



सह वीर्यं करवावहै

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**Shri Sudhir Gupta,**  
Principal Advisor (MS),  
Telecom Regulatory Authority of India,  
Mahanagar Door Sanchar Bhawan,  
JLN Marg (Old Minto Road),  
**NEW DELHI-110 002**

Dear Sir,

This is with reference to invitation of comments on Consultation Paper No 9/2011 on "Allocation of Spectrum Resources for Residential and Enterprise Intra-telecommunication Requirements/ Cordless telecommunications system (CTS)."

The comments of Institution of Electronics and Telecommunication Engineers (IETE) are enclosed herewith for your kind perusal.

Thanking you,

Yours sincerely,

( S R AGGARWAL )  
Secretary General

encl: as above

## DRAFT COMMENTS ON THE ISSUES FOR CONSULTATION

**3.1 Whether the current allocation of spectrum for CTS is sufficient to meet the requirements? If not, then how to meet the demand of cordless telephony spectrum requirements?**

**Comments:** The current allocation of Spectrum Cordless Telecommunication System (CTS) in the frequency band of 1880-1900 MHz as mentioned in Chapter-II of TRAI Consultation Paper No. 9/2011 seems adequate for the DECT applications. In case of future need, frequency band of 1900-1910 MHz paired with 1980-1990 MHz, as mentioned in Para 2.5 of the TRAI Paper, may be utilized.

**3.2 In view of the availability of cellular mobile services in the country and possibility of Fixed Mobile Convergence (FMC), is there any need to have DECT Phones?**

**Comments:** Yes the need for DECT phones will continue to exist along with cellular technology. DECT provides a reliable, affordable wireless solution for residential and Small Enterprise Establishments (SMEs) without the use of Cellular spectrum and no radio planning requirement. In future, the DECT technology will not be limited to voice but will also be used for data and video and machine to machine communications. A significant number of PABXs exist in India, and this number will proliferate if the required Spectrum is easily made available. DECT technologies are aimed at making the PABX wireless. The DECT and the FMC technologies will continue to co-exist due to reasons of huge demand of capacity in the last mile wireless access and affordability. Also, the possibility of the two technologies seamlessly working with easy hands off cannot be ruled out in future.

**3.3 Is there any requirement of allocating spectrum for digital CTS, in view of similar solutions being available in already de-licensed band 2.4 & 5.8 GHz?**

**3.4 Whether de-licensing of the spectrum for digital CTS applications will be the right path?**

**Comments 3.3 & 3.4:** The ISM (Wi-Fi) band in 2.4 & 5.8 GHz frequency band will be heavily utilized with emergence of ambitious Broadband plan of the Government of

India and therefore, it will be preferable to allocate spectrum for digital CTS. Further, restrictions and restraints are natural barrier to development and growth and therefore, de-licensing of Spectrum for CTS application will fuel the innovation beyond imagination leading to huge demand of last mile wireless access easily fulfilled through already internationally proven DECT technology and hence there will be compounding need for added spectrum for DECT.

**3.5 Do you agree that the 1880-1900 or 1910-1920 MHz band (TDD Mode) be allocated for digital CTS applications? If yes, what should be the limits of emitted power (EIRP), power flux density (pfd), antenna gain etc?**

**Comments:** It will be advisable to follow ETSI or the standards of equivalent International Standard Organizations.

**3.6 Do you see any coexistence issues between existing cellular systems using adjacent band with low power CTS allocations in 1880-1900 or 1910-1920 MHz band? And**

**3.7 Whether the de-licensing of either 1880-1900 MHz or 1910-1920MHz band for low power CTS applications will result in loss of revenue to the government?**

**No Comments.**

**3.8 Will there be any potential security threat using CTS? If yes, how to address the same.**

**Comments:** Being low power digital equipment working in a closed environment CTS is inherently secure. However, Govt may like to do a thorough study of this aspect. In case, needed necessary Lawful Interception (L I) methodologies may be adopted where the installations deal with sensitive work.

**3.9** Amongst the various options of digital technologies available to meet the cordless telephony requirements, either spectrum allocation can be considered according to technology or the etiquettes/ specifications can be defined for the de-licensed spectrum band. What method of allocation of spectrum for digital CTS applications should be adopted?

**Comments:** Our recommendation is to follow an approach to ensure that the country moves towards the regime of technology neutrality and also maintains interoperability.