

9/11 and the forgotten history of the public safety communications network that was never built

By Robert McDowell

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September 11, 2001 will forever be known as one of America's darkest days, the day terrorist attacks claimed 2,819 innocent lives in New York, Virginia and Pennsylvania. Behind the headlines, however, is the number of lives lost due to the inability of first responders to communicate effectively with one another.

The 9/11 Commission's report highlighted the need for a nationwide, interoperable public safety broadband network as one of many important, as well as tragic, lessons learned from the events of that day. Ten years after the attacks, America still has not realized the vision of that nationwide public safety network. As scores of articles ask "why?" this week, what remains unwritten is the forgotten story of recent lost opportunities. Policy makers should fully understand the complicated history of efforts in this area before making important decisions that have the potential to cost taxpayers billions.

Although some officials are calling for more pieces of the airwaves to be allocated to public safety as the ultimate solution, Congress did just that in 1997. In fact, Congress set aside a huge chunk of some of the television broadcasting frequencies a full four years before the attacks. Unfortunately, no one came up with a plan to clear the channels of TV broadcasters let alone to pay for the construction of the new network.

Later, in 1999, the Federal Communications Commission (FCC) worked with some from the public safety community to use about half of these channels for a voice network. Although such a decision may have made sense then, using such "prime real estate" just for old-fashioned voice communications makes no sense now given today's technological advances. Using those valuable frequencies only for voice is like building a one-story convenience store in lower Manhattan. Convenience stores serve a purpose, but constructing a one-story building in such a desirable neighborhood does not fulfill the highest and best use of that precious land.

Five years later, in Hurricane Katrina's wake, Congress produced the long-debated and complicated Digital Television Act of 2005. That law called for TV broadcasters to cease all old-fashioned analog uses of those frequencies, move to a neighboring part of the dial and use less spectrum so the leftovers could be auctioned for mobile wireless purposes. It finally established a date certain for when broadcasters would be forced to

relinquish to public safety the huge chunk of spectrum that had been set aside in 1997. Additionally, while the legislation allocated \$1 billion for interoperability grants for public safety's use, no funds were identified for the construction of a national public safety network.

In 2007, the FCC tried combining the chunk of airwaves set aside for public safety in 1997 with a smaller commercial slice to try to forge a public-private partnership to build the network. Regulations for use of this portion, known as the "D Block," were written by the FCC to public safety's specifications. I supported this effort as did all of the other FCC commissioners. During the auction, however, no one bid on the D Block because all of the rules made it impossible to draw up a successful business plan to build the network.

Currently, public safety agencies have use of 97 megahertz of spectrum across a variety of frequencies. To put that techno-speak in context, however, keep in mind that Verizon Wireless serves over 106 million people with 88 megahertz. In contrast, public safety has 97 megahertz serving 2 million users. Granted, not all frequencies are created equally. But this compelling statistic begs the question, what does public safety really need: more spectrum or more money? Another 10 megahertz of spectrum won't get a network built. Money will. Policy makers should study the history and think twice before making this potentially irreversible decision.

Remember the convenience store in lower Manhattan analogy to describe building an old-fashioned voice network on quality TV spectrum? Which is more efficient: giving a neighboring block of Manhattan to build a skyscraper, or tearing down the one-story convenience store to build the skyscraper on that same plot? Perhaps a better approach would be to auction the D Block with no "zoning" restrictions to increase its value and yield to the Treasury — and then use that money to build the new network.

A little-known fact in this debate is that several jurisdictions wisely didn't wait for the government to act and have built their own regional networks. Obvious targets such as Washington, New York and Los Angeles have already built state-of-the-art systems.

Places as diverse as Chesapeake, Virginia; Seattle, Washington; and the state of Mississippi have construction projects underway.

At the same time, the private sector has produced powerful technologies which are available right now. Over the years, some vendors have sold public safety \$5,000 radios that have less functionality than smart phones that cost a few hundred dollars. The power that comes from combining the latest mobile technologies with Internet-based innovations should be available to public safety just as it is to everyone else. Lives could be saved — as well as hard-earned taxpayer dollars — by adopting more of an off-the-shelf mentality.

In the end, regardless of the path adopted, we all share the same goal for our heroic first responders: a powerful, nationwide, interoperable broadband network. Public safety

should have every tool at its immediate disposal. With so much at stake, let's be sure to get it right this time. While we should always offer them our thoughts and prayers, they need the best technology too. May God bless them all.

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