surrendered within 06 months.