![telent - talent with technology]

Telent surpasses a decade of critical comms support for all fire services across Ireland

The Republic of Ireland's fire services are responsible for ensuring the safety of more than five million people. Ireland's fire brigades are operated by 27 fire authorities, made up of 218 fire stations that deploy more than 3,200 serving fire personnel to attend tens of thousands of emergencies every year.

The emergency call taking, incident dispatch and mobilisation of the first response crews and fire appliances is managed and operated by three Regional Control Centres (RCC). The RCCs are based in Dublin (Eastern Region), Limerick (Munster Region) and Castlebar (Western Region).

From the second a 999/112 call is made to a Fire and Rescue Service, the technology infrastructure in place becomes critical in alerting crews and enabling an effective response. To ensure Ireland's fire services can continue to undertake their life-saving activities, and to optimise response times, it is vital that the technology in the fire station that mobilises crews is constantly upgraded and managed.

Upgrading legacy technology

These Fire Services Communications Centres provide vital 24/7/365 call answering services for the public to contact fire services when they have an emergency. The control room operator will then send the appropriate fire service resources and crews to the incident.

Since 1992, each region and control centre have operated independently with individual incident management, analogue radio, mobilisation and alerting systems. For operational, technical and practical reasons, in 2015 the fire services in Ireland opted to move to a new national model. With a centralised approach, greater visibility and tracking of resources and emergencies were enabled to those in the control rooms. In turn, crews could be mobilised more efficiently and effectively.

"We are delighted to continue our collaboration with Telent, with its knowledge and expertise ensuring that our staff are provided with the latest and innovative technologies to effectively undertake their daily duties. Advanced technology plays a unifying and crucial role in connecting our fire services and resources, allowing for the essential fast response times to save lives and keep our communities safe."

– Fergal Stack at Irish Fire Services

To enable this unified fire station collaboration and the sharing of vital data between station end mobilisation systems across 218 fire stations, interoperability needed to be assured. This would be achieved with upgrades to existing legacy technology in line with common technical standards.

The Irish Fire Service adopted the specification for emergency communications called GD92 and MG4 to ensure that station-based equipment from multiple vendors could work together. MG4 is the standardised protocol used for alerting equipment, including paging transmitters, to mobilise firefighters. GD92 is commonly used to deliver these MG4 messages over a wide area network and helps alert urban and remote fire station equipment. These protocols ensure that alerts and vital information can be transferred over the communications network and reach its intended destination instantly.

Selecting the right partner

With a proven track record for installing, upgrading and supporting 'best-of-breed' station end solutions for over 47 (27 in Ireland) fire and rescue services across the Ireland and UK, Telent was selected as a support partner in 2016. Telent provided a National Fire Alerting and Communication System for the Irish fire services.

As part of the collaboration, Telent replaced three legacy GD92 systems and 27 MG4 alerting systems that were used across the fire stations with a new national station end solution in partnership with equipment manufacturer Multione. Telent's support also involved the installation and integration of new Central Communication Processors (CCPs) for each of the Computer-Aided Dispatch (CAD) systems in the services data centres. This ensured seamless and efficient communications were established across all control centres and fire stations. The CAD systems record all data related to 999/112 and urgent requests for the fire services assistance. It is used by teams in the control rooms to assess, prioritise and dispatch fire crews to locations where an emergency may be unfolding. Telent also supplied and installed new station end mobilisation systems in 218 fire stations.

The role of station end systems is critical for the mobilisation of resources, providing the vital link from control room to firefighters and appliances. As part of its offering and with the importance of these systems in mind, Telent provides 24/7/365 operational centres to mirror the around the clock requirements of the fire service. This includes a range of different support options from its Service Desk to handle calls from its emergency services customers and dispatch the necessary teams and engineers to attend and provide technical support. With strategically placed offices in Dublin and Belfast, Telent can respond to the needs of the Irish fire services quickly and efficiently.

Continuing the partnership

The National Mobilisation and Communications System, (NMACS) have been tasked with the responsibility of migrating the three regional communications centres and the 27 Fire Authorities to central national platforms for the receipt and despatch of Fire Service 999/112 calls. In tandem with this NMACS manage the centralised architecture for the provision of centralised mobilisation platforms and communications systems for Fire Authorities nationally.

Telent will continue to support Ireland's fire services for the next five years. A contract has been signed to support NEC Software Solutions' delivery and roll out of new CAD and integrated communication systems that will further support staff in the three control rooms across Ireland. As part of this new contract, Telent is supporting the delivery of the new national command and control system by supplying and installing the new equipment, all while providing first-line support for the duration of the contract.

"As a long-term support partner for the Irish fire services, we are pleased to continue our partnership into the next five years. We understand the vital role that firefighters and control room staff play, and we recognise the importance of providing them with the most up to date and mission-critical technologies and unfailing communications when responding to emergencies."
- Barry Zielinski, Strategy & Development Director at Telent