



BT provides Ireland with “life critical” service

Challenge

In 2007 the Department of Communications, Energy and Natural Resources carried out a commercial tender process to find a solution provider to build and run the country's Emergency Call Answering Service (ECAS). The ECAS answers calls made in the Republic of Ireland to the pan-European emergency service number, 112, and to the traditional 999 number. The move was driven by new European regulatory requirements and the Irish Government's ambition to provide a world class service to the people of Ireland

Aidan Ryan, Telecommunications Advisor at the Department, put the scale of the programme in context. “It was a massive transformational undertaking on an operational and regulatory level,” he said. “We were going into the unknown because we had no precedent to follow. The service was starting from scratch at a time of immense technological change, with the growth of mobile as well as changes in the emergency services community.”

The new platform would cover all 999 and 112 emergency calls, connecting callers to the appropriate emergency service - fire, garda, ambulance and coastguard - 24 hours a day, seven days a week, 52 weeks of the year. The service operates under legislation contained within the Telecommunications Act and is regulated by the Commission for Communications Regulation (ComReg).

Tony O'Brien, Emergency Call Handling Services Manager at ComReg, recognised that the new service presented major technical and change management challenges. “It was something of a journey into uncharted waters. We knew our starting point and we knew our end goal but joining the origin and destination was always going to be difficult. At the start we didn't envisage the complexity of what we were going to be dealing with.”

In addition to the existing call centre location in Eastpoint new operator centres were built in Navan, Co. Meath, and Ballyshannon, Co. Donegal. Caller Line Identification was to become a key component of the service for the first time, with the location of the caller from

both fixed and mobile phones used to automatically determine the Emergency Services Control Centre to which the call should be forwarded for the first time.

Access to the emergency services was to remain free to citizens and paid for by the authorised operators. EU license obligations ensure every user can be connected to a public safety access point free of charge. The telecommunications network operator pays a call handling fee set by ComReg, the telecom regulator responsible for managing the new funding model.

BT won the five-year contract and rose to the challenge of a massive programme. A world leader in the provision of emergency call answering, it has run a safe and robust service in the UK for 75 years, handling around 80,000 calls a day. BT would draw heavily on this experience for the Irish design, build and roll-out, leveraging and providing world class processes and procedures, management structure and knowledge of the telecommunications industry.

The Department of Communications, ComReg and the emergency services would work in partnership with BT to measure, monitor and improve the effectiveness and efficiency of the end-to-end call handling process, and to foster and promote an environment of positive collaboration across all the stakeholders.

Benefits

ECAS in Ireland was a unique green field programme, a total outsource of a complex “life critical” service that drew on all of BT's know-how, project management and change management skills as well as technological expertise. It also represented the largest change programme for all emergency services on how 112/999 calls are handled, routed and handed over.

BT's commercial approach was to fund the upfront investment and to recover its costs through a small fee for every call. ComReg would manage the governance of the model.

Case Study

Emergency Call Answering Service

Having established the approach, BT built the three operator centres and went through a rigorous recruitment and training programme, creating 100 jobs. Two equipment centres were set up, housing the hardware and the best-of-breed ECAS platform that BT deployed. The network built by BT to enable the ECAS operations is an appropriate mix of robust and reliable technologies, constantly monitored to ensure that the service is always available to the public.

The ECAS is also required to adhere to a number of internationally recognised standards to provide evidence of its approach to quality, information security management and its ability to operate on a continual basis. Accordingly the ECAS has been audited and been certified to the following recognised standards, ISO 9001:2008, ISO27001:2005 and BS25999-2:2007. . This one of the first projects here to achieve these demanding standards, demonstrating BTs commitment to ensuring that Ireland's critical national infrastructure is fully secure for the people who rely upon it.

The technology deployed by BT to provide the platform that underpins the service is tried and tested in other jurisdictions and provides significant advantages. Future-proofed for subsequent improvements, it also removes the complete reliance on the Public Switched Telephone Network (PSTN).

The average call answering time improved from a 1.3 seconds to 0.5 seconds. More non-emergency calls, hoax calls, and erroneous calls are now filtered out at the first point of contact.

"We take and route the calls quickly, accurately and safely, filtering out the majority of false calls with best-in-class procedures," said Alex Manek, ECAS Policy & Performance Manager, BT. "We have carefully trained the operators and worked closely with the emergency services to make the Irish service as efficient as possible."

When an ECAS operator is contacted they "hand off" the call to the requested emergency service as speedily as possible. Refresher training for operators and supervisors takes place every month in the operator centres.

The ECAS experience of BT was invaluable when it came to creating an Irish service. The ability to accurately forecast demand, schedule the right number of operators while always retaining the capability to respond to any type of emergency, are skills that BT has honed through experience.

Core BT strengths ensure that ECAS runs on a highly resilient infrastructure, across both equipment and operator centres. Uptime for the IP network is as close as possible to 100 per cent, and it is flexible enough for operator centre locations to be changed as required.

"The programme has been a unique mix of people, process and technology, and demonstrates BT's broad range of expertise," said Alex Manek. "We developed a solution that incorporates BT's world class processes, a world class operator service and best-in-class technologies."

The terms of the contract make it easy to gauge the success of the programme. "BT has met key metrics so we can quickly measure the quality, the efficiency and the expediency of the service, down to the level of each call at any time of the day. The big test is if it works and it does. It works very well," said ComReg's Tony O'Brien.

The Department of Communications, Energy and Natural Resources is also pleased with the outcome. "The service is live, it's working and there are no problems. It has delivered what it was supposed to," said Aidan Ryan. "Many organisations were involved in the successful delivery of the service. As a big international organisation BT certainly brought attributes to the table."

Offices worldwide

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