

Digital Television and the Nationwide Public Safety Interoperable Network

By
Marilyn
Lawrence



On Tuesday, February 17, 2009, a very significant change will affect nearly every household in North America. That is the date when US television broadcast stations must cease all analog transmissions and broadcast only digital signals bringing a significant improvement to the quality of the programming you receive. Although the mandate for Canada is not until August 31, 2011 much of the television broadcasts viewed in Canada's most populous areas comes from US stations near the border. I'm sure you have seen media reports about this changeover recently.

OK Marilyn, thanks for the update...but what does this have to do with public safety and IMSA? When the television stations stop analog broadcasts they must also give up portions of the spectrum where many analog television stations are currently licensed by the Federal Communications Commission (FCC) to broadcast their signals. When that happens a large portion of the 700 MHz band will be turned over to eligible public safety entities for licensing conventional narrowband two-way radio communications systems. Many new systems are already in operation in areas where no television transmitters were operating. IMSA will play a critical role in the licensing process for these newly available frequencies by coordinating applications for new systems before the applications are sent to the FCC.

In addition to the frequencies allocated to public safety for conventional voice use there is additional spectrum coming available, divided into several 'blocks' that was made available to commercial carriers to expand wireless networks and expand services. Auctions held by the FCC earlier this year brought billions into the treasury as commercial carriers purchased the spectrum that will allow them to offer many expanded services. Those services, commonly called 3G and soon 4G, will bring comprehensive Internet Protocol (IP) based solutions where voice, data and streamed multimedia becomes available to users at higher data rates than previously available. All those 'gee whiz' features you see on cellular commercials will be supported by these networks.

One of those 'commercial blocks' is called the D-Block. This com-

mercial patch of ten megahertz of 700 MHz spectrum was not purchased during the auction. We anticipate that it will be up for auction again early in 2009. The D-Block must be developed in cooperation with another ten megahertz of spectrum at 700, allocated to public safety, to establish a nationwide public safety interoperable network capable of bringing advanced broadband technologies to the public safety practitioner on the street. This hardened dedicated network would provide a network that could be used anytime, anywhere by public safety and would be interoperable between every user no matter what agency they worked for or where they were located. While the majority of services on the new network would be 'in-house' functions the problems we have experienced in the past with the inability of emergency personnel to talk to each other would be eliminat-

ed. This network, which would be predominately data driven, would also have the capability for secondary voice. It is not intended to replace the conventional two-way voice networks now in place but rather to bring a host of new and expanded services to the street that are just not possible on the current narrowband channels we use for voice communications.

IMSA has been involved with this exciting process since the beginning. IMSA was one of the four associations that established the non-profit Public Safety Spectrum Trust (PSST) which applied for, and was named by, the FCC as the Public Safety Broadband Licensee (PBSL) to hold the public safety portion of the spectrum that will mate with the D-Block to establish the nationwide network. The FCC later named IMSA as one of the national organizations to hold a director seat on the board

that will have control over the establishment of the network, the operation of the network and the alignment of the spectrum to allow the network to exist along side the narrowband users. You will find several filings that IMSA participated in on this matter before the FCC on our Web site.

Want to know more? You can contact Doug Aiken, IMSA Wireless Technologies Director, visit the IMSA Web site or perhaps visit the IMSA booth at the upcoming International Communications Wireless Expo, IWCE, in Las Vegas on March 18 to 20. IMSA will be there in booth 134. Or, plan to join us at the **114th Annual IMSA International Conference & 32nd Annual School in Orlando, Florida at ChampionsGate - August 18 - 26, 2009**

I hope to see you there!



OBITUARIES

Larry B. Hugel Northwest Section

A Traffic Signal Technician with Kitsap County DPW, Port Orchard, WA passed. Larry had been a member since 1991.

John J. Gibbons Arizona Section

John J. Gibbons a Foreman with Kimbrell Electric in Glendale, AZ passed. John joined IMSA in 2001.

John R. Hedman, Jr. New England Section

John R. Hedman, Jr. was a Senior Electrician with Groton Utilities - Electrical Operations in Groton, CT. John had been a member since 2001.

M. Travis Stanley Midwest Section

M. Travis Stanley was a Civil Engineer I in the City of Decatur, IL. Travis recently joined IMSA in 2005.

William S. Powers Southwest Section

William S. Powers with the City of Baton Rouge had been a member since 2003.

Ray Carrell Southwest Section

Ray Carrell a Parking Meter Tech with the City of Baton Rouge - PW joined IMSA in 2007.