



Leading the way in traffic  
technology

**telent**  
service • commitment • value

# Introducing **telent**

**telent** is a technology services company providing a broad range of network and communications services across a variety of industries, including transport, telecommunications and the emergency services. We have unique scale and boast one of the largest engineering field forces of its kind in the UK. Our track record for quality and delivery is second-to-none.

We are no strangers to traffic – in fact we have over thirty years' experience in providing integrated services and solutions to the UK road industry. From the Highways Agency to City Councils and Local Authorities across the country, all have benefited from our in-depth understanding of the safety and operational requirements of the traffic environment. Our capabilities span the full suite of roadside technology assets, from Urban Traffic Control to Motorway Signalling Equipment.

## **Integrated services and solutions for traffic**

Our services and solutions range from systems integration to asset maintenance and management. We can install and maintain roadside electronic equipment, and provide and maintain private transmission networks, including system design and turnkey solutions for Intelligent Transport Systems (ITS) such as urban traffic management & control systems, traffic signals, variable message signs, CCTV, Journey Time Monitoring (JTM) and Automatic Number Plate Recognition (ANPR). We know that quality is as important to you as it is to us, so whatever your needs, our fully managed service approach will ultimately drive down cost, but never quality. The solutions we offer are proven to reduce traffic flows and congestion, journey times and pollution within and between major urban centres.



---

At **telent** we like to be involved in the complete lifecycle of a project. We'll work with you to assess your needs and capture your requirements, then together, we'll get your project up and running. We'll also provide you with on-going support so that any issues can be identified and resolved quickly and without detriment to your business. We work with the UK's most respected agencies and authorities. They trust **telent** to work in partnership with them to deliver service excellence. Why not make **telent** part of your team? We're leading the way in traffic technology.

#### **telent's traffic offering at a glance**

- ▶ System definition
- ▶ System design and installation
- ▶ System integration
- ▶ System maintenance and management
- ▶ Network design and installation
- ▶ Network maintenance and management
- ▶ Corrective and planned asset maintenance
- ▶ Asset management
- ▶ Traffic and traveller information services
- ▶ Traffic signal equipment, design, manufacture, installation and maintenance

#### **Quality and customer focus**

We have a well-earned reputation as a leading provider of highway and transportation solutions. But the real success comes from the relationships that we develop with our customers. **telent** is proud to be a 'partner of choice' for our customers in pursuit of best value solutions. And we believe that through effective partnership, we can develop and deliver solutions that really meet your needs. Our systems and processes have been designed to meet the demands of international quality standards bodies, customer specifications and health and safety requirements. We are ISO 9001:2000 and ISO 14001 accredited and work within recognised industry specific accreditations. The world doesn't stand still, and there are always new and improved ways of doing things, we therefore work under an ethos of continuous improvement.

As a business, we know that our people are our greatest asset. We support their development needs and provide them with the relevant knowledge, skills and experience so that they can deliver an excellent service to you.

---

## Consultancy

We have a long history of delivering successful consultancy projects, and can tackle anything from initial feasibility study to solution design.

### ► Defining a cost-effective transmission solution

We managed the provision of new services over the Highways Agency's existing broadband network in support of the new technologies and systems for its seven Regional Control Centres (RCC). As part of the project **telent** was responsible for coordinating all project suppliers, capturing requirements and providing a cost-effective transmission solution against tight time-scales.

### ► Evaluating the impact of video compression

We undertook a study on behalf of the Highways Agency to analyse the effects of video compression on their image processing systems. The first part of the study collated a list of all the systems currently in use or planned within the customer's network. The second part brought together a number of video compression systems and transmission equipment to determine the effect of compression algorithms on end-system performance.

### ► Disaster recovery

We provided consultancy for the Highways Agency on producing an interim solution for the transfer of data and voice communications from the West Midlands RCC to a fallback Disaster Recovery Centre at Coleshill. This was required to provide continuity of operational services for the West Midlands RCC in the event of a failure or evacuation of the building.

## System integration

Our system integration services and solutions for the road industry are not only improving traffic flow and communications on our motorways and other major roads they're reducing costs too.

By working closely with you, we can establish your precise requirements and develop innovative communication solutions that help you get results. We're experts in network and business planning and the systems we develop will help you get road users from A to B safely, without delay.

### Our expertise covers:

- ITS
- Network dimensioning and optimisation
- Systems integration and implementation
- Highways management
- Asset support
- ANPR systems
- CCTV cameras
- Maintenance management systems

### Broad product knowledge

**telent's** systems engineers have a broad product training so they can quickly and easily address system integration issues from application design, system design & systems integration, through to installation & commissioning as well as on-going maintenance activities.

No matter who you work with at **telent**, rest assured the level of service you receive will be second-to-none. Our design teams all use the same core processes to meet specific project or customer needs and our peer and hierarchical review method ensures long-term consistency. All activities are traceable from initial requirement right through to the long-term configuration management of the system.

From system design, feasibility trials, testing, equipment selection and systems integration, we have a consistent approach to developing a holistic, whole-life network design to truly meet your needs.

---



---

## Support and maintenance

**telent** is the business that never sleeps... we have been involved in communication systems for over thirty years, providing 24/7/365 maintenance and callout services and our large team of field engineers ensure we're never far away if you need us – help is always on hand.

We provide and support end-to-end communications systems, covering core communication supplier technologies and peripheral systems and applications. These include communication and radio networks, traffic signals systems, CCTV cameras and variable message signs that help you keep traffic moving. We get excellent results by always adopting an unbiased view and making decisions based on quality, functionality, scalability and cost.

### Multi-skilled engineering field force

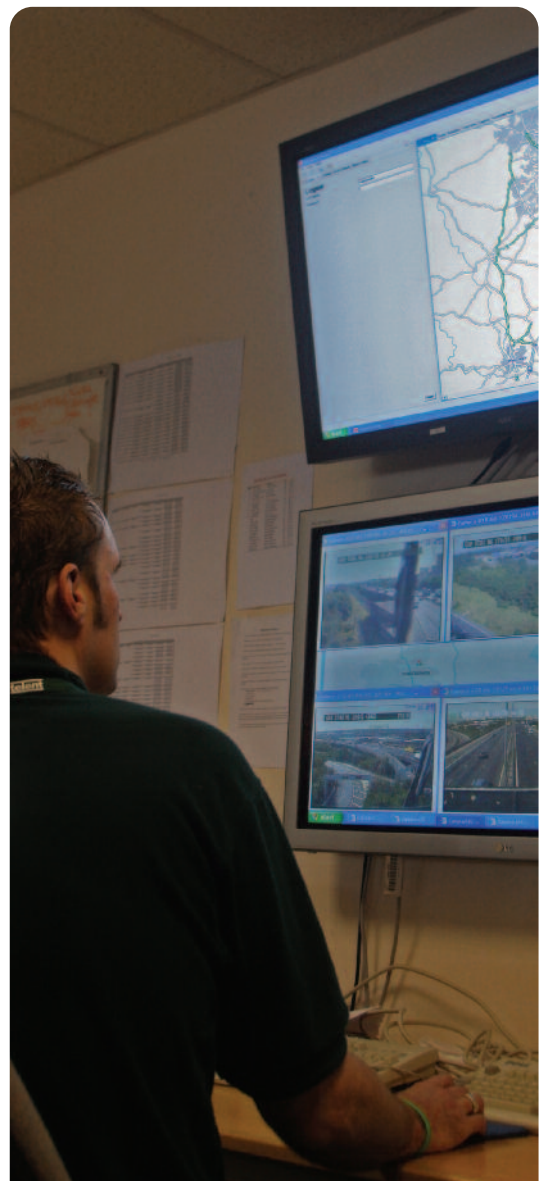
**telent** has one of the largest teams of field engineers of its kind in the UK. They are managed through either localised dedicated support teams or via our Service Centre. This means we can easily choose the people with the right skills to do each job – saving us all time and money. Many of our engineers are security cleared to work on sensitive contracts at various levels.

Our staff are assessed under the National Highways Sector Scheme which enables clients to be confident that **telent** staff possess the skill to perform the tasks required.

We're also experienced in change management, and so can seamlessly transfer staff under the Transfer of Undertakings Protection of Employment (TUPE) regulations as part of a customer's outsourcing strategy.

Our maintenance teams provide preventative and corrective maintenance and emergency responses to urgent faults throughout the country, including a two-hour response to any part of our customer's network. Our engineers have in-depth knowledge of a vast range of ITS equipment and systems, covering all aspects of data, voice and video communications using radio, copper cable and fibre optic transmission media.

We use our own and 3rd-party maintenance management system to support the services we provide. The systems provide full asset management, including: fault recording, engineer selection, asset location and history, remote monitoring of assets, an asset database including network/system diagrams and a whole-life cost model tool to help determine the optimum time for replacing assets.



### Solutions tailored to your requirements

At **telent**, we like to get to know our customers and understand how their business operates. We can then tailor solutions that meet exact requirements. Wherever possible, we'll maximise existing systems to keep costs down and improve efficiency and our number one aim is always the safety and environmental sustainability of transport.

You can rely on us to deliver solutions that anticipate changing needs, protect your investments, are reliable and easy to use. We are experts in a large number of technology solutions and services, with the goal of providing full-lifecycle support for:

- ▶ Core communications networks
- ▶ SDH
- ▶ ATM
- ▶ IP Networks
- ▶ Access
- ▶ GSM
- ▶ PMR
- ▶ PABX system development
- ▶ Integrated CCTV communications
- ▶ Integrated control centres
- ▶ Radio communications
- ▶ Real-time passenger information systems
- ▶ Electronic tolling systems for road/tunnel charging
- ▶ Strategic network management & maintenance
- ▶ Traffic control system
- ▶ Traffic signalling systems
- ▶ Variable Message Signs (VMS)
- ▶ Automatic Number Plate Recognition (ANPR)
- ▶ Wireless Networks

### First line maintenance for the North West

**telent** is the maintenance contractor for the North West TechMAC for the Highways Agency. We were awarded this 5-year contract in 2006 and provide 1st, 2nd, 3rd and 4th line maintenance on equipment and systems for the motorways and trunk roads within the region. This includes VMS, emergency roadside telephones, matrix indicators and CCTV camera systems.

We also project managed the installation phase of the North West NMCS1 upgrade for the Highways Agency. This entailed the upgrade of over 390 signals, 42 transponder sites and around 120 power cables spread over 290 miles of motorway throughout Cumbria, Lancashire, Merseyside and Cheshire. Successful completion of the project resulted in a significant increase in the performance of the motorway communications network in the region, and we now provide 24/7/365 maintenance and fault management of this equipment under our TechMAC contract.

### Traffic Signals Maintenance Contracts

**telent** is currently undertaking 14 Regional Urban Maintenance contracts throughout the UK. These include round-the-clock maintenance and repair services of urban traffic control equipment including:

- Traffic Signals
- Controllers
- Push Buttons
- Detectors
- VMS
- Wig Wags
- Rising Bollards
- CCTV

As a trusted maintenance provider **telent** has developed maintenance regimes, spares and repair services, processes and procedures that can be easily adapted to specific urban contracts. We have teams of installation and maintenance engineers that are multi-vendor trained giving us the flexibility to adapt to other manufacturers' equipment. We also have our own Fault Management System, in use across all our contracts, that is able to identify and prioritise faults from the roadside.



## Urban Presence & Product



**telent** recognises the importance of keeping our cities and major towns on the move safely and our acquisition of the intelligent traffic systems group, TSEU in 2008, gave us the specialist knowledge that really helps our customers in this increasingly important area. TSEU, now incorporated within **telent**, was a specialist provider of traffic control solutions and services in the urban roads market, predominately in the UK. The combination of its experience and our consultancy and systems integration expertise has gives us one of the leading positions in this market. Since the acquisition, we have developed a range of innovative solutions to improve the management of Local Authority transport infrastructure in the face of increasing traffic congestion. These include the design of our new Optima Traffic Signal Controller.

The new product range builds on the tried and tested Microsense/TSEU equipment that is currently deployed in the UK market. Our product portfolio is to increase to over 40 products within the next 2 years.

Technology is always changing, so we make it our business to keep abreast of new technical developments. It's a combination of this proactive approach, strategic partnerships and acquisition, that has positioned **telent** as a leading supplier, installer and maintainer of all aspects of ITS in UK.



### Our expertise covers:

- ▶ Traffic controllers
- ▶ Signals and street equipment
- ▶ Detectors
- ▶ Warning signals
- ▶ Software tools and systems

---

## telent in action

Our customers have helped make our business what it is today. Our extensive network of office locations means that distance is no barrier to forming long-term working relationships, and whatever your needs, our comprehensive portfolio of services means that we are sure to have a solution.

### West Midlands Urban Traffic Control (UTC) Major Scheme

**telent** is programme managing this scheme designed to reduce congestion in the West Midlands metropolitan area by linking, for the first time, each of the region's existing UTC centres together with the traffic systems operated by the Police, the Highways Agency and public transport operators. The new system identifies traffic hot spots, make traffic signals more efficient, improves the bus network, delivers more traffic information, and enables deployment of intelligent transport services. Customised high-level network designs have been created, using interoperable UTMC compliant equipment to maximise whole lifecycle cost benefits. ITS components include: a Central Control Room, selective vehicle priority systems, CCTV enhancements, traffic signal junction controllers, VMS, environmental monitoring signs, communications and evaluation systems.

### National Roads Telecommunications Services

**telent** is providing the technical expertise to help the NRTS consortium move onto their new IP network and make it fully operational. We provide technical support and design services into Genesys who manage the project. We have been identifying, designing, project managing and delivering a programme of works to convert and upgrade legacy services to make best use of the new digital network. This has included the upgrade of transmission paths to double the data throughput by moving to digital transmission services, and standardising configurations across the whole network. An additional project is ongoing to identify and upgrade all legacy IP services to make better use of the added resilience that the new routed network can offer, down to the road-side locations. We are also rationalising space and qualifying the fibre network across the figure of eight motorway network in readiness for the roll-out of a 10G upgrade, providing the Highways Agency with additional bandwidth.

### The Highways Agency

**telent**'s Automatic Vehicle Location (AVL) turnkey solution helps the Highways Agency keep track of its Traffic Officers. We combined PMR, GPRS and GPS systems so that the Highways Agency can locate and direct Officers, via their control rooms, in-vehicle and through hand portable equipment - an essential capability to manage their rapid response to motorway incidents.

### Local Authorities – West Midlands

**telent** has continued the successful development of traffic and traveller information service, MATTISSE - a Real-Time Passenger Information (RTPI) system for the Midlands area. This system links local rail, bus and road information from the UTC centre and the Police, which is then made available to the travelling public via free information kiosks and large display screens sited at strategic locations. The same information is also available through a public service website: [www.help2travel.co.uk](http://www.help2travel.co.uk).

### Centro

**telent** worked on behalf of eight local authorities in the West Midlands to establish what the urban transportation environment should look like in the future. We recommended improved Urban Traffic Management and Control (UTMC) systems; region wide state-of-the-art bus tracking and information system, integrated ticketing system and the potential use of road user charging schemes.

### Automatic Number Plate Recognition (ANPR)

**telent** has experience in the supply, delivery, installation and maintenance of ANPR cameras and their corresponding systems. We have undertaken ANPR projects throughout the country for various Police Forces, and provide maintenance and 24/7/365 fault rectification services on all of our contracts. We have installed and currently maintain ANPR systems across many of the UK strategic road and motorway networks.

### Urban traffic

**telent** is a partner in Kent Highway Services, an alliance with Ringway Jacobs and Kent County Council, working towards offering a joined up highway service to the citizens of Kent. Our role is to ensure that the ITS in Kent are maintained to the highest levels by providing innovative solutions to ITS issues in the county.

---



Point 3  
Haywood Road  
Warwick CV34 5AH  
United Kingdom  
**Telephone:** +44 (0)19 2669 3000  
**Email:** traffic@telent.com

[www.telent.com](http://www.telent.com)



service • commitment • value

