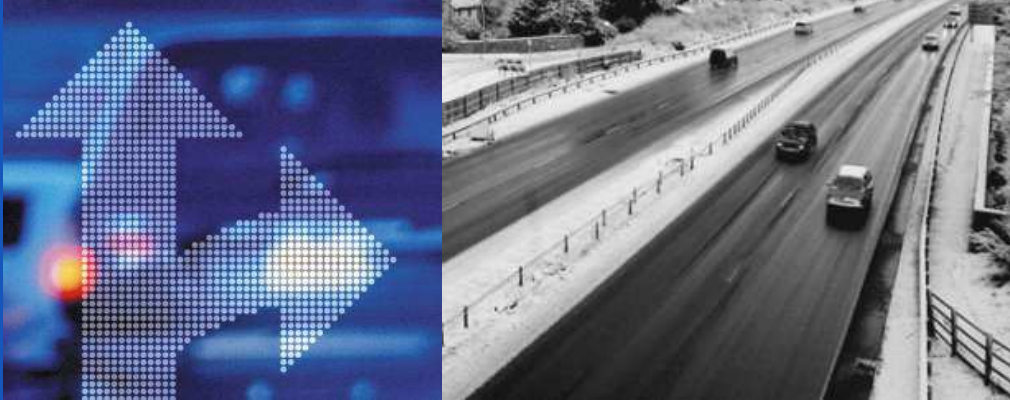


MapMechanics supports Met Office route based weather forecasting with NAVTEQ maps



The UK Met Office is using NAVTEQ map data supplied by MapMechanics as a key component in the trials for a new route-based weather forecasting system.

The Challenge

For many years the Met Office has provided specialist weather forecasts and advice to local authorities and trunk road operators responsible for winter road maintenance. Accurately forecasting road surface temperature and wintry conditions helps road engineers to plan when to salt the roads to prevent ice forming; grit to make surfaces safer; or deploy ploughs to clear snow.

Traditionally these forecasts have been for an area or region which may contain many routes. The challenge for the Met Office was to develop the next generation of detailed road weather forecasts along each individual route.

The Solution

The new system is set to become part of the Met Office's long established OpenRoad service providing organisations such as local authorities and agencies across the UK access to weather forecasting information in order to plan road gritting and similar activities.

It features unique numerical weather prediction models which break the country down into 4km grid squares. MapMechanics was chosen to supply the NAVTEQ map data which is used to determine which roads are affected within each sector.

An enhanced on-screen interface for the system has also been developed, so overlays for cloud cover can be toggled on and off.

THE CHALLENGE

- To develop a system which would deliver next generation detailed road weather forecasts.
- To give customers maximum confidence in the new, precise weather predictions.

THE SOLUTION

- A system featuring unique numerical prediction models which break the country into 4km grid squares.
- Colour coded routes.
- Enhanced on screen interface.

THE BENEFITS

- Easy identification of potentially icy routes and the most vulnerable stretches of road.
- Precise targeting of resources.
- More responsive service.
- Cost savings.
- Environmental impact limited.

The Benefits

The Met Office is constantly looking for ways to help customers improve the safe and efficient running of the UK road network and these route trials could represent a big step forward for the future of road weather forecasting.

Taking advantage of the precision, the new system brings a much more visual element to the forecasting. Routes can be colour-coded by sector, so it is possible to see at a glance not just which roads might be prone to icing on a given night, but also which stretches of those roads are most vulnerable.

If the trials are successful, customers would be able to have maximum confidence in the weather predictions and, as a result, have the information to target resources more accurately – providing a more responsive service, saving costs, and limiting the environment impact of gritting to those locations where it is most needed.

The new system not only considers the air temperature in a given region, but also includes factors such as road surface temperature, road construction and traffic flow. All this has to be related to each road location – a process which relies on the precise, high-resolution NAVTEQ road network data.

“Our new system takes advantage of high-resolution modelling and considers factors such as topography and the presence of buildings. For this we required very precise road mapping, and NAVTEQ street-level data from MapMechanics provides this.”

Aileen Semple
Met Office road business manager

About NAVTEQ

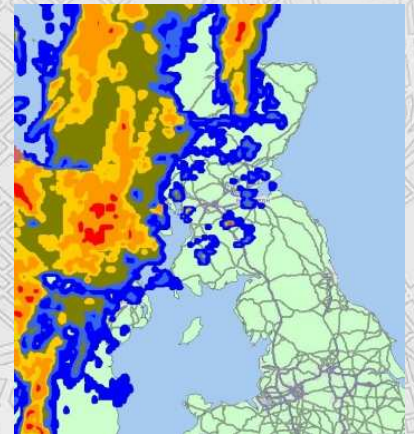
NAVTEQ is the leading global provider of digital map, traffic and location data that enables navigation and location-based platforms around the world. NAVTEQ supplies comprehensive digital map information to power automotive navigation systems, portable and wireless devices, Internet-based mapping applications and government and business solutions. The Chicago-based company was founded in 1985 and has approximately 4,400 employees located in 192 offices and in 43 countries. Its European headquarters are in Veldhoven, Netherlands. For more information, visit www.navteq.com.

About MapMechanics

MapMechanics meets customer requirements by evaluating data and software globally and offering the most suitable solutions for each application, as well as consultancy, bespoke development, training and technical support. It's the British distributor of The MicroAnalytics' TruckStops routing and scheduling solution and the entire suite of GeoConcept GIS systems for desktop, pocket PC and the web. It also publishes the UK's most comprehensive data catalogue online and on paper.

About The Met Office

We are one of the world's leading providers of environmental and weather-related services. Our solutions and services meet the needs of many communities of interest from the general public, government and schools, through broadcasters and online media, to civil aviation and almost every other industry sector - in the UK and around the world.



NAVTEQ CONTACTS

enterprise@navteq.com
www.navteq.com