

## READING BOROUGH COUNCIL

Remote Controlled Stop:Go Innovation



### The Challenge:

Traffic management at static sites or emergency/ temporary works has traditionally relied on operatives manually holding and rotating Stop:Go boards. This method exposes workers to live traffic, creating high-risk situations and numerous near-misses. Moreover, operatives often face aggressive behaviour from the public.

Miscommunication during manual operation can lead to dangerous situations, such as a double Go signal, with potential to cause head-on collisions.

Recognising these risks, Chapter 8 of the Traffic Signs Manual states that "Manually rotated 'STOP:GO' signs should only be used if a risk assessment has determined that the use of remotely controlled signs is not appropriate." Similarly, the Safety at Street Works and Road Works Code of Practice recommends using remotely controlled Stop boards wherever possible.



**The Innovation:**

Solar Gates UK have developed **INSTABOOM Go** a lightweight, solar powered, remote controlled Stop:Go solution. This innovative solution addresses the safety concerns associated with traditional methods and is the first of its kind in the UK market. Originally designed for overseas markets, **INSTABOOM Go** offers the following features:

- **SOLAR POWERED** - Operates continuously in direct sunlight and for up to two weeks without sun.
- **REMOTE CONTROL** - Allows up to four signs to be controlled by a single operative from a safe distance, using a robust software system that prevents simultaneous Go signals.
- **QUICK SETUP** - Each unit, weighing just 22kg and the size of a small suitcase, can be set up in under a minute.



- **SAFETY AND EFFICIENCY** - Operatives can control traffic from a secure location, reducing exposure to moving vehicles.



The software, developed by SGUK, allows the signs to be permanently connected by two independent radio channels and prevents the possibility of more than one Go signal.

Using the remote control, the operative can position himself in a safe location away from moving traffic; the only requirement is to maintain line of sight for every board over a 200m set up.

Once paired at a depot, operatives can deploy a full TM set up in minutes and be in control of the traffic.

## The Project Award:

In recognition of its groundbreaking approach to traffic management and roadwork safety, **INSTABOOM Go** won the Traffic Signs and Lines category at the LCRIG 2023 Innovation Festival Awards. This accolade highlights the product's potential to transform industry practices. As part of the award, Solar Gates UK partnered with Reading Borough Council to conduct road trials.

## The Council Partnership

Reading Borough Council embraced the opportunity to pilot **INSTABOOM Go**, showcasing their commitment to innovation. Known for their progressive approach, the borough council manages its own traffic operations within the county and have 15 Highways and Drainage 2-man crews operating from the central highways depot.

Reading Borough Council deployed the new system in February 2024. Initial training was provided to all Highway Operations Crews, and the units have since been used regularly for various tasks, including pothole repairs, emergency works, and RTA assistance with the police.

Highways and Traffic Services Manager, Sam Shean, who headed the innovation trial explains:

*"We have been using the **INSTABOOM Go** for several months now, and the improvement in the safety of our crews has been significant. As a local council, ensuring the safety of our employees and the public while they manage roadworks and other infrastructure projects is a top priority. The **INSTABOOM Go** has proven to be a reliable and efficient solution for our needs.*

*The remote operation feature has been particularly beneficial, allowing our crews to manage traffic control without having to be in close proximity to moving vehicles. This has drastically reduced the risk of accidents and near-misses, providing a safer working environment for everyone involved.*

*Additionally, the ease of deployment and the solar-powered design of the **INSTABOOM Go** means that we can set up and manage our work sites more effectively, with minimal disruption to traffic and no reliance on external power sources. This has not only enhanced safety but also increased the efficiency of our operations by reducing the manpower required to operate the system, reducing the costs of the gang considerably without losing productivity.*

*We continue to support innovation within the industry and are always looking to trial and bring solutions to Reading that we can adopt as 'business as usual', which has been proven with the **INSTABOOM Go** trial. We have now purchased three sets of **INSTABOOM Go's** and we are using them within our day to day highway works operations."*



## Trial and Findings:

Post-training, two man crews quickly integrated the new technology into their daily routines. Initially, teams used two operatives, but as confidence grew, they reduced to one, cutting labour costs. The simple setup process allowed for rapid deployment comparable to traditional methods. Weekly charging at the depot was straightforward. Crews reported that **INSTABOOM Go** was user-friendly and significantly enhanced their safety.

**Luke Caines, Highways and Drainage Supervisor, commented:**

**“Overall, the **INSTABOOM Go** has been an invaluable addition to our equipment, significantly improving the safety and well-being of our crews. We highly recommend it to other councils and organisations looking to enhance their traffic management practices”.**



## Key Facts:

- **Lightweight** - Each unit weighs 22kg, facilitating one-person deployment
- **Solar Powered** - Can function for up to two weeks without sunlight and 24/7 in direct sunlight
- **Single-Operative Use** - Reduces manpower requirements for traffic management deployment
- **Remote Controlled** - Enables traffic control from a safe location
- **Compact** - Allows a complete Stop:Go deployment from an estate car or small van