**CASE STUDY** 

## Smart Closure: Preventing Harm to Road Workers

Advances in incursion warning technology are reducing the risk of death or serious injury to road workers. This was the message that came from recent incidents that saw HRS's Intellicone Smart Closure System help to mitigate the consequences of two recent safety incursions on the M4 and M61, which meant serious threat to both road workers and road users' safety was immediately eliminated.

A vehicle driven by a member of public gained access to the Balfour Beatty Vinci (BBV) joint venture project at junction 12, eastbound between 12-1am, by overtaking a works vehicle through the secure airlock. This driver was asked to pull over and wait for assistance but instead carried on towards the works.

A workers Portable Sit Alarm (PSA) was triggered by Colas traffic management staff on the slip road to warn others of the potential dangers onsite. As a result, the errant vehicle was apprehended on-site at the second internal airlock by the traffic management crew who acted instantly on hearing the alarm. The police were called and the driver escorted off site and into Reading Services.

Speaking after the event, Night Supervisor Kevin Rollinson, Colas said: "This incident tonight shows the Smart Closure system works. Everyone on site was instantly aware of the threat and it was dealt with quickly and effectively."

Billy Prescott, Night Traffic Safety Control Officer, Balfour Beatty said: "As soon as the alarms were activated everyone was alerted to the fact there was a safety incident on site, and we could deal with it instantly. The PSAs are very effective, and we use them every night on site. They key thing here is to be planned with our approach to safety."



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## **CASE STUDY SMART CLOSURE**

In another recent incident on the M61 leading to a Chevron managed resurfacing project on the M60, after initially stopping, a vehicle drove through the road closure at speed, again putting road workers at risk. Will Rowe, Traffic Safety Control Officer, Chevron said: "This incident was a very close call because of the speed the vehicle was going through the closure and a number of the team could have been seriously hurt but because the PSA was immediately activated, everyone was instantly aware of what was going on. I'm a great believer of having PSA's on all sites."

## **Portal Site Alarms (PSA's)**

PSA's are audio-visual portable alarms that can be used to warn the workforce of an incursion on site or access by authorised non-works vehicles. The PSA connects to the HRS device management platform via a private access point name (APN) and multi-network SIM card. This means that we can provide unlimited range and communication between any number of PSAs.

All PSAs have two warning modes; alarm mode which is used for errant vehicle incursions and is signified by a three-tone siren and red flashing LEDs, and alert mode which is used for authorised non-works vehicles (emergency or escorted vehicles and gritters) and is signified by a one-tone siren and blue flashing LEDs.

PSAs have internal batteries that last 40 hours. A back-up battery box can be used to extend this to approximately 500 hours. This is useful for weekend closures or instances where equipment is required to be on site for extended periods of time.

Incursions remain one of the greatest risks to the safety of the workforce. Using a simple but effective long-range warning system is more effective than using mobile phones and gives both traffic management operatives and the workforce the tools to create a safer working environment.

Our Incursion Warning Systems are industry recognised as an important tool to improving site safety. This is documented in the latest Raising the Bar 27 document and videos which are available from the Highways Safety Hub <a href="https://www.highwayssafetyhub.com/raising-the-bar-guidance.html">www.highwayssafetyhub.com/raising-the-bar-guidance.html</a>

HRS has several digital services aimed at keeping road workers and road users safe. These are a combination of physical assets that are deployed on-site alongside digital services that enable the physical assets to work as intended. These are underpinned by the company's proprietary Internet of Things (IoT) platform, which enables the delivery of real-time information from temporary worksites to the right person at the right time.



## **About HRS**

HRS's mission is to provide technology-based safety solutions that will help to significantly reduce injuries and fatalities in temporary work zones, whilst providing the travelling public with accurate real-time information. Our solutions have been proven to safeguard road workers on many occasions whilst also delivering net cost savings in temporary traffic management

For more information visit www.highwayresource.co.uk or call us on +44 (0) 800 206 13 19

