

# TR2 Terror Response Technology Report

Business Opportunities for Critical Infrastructure Protection

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## Harris Introduces Multiband Radio for Public Safety Market

Taking advantage of its expertise in developing and producing multiband software defined radios for military use, Harris Corp. [HRS] is introducing a family of radios for the federal, state and local public safety agencies that will allow for interoperability using a single radio with existing communications infrastructure.

For Harris the introduction of the Unity family of multiband software defined radios marks the company's entry into the public safety communications market at the federal, state and local levels. Earlier this year the company introduced a multiband radio for federal first responders called the RF-1033M. Harris is well known as a top provider of military tactical radios.

"We are bringing proven, reliable and affordable multiband technology, something Harris has been doing in the military tactical area, and now bringing it to another very difficult area which is public safety communications," Kevin Kane, director of government business development and federal agency sales and marketing, for Harris, tells TR2. "We believe that we are addressing this critical interoperability problem among public safety agencies. And we think that this [new radio] represents a leap in that market."

Kane also says that just like in the military market, the public safety market requires a high degree of reliability and customer service.

Harris's new handheld Unity XG-100, which is being demonstrated this week at a public safety communications trade show in Kansas City, Mo., extends the frequency range of the RF-1033M to cover the 700/800 MHz bands. The company says the XG-100 represents its second generation multiband radio for the public safety communications market following the RF-1033M.

Eventually Harris will bring forth additional radios as part of its Unity family, all aimed at enabling interoperability for the public safety communications market.

Frequently emergency responders use several different radios to achieve interoperability with other responders during an incident. That's because for years, state, local and even federal public safety agencies have acquired single band radios that met their respective needs. Even within a particular county or city, police, fire and rescue each may use radios that operate on different bands and frequencies, which mean responders may have several radios on hand just so they can talk to their city counterparts in a different agency. That problem is exacerbated when multiple agencies across different counties jointly respond to a crisis or incident, not to mention the additional communications challenges that arise when state and federal responders are also involved.

While emergency responders in a certain region and state often do exercises so that they can improve how they communicate with each other during a crisis, it is still expensive if individual responders are using more than one radio. And for major crises, such as Hurricane Katrina, where emergency responders from all over the United States show up with their own communications equipment, the need for radio systems that can quickly and efficiently work with one another becomes more apparent.

Kane says that the XG-100 will be priced similarly to existing high-end single band radios, while offering the capabilities of multiple radios in a single system.

That combination of price and multiband technology will help transform public safety communications, George Fores-

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man, the first under secretary of preparedness at the Department of Homeland Security, tells TR2. Foresman spent more than two years coordinating preparedness efforts fore DHS before resigning last year to return to the private sector. He is currently a consultant.

Before 9/11, local jurisdictions basically left it to the response agencies within their city or county to determine what radio systems they wanted. The local elected officials just wanted to make sure the radios worked, Foresman says. Now more officials are tuned into the need to make sure that the radios are interoperable with radios of other responders in their jurisdiction and neighboring counties so that mutual aid response is more effective, he says.

That change in how states and localities view public safety has created the business case for interoperability, Foresman says.

Foresman says that if the price of the new multiband radios is comparable to existing single band systems that makes it likely that the new technology will easily find its way into the public safety communications market. He says the fact that the new radios can work over existing communication infrastructure will make it easier for states and localities to make the investment in the new systems.

Harris plans to begin field trials of the XG-100 later this year. The company still needs to get various certifications completed for the radio as well. The radio should be ready for shipping sometime next year, Kane says.

In addition to Harris, Thales earlier this year introduced a handheld, multiband software defined land mobile radio for federal, state and local public safety communications. Under a \$6.3 million contract provided by the DHS Science and Technology Directorate, Thales is pilot testing Liberty this year with first responders across multiple levels of government. The company estimates that Liberty will cost about \$5,000 per radio.

