Picture credit: Getty

RED ALERT

Javier Colado *explains why as national safety risks rise, public alerting becomes more urgent*

In the corporate sector, organisations take their duty of care to their employees seriously. It is important to them that safety procedures are in place to protect staff, even though duty of care is not an actual legal obligation. What is important is that they guard against the legal, financial and reputational ramifications they face if they are found to be in breach of an acceptable duty of care. At the same time, employees are also expected to act prudently and with care, and this creates a social contract between both employer and employee to ensure safety is a priority.

When emergencies arise in the workplace, the issues of risk and safety are immediately thrown into the spotlight. In the event of a fire, if a building needs to be evacuated or there is a risk of danger from an intruder, it is vital to know which employees or visitors are inside. Those in control need to be able to confirm who has actually left and whether the emergency services should spend critical time and resources searching for survivors. To enable this, organisations are increasingly using technology that allows them to communicate with staff quickly or which controls IT passwords or entry access to buildings.

Of course, privacy is often a concern for employees, and if companies require them to download a communication app so their security teams can send alerts and notifications when there is a crisis, this can lead to resistance from members of staff. These apps typically allow employees to check in with the company if they are working outside the office or allow security to track their location to ensure their safety in an emergency situation, but this level of intrusion is not always welcome.

To combat this, companies must demonstrate that this level of care is for the benefit of their health and welfare.

The public emergency warning system will be used during imminent or developing major emergencies to keep people safe

The fact is that the majority of employees will have a level of concern for their own safety and if they understand the reasons why they need to download an app, they are much more likely to follow security protocols and turn on the device or app designed to protect them.

No one is immune from risk, so if employees are convinced that they could be susceptible to whatever situation the organisation is trying to protect them from, and that the consequences are potentially serious, they are much more likely to adhere to security protocols.

But how does this translate to the general public? Implementing safety procedures and technology support to care for staff in emergency situations – within even large enterprises – is relatively straightforward to manage, even if some employees prove resistant. However, a recent EU Directive, the European Electronic Communications Code (EECC), is set to raise the bar and focus not on the safety of people in individual organisations or institutions, but on an entire country's population.

PUBLIC WARNING SYSTEMS

The Directive concerns public warning systems and covers all the Member States of the EU and the UK, under current legislation. Once the UK exits the EU, the Government has committed to biding by this new EECC regulation. Under Article 110 of the Directive, EU countries that are setting up a public warning system will need to comply with specific rules and have the system in place by June 2022.

The public emergency warning system will be used during imminent or developing major emergencies to keep people safe. The warnings will primarily be distributed by mobile network providers and the Directive is due to become law in December 2020, just over a year away, with the deadline for implementation falling two years later in June 2022.

In the UK, we don't have a public alerting system and rely largely on a combination of different emergency services agencies, the broadcast media and social messaging to garner vital information. This can lead to confusion and potential danger if the information is wrong or outdated. The duty of care that these agencies have is sometimes brought into question, such as at the recent inquest into the London Bridge terrorist attack. It was revealed that vital medical assistance was delayed at the scene because senior decision makers had so much information it hindered their ability to build accurate situational awareness. What was clearly called for in this particular scenario was consistent, rapid and accurate cross-agency information, and this is part of what the EECC Directive is aiming to achieve.

Threats to the public from terrorist acts remain high. Last year, the town of Salisbury hit the headlines when, what had appeared to be a medical incident involving a middle-aged man and a younger woman, became an emergency when it emerged that they had been poisoned with the nerve agent Novichok. This was a multi-layered, multi-disciplinary event that required the involvement of the police running a criminal investigation at the same time as Public Health England investigating a major threat to the people of Salisbury. To confuse matters, the general public were being told that this was a low-risk incident while service personnel in hazmat suits were carrying out their work in the town centre. This is a good example of how a location-based public alerting solution could be used to enable an emergency to be contained in a specific area, helping to avoid unnecessary disruption or panic in other areas that are unaffected.

In March of this year, there was a controlled explosion of a suspect package on the Glasgow University campus and similar suspicious discoveries near Heathrow Airport, London City Airport and at Waterloo Station. These incidents led to evacuations and cordons being erected around sites to ensure safety and thankfully nobody was injured. However, these are not rare occurrences, and they highlight serious limitations in the UK when it comes to quickly and efficiently alerting the public, whether it's passengers, students, employees, staff or passers-by, in the event of an emergency.

More recently, 1,500 people in Whaley Bridge, Derbyshire were evacuated when the reservoir dam above the village looked in danger of collapsing, threatening homes and businesses. The evacuation on this occasion was managed by the emergency services and an SOS message rung out on the church bells in the village by the local vicar.

THE PUBLIC EMERGENCY WARNING SYSTEM WILL BE USED DURING IMMINENT MAJOR EMERGENCIES

Regardless of the nature of the event, its cause, or scale, communities including homes, businesses, educational campuses, public service agencies and local authorities must be equipped to rapidly respond to an emergency that threatens the general public. They should be able to identify those at risk and communicate with them in their own language through each stage of an emergency.

Prior to the EECC Directive coming into force, a project launched by the Cabinet Office to trial alerts to mobile devices has found that responders, for whom duty of care is an essential part of their daily work, wanted to see the implementation of a national alert system and a majority of citizens involved in the trial agreed.

Public alerting is a topic that has concerned not just the UK, but national governments and emergency response authorities around the world. The major common challenges are ensuring that the public alerting system can: disseminate messages quickly to everyone at risk, ideally within minutes of an emergency; contact people 'on the go', including visitors and those unfamiliar with local alert systems in place; and maximise communication reach, relevance and bi-directional response with people at a specific location.

Work needs to be done now to align emergency services with mobile telecoms operators, including implementing an alerting system to provide a multi-modal approach featuring Location-Based SMS, as an optimal solution. Leveraging the telco infrastructure, messages can be sent anonymously to everyone in an area connected to a mobile-phone tower without predefined databases of mobile phone numbers.

By automatically detecting the nationality of a person's SIM card, messages are sent in the appropriate language to improve the effectiveness of communication to visitors and international travellers. Meanwhile,

two-way communications enable checks on people to see that they are safe or have requests for assistance, and allows them to respond to messages or polls. The simple, unobtrusive and familiar nature of SMS technology helps to avoid panic during evacuations or similar situations.

The total number of SIM cards, and people, in an area can be seen if they are connected. This information is available in the system before sending an alert. Estimates can be made of crowd sizes for planning purposes and deployment of emergency personnel.

IF A BUILDING NEEDS TO BE EVACUATED IT IS VITAL TO KNOW WHICH EMPLOYEES ARE INSIDE

This feature also enables emergency services to confirm if an area has been successfully evacuated and to monitor the movement flow of people to plan resources along different routes as an event unfolds.

Address-based and directory-based alerting are available to distribute messages using geo-coded national address registers or address registers of companies, as well as for emergency services and other agencies. For national-scale alerting, multiple stakeholders can use the same solution, tailored for their jurisdictions. The solution can be scaled from national to regional to local areas, with each agency having their own defined set of templates, roles, hierarchies and directories.

Around the world nations are eyeing their own public alerting capabilities. All four mobile operators in Sweden, for example, have implemented the capability to send alerts as part of their SOS Alarm system. This is used in conjunction with sirens, radio and TV broadcast, voice, social media and Common Alerting Protocol alerts to other systems.

Australia is utilising a location-based SMS approach to deploy the next generation of its Emergency Alert Australia system to help protect its over 25-million residents and approximately 9-million annual visitors.

REACHING OUT

The ability to reach people with diverse handset types, and to automatically detect the language of SIM cards is important to country-wide deployments. The situational awareness gained through analytics on the number of people affected in a geo-fenced area enables authorities to better understand the gravity of a situation and better prepare for rescue efforts.

Just like the response from some employees to company security policies, there is likely to be resistance to receiving unrequested public alerts in some quarters. However, like the organisations we referred to earlier, the British Government has a duty of care to British citizens, a moral obligation to overseas visitors and the deployment of a public alerting system in the UK is necessary to meet that requirement and keep people safe. Used in conjunction with a critical communications platform, it will have the power to rapidly inform the right people, in the right place, with the right message and boost the security of the public so they can feel assured in an increasingly uncertain environment ●

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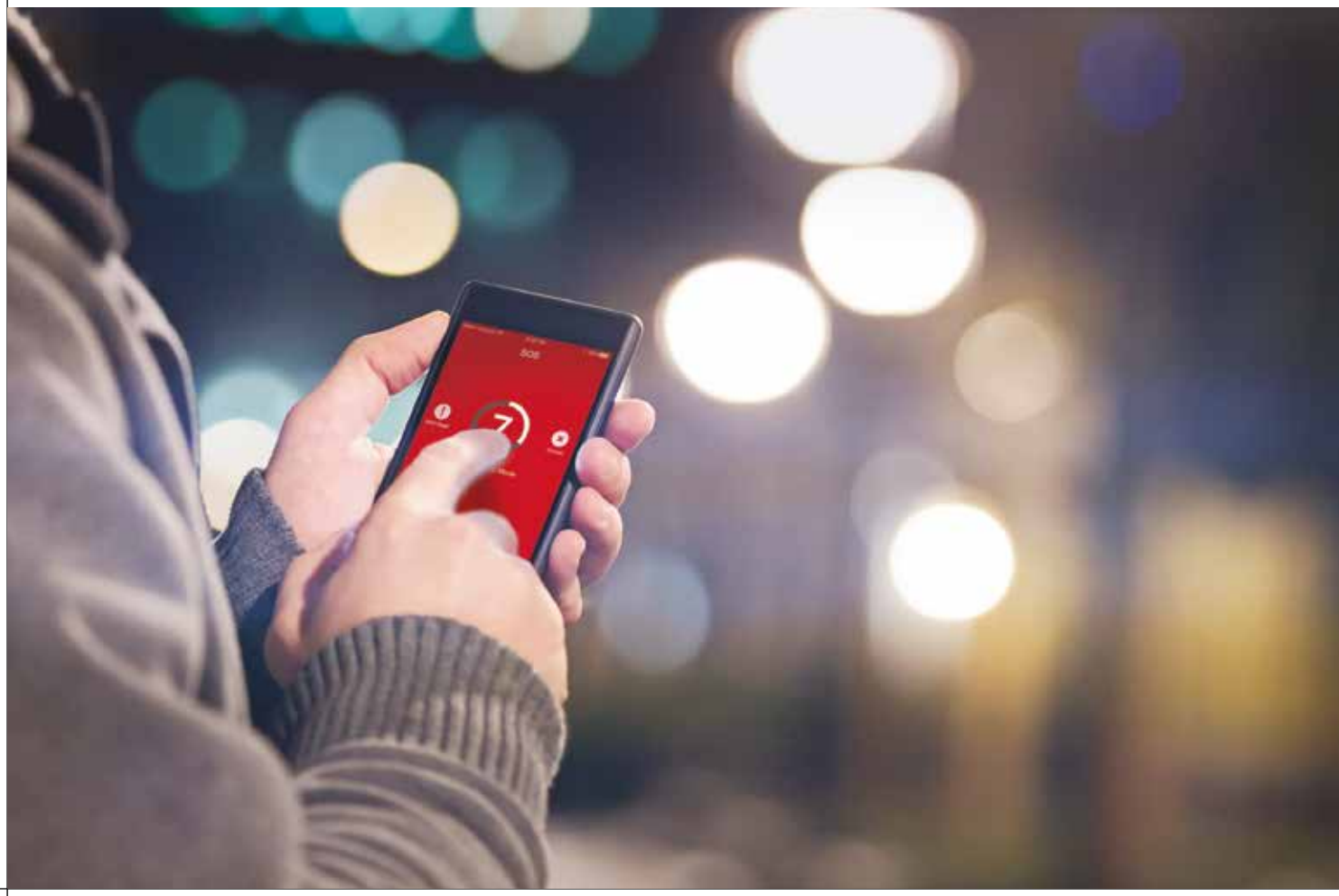
Warnings will primarily be distributed by mobile network providers to the general public's phones



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