



To: **Advisor (MN) Mr. Sudhir Gupta**
Telecom Regulatory Authority of India
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Subject: **Request for comments on “Allocations of Spectrum for Technologies such as DECT, to meet the Residential and Enterprise Intra-Telecommunication Requirements” Dated February 19, 2010**

DECT Forum appreciates this opportunity to respond to the request by TRAI for comments on “Allocations of Spectrum for Technologies such as DECT, to meet the Residential and Enterprise Intra-Telecommunication Requirements”.

The DECT Forum is an international industry association embracing suppliers and operators of DECT based terminals, systems, and networks. DECT stands for "Digital Enhanced Cordless Telecommunications" and denotes a radio technology suited for voice data and networking applications with range requirements up to a few hundred meters. The DECT Forum represents the interests of the DECT industry with the following primary objectives:

- To promote DECT as the worldwide cordless communication standard.
- Pursue worldwide harmonization of frequencies for DECT products.
- To provide an interactive forum for sharing information and experience between regulatory and standardization agencies, operators, users and manufacturers.
- To manage the evolution of DECT in a way which protects legacy investments and permits orderly service migration and expansion.



The DECT Forum fully supports the DECT Forum India proposal “Allocations of Spectrum for Technologies such as DECT, to meet the Residential and Enterprise Intra-Telecommunication Requirements”

The DECT Forum is strongly convinced that allocations of a spectrum block within 1880 – 1920 MHz for license exempt onsite residential and enterprise DECT systems, will be beneficial to the Indian public, administrations, enterprises and industry.

On DECT Features

The DECT Forum wishes to emphasize some of the features and provisions already described in the proposal document from DECT Forum India.

DECT provides excellent voice quality and a very high radio link reliability, which cannot be secured by equipment using the 2,4 or 5 GHz ISM bands. These are important features for user friendly wireless communication in homes and enterprises, and necessary features for mission critical applications, as in hospitals and process supervision in factories.

Good and reliable wireless onsite communications systems increase productivity, and will also decrease the load on the public telephone systems, since all onsite traffic is switched onsite without connecting to the public network.

On license exempt spectrum for DECT

Spectrum allocations for cellular systems, all over the world, have a needed guard band between the up-link spectrum block, UL, and the down-link spectrum block, DL. These guard bands are difficult to use efficiently. However, DECT with its low power TDD technology and unique instant Dynamic Channel Selection procedures, iDCS, has been able to efficiently utilize these guard bands. Early studies, which led to the DECT radio specification, and subsequent experience in real life of hundreds of millions of installed DECT systems, confirm the good coexistence between DECT license exempt residential/enterprise systems and cellular systems. There are no complains. Below is given an overview of DECT license exempt allocations and corresponding adjacent cellular systems:

Countries	DECT allocation	Directly Adjacent Cellular Technologies
Europe, Australia, New Zealand, several Asian and African countries	1880 – 1900 MHz	GSM, 3G, (LTE, Wimax)
Lesoto,	1900-1920 MHz	
Most Latin American countries	1910-1930 MHz	GSM, CDMA, 3G
Brazil and Uruguay	1910 -1920 MHz	GSM, CDMA, 3G
USA, Canada and a few Latin American countries	1920 – 1930 MHz	GSM, CDMA, 3G, (LTE)

Table. Overview of DECT license exempt allocations and adjacent cellular technologies.

Below is a figure shows the frequency band 1880 – 1920 MHz in India. The blocks defined in IND 53 and 54, and all possible DECT carrier positions F0- F21, are indicated:

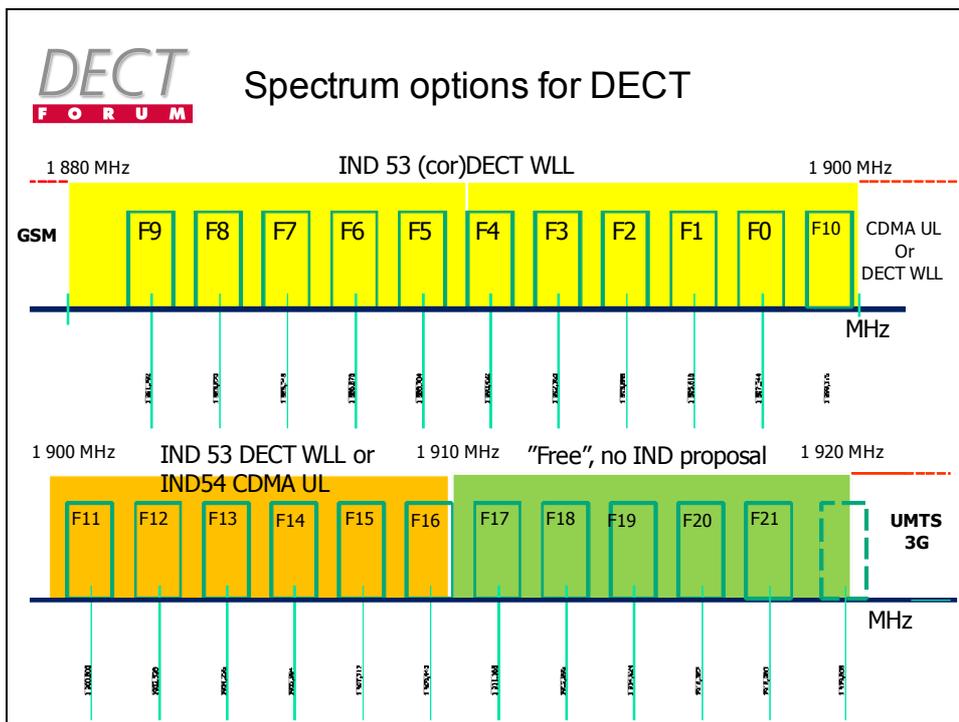


Figure. Possible options for license exempt spectrum in India

An interesting observation is that there are already DECT allocations outside India, that fit with any possible option for license exempt DECT spectrum in India.

And furthermore, any cellular technology, which could become adjacent to a license exempt DECT allocation in India, is already adjacent to DECT in countries outside India, and has been so for years without problems. Thus there should be no need to spend efforts on further analysis of the coexistence properties between DECT and cellular systems. If there anyhow would be an interest to discuss coexistence issues, DECT Forum is willing to assist.

Thus when considering and judging on which spectrum option is preferred for DECT, there is no need to spend time on the issue of coexistence with cellular technologies, but the considerations can be focused on other issues.

DECT has been designed to provide coexistence between WLL systems and uncoordinated residential/enterprise system installations. In Europe and most Latin American countries, DECT WLL systems have from the very beginning been allowed and installed together with DECT private license exempt systems on a common spectrum. In India, on the contrary, corDECT operators got the WLL license without having private DECT systems sharing the same spectrum. Thus allowing license exempt systems within the 1880-1900 MHz band, would, we suppose, require some kind of agreement with existing corDECT operators, while a DECT allocation within the band 1900-1920 MHz would not need any such agreement.

Finally, DECT is an IMT-2000 technology, thus allocation within the proposed band 1880 – 1920 MHz is in line with ITU-R recommendations.

Respectfully submitted,

Berne, April 23 2010

A handwritten signature in black ink, appearing to read "Erich Kamperschroer".

Erich Kamperschroer

Chairman of the DECT Forum