

Ambulance Services

Saving lives in Australia

In Queensland, Australia the ambulance dispatch center knows exactly where the ambulances are located. Alarms are sent directly to the ambulance nearest the emergency giving a shortened response time and a higher life saving ratio as a result. The ambulance staff are enabled to send ECGs and real time patient data to the hospital for decision support and to prepare teh hospital for the arrival, leading to earlier diagnosis and treatment. Many public safety companies have already implemented Mobitex[™] in their business with impressive results.

The Challenge

Responding to some 450,000 calls per year, Queensland Ambulance Service (QAS) knows the value of providing a rapid, efficient, and accurate emergency service. QAS operates a fleet of 950 ambulances, with 240 response locations and 2000 staff - a massive logistical operation that demands the very best support. QAS identified a

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need for a reliable and secure system to locate ambulances closest to emergencies and to be able to send data wirelessly between the vehicle and the hospitals. QAS required a system with high capacity and reliability for it's mission critical operations. They also demanded a private network operating on the 400 MHz frequency band for security



reasons. QAS identified a combined technical and service solution in Mobitex, one of the most successful wireless technologies for dedicated packet data networks.

The Solution

The QAS dispatch center knows where the ambulances are located at all times through GPS (Global Positioning System). Alarms can therefore be transmitted directly to the ambulance nearest to the accident. The ambulance staff send status reports frequently during a response to an alarm. This is now done through pre-defined status codes transmitted wirelessly to the dispatch center. The ambulance staff send real time patient data to the hospital so that the hospital can mobilize necessary expertise and resources, making them available the moment the patient arrives. The staff can also consult with specialists online for decisionmaking support to be able to provide earlier diagnostics and treatment.

The total solution consist of network, installation and maintenance and operation training from Mobitex Technology and application software and gateway solution from Technisyst. The QAS solution is scalable and easy to expand with respect to coverage and capacity. The operational cost is low due to the ease of network operations and maintenance. The communication is based on Internet Protocol (IP), micro links and X25 as well as built-in redundancy functions such as alternative pathway.

The Benefits

Enhanced vehicle dispatch with faster, more accurate and more reliable communication than voice radio.

Improved level of dispatch information providing location information and ability to direct ambulances to the most appropriate hospital.

More effective use of resources as the hospital can mobilize necessary expertise and resources, making them available the moment the patient arrives.

Shorter response time through instant location of ambulance nearest the emergency.

Higher life saving ratio through pre-hospital care providing earlier diagnosis and treatment of patients. **Totally reliable communications** with high relia-

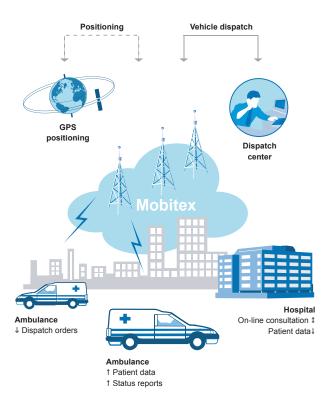
bility and built-in redundancy functions such as alternative pathways.

Scalable solution which is easy to expand with respect to coverage and capacity.

User-friendly system that is easy to use for all ambulance and hospital staff.

Short training time on network operation and network maintenance.

Up and running extremely fast



In Australia, Mobitex Technology has an excellent and long-standing relationship with Technisyst, an integrator that has been recognized as one of Australia's Fast 50 technology companies.

Facts about Mobitex

Mobitex is an advanced wireless data-only network, with very high reliability and security, designed for transmission of short, bursty data. Originally developed by Telia AB and manufactured and sold by Ericsson AB, Mobitex is now controlled by an independent organization, Mobitex Technology AB based in Gothenburg, Sweden. Mobitex Technology develops, sells and supports the technology worldwide.

Mobitex has a number of key advantages. It provides a highly secure environment, fast data delivery, the highest level of reliability, always-on and true push functionality and extensive seamless coverage. Mobitex' scalable nature makes it an excellent choice for both large and small installations meaning that it can be deployed on a national basis or on a local basis to cover e.g. a single manufacturing plant, city or metropolitan area.

Mobitex is today widely deployed delivering industry leading performance in terms of connectivity and cost-efficiency to public safety organizations and other professional users on all continents.

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Why Mobitex

The network in Queensland is an excellent example of how Mobitex can be used for custom applications in a private network. The demand for reliability and security in their service is vital and this is one of the key benefits of Mobitex networks. "We chose the system because it has significant capacity to grow and to meet our needs," says Bill Delaney, Project Manager, QAS.