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Federal Communications Commission
Authorization and Evaluation Division
1435 Oakland Mills Road
Columbia, MD 21046

Reference: 410-430 MHz Experimental License Request

To Whom it May Concern:

Sensus has recently applied for an Experimental License to be used within the 410-430 MHz frequency band. Sensus is a global supplier of wireless Critical Infrastructure digital communication devices that are used to provide Smart Grid and Smart Metering data for both small and large scale operations. Sensus owns nationwide FCC spectrum licenses in the Narrowband PCS 900 MHz range; this spectrum range is not available outside of IARU Region 1 as it is allocated for cellular telephone networks.

However, 410-430 MHz is available in IARU Regions 2 and 3 specifically for the type of networks Sensus plans to export. Additionally, the European Communications Commission (ECC) Decision (04)06 and amended in 2011 (see attached) specifically calls for the use of this spectrum for use like ours:

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DECIDES

1. that this Decision covers Wide Band Digital Land Mobile PMR/PAMR systems using different channel bandwidths;
2. that the frequency requirements for Wide Band Digital Land Mobile PMR/PAMR systems referred to in the Annex to this Decision shall be met within the bands
 - a) 410-430 MHz and/or 450-470 MHz with 10 MHz duplex spacing between the transmit frequencies of mobile stations (410-420 MHz and 450-460 MHz) and the transmit frequencies of base stations (420-430 MHz and 460-470 MHz)"

Other regions throughout the world including the Middle East and Asia also use this frequency band for digital communications.

In the UK Sensus is partnering with SmartReach, a consortium consisting of members Arqiva, British Telecom, and Detica to compete for the UK government's Smart Grid/Smart Metering tender. Sensus is now a shortlisted finalist for this multi-billion dollar project. As a result, it becomes necessary for our company staff to sporadically test designs destined for this export market using the 410-430 MHz band. Partnering company Arqiva currently holds nationwide OFCOM licenses for 410-430 MHz, and this is where we plan to operate the Smart Grid/Smart Metering wireless system.

In reality our purpose for using these frequencies on an experimental basis is for development and testing in facilities containing indoor labs. No permanent antennas are planned to be used, no equipment of any type will be mounted higher than eight (8) feet, and antennas will be limited to omni 6 dB gain types with a maximum EIRP of 36 watts. In a typical laboratory environment, power is limited to 2 watts EIRP from a 2.3 dBi omni antenna antenna mounted two (2) feet from ground level. Duty cycles are typically less than 4.5% and testing is sporadically performed during working hours.

We appreciate your consideration of our Experimental License application, and hope for a speedy issuance.

Sincerely,

A handwritten signature in black ink, appearing to read "Todd R. Ellis". The signature is fluid and cursive, with a prominent flourish at the end.

Todd R. Ellis, PMP
Senior Product Manager,
Radio Infrastructure and Spectrum Portfolios