Leveraging Hexagon Solutions to Unify Dispatch & Response Across Bavaria

Bavarian State Police
Bavaria, Germany

The Free State of Bavaria is Germany's second largest state, yet boasts the country's lowest crime rates. The agency responsible for that achievement is Bavarian State Police.

With 40,000 employees, Bavarian State Police ensures the safety and security of more than 12.5 million people. And while the agency makes it look easy, maintaining low crime rates hasn't been without its challenges.

In addition to a large area and population, Bavaria also features diverse policing scenarios. Bavarian State Police must support law enforcement efforts in a major city, mountain regions, rural villages, and everywhere in between.

To better serve its communities, Bavarian State Police experienced a complete operational reorganization from 2005 to 2008. This included merging 29 disparate command and control centers into 10, creating a different scale of operation and new challenges for supporting IT requirements.

"Given the fact that the security situation, including the types of crimes, constantly changes, our security forces and, in particular, our state police need to react accordingly," said Bavarian State Minister of the Interior, Building, and Transport Joachim Herrmann. "For that reason, we also need modern, flexible information

systems ensuring that police forces are always up to date and have access to the latest information."

As a result, the police agency needed a new dispatch and incident management solution that would unify its command center operations statewide. The solution also needed to connect local police stations with the command centers and support officers in the field with incident information.

Unifying Dispatch & Response Statewide

In an average year, the Bavarian State Police processes 1.3 million incidents. To keep up with incident volume while unifying its statewide operations, Bavarian State Police required a singular dispatch and incident management solution. While that solution needed to support and unify its command centers, it also had to provide a modern and consistent system architecture for the entire police organization, from the emergency operation center of the Bavarian State Ministry of the Interior to local police stations.

Bavarian State Police selected Hexagon's Safety & Infrastructure division to help it achieve more efficient and effective policing through an integrated solution – one that enabled greater flexibility and resilience through a single, virtual system deployed across many sites.

Powered by Hexagon's industry-leading computer-aided dispatch (CAD) system, 9 of 10 Bavarian State Police command centers are in sync with each other – and with the German Federal Police and Bavarian fire departments and emergency services. Plans to implement CAD at the 10th center has begun. Through interfaces to other systems, all of the agency's command centers manage emergency calls, alarm notifications, digital radio communication, criminal records searches, and more.

"The command and control system is our central platform with all other communication techniques being associated with it," said Anton Beierweck, IT manager of the statewide command and control solutions for Bavarian State Police.

Bavarian State Police is also leveraging Hexagon's key application for accessing real-time incident information via the web. It allows the agency and local police station to dispatch, manage, and update various incident types from a web-based interface. Currently, the Bavarian State Police has 280 local police stations with up to 3,000 concurrent users statewide, and potentially more than 30,000 users are authorized for access.

Supporting First Responders with Spatial Information

With the rapid adoption of consumer mobile technologies, more people are making emergency calls from their personal devices. The need to accurately pinpoint an emergency caller's geographic location has never been more important for police.

"A very important aspect for us is a powerful spatial data platform that is integrated into the command and control system from Hexagon – to use our forces optimally and to help the people who are making emergency calls so we can locate them quickly," said Beierweck.

This includes the interfacing of digital radio systems and their emergency command call features into the command system, which improves police and public safety. Officers can push a button on their radios, which transmit voice and location data to the command centers, creating an incident in the CAD system automatically.

Geographical information processing at Bavarian State Police has evolved into an important instrument for spatial analysis and decision-making. In addition to the integrated mapping features available in CAD, Bavarian State Police link orthophotos and other external data from geodata servers to the system via Hexagon's map-based, workflow-building toolset.

The agency is also planning to introduce mobile technologies to meet the growing demands of incident and emergency

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management services. Using mobile workstations and smartphones would increase Bavarian State Police's law enforcement flexibility in the field.

Making Data-Driven Decisions for Better Law Enforcement

Collecting, managing, and using big data is a growing trend among police agencies worldwide. Across Europe, Bavarian State Police is at the forefront of leveraging law enforcement data to drive smarter public safety decisions.

With an integrated solution that relies on CAD and other innovations, Bavarian State Police can collect, analyze, and share critical incident and geospatial data. Having one platform removes silos, which gives Bavarian State Police the flexibility and agility to make more informed law enforcement decisions even faster.

"[Hexagon's] solution provides us with facts – with maps, object data, and personal and factual information," said Walter Griesch, head of the command and control center, Middle Franconia, police headquarters Nuremberg. "When we put all that together, we can make decisions that will have a large impact on how we protect the people of Bavaria."

COMMAND & CONTROL OPERATIONS

Responsibilities

- 1.1 million incidents
- 1.3 million emergency calls

Resources

- 40,000 police personnel
- 420 full-time I/CAD users
- 280 police stations using Hexagon's web-based CAD interface
- 3,000 concurrent users