St. Francois County answers the call for next-generation 9-1-1

Missouri counties modernized their emergency services technology to support mobile devices and future applications

At a glance

Multiple counties in Missouri replaced an outdated analog 9-1-1 system with NG9-1-1 from Atos.

Outcomes

- Enabled mobile location, text and other inputs to call system
- Lowered costs through updated managed network
- Streamlined call management and dispatch processes

About St. Francois County Joint Communications

St. Francois County Joint Communications serves about 85,000 people in St. Francois and Ste. Genevieve Counties in southeast Missouri. They provide hosted 9-1-1 services to additional area PSAPs through a connected secure network.

A state of emergency

The nation's emergency call system is facing a crisis of its own – aging, obsolete infrastructures that weren't designed to accommodate today's wireless mobile society. Next-generation 9-1-1 (NG9-1-1) has emerged to adapt emergency communication services to the needs of a technology-dependent populace, providing the ability to transmit text, images, video and data to 9-1-1 public safety answering points (PSAPs).

St. Francois County Joint Communications, a consolidated dispatch center in rural southeast Missouri, saw NG9-1-1 as the path to the future when it needed to replace an out-of-date analog system. The center needed a solution that could meet current standards for call delivery, including better support for wireless callers, and quickly adapt to evolving requirements.

"People are more mobile and connected now, even in the most rural areas of the county," said St. Francois County 9-1-1 Director Alan Wells. "Citizens should be able to contact 9-1-1 in the fastest, most convenient way possible."

Looking to the future of 9-1-1

In the spring of 2017, Wells and team began the search for a system that would support NG9-1-1 as well as reducing network costs and improving processes for call-handling and dispatch.

Wells recalled, "When St. Francois County was exploring NG9-1-1, I called Atos' Phil Rotheram for advice because he's been working with public safety technology for more than 20 years and I trust his industry expertise. After many discussions, presentations and competitive comparisons we had almost made our decision. Then Phil took me to a facility in Madrid to see the systems in action, and I was blown away."

"St. Francois County is truly planning for the future with this initiative," said Rotheram, Global Head of Product Strategy for Public Safety at Atos. "There wasn't an example to follow in the U.S., but Atos' next-generation systems have been used extensively in Spain and a number of other European countries for public safety incident management and dispatching."
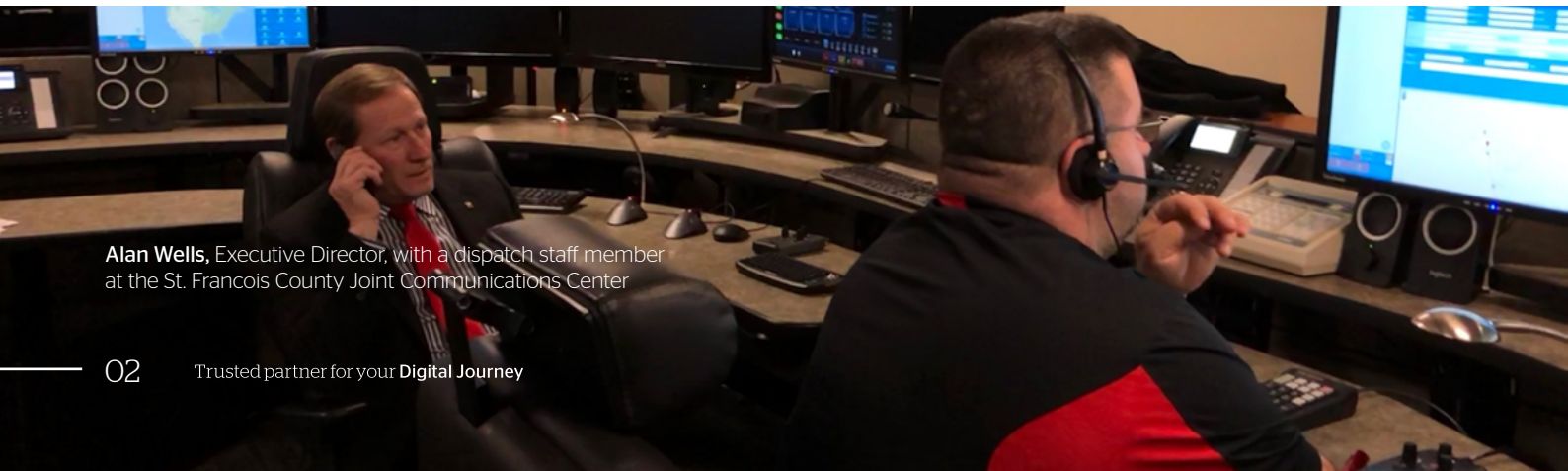
First in U.S. with OpenScape First Response v2.0

St. Francois County became the first agency in the U.S. to implement Atos' OpenScape First Response system and network services, including:

- OpenScape Voice unified communications that allow 9-1-1 centers to receive and accept calls from different sources (voice, video, SMS, social networks, apps and instant messaging)
- GEMMA (Global Emergency Management), Atos' end-to-end emergency management solution
- Managed network services connecting five PSAP locations across the St. Francois County 9-1-1 service area
- Migration to a new facility
- Up-to-date, ruggedized tablets and laptops for the field

Atos signed the initial contract with St. Francois County in June 2017 and went live with the system in March 2018. Being the first implementation in a new country comes with its own set of challenges. But Atos and St. Francois collaborated to adapt the technology to the counties' needs, finalizing the modifications in April 2019.

"In my business, seconds mean life or death," said Wells. "Atos' team understands this; they anticipate what we need and customize solutions to fit our operations."

Alan Wells, Executive Director, with a dispatch staff member at the St. Francois County Joint Communications Center

Dispatchers go mobile, too

For the first phase of the project, Atos implemented a geographically separated, redundant OpenScape Voice and GEMMA solution to provide comprehensive functionality to five 9-1-1 dispatch centers.

"Regardless of which PSAP facility they're in, operators can answer calls as if they were in their home PSAP," said Rotheram. This location-independence is invaluable in cases such as natural disasters, where the connection into one facility might be lost and calls need to be routed to another facility.

More flexible call handling

The GEMMA emergency call-taking and dispatching center software uses real-time geographic data combined with secure mobile technology.

The GEMMA user interface was adapted to let operators transfer calls to other agencies and add in resources to assist in the response. Atos also configured the system to handle different call types, including non-emergency and administrative calls, through a single user interface.

Wireless location support

With OpenScape First Response, operators can view a variety of location information on wireless callers depending on the data available from the wireless carrier. A map built into the user interface plots where the call is coming from. When the carrier provides Wireless Phase 1 information, the PSAP receives the caller's phone number and the location of the cell tower and sector. If the carrier provides Wireless Phase 2, the operator also receives additional location information such as latitude and longitude of the caller with a high degree of accuracy.

Benefits

OpenScape First Response accommodates changes in communications technologies to optimize resources, reduce response times and improve reliability. For St. Francois County, new capabilities include:

- Support for current and future call-delivery standards
- Ability for any dispatcher to log in and answer calls from any PSAP
- Detailed location information on wireless callers
- Single, integrated platform for NG9-1-1 workflow management
- Turnkey network management yielding 50 percent savings over the legacy vendor

The NEXT next-generation 9-1-1

For the second phase, St. Francois County agreed to be Atos' U.S. pilot case in Missouri for Emergency Services IP Network (ESInet) and Next-Generation Core Services (NGCS), the technology required to deliver voice, video, text and data calls to the PSAP. Atos will replace all the network connections coming into the 9-1-1 centers, moving from analog trunks to a full ESInet.

The Joint Communications Agency plans to expand beyond its current footprint to bring in other neighboring cities and counties. The long-term goal is to make NG9-1-1 technology available to agencies across Missouri, creating an interconnected statewide solution.

Why Atos for public safety

Atos' mission is to serve the nation's first responder community as its NG9-1-1 transformation partner. We design custom-fit communication ecosystems leveraging existing investments and assets using proven IT modernization methodologies.

Learn more about NG9-1-1 at atos.net/en-na/ng-9-1-1 or email info.na@atos.net.

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June 2017	March 2018	April 2019	Fall 2019	January 2020
St. Francois County signs contract with Atos for OpenScape First Response	Phase 1 system goes live	Modifications completed for final customer acceptance of Phase 1 system	St. Francois County finalization and deployment for Phase 2	Full managed network with support for text and multimedia 9-1-1 calls

About Atos

Atos is a global leader in digital transformation with 110,000 employees in 73 countries and annual revenue of € 11 billion.

European number one in Cloud, Cybersecurity and High-Performance Computing, the Group provides end-to-end Orchestrated Hybrid Cloud, Big Data, Business Applications and Digital Workplace solutions. The group is the Worldwide Information Technology Partner for the Olympic & Paralympic Games and operates under the brands Atos, Atos Syntel, and Unify. Atos is a SE (Societas Europaea), listed on the CAC40 Paris stock index.

The purpose of Atos is to help design the future of the information technology space. Its expertise and services support the development of knowledge, education as well as multicultural and pluralistic approaches to research that contribute to scientific and technological excellence. Across the world, the group enables its customers, employees and collaborators, and members of societies at large to live, work and develop sustainably and confidently in the information technology space.

Find out more about us
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Let's start a discussion together

About Atos in Public Safety

Next-generation 9-1-1 (NG9-1-1) systems are highly specific to the specialized needs of emergency services agencies today and in the future. Atos Public Safety provides these agencies the most scalable NG Core Services (NGCS) carrier-grade routing solutions and Emergency Services IP Network (ESInet) managed service ecosystem available in the industry. Led by a veritable Who's Who of seasoned public safety professionals, Atos Public Safety's mission is to serve the nation's first responder community as its NG9-1-1 transformation partner. We design custom-fit communication ecosystems leveraging existing investments and assets using proven IT modernization methodologies. The names you know and trust, the company known and trusted worldwide for complex IT management, bringing the public safety industry an end-to-end NG9-1-1 managed network delivery system.

For more information: info.na@atos.net