

# CHARM

## *National Advanced Traffic Management Software for the United Kingdom*

In October 2015, Kapsch TrafficCom was awarded a contract by National Highways (NH) to supply the DYNAC Advanced Traffic Management Software for implementation throughout England motorway (over 2400 miles) and a major road network as a part of the collaborative programme CHARM.

This initiative aims to modernize and consolidate traffic management on the highways, contributing to a healthy world without congestion.

### **Innovative solutions contribute to a healthy world without congestion.**

The CHARM programme is a strategic initiative of the UK road network agency to realize an open, modular architecture for Advanced Traffic Management Systems (ATMS). The selected software technology under CHARM provides the level of integration, scalability, and resiliency desired by NH to manage critical road networks more effectively and safely. Additionally, CHARM offers a modern ICT framework and a standards-based platform that supports the timely and cost-effective deployment of future services and innovation modules to meet the evolving needs of NH, road users, and other stakeholders.





## Project Scope:

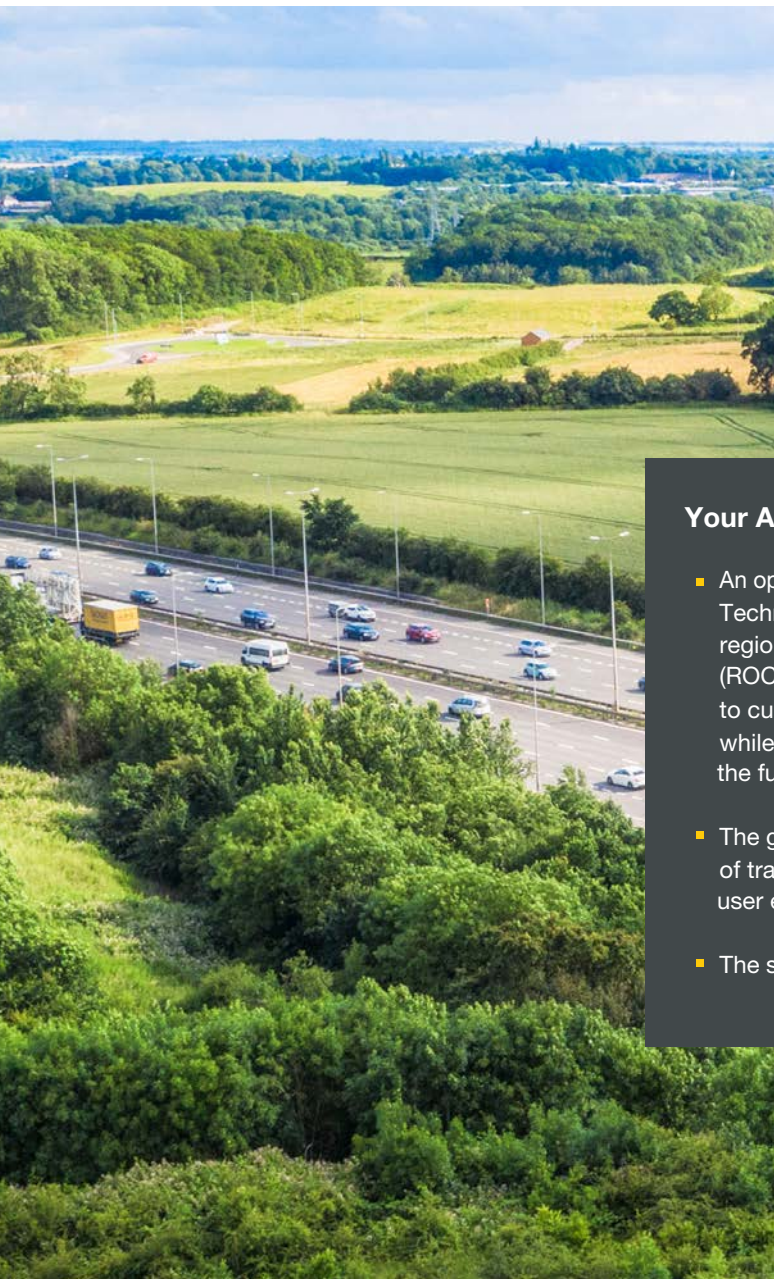
- National Highways has 7 Regional Operation Centre's (ROC's) to manage England's motorway network and major A roads across the country. 5 ROC's are already live with DYNAC as the core TMS application with full deployment in all 7 ROC's expected by March 2025.
- The project utilizes an Enterprise Service Bus (ESB) developed by CGI as a subcontractor.
- DYNAC Version 15.1 is currently in use, with plans to upgrade to the latest version of the product in 2025 after the roll-out is complete.
- Approximately 50+ changes are requested each year, all of which are completed within the agreed time-frames and to the satisfaction of the customer.
- AIMS support includes elements of Service Desk, Service Management (incident/problem/change/major incident/event/asset/release and configuration management), along with 2nd and 3rd line support.

## The Challenges:

- Integration: Seamless integration of numerous disparate technologies and bespoke systems with legacy protocols and interfaces in a brownfield environment.
- Geographic Scale: The CHARM programme covers seven Traffic Management Centers (ROCs) across the full England motorway network and major A roads.
- Long-term Commitment: NH's selection of the DYNAC ATMS solution and Kapsch services represents a significant investment and a crucial long-term partnership.

## The Solution:

- National Highways opted for a new Advanced Traffic Management System (ATMS) with a focus on scalability, resiliency, and interoperability of the central system, while making use of existing technical infrastructure and road network assets to better control and manage traffic. Consequently, the Kapsch DYNAC solution was chosen due to its established reliability in critical ATMS operations, adherence to technical standards, configurability, and future-proofing capabilities.
- Upon completion of the CHARM implementation and roll-out, National Highways will utilize DYNAC to more effectively and safely manage their motorways, and improve transportation services through a unified software platform and integrated ATMS/ICT environment. This environment encompasses traffic control centers, a comprehensive network of fixed roadside assets, mobile users, and other stakeholders.



## Your Added Value:

- An open, modular Information and Communication Technology (ICT) architecture designed for all regional and national Traffic Management Centers (ROCs) in both countries. This architecture caters to current operational and maintenance demands while ensuring scalability and flexibility to address the future needs of RWS.
- The goal is to achieve more efficient management of traffic operations and enhance the overall road user experience.
- The system is designed to be future-ready.