

For smaller public safety agencies:

VIDA Select provides immediate voice interoperability with assured migration path

In an era of growing statewide and regional public safety networks, smaller agencies often have a tough time of cost-effectively meeting the need for voice interoperability among first responders in an emergency. Just as important, many have been locked-out of

the numerous advantages available in IP-based digital voice and data networks due to the high cost of entry.

That's all about to change thanks to a new, super-efficient packaging of the essential technology required to achieve these goals. Called

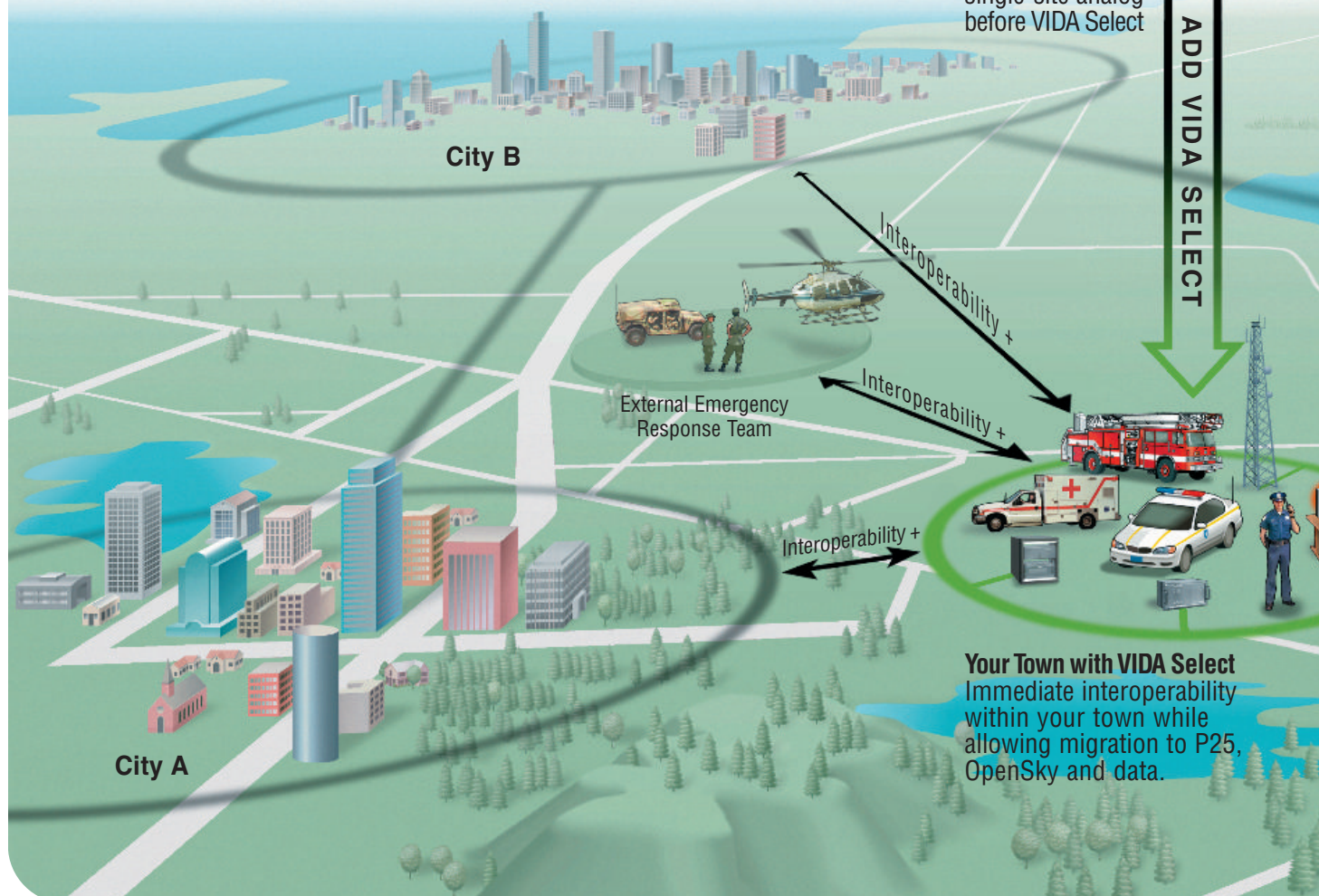
No more "islands" of communications

Small PS agencies can be left behind with the development of large regional and statewide IP-based radio networks. Most low-cost interoperability solutions solve only one problem, with few options and no upgrade path. VIDA Select provides immediate interoperability plus an upgrade path to full IP networking that qualifies for DHS and other interoperability grants.



Your Town
single-site analog
before VIDA Select

ADD VIDA SELECT



Your Town with VIDA Select
Immediate interoperability
within your town while
allowing migration to P25,
OpenSky and data.

VIDA Select, this new entry-level, IP-based interoperability solution from M/A-COM also provides the much needed migration path to voice and critical data applications. Recently announced, it is now available nationwide through M/A-COM's Network Solutions Providers (NSPs).

"Hurricanes Katrina and Rita really drove home the message that, these days, emergency response teams from anywhere in the country have the mobility and training to provide immediate help, no matter where it is required," said Mike Salmon, president and owner of Communications Associates, a M/A-COM NSP headquartered in Springfield,

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Mike Salmon

Mo. "That's terrific for those in need of help. But it can be very difficult for the smaller public safety agencies who have a responsibility to ensure that these first responders can communicate when they arrive," he added.

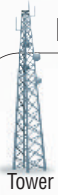
Salmon should know.

He and a team of communications technicians from his home base in Missouri were among the dozens of volunteer support groups who showed up in New Orleans and all along the Gulf Coast in response to the recent storms (*see Channels, Vol. 7, Issue 1 for a full report on Katrina*).

"There are numerous EDACS systems along the Gulf Coast and they not only survived the

continued →

Legend



Tower



Console/dispatcher



Users (mobiles & portables)



Digital voice & data IP network (WAN)



Network Switching Center (NSC)



Interop Assist Application



Gateways (1-3)

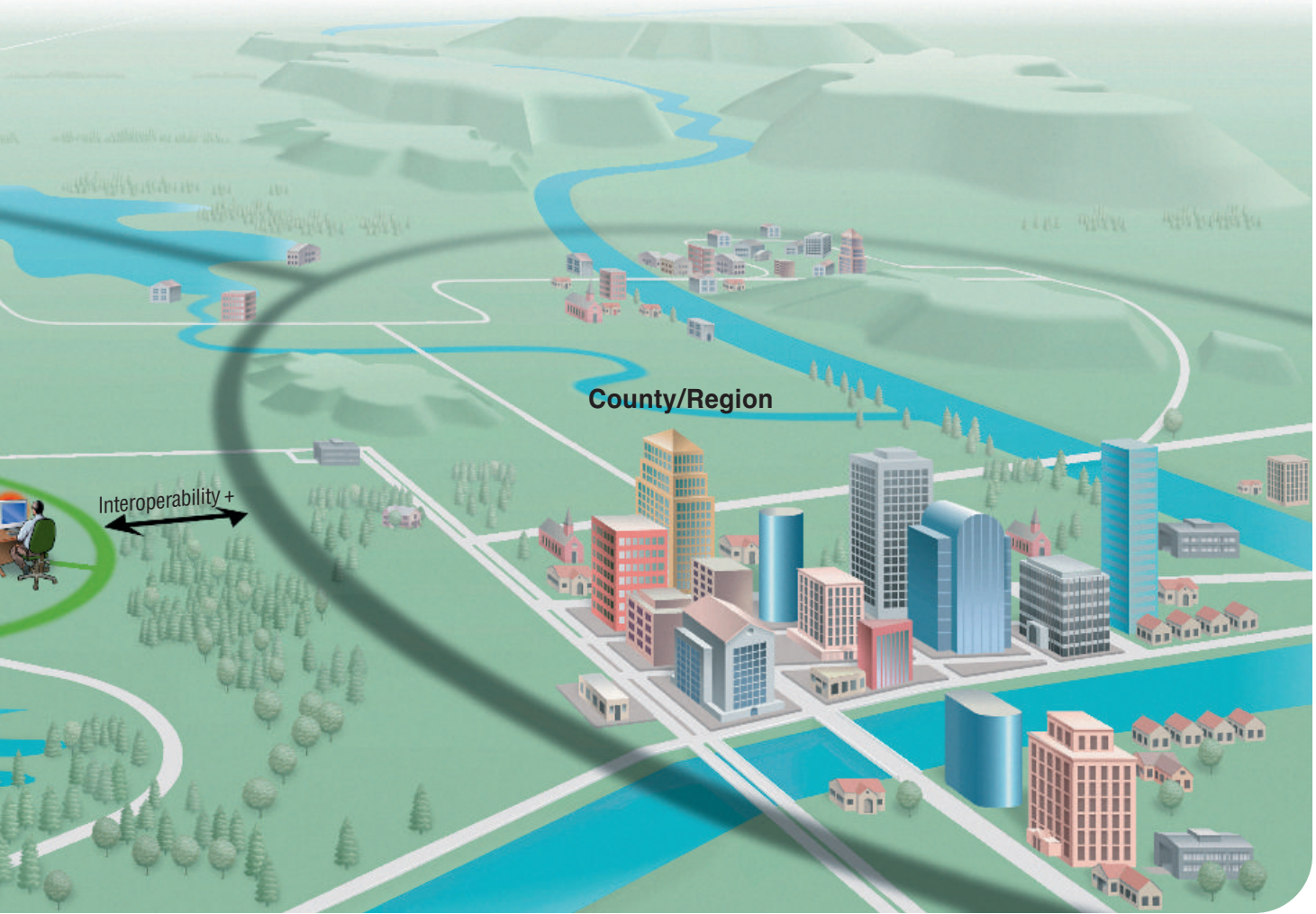


Voice IP network



Voice interoperability + ability to migrate

VIDA Select features/components



“We developed VIDA Select in order to make the packet switching affordable to even the smallest public safety entities.”

Craig Moore

storms intact but provided interoperability with all the many first responders who came to help out. Unfortunately, there were many other groups throughout the region which were not so lucky. Even the smallest agencies are feeling increased pressure to have interoperability solutions in place,” Salmon said.

Funding focused on interoperability

Thus far, interoperability has been an important focus of funding efforts from the Department of Homeland Security (DHS) and other public safety and law enforcement groups.

“The DHS has made grant funding available to smaller agencies in order to improve interoperability during emergencies,” said Craig Moore, M/A-COM product manager. “They have made it clear that their responsibility is to improve communications between first responders. However, it is not their responsibility or intent to fund other upgrades to every agency’s radio system.”

The inevitable result has been that the two goals – interoperability and migration – have been approached independently. While this approach is understandable, it is not in the long run the most cost-effective solution for small agencies. The reason is based on technology.

“Most of the interoperability solutions available to the smaller agencies are simple patches that hook the audio feeds together,” Communications Associate’s Salmon explained. “They are a tactical solution that can be deployed during an emergency by manual dispatcher intervention and provide a measure of interoperability. But they aren’t really up to the demands of modern communications systems that require a higher level of coordination and control.”

What’s worse from the perspective of the smaller agency is that these audio patches tend to be a dead-end solution for a problem that arises infrequently. While no one wants to be unprepared, it would be of great benefit to smaller agencies if their investment in infrastructure could be utilized more cost effectively.

“Audio patching devices do nothing to help an agency get to the next step in the development of their communications infrastructure,” said Salmon.

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A technology to bridge the gap

That “next step” is an assured migration path to broader digital voice and data communications such as that offered by M/A-COM’s P25^{IP} and OpenSky.

“M/A-COM’s interoperability solution has been a preferred choice among public safety groups for several years now, and the company has fielded more than 35 of these IP-based intelligent switch solutions – the most in the industry. These systems provide a high level of interoperability, with dynamic configuration and full managerial control by incident commanders. In addition to interoperability across all frequency bands and manufacturers, it supplies the main ingredient for migration to new IP-based voice and data technologies,” said Moore.

That main ingredient is the IP-based packet-switched technology and its control equipment that replaces the circuit-switched technology used in older communications systems.

“We developed VIDA Select in order to make packet switching affordable to even the smallest public safety entities,” Moore said. “It’s our interoperability solution scaled down to enable it to fit within the grant funding guidelines. In fact, in many cases it’s affordable even without federal funding.”

No longer priced out of the IP market

VIDA Select is an entry-level interoperability solution that makes the switch and associated equipment accessible even to cash-strapped agencies. The result is that now, for little more than the cost of a dead-end, limited interoperability solution, these agencies can gain interoperability while building a solid foundation for the future.

“A small locality with a single-site system will usually end up paying around \$100,000 for an audio-patch interoperability solution that has no ability to prioritize calls, may require the time-consuming dispatch of a specially-equipped vehicle to the scene of the emergency and cannot be configured on the fly,” Moore explained. “It meets the minimum requirement for interoperability, but it does nothing to bridge the gap between older, analog radio systems and digital IP network-based systems. It makes no sense for small entities to have thousands

IT'S ALL ABOUT THE IP SWITCH...

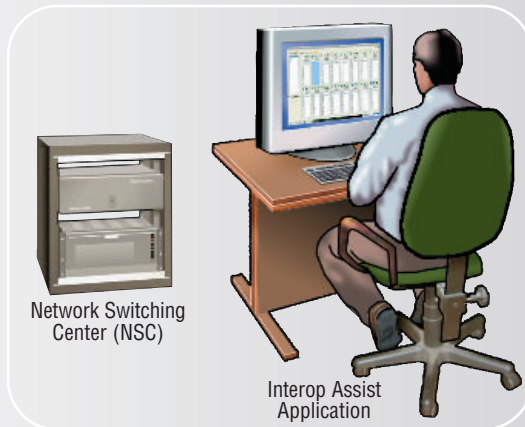
The primary limiting factor for older radio systems, whether trunked or conventional, is circuit-switched technology. VIDA Select removes this barrier by providing an entry-level packet switch that supports future growth. The switch is based on the worldwide IP suite of standards, assuring compatibility with multiple technologies and sources.

VIDA Select (entry level packet-switched technology)

- For single agency/region
- 1 gateway and 2-interoperability talk-paths (expandable to 24 talk-paths)
- 1 Network Switch
- Interop Assist Application
- Ability to integrate an OpenSky or P25^{IP} system
- 6 talk-group IDs

Options:

VIP consoles, P25^{IP} or OpenSky site license, data license.



Future Expansions:

- Multiple Sites
- Multiple Air Interfaces
- Multiple NSCs (non-HA)
- Full Network Management
- Logging recorders
- Maestro Consoles
- High-availability NSC
- Split NSC Configuration
- Increased capacity (groups, units, sites, talk-paths, consoles, etc.)

Options:

Up to 300 VIP/Maestro Consoles, unlimited logging recorders, data license, P25^{IP} and/or OpenSky site licenses.

of dollars tied up in equipment that is just sitting around waiting to be used.”

Now, for very little more than a patch-based interoperability-only solution, smaller agencies and regions can go to one of M/A-COM's Network Solution Providers and get a basic configuration of VIDA Select.

“The basic configuration is practically a shrink-wrapped solution,” Moore said. The M/A-COM NSP will install, configure and train personnel in its operation. “You get packet-switched interoperability, a single network switch, control equipment and an easy to use, Windows-based graphical user interface. You can add to everything from there, at whatever pace suits your requirements.”

Seamless integration with VIDA Network

Because all of the components in VIDA Select are based on open architecture and end-to-end IP, integration with a VIDA Network and other standards-based network applications is seamless, and choices abound.

“Basically, you can hang just about anything off of a VIDA Network,” said Communications Associate's Mike Salmon. “Most of the other so-called IP-based systems are proprietary. They are not truly end-to-end and you can only buy from a single manu-

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facturer. Customers essentially have little or no freedom of choice in applications and third-party peripherals. That's not true with M/A-COM's solutions. You have real choices.”

In addition, buying from M/A-COM's nationwide network of partners allows small agencies to work directly with the suppliers they know and who know their specific requirements. Mike Wolf of Eastern Communications, a long standing NSP based in Long Island, NY, is particularly pleased to have an affordable solution for his customers.

“There are a lot of small agencies who are becoming aware of just how important high-level interoperability and access to future technology is. I've had many customers express their concern about being able to keep up with the growing demands placed on their communications systems. With the introduction of VIDA Select, these customers now have an affordable path that will allow them to meet those demands and continue to provide the high level of emergency services and law enforcement that their constituents deserve.” ■

For more information about VIDA Select, please contact Bob Sitterley at sitterlro@tycoelectronics.com.