The ‘digitalisation-wave’ soon to hit transport
Many industries have been dramatically hit by a wave of digitalisation and transformed services. The telecoms sector, media industry and even the banking sector have radically changed over the last couple of decades. And the biggest change in the media sector was not made by the media companies themselves but by Google and Facebook etc. Transportation has had unchanged structures since owning a private car became dominant. Nowadays, transport systems are a strange combination of separately financed traffic systems, political decisions and local businesses, and the consumer is always left alone to deal with the differences.

For example, if I wanted to compare the cost of using a taxi, bus, train, airplane, rental car (or a private car) to make a 500km-long journey, the calculation would be very difficult.

Bus transportation is subsidised in one way and trains in another, and private cars have high start-up costs but usage is relatively inexpensive.

A flight ticket is perhaps the only example where all costs are somewhat included in its total price.

‘Mobility as a Service’ – the new transport paradigm
Mobility as a Service (MaaS) is a mobility distribution model in which a customer’s major transportation needs are met over one interface and are offered by a service provider. Typically,
services are bundled in to a package – similar to mobile phone price-plan packages.

The vision is to see the whole transport sector as a co-operative, interconnected eco-system, providing services reflecting the needs of customers. The boundaries between different transport modes are blurred or disappear completely. The ecosystem consists of transport infrastructure, transportation services, transport information and payment services.

Drivers towards new thinking

The needs and expectations of the users will continuously become more demanding and fragmented, while the resources for developing transport systems are decreasing. New technologies enable users to take a more dynamic, proactive role as a developer and data producer in the transport system. The user will no longer be the only consumer in the transport system – instead, the whole transport system will be generated with, to and by the users. The role of data and information will be crucial. Transport data, data infrastructure and physical transport infrastructure will together compose the essential platform for mobility services. Bringing MaaS to the customers is made possible by the simultaneous availability of multiple technologies such as wireless broadband, smartphones and tablets as interfaces, and location-based services and connected cars. Already evident changes in the users’ values, attitudes and behaviours are pushing us towards a shift from ownership to utilisation. Today’s technological solutions already enable us to answer the users’ seamless mobility needs to a certain extent. In the future, through the use of automated vehicles, MaaS will substantially enhance productivity by offering the level of convenience of a private vehicle but without the physical ownership.

Mobility as a Service is a paradigm change in transportation, not only in the customers’ eyes but also for the transportation system and its other stakeholders. In the past, the performance of the transportation system was evaluated primarily on speed, convenience, and affordability. This is why automobile-oriented improvements were favoured. In a modern world, the purpose will no longer be to improve the transport system by doing more or building more capacity, but by doing things in a smarter way.

Benefits of considering MaaS

User-benefits include: developed, personalised and smart mobility services reflecting the users’ diverse needs; seamless, well-functioning transport services (transport as an experience, your personal 90-minutes per day); and easy access to mobility.

For the public sector, benefits include: full deployment of ICT improves the effectiveness of the whole transport system; efficient allocation of resources (based on real needs of end-users); growth employment and vitality generated by new businesses (public sector as an enabler); and improved traffic incident management and a more reliable transport system through advanced data deployment.

For businesses, benefits include: profitable markets for new transport services; renewed opportunities for the traditional transport and infrastructure business sectors as part of
innovative service concepts and co-operation; and smarter transport connections for all sectors.

**Market potential of MaaS**

The world is moving towards ‘everything-as-a-service’ thinking. At least in developed economies, the competitive advantage will lie in service business providing smart and advantage services and comprehensive life-cycle solutions.

On average, consumers spend close to €500 per month on transport costs. For an operator who takes care of all the transport needs of the consumer, the average revenue per user (ARPU) is potentially high. ARPU in mobile telecommunication lies below €30 in developed countries which means that the potential market for MaaS is over tenfold that of mobile markets. Market size or customer behaviour have not been proven so far.

**The advanced European transport policy as a platform for developed transport services and new business opportunities**

As first steps, all we need is open minds and encouragement. Through smart regulation, the public sector can act as an enabler building a regulative framework that unchains the potential of the various actors. The focus of regulation should be ensuring transparent market conditions and fair market performance and securing the legal position of the user (as a consumer) instead of technically-focused and detailed regulation of individual transport modes. In some cases, deregulation should be considered. Appropriate data policy is a crucial catalyst – or obstructionist – for progress.

**Market structures and the new offering**

Mobility operators will most likely change the logics of the rest of the value chain. They integrate the offering of transport providers and infrastructure to a consumer package. The same logics already apply, more or less, in the aviation industry where a flight ticket is often bought from a travel agent who puts together the flights and airport costs.

**Chance or a threat for public transport operators?**

With this new offering, traditional public transport networks/operators can benefit in two ways. On the one hand, having mobility operators makes it easier to use public transport as part of the value chain. On the other hand, some public transport operators can become the operators of new mobility. Public transport operators will have to look at their strategies in a new light sooner than one might expect.

**How to keep up with new technology and evolving markets?**

On 16-19 June 2014 in Helsinki, the 10th ITS European Congress will take place. Organised by ERTICO – ITS Europe and the European Commission, and hosted by ITS Finland, the Finnish Ministry of Transport and Communications and the City of Helsinki, the event will address Mobility as a Service in many of the high-level speaker sessions.

**Reference**

1. [www.itsineurope.com/its10](http://www.itsineurope.com/its10)

Sampo Hietanen is the CEO of ITS-Finland – a network of over 70 organisations varying from authority, business to research. He is actively involved in developing new usage-based taxation schemes and promoting the big shift in changing transport network structures with modern technology. Sampo's background is in executive positions in civil engineering and ITS.
York by Bus: a campaign to help passenger growth

City of York Council is encouraging even more people to travel by bus in York by offering a package of bus incentives through its ‘York by Bus’ campaign. For Eurotransport, Cllr Dave Merrett, Cabinet Member for Transport, Planning and Sustainability at City of York Council, explains the different aspects of the campaign – including a new multi-modal journey planner – and its aims to help deliver benefits for the city.

The York by Bus campaign is funded through part of the £3.5 million Better Bus Area Fund, awarded to City of York Council from the Department of Transport (DfT) in 2012. The campaign is supported by all bus operators in York who work together through the York Quality Bus Partnership, and builds on a number of improvements which will help to further support bus services around the city.

Our aim is to encourage even more people to travel by bus and increase passenger numbers by 18% by 2015. We know this campaign will help to deliver real benefits for the city and for every £1 spent in York, this project should deliver £4 of benefits by reducing congestion, improving air quality and health, and reducing road accidents.

New real-time passenger information screens have been installed at bus stops across the city centre and the city’s new transport smartcard is set to be launched later in 2014. Through this campaign we hope to raise even more awareness of the benefits of travelling by bus in York. We have one of the best Park & Ride services in the country and offer a number of frequent and several now reduced-cost ordinary bus services across the whole of York. Working closely with bus operators, York by Bus is set to be the biggest bus campaign York has ever seen.

In 2013, York was selected as one of only four areas across the country to be awarded a share of the £16.5 million new Better Bus Area funding (aka BBA2), designed to drive-up bus performance and passenger numbers by getting operators and authorities to work together through bus partnerships. As such, York is now designated as a ‘Better Bus Area’, enabling the council and bus operators’ to combine resources to improve the bus service, particularly its reliability, which can be difficult to manage in a historic city with a road network built more around the requirements of horses and carts than modern traffic.

We will invest this money towards measures to assist bus services and the DfT will add another 20%. Altogether, the bid is worth £1.4 million between now and 2018, with £1 million being provided by bus operators, £200,000 from City of York Council and £200,000 from the DfT’s top-up payment.

Working together, City of York Council and operators will prioritise how the money is used...
on measures that will include: improving traffic signals and small changes to kerblines to help buses across junctions; funding to continue with successful features of the Better Bus Area funding won by the council in 2012, including the city’s Bus Warden, officers in the Traffic Management and Control Centre who respond to incidents on the bus network and work with operators to keep buses on time and the Bus Enquiry Point at the Railway Station; and paying for short lengths of new bus lanes where they are needed.

By working closely with local bus operators to drive through further improvements on York’s bus network, we will continue to improve service reliability and offer more incentives to travel by bus.

In addition to this, two new and improved Park & Ride sites are due to open in York in summer 2014 at Askham Bar and Poppleton Bar. The new sites will build on York’s portfolio of five existing sites across the city which attracts over four million passenger journeys every year.

The £22.7 million project represents one of the largest single investments in the city’s transport infrastructure since the northern ring road was built in the 1980s. The DfT will fund 70% of the scheme and City of York Council the remaining 30%.

York is also set to become the first city in the north to introduce a new fleet of electric buses across the city thanks to a successful bid in May 2013 which awarded the authority, First and Transdev £1.4 million funding towards 15 new electric buses.

Made available through the government’s Green Bus Fund, the new buses will provide cleaner and greener bus journeys for thousands of passengers across the city and will save over 7,500 tonnes of CO2 emissions in York over their lifespan.

“Our aim is to encourage even more people to travel by bus and increase passenger numbers by 18% by 2015”

York successfully received funding for: one electric bus for use on the University of York’s ‘Unibus’ service (bid submitted by Transdev); two electric buses serving the Derwenthorpe sustainable housing development (bid submitted by City of York Council with the support of Joseph Rowntree Foundation); and 12 electric buses to be deployed on the York Park & Ride network (bid submitted by First York).

A recent study has shown around 80% of York’s bus services could be operated using electric vehicles because they operate largely within the urban area, making it easy to provide recharging facilities. It is therefore our aspiration to improve air quality in York by converting these services to electric power, and we’ve been determined to improve air quality and the city’s carbon footprint by working with bus operators through York’s Quality Bus Partnership to achieve this. These 15 new electric buses will be a tremendous step forward, and will demonstrate how we can transform York’s bus fleet and environment for the future.

The electric buses will be assembled close to York at Sherburn by manufacturer Optare, providing a further boost to the local economy.

This also supports our ‘Low Emission Strategy’ adopted in 2012 to improve air quality in York. The first such strategy in the country, it contains a variety of measures tackling emissions from different sources, of which buses are an important group given their frequency through the city.

Supporting the growth of electric vehicles is a big cultural step-change nationally, but York is again leading the way in this area and in November 2013 became the region’s first city to introduce a network of pay-as-you-go electric vehicle charging points. By providing these public electric charging points and local electric buses, people will be encouraged to use electric vehicles which are another important step towards achieving an improved carbon footprint.

In addition to the 12 charging points already located across York, the network consisted of six fast charging points and were installed at five locations across city centre car parks (Union
Terrace and Nunnery Lane) and Park & Ride sites (Monks Cross, Grimston Bar and Designer Outlet) allowing drivers to re-charge their cars on a pay-as-you-go basis. The network was installed by City of York Council and is publicly accessible with a simple payment system so that users can pay by phone or text in a similar way that drivers currently pay for parking in council owned car parks. Four further charging points will be installed in early-2014 in three additional locations – all with Rapid Chargers to follow.

We’re determined to improve York’s air quality and using electric vehicles means a 50-60% reduction in CO₂ and zero fuel related emissions of air pollutants, with significantly lower running costs than diesel, which makes them an ideal substitute for businesses and organisations using York’s roads.

Besides these many new investments in the city’s transport network, we recently launched the region’s first multi-modal journey planner to help residents, visitors and businesses navigate their way around York easily at a touch of a button. The new planner is supported by our four-year ‘i-Travel York’ initiative, made possible by £4.6 million of government funding which we successfully bid for in 2011.

Compatible with all desktop computers, smartphones and tablet software, the planner provides users with the best options for walking, cycling, public transport, including Park and Ride, and driving routes, by simply typing in a destination point.

Building on the Traveline Yorkshire service, the planner incorporates walking, cycling and driving options all in one place – a first for the Yorkshire region.

Providing the latest navigation advice, the planner also helps plan trips to/from anywhere in the UK to destinations within 15 miles of York.

The planner aims to encourage the use of sustainable and active travel modes, such as walking, cycling or public transport and help cut congestion by offering comparative information on trips such as time, distance, cost and CO₂ emissions.

Reference
1. Available at www.itravelyork.info

Cllr Dave Merrett was brought up in the UK, Canada and Sweden, and has had a lifelong interest in transport, inspired by Goteborg’s integrated tram and bus network which he used extensively as a young person. A British Rail sponsored degree in Engineering Science at Oxford University led to a career designing and assessing rail bridges, currently for Amey Consulting. A Labour Councillor since 1982, Dave has led on York’s Transport, Planning and Environment for much of the last 27 years.
Europe is growing together
The European Union is bringing together all countries across the whole continent. One of the most important aspects (known as the Schengen Agreement) was the opening of the borders between EU Member States. The citizens of the Member States benefit a lot from travelling throughout Europe without being stopped at the borders. The result is not really surprising: people are more and more travelling cross-border; for daily commuting as well as for vacation travel. Today, cross-border travel is a part of everyday life for millions of citizens in the EU.

Analysing cross-border travel leads to one specific result: it is always the people’s next border which they are most likely to cross. The reason for that is simple: during a year, daily commuting or weekend leisure trips take place more often than going on holiday or on long-distance business trips. This fact has a certain implication for stakeholders in the travel market. Cross-border activities should have a strong focus on each direct neighbouring region.

Strengthening public transport by providing travel information
The percentage of cross-border travel made by public transport compared to journeys made by private cars is still not as high as it could be. There have been a lot of improvements made for cross-border public transport during recent years. New connections have been introduced and fare systems have been extended to cover whole cross-border journeys with only one ticket. Those are the basic prerequisites for cross-border public transport travel. But this is not enough. Passengers can only use a connection when they know that it exists. Although this is quite a simple statement, it implies two things:

1. A special marketing campaign is necessary when introducing new public transport connections.
2. A continuous information service has to be available where passengers can get any information they need for their journey.

Cross-border travel information with EU-Spirit
Verkehrsverbund Berlin-Brandenburg GmbH (VBB) is Germany’s largest association in terms of area. It is a municipal association owned by the Federal States of Berlin and Brandenburg as well as the cities and districts in Brandenburg. Forty transport companies across VBB’s area offer their services to approximately six million residents and many more visitors to Germany’s capital region. To improve public transport, VBB is cooperating with its neighbouring regions (the surrounding Federal States of Germany) and also the western part of Poland.

Eurotransport
Volume 12, Issue 2, 2014
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In ideal terms this information has to be as individual as possible (keeping in mind for example that individual car navigation was one big innovation having made cross-border car journeys quite easy).

Web-based information services for cross-border journeys
Over recent years, web-based travel planning services have become very popular in the context of public transport. Many regional authorities, public transport operators and even private companies are running such services. Passengers heavily use the services so that they can always be up-to-date and so they can plan their journeys (also in case of delays and disturbances). Therefore, the obvious strategy for information on cross-border public transport services would be to use these existing web-based services (for example, VBB’s travel planning tool called ‘VBB-Fahrinfo’) and to connect them with each other.

How to connect information services
The question how to connect such web services leads to two general technical approaches:

1. Take the timetable data that is in each travel planning service and copy it into one big central data pool (data pooling), or;
2. Establish technical connections in the background of each travel planning service so that they can exchange route information with each other automatically in real-time (distributed approach).

Data pooling seems to be the initial easiest way. But you shouldn’t forget that copying the data has to be carried out regularly whenever timetables change. Data pooling also has certain limitations providing real-time, disturbances and fare information (this information can’t be pooled completely). However, the distributed approach needs much less maintenance efforts during the operation and guarantees the availability of up-to-date timetable data at any time without manual efforts during the operation.

EU-Spirit as a solution
That was the reason why the decision was made towards the distributed approach when the first European project started to deal with cross-border journey planning for public transport. In 1998, EU-Spirit was born as a Research and Development project within the 5th Framework Programme of the European Union. EU-Spirit technically installed standardised APIs to each participating travel planning system and connected them to a central component. The central component’s job was to manage all journey requests by identifying start / destination area and then splitting-up the journey request to each travel planning system which has (at least: partial) information for the requested route. Each system delivers the relevant information it has and passes it back to

Example for an integrated route from an address in Berlin (VBB) to an address in Lund (Skanetrafiken) using a flight for the long-distance part of the journey and including footpaths from/to start/destination

Connecting different travel planning systems via EU-Spirit’s central component
the central component where all partial information is combined to a complete journey. The complete result is given back to the system where the initial request came from and which can display it to the passenger who asked for the route. In cases where the start and destination area are not direct neighbours, a long-distance information server serves railway and flight connections between those regions.

The big advantage of this system concept is that the existing travel planning services can still be used by the customers (in terms of potential passengers) who do not have to learn a new system. VBB was partner in the EU-Spirit network from the earliest beginning of the 5th EU Framework project (1998-2001).

At the end of the project a very important infrastructure event took place: the opening of the so-called Öresund Bridge between Denmark and southern Sweden. From that time onwards, cross-border traffic between both countries increased rapidly which resulted in an increase in demand for cross-border travel planning. The EU-Spirit project partners from Denmark\(^1\) and southern Sweden\(^1\) were in-charge of continuing the service which was developed in the project. From that time EU-Spirit continued over the formal end of the EU project and is still today continuously operated and financed by the EU-Spirit partners.

Nowadays, EU-Spirit has partners from Denmark, Sweden, Poland, Luxemburg, France, Finland and Germany and the network is still growing. Like any other organisation which goes beyond a certain size, some formal structures are needed. As a result, the EU-Spirit partners decided to meet regularly for strategy discussions and decisions as well as to have a coordinator who is responsible for any formal tasks. It is VBB’s pleasure to serve as EU-Spirit’s coordinator since the continuous operation after the projects end started. Since then, an extension to VBB-Fahrinfo called ‘VBB-Fahrinfo Europe’ has been added and now the whole EU-Spirit network is accessible for customers.

Projects involving EU-Spirit

During recent years there have been several other European funded projects which made use of the EU-Spirit technology and which continued the idea of distributed cross-border journey planning. VBB, as the EU-Spirit coordinator, was involved (among others) in the following projects:

**e-Kom**

This was an ERDF project for Real-Time Passenger Information in the area of the river Odra partnership. E-Kom provided the basis for the interconnection between VBB’s area and western Poland. An intensive cooperation started with the City of Poznań and the private Polish information service provider, Jakdojade.pl, which provides up-to-date public transport timetable information and travel planning services for the big Polish cities and...
There is significant commuter traffic by public transport in this area. To make commuting (and also all other kinds of trips) by public transport more convenient, a cross-border information service for public transport will be set-up. This service will be based on the existing services of the participating regions based on EU-Spirit.

In Scandinavia there are current plans to integrate Norway in the EU-Spirit network. Together with the partners from Denmark and Sweden (and the new partner from Finland) the network would cover the whole of Scandinavia. This would underline the strong partnership among the four Scandinavian countries.

Perspectives

Cross-border travel planning services are well-developed and provide reliable and helpful information for customers. This is currently carried-out by route planning tools. But technology is moving forward and, especially by the broad availability of smartphones, travel information during a trip is getting more and more important. Apps, at least for iOS and Android, are nowadays a must-have and an important extension of regular web-based services. This shift from web to mobile started in the local areas and will continue on cross-border trips (in VBB’s area there are now more customer requests to the travel planner sent by mobile phones then sent by regular stationary internet). So, one of the obvious next steps is to integrate cross-border travel planning services into mobile applications of the EU-Spirit partners.

But there is still one aspect that might be an obstacle in the near future. Smartphone users usually have to pay a lot for mobile internet access outside their home network. So, smartphone usage abroad might still be a bit expensive. Another idea to provide on-trip cross-border information for passengers is to bring the information directly into the vehicles. Flat screens have become affordable and are nowadays widely used in public transport. A flat screen in a bus or train can display connections at the next station – also in real-time. The data supply for such flat screens is carried-out by the local authorities or transport operators. To also have this information available in neighbouring regions for cross-border journeys, the background systems have to be connected. Here, the EU-Spirit technology provides a promising base to improve customer information even more.

References

1. rejseplanen.dk
2. skanetrafiken.se

Jürgen Roß studied Planning and Operation of Public Transport at the Technical University in Berlin and graduated in engineering. He began his career in the Operations Department at Frankfurter Verkehrs- und Tarifverbund (FVV). From 1983 to 1998, he worked with Berliner Verkehrsbetriebe (BVG) – the biggest public transport company in Germany – starting in the Bus Operations Department and as an Assistant to the Board of Management before he worked as Deputy Head of the Planning and Development Department. Jürgen has been working at Verkehrsverbund Berlin-Brandenburg GmbH since 1998. He takes the responsibility for planning and development concepts and projects for the integrated public transport network in VBB’s area.
In 2014, the 10th ITS European Congress will be organised by ERTICO – ITS Europe and the European Commission and will be hosted by ITS Finland, the Ministry of Transport and Communications and the City of Helsinki. From 16 to 19 June 2014, participants will witness one of the most advanced cities in Europe in terms of intelligent transport systems. This year’s theme is ‘ITS in your pocket – proven solutions driving user services’ – an interesting title which puts much emphasis on the user as a key recipient of intelligent transport services.

With this in mind, the topics addressed in Helsinki will cover open data, smart ticketing and parking, multimodal networks, city logistics, eco-driving and automated vehicles. In over 100 sessions, registered delegates will hear about digital maps, multimodal journey planners, road charging and tolling, parking management, urban mobility, electro-mobility, and vehicle-to-vehicle/vehicle-to-infrastructure communications. This is of course not a comprehensive list but gives you some ideas of what you can expect from the exciting programme.

These will be amongst the subjects discussed in the three Plenary and eight Executive sessions. In addition, ITS Helsinki will focus on international cooperation between the EU and its Russian neighbour. This is a particularly relevant debate as the EU and Russia, given also their vicinity, share common interests in terms of cross-border travelling and mobility of goods. The Smart Transport Corridor between Helsinki and Saint Petersburg is one of the examples of this cooperation; it covers all modes

This year the ITS European Congress is turning 10 – a great achievement and after 15 years, the ITS European Congress has firmly become an unmissable date in most of the agendas of ITS professionals. The 2013 Congress in Dublin gathered over 1,700 delegates coming from many EU Member States as well as from overseas. Visitors included CEOs, Managers and Directors of mobile network operators, public authorities, research sector, service providers, suppliers, traffic and transport industry, users and vehicle manufacturers.
of transport (road, rail, sea and air) and addresses both personal and freight transport.

Another central theme will address new mobility apps and the use of open data. It is widely acknowledged by the ITS industry that there is a need for new devices and applications that give the opportunity to users to access content anytime and anywhere. This development of new ITS applications (digital maps, location-based services, multimodal journey planners, etc.) involves an opening-up of data resources, promoted both by the Digital Agenda for Europe and the European transport policy. However the open data topic raises issues related to quality, reliability and privacy; representatives of the industry and government officials will discuss these delicate subjects at the Congress.

The Congress will also bring a lively discussion on the business aspect of ITS. There is a lot of development and investment in the ITS industry but the commercial beneficial aspect of this world is often kept unspoken. Indeed there are many benefits and a high economical return that ITS brings to the industry and some exceptional business cases from all around the world will show how money has been made through ITS.

The 2014 ITS Congress will take place during the Finnish midsummer but given the long-term experience of the host country with extreme weather conditions, a session will focus entirely on this subject. Winter is the longest season in Finland, lasting for approximately 100 days in South-Western Finland and 200 days in Lapland. During the long Finnish winters, permanent snow covers open grounds and is deepest around mid-March, with an average snowfall of between 20 and 90cm of snow. In these extraordinary conditions, the transport networks are strongly affected and require the necessary maintenance to ensure safety. ITS is one of the most powerful tools that local authorities have in this respect; cooperative services and connected vehicles for instance can provide essential data for quick response to emergencies and to smooth the traffic flow. Winter and snow will be topics widely discussed, but this session will also highlight the issues with other type of extreme weather conditions such as flooding and heat.

The Plenary and Executive sessions will have speakers representing the European Commission, the Finnish government and the Ministry of Transport, CEOs and managers of leading companies including: HERE; Imtech; T-Systems; SANEF ITS; Q-Free; BMW; Continental; SIEMENS; SWARCO; Kapsch; and Renault, to mention just a few.

For the first time ever, ITS Helsinki will feature the Commercial Theatre – a space located in the centre of the exhibition area dedicated to near-market products or services. The Commercial Theatre will host Commercial Paper Sessions, Special Interest Sessions (‘Industry Insight’) and Commercial Presentation Sessions. The Commercial Theatre will be the place for presenting and promoting ideas for the market – a product or a service which has a strong commercial value.

For the 2014 programme, in addition to the call for technical and scientific papers, the programme committee has decided to give the opportunity to ITS professionals to present an activity (product, service or idea) ready for the market. This was very welcomed by the audience; of the 331 papers submitted, 22 applied to be considered in the commercial category. These papers will be presented in groups gathering similar themes for a length of 60-90 minutes for each session and will be open to anyone with a pass (delegate, exhibitor or visitor).

Furthermore, to highlight the focus on the commercial and deployment aspects of ITS, special interest sessions titled ‘Industry Insight’ will take place during the Congress – these are customised meetings for companies and
Applying a traffic light priority system improves the traffic flow of public transport. Less variation in driving time translates into fewer driving hours, reduced fuel consumption and reliable schedules. This makes public transport an appealing choice to the people.

To successfully implement these services, the communication has to be reliable and available when the fleet is operating. A private communication network set up with SATEL data radio modems ensures you a secure communications network which is available when you need it and where you need it.

If you are interested in improving your public transport systems with solutions based on real-time wireless data communications, contact us. We know how to make your city smarter.

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Improved mobility, efficiency, safety and sustainability are just some of the benefits enjoyed by Siemens customers.