

DELIVERING A RAPID RESPONSE THROUGHOUT THE REPUBLIC OF IRELAND



“Excelerate had the expertise and operational experience to understand what we were trying to achieve throughout this important project. The new mobile command and control vehicles will enable us to deliver a rapid response to incidents wherever they may occur and deliver an enhanced level of service.”

Derek Gallagher, Sergeant-in-Charge, Technical Support Unit, An Garda Síochána

Formed in 1922, An Garda Síochána is responsible for the maintenance of law and order throughout the Republic of Ireland with a mission to achieve the highest level of personal protection, community commitment and State security. The role of An Garda Síochána, commonly known as the Garda, is to prevent and detect crime whilst protecting life and property quality while maintaining the highest standards of integrity, professionalism and efficiency. With over 14,000 members, it is also responsible for safeguarding the liberties of the individual citizen, preserving public peace and providing guidance for young people as they seek to become caring, law-abiding citizens.

The Challenge

The Garda was well apprised of the operational benefits that could be derived from using mobile command and control vehicles and for several years had been successfully using a vehicle equipped with CCTV, radio and GSM communications. This vehicle was being used to attend critical incidents and traffic accidents as well as concerts, horse race meetings and other sporting events in areas where there were no existing Garda facilities.

However, with just a single vehicle based at the Garda's Phoenix Park headquarters in Dublin, the organisation had only a limited ability to rapidly deploy command and control facilities throughout the whole of the Irish Republic. The Garda also wanted to ensure that the mobile command and control facilities could be quickly and easily deployed at the scene of an incident without having to send out additional specialist technical staff every time the vehicles were used. It was as a result of a particular siege incident during 2006 that the decision was taken to upgrade the Garda's command and control capabilities to provide improved geographical coverage.

The Solution

The concept development phase of the project took two years and in March 2008, an order for four vehicles was placed with Wilker Conversions, a specialist coachbuilder. The award-winning Mercedes Sprinter was chosen as the most appropriate vehicle to meet the Garda's specific requirements.



To provide and install the required level of technology, the Garda needed to identify an organisation with high levels of technical expertise and could demonstrate a track record of successful implementations for the emergency services. After seeing the work Excelerate Technology had completed for organisations such as Royal Berkshire Fire and Rescue Service, Thames Valley Police and the Metropolitan Police, the Garda asked the company to put forward a detailed proposal for the supply and installation of a complete voice, data and video solution.

Although the Garda already had a good idea of the technology that was required, Excelerate Technology worked closely in partnership with the project team making key recommendations throughout the design stage to provide a comprehensive suite of cutting edge technologies with the scalability and future proofing to deliver a long operational life.

Each of the mobile command and control vehicles were fitted with a roof mounted 95cm satellite dish to provide a resilient stand-alone broadband connection for high-speed data, voice and video communications. It can be rapidly deployed within four minutes of arriving at serious incidents regardless of location. The satellite network is operated and managed by Excelerate Technology ensuring the delivery of high quality bandwidth, which can be tailored in real time to suit specific operational needs, budgets and service level requirements.

To complement the VHF and UHF radio communications equipment, Excelerate technology installed a VoIP handset on each vehicle that can be used to make and receive calls that are seamlessly routed through the Garda's telephone network based at Phoenix Park. To provide additional resilience, these handsets can also use GSM networks to make VoIP calls.

Four ruggedised PC terminals were installed in each vehicle to enable strategic emergency planning software, GIS, email, instant messaging and other specialised applications to be run. Using a VPN, they give personnel access to the same critical incident information as if sitting at a workstation at HQ. All such applications will be current in real-time using the satellite links to ensure that vital operational decisions can be made using the latest, up to date information. The Garda is also planning to install Excelerate's VPN solution in other vehicles over the coming months.

Excelerate Technology also equipped each mobile command and control vehicle with a day/night CCTV camera mounted on an extendable, hydropneumatic 5 metre mast that transmits live video into the mobile command and control unit for viewing on any of the PC terminals by silver command staff operating at the scene of an incident. Images are stored on a video server and securely via satellite links to a video server for online access in real-time by authorised personnel including Gold Command at HQ. Additional technologies installed by Excelerate include skydomes that give operational personnel access to satellite-based TV news channels on the move or from any static location, external lighting and a reliable power generator.

The vehicles were completed and delivered in September 2008. More than forty members of the Garda were trained to drive and operate the new mobile command and control units before they came into operational service at the beginning of 2009. One vehicle is now based at Garda HQ and the others are based at three regional locations – Cork, Sligo and Mullingar.