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भारत संचार निगम लिमिटेड
(भारत सरकार का उपक्रम)
BHARAT SANCHAR NIGAM LIMITED
(A Govt. of India Enterprise)
BSNL 3G)))) BSNL LIVE
Faster than your thoughts 2010

No. 1-20-/2011-Regln./200

Dated: 08th Feb., 2012.

To,

Secretary,
Telecom regulatory Authority of India
Mahanagar Door Sanchar Bhawan
Jawahar Lal Nehru Marg (Old Minto Road),
New Delhi – 110 002

{Kind Attention Sh. Sudhir Gupta Principal Advisor (MS)}

Subject : Consultation Paper on Allocation of Spectrum Resources for Residential and Enterprise Intra-Telecommunication Requirements / Cordless Telecommunication System (CTS)

Sir,

Kindly refer your office Press Release No. 60/2011 issued a Consultation Paper No. 9/2011 on 26th Dec, 2011 on the above subject.

BSNL, is a wholly owned Government of India undertaking, which provides the largest share of telecom services on fixed line networks in the country. BSNL's land lines which were its main source of income has been coming down due to subscribers giving up land line connections in favour of Mobile connections. Whereas in the rest of the world, land line has been able to find value addition through cordless telecommunication systems, the same has not been the case in India. This has affected BSNL's fortunes very adversely. BSNL is currently having the widest land line cable infrastructure place all over the country which is capable of providing service on its fixed lines to the entire length and breadth of the country.

BSNL has considered the Digital Enhanced Cordless Telecom (DECT) technology to be interference free, low cost technology and has a high level of security. This technology given BSNL an opportunity to make a substantial value proposition to its land line customers and hence will be very beneficial to BSNL. With this view, BSNL has requested Department of Telecom for permitting it to use DECT technology in the unlicensed frequency band of 1880-1930 MHz on all BSNL land line telephones.

BSNL, therefore, is grateful to the TRAI for having brought out this Consultation Paper. This has given BSNL an opportunity to make a case to the Authority, for its kind consideration, so that it can increase its land line revenues which has been falling due to subscribers leaving its landlines due to its perception of low value vis-à-vis the mobile services.

Point-wise comments of BSNL are as follows:-

Sl.No.	Issue	BSNL's Comment
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?	Yes, the current proposed allocation of 1880-1900 MHz band of spectrum though may be sufficient to meet the current requirement, yet, in future, based on the demand, another band of spectrum 1910-1920 MHz can be considered. Presently the problem is that the currently the 1880-1930 MHz is a licenced band which prevents BSNL from taking advantage of it. It has been told by CTS equipment vendors that the world over the CTS systems work in a delicensed but protected band of 1880-1920 MHz.
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?	The salient features of the DECT technology are as under:- • DECT is Digital Enhanced Cordless Telecommunication technology used all over the world for cordless communication. • It operates in frequency band of 1880-1930 MHz all over the world in unlicensed but protected band. • It is the only digital cordless technology identified by ITU/IMT-2000 for the future. Advantages- • DECT is interference free due to etiquette defined band and dynamic channel selection. • It has high level of Security • It has interoperability between all brands • It is a low cost technology • It has total mobility and handover • It has capability of dynamic selection of channel on call set up and also during conversation – crystal clear voice performance with very reliable data/message transfer. • It has GSM type handsets with similar display and features – GSM + DECT sets available. • Dual mode GSM and DECT hand sets are available in the market. DECT Phones currently have market world over and essentially serve house hold and indoor

		enterprise requirements. Therefore, need appears to be there currently and s driven by the market.
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?	In the present NFAP 2011 Note 57 the present position is as follows :- "Requirements of micro cellular wireless access systems (fixed/mobile) based on TDD access techniques, especially indigenously developed technologies and digital cordless phone systems allocation with maximum transmit power of 250 mw capable of coexistence with multiple operators may be considered in the frequency band 1880-1900 MHz on a case by case basis." The desired changes which will help in induction of this technology are as under : A. 'De-licensing' the band for general non-commercial private use. B. Restricting/Protecting the use of this 20 MHz band to those technologies using multi-carrier (with 2 MHz maximum carrier separation) / TDMA /TDD technology with interference free dynamic selection procedure during call set up and conversation /communication phase. In many important countries, the allocated spectrum for Digital CTS is 1880-1900 MHz. Therefore, it seems more logical to allocate the same frequency band.
4.	Whether de-licensing of the spectrum for digital CTS applications will be the right path?	Yes, for the country as a whole. BSNL has the largest land line network which is spread all over the country. Utilization of this useful technology for a substantial portion of the country's land line network is extremely desirable. However, seeking permission from the licensor on case by case basis for such large usage requirement (BSNL landline subscriber base) is neither possible nor desirable. Because of this reason BSNL has made a case to DoT for grant of permission for use of DECT technology in the frequency band of 1880-1930 MHz for all BSNL land line phones instead of taking permission on case by case basis.
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 (PDF), antenna gain etc?	Yes. However, since the technology is widely in use internationally and is in coexistence with other wireless technologies such as GSM/CDMA, the feasible specifications can be set.

	Do you see any coexistence issues between cellular systems using adjacent band with low power CTS allocations in 1880-1900 or 1910-1920 MHz band?	It is feared by GSM/wireless operations that using adjacent band 1880-1900 or 1910-1920 MHz in CTS may cause interference in existing GSM Network due to same corner frequencies i.e. 1880 MHz and 1920 MHz. Sharp filters therefore will need to be incorporated in CTS network to avoid this interference if 1880-1900 or 1910-1920 MHz is allocated for CTS.
7.	Whether the de-licensing of either 1880-1900 MHZ or 1910-1920 MHZ band for low power CTS applications will result in loss of revenue to the Government?	On the contrary, in case BSNL is able to increase its landline revenues on account of deployment of a de-licensed CTS technology, it will directly increase Government revenues due to service tax etc. Increasing BSNL revenues also means indirectly increase in Govt. revenues. The aspect however can be addressed in totality by DoT.
8.	Will there be any potential security threat using CTS? If yes, how to address the same?	Competent Law Enforcement Agencies (LEA) of Govt. of India can address this aspect. Presently also the landline networks and Wi-Fi network of any operator are subject to law enforcement agency / security guidelines issued by the GoI from time to time.
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 the de-licensed spectrum band. What method of allocation of spectrum for digital CTS applications should be adopted?	From the industry point of view, the second option i.e. etiquettes/specification can be defined for the de-licensed spectrum band, appears to be the better.
10.	Any other issue?	No

8/2/12

(Raj Kumar)
DGM (Regln.-II)