Mobile Tornado

Game-changing push-to-talk over cellular technologies will help the global effort to improve worker safety

Every day, 7,500 people die from work-related causes across the world. And one million more fall sick or are injured at work. To prevent these unacceptable losses, the International Labour Organisation has called for stronger occupational safety and health systems. Last year, the UN agency added the category of a safe and healthy working environment to its fundamental principles and rights at work. This means that all 187 member states must respect, realise and promote occupational safety and health, regardless of their level of economic development.

“ We have an essential responsibility to ensure that people go to work and come home alive, uninjured, and healthy, ”

ILO director-general Gilbert F Houngbo
World Day for Safety and Health at Work (April).

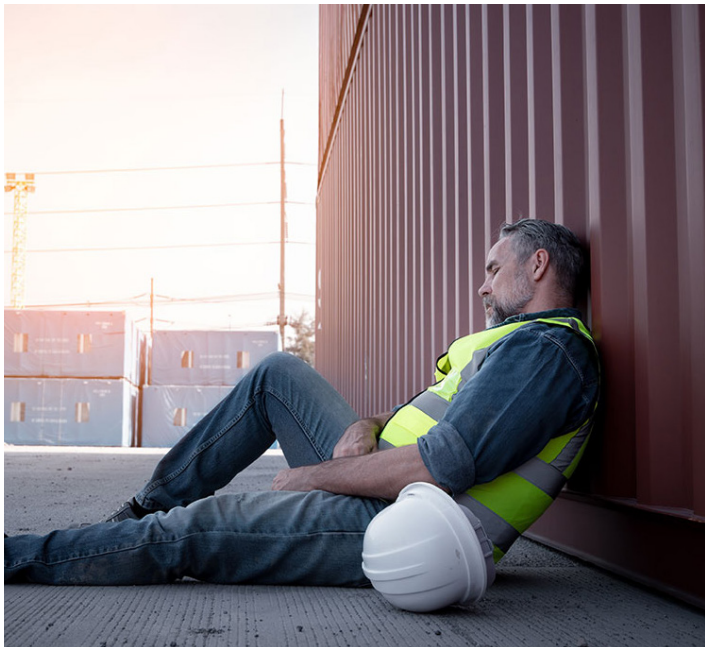
Technology trends are altering the way we work across the world. The proliferation of mobile devices means that mobile workers make up an increasingly large part of the global workforce.

The number of mobile workers hit 1.3 billion in the middle of the last decade, more than a third of the total, according to the International Data Corporation. The market intelligence group has estimated that up to 60 per cent of the US workforce could be mobile workers by the end of 2024.

It defines them as workers enabled with mobile devices to perform tasks and workflows. They fall into two categories: knowledge workers who work from a single location or frontline workers who operate in the field. Clearly, it is the latter who face the biggest safety risks, particularly when they are working in challenging or dangerous environments.

The UK has more than five million employees who work alone for at least part of the day, according to accountancy firm Grant Thornton. It found that stronger enforcement of legislation had led to increased employer focus on the safety of lone workers.

A sharp rise in corporate manslaughter prosecutions and more stringent penalties has also concentrated minds. Lone workers can face many dangers: the Health and Safety Executive lists violence in the workplace, mental health, medical suitability and isolated or rural workplaces, as particular risks for those working alone. There is also the danger of literally falling asleep on the job.



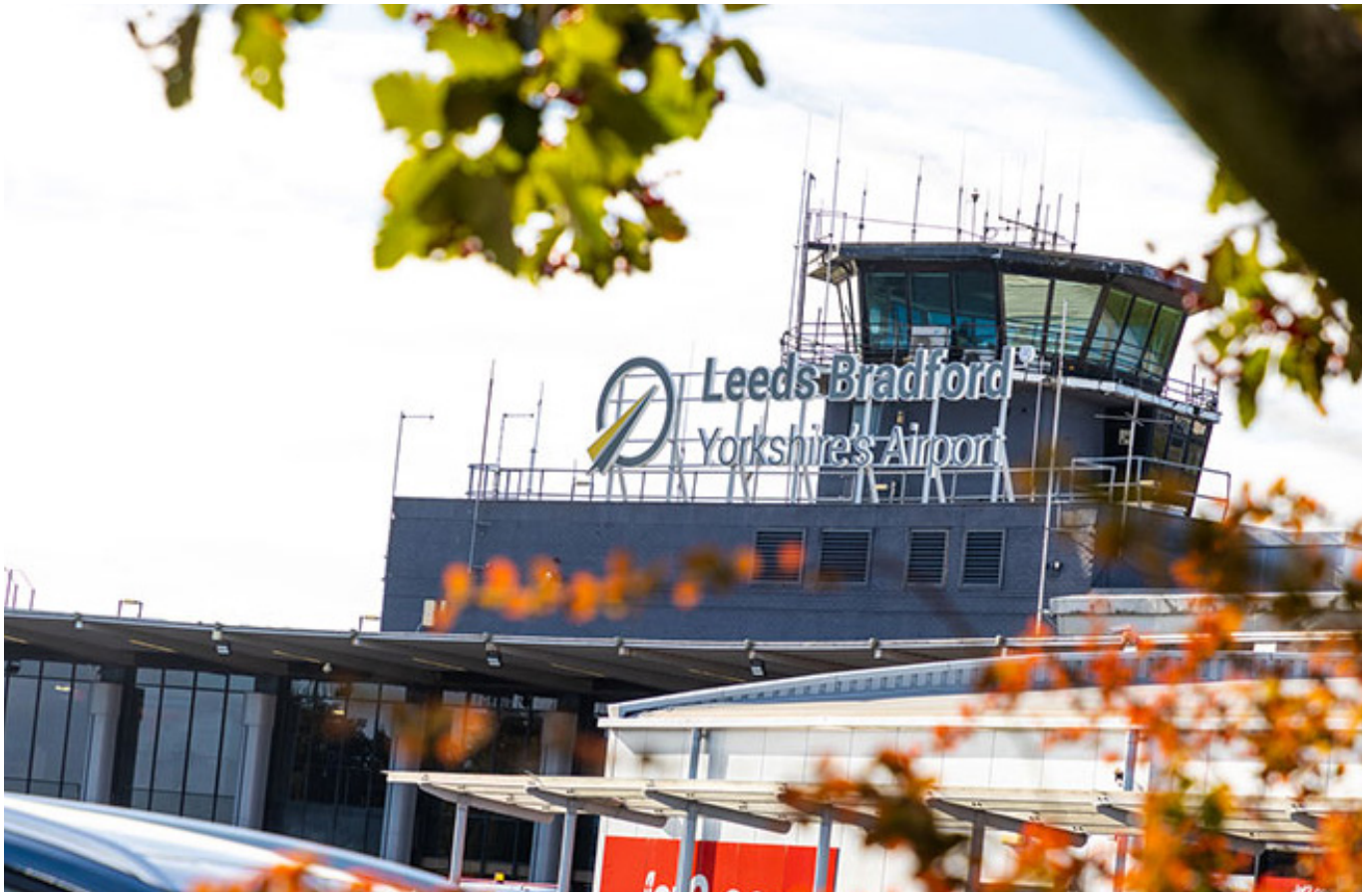
With occupational safety and health now a fundamental principle and right for workers around the world and progress being made in low and middle-income countries, what can employers do to safeguard the wellbeing of their people and stay compliant with new policies and programmes being implemented?

Advances in critical communications that take advantage of global growth in mobile networks can provide an answer, especially for lone workers.

To illustrate the point, investment in mobile network infrastructure has shrunk the coverage gap from a third of the global population to just six per cent over the last decade, according to the GSM Association. The industry group predicts that 5G networks are likely to cover a third of the world's population by 2025. In many countries, older generation networks are being switched off but in others, notably low-income regions, 2G and 3G retain a significant presence, according to the International Telecommunication Union, another UN agency.

Most workers can access mobile networks, whether 2G, 3G, 4G or 5G, wherever they are in the world. Employers, whether in the public sector or private sector, can harness the power of new mobile technologies to monitor and manage the safety of their workers in the field. The growth in coverage has exposed the limitations of expensive legacy radio systems for critical communica-tions and created opportunities for push-to-talk over cellular (PTToC) as a robust, reliable and cost-effective alternative with the game-changing benefit of extra safety features for lone workers.

Adoption is accelerating across the world. In the UK, Leeds Bradford Airport recently become one of the first airports in Europe to make the switch from legacy radio system to PTToC for critical communications. Yorkshire's largest airport is using Mobile Tornado technologies for instant communications with individuals and groups of workers to improve safety, efficiency and productivity in complex daily operations.



Airports are just one step away from emergency services with their safety requirements. It is just a matter of time before the first blue light service makes the move. Indeed, trials of Mobile Tornado's technologies under way with police and fire services in two western countries.

In the United States, Mobile Tornado has partnered with Stolz Telecom, a provider of innovative telecommunications services and leading-edge business technology to the public safety and enterprise sectors. Founded by a former FBI agent, Stolz Telecom is based in Oklahoma and Texas and develops mission critical communications solutions for the US public safety community, which relies on mobile frontline workers. Robert Stolz, president of Stolz Telecom and a life member of the FBI Agents Association, said:

> *"Our vision is to create safer, more proactive organisations by redefining the boundaries of critical communications.*
>
> *We are excited to be able to offer Mobile Tornado's world-leading solutions to our customers, the people who keep our communities safe."*

In Latin America, Mobile Tornado has expanded its presence by moving into the new markets of Guatemala and El Salvador. The company already has a strong user base in Colombia and Mexico and is planning to expand further into countries like Costa Rica, Honduras and Nicaragua. Latin America has a large presence of private security organisations, a sector characterised by lone workers.

Mobile Tornado's technologies are deployed in more than 30 countries worldwide with mobile operators, government agencies and private enterprises.

Control rooms use Mobile Tornado's browser based dispatch console to command, control and communicate instantly with lone workers and groups in the field at the push of a button. The console enables live location monitoring, historic location tracking and reporting via an interactive map. Managers can create geo-fences and receive notifications and reports when mobile workers enter or leave an area.

Users can alert other users as well as their controllers at the touch of an SOS button to trigger emergency assistance. Other benefits include time and attendance monitoring, guard patrol and incident reporting.

Knowing where each and every mobile worker is located at any given time can improve safety, response times and decision making. Emergency alerts, activity monitoring and impact detection provide an extra layer of protection for individual operatives. Being able to locate and manage mobile workers and communicate with them instantly can boost efficiency and productivity.

This spring, the company will launch a range of new, improved features aimed at lone workers. The automatic or manual check-in mechanism notifies managers if a lone worker fails to respond at set intervals, meaning the control rooms can quickly identify if someone's safety is in danger.

Push-to-talk over cellular technologies represent the new frontier in critical communications. We believe they can help ensure the newly enshrined fundamental principle and right for occupational safety and health for mobile workers.

*** Luke Wilkinson is global head of sales at Mobile Tornado**