# ClearWay™



## Radar Solutions For Intelligent Transport Systems
*Innovative Radar-Based Solutions Advancing Safety and Efficiency*

✓ Improves road safety and efficiency

✓ Operates in all weather and light conditions

✓ A future-proofed solution

✓ Continuous monitoring and fully automated detection

**Safety is everything.**

NAVTECH RADAR

# High performance, radar-based solutions

*Tailored to your unique challenges*

### Automatic Incident Detection

Providing a safe environment and freeing up essential transport routes has become a major focus for Navtech Radar. The costs involved in accidents and congestion are high. Our ClearWay Automatic Incident Detection (AID) solution is improving safety and efficiency on highways around the world. By alerting control rooms to incidents in real-time, a response can be initiated quickly thereby reducing the chance of a secondary incident occurring.

### Complete Coverage

Each ClearWay sensor scans 360°, four times a second and covers up to one km of road length. All lanes in both directions can be covered by a single sensor. As ClearWay scans beyond the road, it is possible to configure the system to identify approaching wildlife such as deer, horses or moose.

ClearWay can monitor the entire width of a motorway or detect on a lane by lane basis. Single lanes can be defined to alert operators to incidents whilst ignoring the normal traffic flow on adjacent lanes.

### Low False Alarm Rate

Alarms are generated when the system detects an incident. ClearWay's intuitive rule-based software enables incidents to be defined using a wide variety of parameters.

During commissioning the system is finely tuned to provide an optimum false alarm rate of one per sensor per day. This ensures the operators both trust the system and also get an opportunity to rehearse standard procedures.

ClearWay continuously monitors average speeds and vehicle counts to provide accurate traffic data for analysis.

### All Weather Conditions

Operation is unaffected by weather conditions including fog, smoke, sandstorms, rain and snow. The technology also operates in all light levels, ranging from the sun's glare to complete darkness.

# Automatic Incident Detection
*In the Harshest Conditions*

## Increased Safety and Traffic Flow

ClearWay cannot stop primary incidents occurring but it can prevent secondary incidents. Preventing a simple breakdown escalating into a collision requires a rapid response.

The more time that goes by, the more likely the situation could turn into a major incident. By providing an immediate alarm, operators can take the necessary action to make the situation safe and keep the traffic flowing. For tunnel operators ClearWay helps achieve EU 2004/54/EC compliance.

## Radar Signal Penetrates Through Smoke

When accidents happen, the effectiveness of the response relies on knowing the facts. In a tunnel for example, heat and smoke will quickly render traditional monitoring technologies ineffective.

Whatever the challenge, a lorry broken-down in a tunnel, a pedestrian walking on the hard shoulder at night or debris concealed by foggy weather conditions, the control room will receive an alarm in seconds.

ClearWay's high-definition radar signal penetrates even the thickest smoke and provides the location of vehicles and people that could be trapped.

## ClearWay also detects:

✓ **Pedestrians**
Pedestrians on a highway or in a tunnel are a danger to themselves and other road users. Clearway detects pedestrians and raises an alarm so the operator can take the appropriate action.

✓ **Wildlife**
ClearWay can see beyond the highway. When it detects animals approaching, it can trigger warning systems to alert drivers of the potential danger.

✓ **Debris**
ClearWay's high-definition radar can detect objects on the highway. Debris can cause accidents if not removed quickly. The alarm generated by ClearWay enables the highway patrol to be alerted.
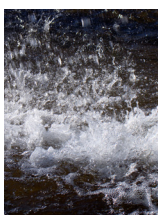
✓ *Slow, reversing or stopped vehicles*
The ClearWay solution raises alarms when it detects vehicles that have stopped or are travelling at abnormal speeds. It can even raise an alarm when it detects a vehicle travelling in the wrong direction. When the operator responds, traffic flow and safety are maintained.
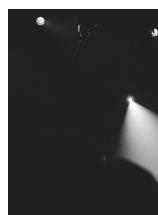
| SMOKE | FIRE | WATER | GLARE | DARKNESS | FOG |

# Integrated Radar Solutions
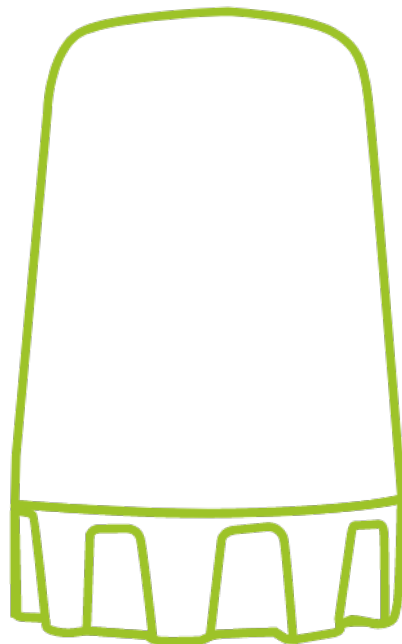
*Deployed In Five Continents*

### Designed From Experience

Navtech Radar has been manufacturing and delivering high performance radar solutions since 2000. We have the experience to produce and install a system that is best suited to your needs.

ClearWay will accurately track vehicles, pedestrians and debris and generate alarms if any of the configurable conditions are met. The low false alarm rate and accurate tracking leads to users placing a high degree of trust in the system.

### Quality Standards

Navtech Radar is a British, award winning, designer and manufacturer of commercially deployed radar detection solutions. Our innovative technology is created at our own ISO 9001 certified facilities in the UK, to ensure the highest standards of quality. Our patented products are utilised across many industry sectors, from intelligent transport systems and security surveillance to industrial automation.

## OEM Integration

Our radars provide highly accurate positioning information in an easy to use format. This can be used to control other automated equipment. We are happy to discuss OEM opportunities to integrate Navtech technology into your products. Recent examples include autonomous vehicles, camera control, enforcement for the rail industry and mining equipment.

## Software Integration

The ClearWay software has been designed and created by our own award winning design team. It can be easily integrated with other systems via a simple API layer.

# Global Customer Support

*Lifetime mechanical warranty*

### Our Experienced Team are Here to Help

At Navtech Radar we believe in building a strong relationship with our customers. Wherever your installation is in the world, our customer support team can connect to it and provide remote technical assistance.

For complete peace of mind, we offer the NavCover+ support plan and a maintenance contract for up to 10 years. NavCover+ is a supplement to the service and product support you receive from your local authorised integrator. To get you started, the plan is included for one year from the date of delivery.

### Our Customers are Our Focus

Navtech Radar strives to ensure that the best interests of our clients are served through the continuous pursuit of innovative technology and operational expertise. All of our business relationships with clients, suppliers and employees rest on a foundation of trust and honesty to ensure the best customer service possible. Navtech Radar's vision, strategy, goals and values are the substance of our company.

### Low Cost of Ownership

ClearWay is a completely service-free solution for its 10-year design life. It means lower lifetime cost of the system with no roadside works required following installation. In addition there is no cleaning required and once commissioned, the system does not require any further recalibration. For peace of mind we offer a lifetime mechanical warranty for our next generation ClearWay radars. In this time they will rotate 1.3 billion times. The upgraded radar design developed by Navtech engineers has removed all wearing parts. The sensors can be mounted on existing infrastructure and require low voltage power and data connections.

### Next Steps

We have installations all over the world. Wherever you are, contact us with your requirements. We can assist with the design to minimise your investment, whilst ensuring the system meets or exceeds your expectations. We can arrange demonstrations on site, online or at our facilities in the UK. Call us today to discuss your project requirements.

# Why our Customers Trust ClearWay

✓ **Automatic incident detection**
Provides fully automated detection and tracking of all highway activity

✓ **Multi-lane coverage**
360° radar coverage and operating range of up to 500m covering all lanes

✓ **Stopped vehicle detection**
Minimises the potential for secondary accidents as the system automatically detects and reports stopped vehicles

✓ **Traffic flow behaviour analysis**
Analyses traffic behaviour, gathering and processing huge amounts of data in real time to produce concise information streams

✓ **Easily integrated**
Smart, in-house developed software seamlessly integrates with all traffic management systems

**View our technical specifications**

Scan QR code or visit https://navtechradar.com/clearway-technical-specifications/