

MILESTONE INFRASTRUCTURE

Remote Controlled Stop/Go Innovation



The Challenge:

Milestone Infrastructure's traditional Stop/Go traffic management practice involves operatives manually holding and rotating the boards while standing in the proximity of live traffic. This approach has resulted in multiple near-misses, including a High Potential (HiPo) incident where a sign held by an operative was struck by a vehicle, as well as instances of aggressive behaviour from the public toward operatives.

The manual operation also increases the risk of miscommunication, potentially causing a "double Go" situation that could result in a head-on collision.

Chapter 8 of the Traffic Signs Manual advises, **"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"**

and in the Safety at Street Works and Road Works: A Code of Practice it says **"Remotely controlled Stop/Go boards should be used where possible"**.

Key Facts:

- Aligns with Chapter 8 of the Traffic Signs Manual, reducing risks by using remotely controlled Stop/Go signs.
- Removes operatives from close proximity to live traffic.
- Single-person operation, lowers traffic management costs, and frees up manpower.
- Solar powered eliminating the need for frequent charging at the depot.

The Fix:

INSTABOOM Go is a portable, solar powered, remote controlled Stop/Go board system; battery life is 2 weeks with no sun or indefinitely with sufficient sunlight. It is controlled by 1 person with the option of having up to 4-way Stop/Go. The built in software means you can never have more than one Go signal. As it is remotely operated, 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.

Milestone Infrastructure shared their insight into the product after its trial:

“It is quick to setup with the case being similar in size to a small suitcase weighing just 24kg, once paired the system can be setup in under a minute. It is powered by a rechargeable 12V 24Ah lead acid battery. The remote controller utilises 3x AAA batteries which should last a year of use.

The signal range has been tested up to 800m and 250m in an urban area. This can be extended further if the master unit is used without a sign as a booster and placed in between the other units. This should be plenty of range as remote Stop/Go should only be operated within line of sight and 200m as stated in Chapter 8 Part 2 of the Traffic Signs Manual. It can operate in all weather conditions with an IP67 rating. For extra stability it is recommended to have the handle extended. In especially windy conditions sandbags can be placed on the handle and even the case.

INSTABOOM Go was trialled for 3 weeks with patching gangs from Drayton depot. For the first half of the trial, Milestone Infrastructure tested using 2-way Stop/Go then for the second half we tested using 3-way Stop/Go.

Once this initial setup is completed (at depot) it is quick and easy taking 1 minute to turn on.

As the units use such little power when not in use instead of turning them off between sites, they can be left on to save time.”

The Findings:

The trial of **INSTABOOM Go** demonstrated significant safety and cost benefits, along with ease of use, leading to Milestone Infrastructure retaining all 3 units and rolling out deployment to other depots.

Reflecting on the trial, Milestone Infrastructure noted:

“Before the operatives used the remote Stop/Go there were some reservations whether traffic would comply to an unmanned Stop/Go sign. However, in practice when setup with the correct signage, the traffic has been compliant without incident.

At the end of the trial, based on positive feedback from the gangs, it has been decided to keep the 3 units and roll out to other depots due to the safety and cost benefits provided and ease of use.”

