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Doug Gilmour, Sales Director, Mobius

power to you





Bumper crowds are set to head for Weymouth Bay and Portland Harbour in Dorset, centre stage for the Olympic sailing events. The area provides some of the best natural sailing waters in the UK, with world-class facilities on land to match.

Dorset County Council has worked hard to introduce a robust and efficient traffic management system to cope with the influx of visitors and international competitors expected in Dorset. The system is aimed at keeping traffic moving, ensuring pedestrian safety and protecting local people and businesses from casual parking.

A key element of the system was a substantial temporary park and ride scheme, provision for accessible transport, extra buses and trains, secure cycle parking and other transport facilities.

The Council recognised that real-time travel information, from bus and train timetables to road conditions are available to people via a range of devices from roadside signs to mobile phones, and this would play a central role in any successful solution.

Councillors also knew that overwhelming evidence from many transport incidents and hot spots in recent years says that, in the event of congestion, the public are more likely to be unhappy about a lack of information than the cause of the hold up itself.

Another key consideration for the Council was the choice between the two connection types available to deliver real-time traffic information, namely the mobile network and public mobile radio (PMR).

A cost effective solution

PMR has been the favoured system for public authorities and transport companies post deregulation for many years as it can be tightly controlled and isolated. At the same time it requires regular investment in essential infrastructure, such as masts, which makes it a more costly solution.

When considering the merits of using the mobile network instead, Dorset County Council needed to be certain that uninterrupted connectivity would be provided during important sailing competitions.

To address these issues Vodafone and its data connectivity partner Mobius, the UK's first integrated data airtime provider, began to develop a potential solution for the Council.

“Vodafone’s groundwork on network capacity was fundamental. The Council knew that Vodafone offers excellent coverage, and had the resources to construct temporary masts compliant with World Heritage site regulations.”

Peter Simm, Strategic Planning and Development Manager, Mobius

Mobius was well positioned to take on the challenge, having delivered successful traffic management solutions in the recent past for public authorities such as Kent and Medway Councils and Centro, the West Midlands Integrated Transport Authority.

Its ‘Machine-to-Machine’ (M2M) expertise delivers reliable, secure, quality connections between almost any machine to any other machine. By collecting data, delivering data and using remote diagnostics, this technology cuts costs, gives better information and reduces maintenance.

Mobius even offers a private network which keeps data off the open internet and is delivered through the mobile network, safely and securely using a fixed IP address for each device, making it easy to set up and control.

“Dorset County Council needed a robust, cost-effective solution to help manage the huge influx of visitors to the region during international sailing competitions. Our public sector experience, combined with our close partnership with Vodafone, gave us the resources to develop a rich and robust solution,” says Doug Gilmour, Sales Director at Mobius.

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Dedicated team

Vodafone began by deploying its dedicated M2M team to carry out a site survey to assess the region’s existing network and calculate the need for additional masts, while Mobius designed an urban traffic management solution based on:

- Variable message signs that warn drivers of potential issues
- Real-time updates at bus stops to indicate routes and travel times
- Real-time updates – via hands-free mobile devices and digital passenger signs – for drivers, spectators and competitors on coaches travelling from London to Weymouth
- Automatic number plate recognition cameras that identify priority vehicles – such as those carrying athletes – and send location details to Weymouth-based traffic management team
- Traffic light control, used to alter the frequency of changes and allow specific vehicles to pass

Mobius offered an additional layer to the Vodafone network with a fixed IP address for each device in the traffic management system, such as bus stop signs, variable message signs and cameras. These addresses will allow administrators to send crucial updates to specific devices quickly and easily.

The Vodafone and Mobius partnership presented a compelling case for the use of an extended mobile network rather than public mobile radio. Vodafone’s early involvement in the project reassured the Council that the Vodafone network would offer the required capacity and security, while providing a more future-proof and flexible solution than PMR.



Peter Simm, Strategic Planning and Development Manager at Mobius, says: "With Vodafone's support, we demonstrated that the mobile network would be reliable, as well as more cost-effective than radio.

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While PMR is independent of any other system and free of call costs, installation and maintenance costs are high. Vodafone and Mobius worked together to show that M2M connectivity using the mobile network would reduce costs by approximately 40%, without compromising availability.

The solution is also easing administration time and costs for Dorset County Council, thanks to the use of fixed IP addresses for each component of the traffic management system. The cost of marshalling the events were minimised too by automating many of the communications required to manage traffic. Real-time travel information helped members of the public and coach companies transferring athletes to plan journeys, avoid obstructions and arrive on time.

Significant benefits

- Real-time traffic management information ensures that visitors, local people and athletes alike move easily to and from sailing venues in Weymouth and Portland during important competitions
- Dorset County Council (DCC) made significant cost savings by using the mobile network rather than spending scarce resources on public mobile radio infrastructure
- Vodafone and Mobius provided DCC with a strong partnership of technology and specific roll out experience
- The solution also reduced DCC's administration time and costs

