Stephen R Whitesell
Senior Technical Consultant
Standards & Regulatory Matters
2 Shannon Ct
Howell, NJ 07731-8919
Tel 732 751 1079
Fax 732 751 0095
Email swhitesell@vtech.ca

March 2, 2004

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Room TW-A325
Washington, DC 20554

Re: Ex Parte filing in the matter of *Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems,* ET Docket No. 00-258.

Dear Ms. Dortch:

VTech is a major manufacturer and provider of cordless telephone products under the VTech and AT&T brand names in the United States. We have recently become aware of ex parte comments filed by the DECT Forum ("DECT Comments")[1] in response to the *Fourth Notice of Proposed Rulemaking* in ET Docket No. 00-258 ("Fourth NPRM").[2] The DECT Comments propose additional technical changes to the Part 15 rules ("DECT Proposal") to allow operation of DECT cordless telephones in the Unlicensed Personal Communications Service ("UPCS") band from 1915 to 1930 MHz. For the reasons described below, VTech is opposed to the additional Part 15 rules changes proposed in the DECT Comments.

The DECT Proposal does little but further confuse an already confused marketplace with no real end-user benefit. Consumers today are faced with choices between 900 MHz, 2.4 GHz and 5.8 GHz products when considering a cordless telephone purchase. Is 2.4 better than 900? Is 5.8 better than 2.4? Where would 1.9 fit in? The consumer is often under the impression that bigger (in this case higher frequency) is better, while the fact is that cordless telephones are capable of providing similar levels of performance in all three of these Industrial, Scientific and Medical ("ISM") band frequencies. Would DECT phones operating in the UPCS band offer the consumer some new capability or level of performance that current cordless telephones operating in the ISM bands do not? The answer is a resounding NO!

---

[1] DECT Forum, "Recommendations of the DECT Forum for Revision of the Rules for the UPCS Band," ex parte filing in ET Docket No. 00-258, November 7, 2003.

[2] *Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems,* ET Docket No. 00-258, *Fourth Notice of Proposed Rulemaking,* FCC 03-134, 18 FCC Rcd 13235, 68 FR 52156 (September 2, 2003).

The DECT Comments claim that UPCS etiquette rules provide "protected" spectrum and higher quality voice communication is false and misleading. The UPCS band is, by definition, unlicensed and, therefore, unprotected. Any equipment complying with the Part 15 rules for its use may operate within the band. The "listen before talk" etiquette required for the UPCS band is certainly not prohibited in the ISM bands. In fact, cordless telephones operating in the ISM bands frequently employ techniques such as spectrum monitoring and swapping of hop set frequencies to avoid interference. The net result is that cordless telephones being marketed today provide excellent quality voice communications while coexisting with WiFi products, microwave ovens, and other users of the ISM bands.

DECT products can operate in the ISM bands like other cordless telephones. The European Telecommunications Standards Institute ("ETSI") created technical specification TS 101 948,[3] to describe how DECT technology could be adapted to comply with the FCC Part 15 rules. According to its scope,

> "The prime objective for specifying DECT-ISM is to allow for introduction of a DECT-based technology in countries that have no spectrum allocated for DECT, but allow frequency hopping applications in the ISM band. The 2,4 GHz ISM band is available in all major markets worldwide."

Following the Commission's Second Report and Order in ET Docket No. 99-231,[4] ETSI decided there was no further need for TS 101 948 and added the following notation to its scope:[5]

> "The present document defining a DECT derivative with a frequency hopping overlay, mainly aimed for the North American market, will become obsolete and will be declared **historical** due to new US FCC part 15 rules. Standard DECT implementations are now allowed on the US ISM frequency bands 902 MHz to 928 MHz, 2 400 MHz to 2 483,5 MHz and 5 725 MHz to 5 850 MHz."

Thus, manufacturers of DECT cordless telephones can offer "standard implementations" of their products in the U.S. marketplace and do not need additional modifications to the Commission's Part 15 rules in order "for Americans to experience technological communication applications that are currently available in Europe and other parts of the world" as suggested by the DECT Comments.

The DECT Proposal includes additional technical changes to the Part 15 rules that would require further scrutiny. In the Fourth NPRM, the commission proposes deleting the rule provisions for asynchronous devices operating in the 1910-1920 and 2390-2400 MHz bands in order to make at least part of the 1910-1920 MHz band available for Advanced Wireless Services ("AWS"). In response to the *Third Notice of Proposed Rulemaking* in ET Docket No. 00-258 ("Third Notice"),[6] several commenters had proposed adding the upper 5 MHz of the 1910-1920 MHz band to the existing 1920-1930 MHz UPCS band for isochronous use, making its band limits 1915-1930 MHz.[7] The DECT Comments support this change but go well beyond the other commenters' proposals and the scope of the Commission's suggestions in the Fourth NPRM by requesting several technical changes to the UPCS isochronous rules.

---

[3] ETSI TS 101 948, *Digital Enhanced Cordless Telecommunications (DECT); DECT derivative for implementation in the 2,45 GHz ISM band (DECT-ISM),* v1.1.1, April 2001.

[4] *Amendment of Part 15 of the Commission's Rules Regarding Spread Spectrum Devices,* ET Docket No. 99-231, *Second Report and Order,* FCC 02-151, 17 FCC Rcd 10755, 67 FR 42730 (June 25, 2002).

[5] ETSI TS 101 948, *Digital Enhanced Cordless Telecommunications (DECT); DECT derivative for implementation in the 2,45 GHz ISM band (DECT-ISM),* v1.1.2, April 2003.

[6] *Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems,* ET Docket No. 00-258, *Third Report and Order, Third Notice of Proposed Rulemaking, and Second Memorandum Opinion and Order,* FCC 03-16, 18 FCC Rcd 2223, 68 FR 12015 (March 13, 2003).

[7] See, for example, Comments filed by Cingular Wireless, Motorola, and the Wireless Communication Association in response to the Third Notice. In some cases, the proposals are for isochronous UPCS use in the 1916-1930 MHz band instead of the 1915-1930 MHz band.

Most notably, the DECT Proposal would eliminate the eight fixed 1.25 MHz wide channels, which would become twelve 1.25 MHz wide channels with the added 5 MHz of bandwidth, in favor of non-fixed 2.5 MHz wide channels. The effect would be to make two, and possibly three, of the 1.25 MHz channels used by current UPCS equipment unavailable whenever a single DECT channel is in use. This reduction in the number of available communications channels is counter to the intent of the other commenters who are seeking to add 5 MHz of bandwidth for isochronous UPCS use, and its ramifications should be thoroughly scrutinized before any consideration is given to the adoption of this proposal.

In summary, the public would be better served by reallocating the 1910-1920 MHz portion of the UPCS band to uses other commenters have suggested than by adopting the DECT Proposal. As noted previously, several commenters have suggested expanding the UPCS band to 1915-1930 MHz under the present rules for isochronous use and giving the 1910-1915 MHz band over to other uses such as AWS, licensed PCS, or the Multipoint Distribution Service ("MDS"). Each of these arguments has some merit, and they have the common viewpoint of expanding the UPCS band by 5 MHz without materially changing the technical rules, thus increasing the number of available PCS channels by 50%. Still others have proposed giving the entire 1910-1920 MHz band over for Community Wireless applications.[8] This argument also has some merit from the viewpoint of making wireless access available where it might otherwise not exist. Any of these alternatives would provide a greater public good than adding another frequency band for cordless telephone operation, which would only add to the marketplace confusion without providing a real benefit to the consumer.

Sincerely,

Stephen R Whitesell

Digitally signed by Stephen R Whitesell
DN: CN = Stephen R Whitesell
Reason: I am the author of this document
Date: 2004.03.02 17:43:17 -05'00'

Stephen R Whitesell

[8] See, for example, Reply Comments filed by Midstate Communications, Penasco Valley Telephone, and UTStarcom in response to the Third Notice.