

**TELECOM REGULATORY AUTHORITY OF INDIA  
NEW DELHI**

Dated 19<sup>th</sup> February, 2010

**Request for Comments**

**Subject: Request for comments on “Allocations of Spectrum for Technologies such as DECT, to meet the Residential and Enterprise Intra-Telecommunication Requirements”**

Telecom Regulatory Authority of India (TRAI) has received a proposal for **Allocations of Spectrum for Technologies such as DECT, to meet the Residential and Enterprise Intra-Telecommunication Requirements.**

2. The paper on this issue, is placed on TRAI’s the website at <http://www.trai.gov.in/WriteReadData/trai/upload/misc/134/Proposal.pdf> for ready reference. The salient points of the same are as follows:

- Digital Enhanced Cordless Telecommunications (**DECT**), is an European Telecommunications Standards Institute (**ETSI**) standard for digital portable phones (cordless home telephones), is most suitable for residential cordless and Enterprise wireless (Electronic Private Automatic Branch Exchange (EPABX) and Data networking solutions, which is adopted in more than 100 countries;
- ITU has recognized DECT as IMT technologies, has since been adopted by many countries all over the world;
- DECT operates in 1880-1930 MHz band out of which normally 20 MHz of is allocated by the Administrations for such applications;

3. Indoor Telecommunications requirements in terms of **Cordless telephone and wireless private branch exchange (PBX) applications** for domestic and/ or enterprise usages have increased many folds. More so the demand of Wireless Local Area Network (LAN) in domestic and enterprise solutions has come up in various technologies implemented in different parts of the spectrum. In most cases the base station connection is to the public switched telephone network or telephone jack, although connectivity with newer technologies such as Voice over IP has become available.

4. As per National Frequency Allocation Plan (NFAP) certain spot frequencies in 1.6 – 1.7MHz, 44-46MHz paired with 48-50MHz, and 150 MHz bands have been allocated for Cordless Telephone applications. The Bands 2.4-2.4835GHz, 5.150-5.350 GHz and 5.725 – 5875 GHz have been de-licensed from wireless licensing requirements, which are also being used for cordless and wireless EPABX applications/ requirements. However, the higher

frequency often brings advantages. The 2.4 GHz and 5.8 GHz band are increasingly being used for a host of other devices, including microwave oven, Bluetooth, wireless LAN, baby monitor; thus, it is likely that a cordless phone will interfere from signals broadcast by those devices. It is also possible for a cordless phone to interfere with the 802.11a/b/g wireless standard, as the 802.11 standard can be configured to operate in the 5.8 GHz range.

4.1 CorDECT, which is evolution of DECT technology, has been implemented in the band 1880-1900 MHz band for providing Wireless in Local Loop (WLL) to the public sector undertaking in various service areas. As per NFAP, the Requirements of micro cellular wireless access systems (fixed/mobile) for telecommunication services based on TDD access techniques, especially indigenously developed technologies, capable of coexistence with multiple operators will be considered in the frequency band 1880-1900 MHz on a case by case basis. Additional requirements of micro cellular systems based on TDD access techniques, especially indigenously developed technologies, capable of coexistence with multiple operators in the frequency band 1900-1910 MHz may be progressively considered on a case- by- case basis. Also the frequency band 1900-1910 MHz paired with 1980-1990 MHz may be considered for cellular telecom systems for coordination on a case by case basis subject to availability of spectrum in these bands and after ensuring compatibility for coexistence with the systems operating in the frequency bands 1920-1980 MHz paired with 2110-2170 MHz (for 3G applications).

5. TRAI requests all stakeholders to kindly offer their comments on the proposal by 15<sup>th</sup> March, 2010.

6. The undersigned can be contacted in case of need for any clarifications.

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