To: Date: 30-Apr-2010

The Advisor (MN), Mr. Sudhir Gupta Telecom Regulatory Authority of India (TRAI) Mahanagar Doorsanchar Bhawan, Jawaharlal Nehru Marg, New Delhi – 110 002

Email: advmn@trai.gov.in

Our Ref: Midas-2010-04-30-TRAI-Roc-19-Feb-2010-DECT-Midas-Comments

Dear Sir,

Subject: Request for comments on "Allocations of Spectrum for Technologies such as DECT, to meet the Residential and Enterprise Intra-Telecommunication Requirements" from TRAI dated 19-Feb-2010.

Midas is an Indian Company engaged in Telecom R&D and equipment manufacturing since 1994. We have been designing and manufacturing telecom systems based on the DECT protocol as standardized by ETSI. We hereby submit our comments in response to your above-mentioned "Request for Comments" dated 19-Feb-2010 in the context of Spectrum Requirements for using DECT as a technology for Residential and Enterprise Intra-Telecommunication Requirements.

## 1. About DECT

Having an extensive experience in working with DECT protocol, we believe that this is an ideal technology for Residential Cordless and Enterprise PABX requirements. The technology defines an Air-interface access standard that can be adapted to various Voice and Data applications while the core radio channel access procedures remain common across the applications. It being a very versatile standard, applications have been developed across a wide spectrum all the way from Residential cordless to Enterprise Telecommunication systems to Wireless Local Loop Systems.

Strong Encryption and Authentication procedures defined in the DECT standard make available such privacy and security related features even to small residential and enterprise users which are normally available only to the Telecom network operators and are not available in the Analog Cordless solutions typically available in the market. This is of immense importance to the residential and enterprise users who would like to have "protection from evesdropping" but are unaware of limitations of solutions that they are picking up from the market.

In addition of the above, the versatile nature of the protocol that defines the Air-interface standard in detail and allows various proprietary applications to be developed on top of this, it becomes feasible to create unique customer specific solutions that require voice or data communication. It is also possible to have DECT-GSM inter-working solutions that

can facilitate the communication over the intra-organisation DECT network when the handsets are located in the enterprise environment and use the valuable mobile network resources only when the dual-mode handsets are outside the enterprise system's coverage. This can help generate revenues for the Mobile operators without overloading their mobile resources that are getting congested.

ETSI, the body that has created the DECT standard has been continuously evolving the DECT standard over the years to include newer services and newer modulation techniques such as OFMDA to increase the data rates. One such example is CAT-iq profile - the Next Generation DECT products that can provide wideband High-quality voice telephony and Broadband data applications in the Residential and Enterprise Telecom Networks.

DECT standard is included as one of the options for IMT-2000 – the only member that provides for uncoordinated installations on an unlicensed spectrum.

## 2. Spectrum Requirements and Options

The DECT protocol is defined to operate in any 20 MHz band within 1880~1930 MHz. It is also possible for the smaller DECT systems such as residential cordless to operate in a 10MHz band.

In India, currently the 1880-1900 MHz band has been allocated to various Telecom operators to provide carrier grade Voice and Data services (NFAP-2009, IND53). The next band of 1900~1910 MHz has been reserved for future expansion of these services (NFAP-2009, IND54). The band 1920~1930 has been earmarked for 3G application (NFAP-2009, IND55). However, the band 1910~1920 MHz remains undefined and unallocated in the NFAP.

It is our submission that either 1910~1920 MHz or 1900 ~1920 MHz bands may be considered for the license-free deployment of residential and enterprise telecom solutions. By making these bands license-free, a spectral resource that currently remains unutilized can be used to give a much needed boost to wide deployment of state-of-the-art, short distance, intra-residence and intra-enterprise telecom networking solutions that are otherwise not in a position to apply and obtain WPC clearance on a case-by-case basis. This would be on the similar lines as freeing up the 2.4 GHz and 5.8 GHz bands from the licensing requirements.

## 3. Definition of Mandatory Requirements to use the spectrum

If and when the license-free band is allocated, it is our submission that "it must be made mandatory for the manufacturer/importer to adhere to certain minimum channel access guidelines in order to ensure that the systems designed and manufactured by uncoordinated entities do not interfere with each other during operations". Otherwise, the advantage of using a common band for un-coordinated deployment would be lost.

Please do let us know if we are required to further elaborate on any of our comments. Thanking you for giving us an opportunity to place our comments in this context.

Yours Sincerely,

For Midas Communication Technologies Pvt. Ltd.

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