[Groundbreaking new digital system to help keep motorists better informed and traffic moving](#)

New technology is being introduced into National Highways' National Traffic Information Service (NTIS) which will make sure consistent and reliable information is available on the nation's motorways and major A roads.

The service provides information that is vital to help both National Highways' operations teams and the emergency services respond to incidents as efficiently as possible and to keep traffic moving.

It also helps road users plan their journeys, avoid delays and stay safe by supplying the latest information to electronic message signs on the network and journey planning digital platforms.

Under the new digital infrastructure, National Highways' operations data is being transferred from a legacy to cloud infrastructure for the first time. Harnessing the power of the cloud will enable National Highways to better collect the data needed to transform how the network is operated.

Alongside this, National Highways (formerly Highways England) will be able to share accurate and up-to-date information with road users regarding planned works, delays or any other congestion which may impact their journey.

National Highways' Customer Service Director Melanie Clarke said:

> This groundbreaking digital transformation will allow us to make positive changes to the way our roads are run and to vastly improve the journeys of road users both today and on the roads of the future.
>
> This is a small part of our Digital Roads strategy which is reverberating across National Highways fundamentally changing how our roads are designed, built, operated and used.

Digital transformation leader Sopra Steria has been appointed to introduce the new system for NTIS over the next five years.

As well as the operational benefits and giving road users better real-time route planning, the new system, introduced by Sopra Steria, will support the creation of an innovative digital twin representation of the strategic road network.

This will be used to map out motorways and major A roads in England digitally and will use machine learning (ML) and artificial intelligence (AI) to accurately predict the conditions of the roads up to 24 hours in advance.

This will help to reduce the impact of both planned events, such as roadworks and football matches, and unplanned incidents such as road collisions both by improving the management of the road network through increased automation and enabling road users to better plan their journeys.

Adrian Fieldhouse, Managing Director (Government), at Sopra Steria, said:

> We're delighted to support National Highways' vision to digitally transform its strategic road network and provide better information to road users to enhance their journeys. Sopra Steria's proven experience in road traffic management and digital transformation, as well as agile methodology, will help National Highways in this significant evolutionary leap to ensure the continued efficiency and safety of our road network both now and long into the future.

Meanwhile, TRL – the UK-based global centre for innovation in transport and mobility – has secured the contract to migrate National Highways' Smart Motorway Calibration and Optimisation (SMCALO) software and services toolkit to the cloud. It will be working with IT service provider Version 1.

SMCALO is a web-based service that enables National Highways to visualise traffic and signal data and monitor parameters such as traffic speeds and flow. It also helps calculate the thresholds for automatic signals to ensure variable speed limits are only on when needed. SMCALO also identifies performance issues with detectors and records when signals are showing.

The new cloud-based solution will enable new data sources to be incorporated and offer easy access to SMCALO data for all stakeholders.

The digital transformation of this system will support optimised traffic flows, reduced vehicle emissions, safer journeys and reduced journey times.

Ryan Hood, Head of Digitisation of Transport at TRL, said:

> This contract win demonstrates TRL's commitment to support our clients with their digital transformation activities, combining TRL's decades of domain expertise with leading Cloud First organisations like Version 1. Improved monitoring of the network is a key component in the integrated approach to road asset management being championed by TRL, which combines a myriad of connected tools to help understand and manage highway assets.

Commenting on the two contracts, National Highways Chief Data Officer Davin Crowley-Sweet added:

"We are ensuring people using our roads are better informed and have trust in the journey information they access from us, so that they feel safe and in control of their journeys.

"While today most of our customers are humans informed by data and technology, the increasing amount of connected and autonomous vehicle (CAV) technology used in private and commercial vehicles could mean a future of providing data to self-driving systems. We must understand this direction and be prepared."

The contracts are important steps in National Highways' Digital Roads strategy.

National Highways has set out its Digital Roads strategy on a new website and 'virtual learning environment'. The web pages clearly set out the company's Digital Roads 2025 vision for safer and greener roads and how the growth of digital technology and the move to electric, connected and autonomous vehicles will fundamentally change roads in the future.

Visit the [Digital Roads website](#).

General enquiries

Members of the public should contact the National Highways customer contact centre on 0300 123 5000.

Media enquiries

Journalists should contact the National Highways press office on 0844 693 1448 and use the menu to speak to the most appropriate press officer.