



भारतीय अन्तरिक्ष अनुसंधान संगठन अन्तरिक्ष विभाग भारत सरकाः अन्तरिक्ष भवन न्यू बी ई एल रोड, बेंगलूर – 560 094, भारत

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A. Bhaskaranarayana Scientific Secretary, ISRO & Director, SCP/FM

No. FMO/F, TRAI/2009

December 7, 2009

Dear Shri Arnold,

This has reference to TRAI D.O. letter No. 103-4/2009-MN dated 21<sup>st</sup> October 2009 enclosing the consultation paper No. 6/2009 dated 16<sup>th</sup> October 2009 on "Overall Spectrum Management and Review of Licence Terms and Conditions". DOS has reviewed this paper and the comments are given below.

Regarding spectrum for BWA services in 2.5-2.690 GHz band. (Refer Para 1.27 of TRAI consultation paper).

As informed to TRAI on earlier occasions, DOS, in principle, identified 40 MHz (2535-2555 MHz and 2635-2655 MHz) for the possible use by BWA. However, DOS has also informed WPC/DOT that use of these two 20 MHz slots by BWA will be subject to ensuring protection to the MSS and BSS services in the spectrum bands adjacent to those proposed BWA spectrum bands. WiMax characteristics, as defined currently, will affect the sensitive MSS and BSS services due to out-of-band emission. This issue is being discussed by an interdepartmental Expert Committee convened by WPC, members of which include DOS, WPC, DOT, WiMax forum and other independent experts. The deliberations are continuing. Apart from theoretical analysis, test measurements have also been recently conducted.

Hence, depending on the results of these deliberations, necessary technical measures to be implemented need to be finalized. Only after this, how much spectrum out of this 40 MHz can become available for actual operation of WiMax can be decided.

## Regarding 3.4-3.6 GHz (Para 1.29 and Table 5).

DOS agrees with TRAI's view and in view of use by satellite services, this band cannot be made available to BWA.

## Regarding Assignment of Spectrum other than 800, 900 and 1800 MHz (Para 3.17).

It is not clear which are the bands denoted by 'spectrum other than 800, 900 and 1800 MHz'? Since many spectrum bands are used for many sensitive services and some of the bands may have specific issues, applicability of 'auction model' to all bands cannot be generalised.

Yours sincerely,

ABbanharman

(A. Bhaskaranarayana)

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