Liberté • Égalité • Fraternité
RÉPUBLIQUE FRANÇAISE

MINISTÈRE DE L'ÉCOLOGIE, DU DÉVELOPPEMENT DURABLE
ET DE L'ÉNERGIE

Report of the ministers' roundtable held on October 5, 2015

on the occasion of the 22nd Intelligent Transport Systems (ITS) World Congress held in Bordeaux on October 5-9, 2015

Prospects for ITS development for the environment and climate protection

Contents

On the initiative of France, the formal opening of the 22nd World ITS Congress was preceded by a ministers' roundtable.

Segolene Royal, the French minister of Ecology, Sustainable Development and Energy and Alain Vidalies, the French State Secretary for Transport, the Sea and Fisheries, broadly invited their counterparts throughout the world and proposed to focus discussions on ITS development prospects for the benefit of environment and climate.

28 countries attended the roundtable. The official list of the acting participants,, including the ministers or their appointed representatives, is attached.

The meeting, neither public nor open to the press, took place on October 5, 2015, from 2pm tp 4pm inside a restricted area in the Bordeaux Convention Centre. The debates have been followed, from an adjacent audience room, by a restricted audience including representatives from the country ITS organizations.

This report was drawn up by the French party on the basis of the session's video recordings. DO NOT TRUNCATE. DO NOT SUMMARIZE.

Introduction

Eva MOLNAR, roundtable moderator, Director of the Transport Division of the United Nations Economic Commission for Europe (UNECE).

Good morning, everybody.

Almost fifteen days ago at the United Nations, the heads of state agreed on the 2030 agenda and new targets for sustainable development. In two months' time COP 21 will be held in Paris. This is therefore a good time to mention tools that allow us to make transport sustainable. To be more specific, this means ITS in conjunction with climate change-related initiatives. We must move towards intelligent mobility and a better use of space.

Opening keynote 1

Alain VIDALIES, roundtable co-chair, Secretary of State for Transport, the Sea and Fisheries, attached to the Ministry of Ecology, Sustainable Development and Energy, France

It gives me great pleasure today to welcome you to Bordeaux for this ministerial round table of the 22nd World Congress on Intelligent Transport Systems. The 2012 World Congress on Intelligent Transport in Vienna inaugurated ministerial level discussions. The Tokyo and Detroit World Congresses continued with these discussions. Intelligent transport systems (ITS) no longer simply boil down to technologies. They are now an integral part of transport policies at local, national and international levels.

France has therefore decided to expand this ministerial meeting process. I am delighted that so many countries and organisations have accepted the invitation from the Minister of Ecology, Sustainable Development and Energy and myself. This meeting brings together national representatives from all parts of the world, as well as international organisations, and in particular the International Transport Forum and the United Nations Economic Commission for Europe. The representatives of national or regional ITS associations have also been invited to share our discussions.

Firstly, this meeting will enable us to discuss the main public policy issues relating to ITS. These issues may concern those ITS services we consider to be priorities for our shared objectives, security, optimal management of transport networks, traffic fluidity and nuisance reduction.

They may also be related to open data, interoperability, support for experiments, data protection, cyber security, finance or assessment. I think it useful to have these discussions on ITS-related public policies in the presence of representatives of national and regional ITS associations, so that industry and service representatives are acquainted with our shared concerns. In fact, these are the businesses which, in the end, will have to develop the intelligent systems and services that respond to our concerns and those of our fellow citizens.

I also invite you to discuss the link between ITS and climate. 2015 will be the year of climate, with COP 21 being held in Paris in December. Its objective is to limit global warming to less than 2 degrees compared with the pre-industrial era and to adapt our societies to disruptions that are already with us. France, with its partners and your countries, is very committed to four components of COP 21:

- A universal binding agreement for the post 2020 regime of the Framework Convention on Climate Change;
- National contributions submitted by the parties before COP 21;
- The financial component intended to fund the transition to resilient "low carbon" economies;
- The solutions agenda or action agenda.

The action agenda is a specific component of COP 21. It is aimed at catalysing, supporting and speeding up the climate-orientated initiatives of governmental and non-governmental stakeholders, and in particular those of businesses and regional authorities. The transport sector is one of the priority sectors of the action agenda. We have already mobilised thirteen sector initiatives. They cover public transport, rail and air transport, as well as airports, roads, port and river facilities, vehicle efficiency, electro-mobility, freight, urban mobility planning, bicycles and ITS.

A presentation on the "ITS for climate" initiative is available in this room. The aim of this initiative is, in particular, to encourage feedback on the positive impacts of ITS and its solutions for climate. By encouraging better informed, more fluid and more responsible mobility behaviour, ITS can play a role in reducing emissions. This perspective must still be documented by experiments and projects.

This is the added value we expect from this "ITS for climate" initiative, which I ask regional and national ITS associations to get involved in. A wide ranging coalition of stakeholders must be brought together around this initiative between now and COP 21. The preparation text of our round table is entitled "demonstrate" and relates to the contribution ITS can make to the fight against climate change. The aim is to put together a few summary paragraphs stating our shared understanding of the issues and mechanisms linking ITS and climate and to state our expectations, so that ITS can make a practical contribution to combatting climate change.

Mrs Violeta Bulc, European Commissioner for Transport, and I are going to co-chair this meeting. Mr Jose Viegas, Secretary-General of the International Transport Forum (ITF) will give an introductory talk on the ITS issues for sustainable urban mobility. Mr Patrick Oliva, Michelin Group Director of Sustainable Development, will give an update on the preparation of the climate conference action agenda. Mrs Eva Molnar, Director of Transport at the United Nations Economic Commission for Europe, will lead our discussions.

Let me continue with a few words on French priorities concerning intelligent transport. In February 2014 France set up an intelligent transport framework strategy called "Mobility 2.0". In view of the European framework and in particular the 2010 ITS directive, the aim of this strategy is to facilitate the deployment of ITS to meet the objectives of security and optimal management of networks, fluidity and emissions reduction.

The first theme relates to open data on transport. The national debate held at the end of 2014 enabled us to make recommendations for controlled open data, allowing the needs of information services providers to be reconciled with the management objectives of services users.

Consequently, provisions relating to providing users with access to the data they need to know were included in the law on growth and business activity. Open data on regular public transport services and mobility services and access to the regional authority route calculators must be available. The law raises the principle of free and immediate dissemination and re-use of data.

The second action concerns the SCOOP@F project, the purpose of which is to deploy cooperative systems over 2,000 kilometres of equipped roads and streets, in order to exchange data with 3,000 connected vehicles. We hope this cooperation between vehicles and infrastructure will contribute to road safety and steadily improve the collection and distribution of road information. This European project is going to be rolled out in France, in close conjunction with experiments carried out by our neighbours. We have done intense work on specifying these services, in cooperation with the State, local facility managers and car manufacturers. On this basis, developments can be started. Corresponding systems will be deployed in 2017.

The third theme concerns multimodal information. Clarification of the open data framework allows many obstacles to be removed. Discussions are being held with transport operators on the subject of giving passengers full and rapid visibility about available forms of transport and the environmental footprint of journeys.

The fourth theme relates to the "Mobility 2.0" strategy. This plans for national and local authorities to work together to identify shared priorities for ITS services. This work, in consultation with regional authorities, enables us to bring out areas of consensus around services such as information about road works and unforeseen events, on-board signalling, and real-time information on traffic, public transport, car sharing and carpooling, on availability of car parks, Park & Ride facilties and delivery areas as well as alternative fuel distribution facilities and electricity charging sites.

Consistent with the European ITS Directive, these general guidelines must give priority to the specifications or standardisation necessary for deployment of these services.

Finally, the fifth theme, the "Mobility 2.0" strategy, relates to the setting up of a framework for innovation and experimentation. This theme has been considerably strengthened in the last year, specifically for automated and autonomous vehicles, which is a key theme of the Bordeaux Congress.

The industrial plan for autonomous vehicles, lead by Carlos Ghosen, is to develop vehicles in which the driving functions can be partially or totally delegated to these vehicles. It is actually a strategic challenge for the industry and keeping jobs. Progress in

the field of driver assistance has encouraged the major internet and digital players as well as the automotive and transport sectors to come together to develop a competitive range of components, sensors, software, control systems and services in order to offer autonomous vehicles at affordable prices by 2020.

The aim of this programme is to make the French automotive and transport sector a pioneer in the design of autonomous vehicles for all. Validated in July 2014, the autonomous vehicles roadmap covers projects involving market and the value chain analysis, technological programs, a security and safety demonstration, the legal framework and deployment of vehicles.

In particular, this road map provides for entirely safe experiments, in order to demonstrate the improvement in road safety and to highlight any regulatory, social and technical obstacles to the deployment of these vehicles. The French energy law for green growth, promulgated last July, will be complemented by an order enabling autonomous vehicles to be tested on the public highway.

After an initial experiment at La Rochelle in the summer of 2011, shuttles were tested at the beginning of 2015. Autonomous vehicles have been used on French roads. At the end of June 2015, Peugeot was authorised to carry out functional testing on the open road. Demonstrations carried out as part of the Bordeaux Congress will help us to gain a better understanding of French know-how on vehicle automation.

Opening keynote 2

Violeta BULC, session co-chair, European Commissioner for Transport

I wish to thank the City of Bordeaux and Minister Vidalies for their invitation. I also thank the participants in this major event, which should contribute to define strategies for intelligent transport. This issue is very close to my heart. It draws a great deal of attention from the European Commission, since it could foster growth, investments, employment, increase energy efficiency and support the development of new digital services. Intelligent transport systems can significantly contribute to road safety, reduce pollution and improve community services, especially for elderly people and persons with reduced mobility.

This ministerial round table gives me an opportunity to share the Commission's position on the manner in which we can tackle key challenges. The cost of climate change is considerable for society. The cost of doing nothing would be even greater. COP21 in December is an essential step. The proposal is to cut our emissions by at least 40% by 2030.

Transport can make a significant contribution to achieving this target, by putting in place more efficient driving systems and using alternative energies, particularly renewable energies. Efforts must also be made in the field of autonomous and connected driving, developing co-modality, more intelligent mobility and better transport management to reduce traffic congestion and pollution. We must also promote green technologies and the circular economy.

ITS constitutes a key step for the development of transport, they are an integral part of the digital revolution. We need a better integration of transport services and networks, to make the transport system more efficient and sustainable. ITS will be a key part of these transformations.

I have worked in the telecommunications and IT world. From my point of view transport needs a formal architecture that we can progressively put in place which allows data sharing and integration of services. We need to encourage national and international discussions and foster the development of new services to intensify cooperation around ITS. The Internet makes it possible to work and communicate via interconnected platforms and share data. We must make transport infrastructure intelligent and create a framework to guarantee secured access to reliable data and protection of personal data. Priority must be given to a global system of standards to offer appropriate safeguards.

With regard to services and solutions, ITS will enable, holistic, integrated solutions for users such as single ticketing or mobility as a service. Connection of databases is the prerequisite towards enhanced mobility and better services. Current trends towards the sharing economy and the setting up of intelligent networks place users at the centre of the transport system and already impact mobility (new services and new behaviours).

We need to develop a global strategy. The European Union is already working on a set of measures concerning ITS, including a roadmap for the deployment of cooperative systems to ensure that all operators work together. Links should also be strengthened with the industry to coordinate the deployment of interoperable ITS and encourage investments in this sector.

The ITS Directive, adopted in 2010, gave the Commission a greater role to foster interoperability of ITS across Europe. The Directive gives the Commission a mandate to intervene in several areas contributing to the deployment of ITS. In this context, the Commission facilitates the dialogue between representatives of Member States, the automotive industry and other stakeholders, inter alia to agree, in 2016, on recommendations regarding the coordinated deployment of ITS within the EU.

The European Union is also financing the deployment of ITS along the trans-European transport network. In this context, the Juncker plan provides new funding mechanisms aimed at encouraging private investors to get involved in the creation of new and innovative transport solutions. Under the Connecting Europe Facility a new call for proposals will be launched in November. In the field of ITS, and in particular cooperative ITS, the available budget for this call will amount to € 70 million. While under Horizon 2020, the next calls for proposals will set aside more than €100 million for the automation of road transport.

Finally, I would like to stress the economic aspect of our discussion. In December, COP 21 will take decisions on climate change. This ministerial round table is the first stage in assessing the contribution ITS makes to this process. We must be bold if we are to cut the carbon emissions of our transport systems and promote the development of ITS. But this "green" objective is all the more crucial as it supports the development of new businesses and will stimulate growth.

Thank you for your attention.

Eva MOLNAR

France would like ITS to be developed and new regulatory provisions put in place to encourage the use of these innovations both nationally and internationally. The development of ITS in transport could help to reduce emissions and improve road safety.

COP 21 will take place soon. At the United Nations we also have the opportunity to learn about the developments that have taken place in road safety over the course of the last ten years. There is a direct link between increased motorised transport, particularly in

South America, and a rise in the death rate in a country, even if speed limit regulations vary from one country to another.

Finally, changes are being made to the Vienna Convention on road traffic. No application for an amendment has been made. This text is planned to come into force at the end of March. It is a major step forward. We expect governments to set out other proposals.

Perspective keynotes

I) Urban transport: ITS-based policies for quality of service, emissions and congestion reduction

Jose VIEGAS, Secretary-General of the International Transport Forum (ITF)

Ladies and Gentlemen, Ministers and Commissioners, Your Excellency,

Last year ITF launched a study in the leading member countries in order to list priorities for policies and debates. According to the results of this enquiry, ITS is at the top of the list. Three projects have been developed, in collaboration with our members. They concern autonomous driving, big data and shared mobility solutions in urban areas respectively.

In spite of campaigns intended to encourage developments in means of transport, the market share of journeys by private vehicle is still too large in the majority of large cities, with resultant traffic congestion and reduced quality of life for residents. The quality of service provided by public transport is not enough for users who do not have direct connections with these services. Furthermore, in terms of mobility, we are facing coherence problems between governmental authorities and local authorities policies. ITS can help us deal with these situations.

In terms of public transport, discussions on “taxibuses” carried out in the International Transport Forum are aimed at meeting passenger needs in real time and thus helping to reduce the volume of vehicular traffic by 20%, which could help to solve the problem of road congestion and cut emissions by more than 24%. The application of a number of measures can thus reduce the price of transport per kilometre and per passenger as well as parking needs and thus improve the quality of life of residents. ITS allows new solutions based on carpooling to be developed and information tools to be used in real time.

II) Action Agenda in the transport sector - preparation of Transport Focus at COP 21

Patrick OLIVA, Senior Vice-president in charge of Strategic Anticipation and Sustainable Development, Michelin Group

Ladies and Gentlemen,

Thank you for inviting me as a representative of the private sector. In his introduction the French Secretary of State mentioned the importance of the perspectives of the COP 21 agenda. I am here as coordinator of the Transport Focus, which will be held on the 3rd December and will be a "first" in the history of the COP. It will give us the opportunity to

present the view of industrialists in the sector and will allow us to show that partnerships can be developed between the State and the private sector.

On the one hand, we will present the thirteen initiatives launched internationally, following the call from the Secretary-General of the United Nations, Ban Ki-Moon, which have the support of governments and the private sector. A needs analysis is essential.

On the other hand, we will tackle the multimodal approach in the transport sector, particularly targeted at cutting emissions. It is essential that commitments made as part of the Transport Focus are included in the 2016 transport agenda.

Our discussions will be focused on the mobility of people and freight, two areas in which innovation could encourage job creation and growth, with support for initiatives in this area from the State and other stakeholders. In conclusion, I sincerely hope we will contribute to the preparation of this event. I warmly invite you to take part in this Focus. Together, we can work with commitment and plan the future.

Contribution addresses (roundtable)

I) Australian contribution

Warren TRUSS, Vice Prime Minister and Minister for Infrastructure and Regional Development, Australia

Ladies and Gentlemen,

Thank you for inviting me.

Australia considers that ITS can play an important role in improving road safety, economic growth, cutting CO^2 emissions and enhancing the well-being of the population.

In Australia, within a federal system, responsibility for transport is often held by the states. Numerous initiatives aim to adopt new technologies. Thus, South Australia has implemented road trials with autonomous vehicles, which is a "first" in the southern hemisphere. An international conference on the subject is planned. Furthermore, the national rail company is working on an advanced train management system and the adoption of new technologies for using GPS navigation systems for locating trains in real time. This system could enable flows on the freight network to be made denser, improve our infrastructure capacity and optimise transport safety.

Moreover, private operators are involved in passenger transport management. We want to encourage the installation of new generation systems likely to reduce the interval between trains from three to two minutes, with no risk to passenger safety.

With regard to traffic management on motorways, Australia has developed a management system based on the use of coordinated digital signage, which enables the number of accidents and delays to be cut significantly. Once the maximum capacity of a motorway is reached other vehicles are not given access. This intelligent system facilitates traffic fluidity. It allows drivers to make daily fuel savings, while cutting greenhouse gas emissions by 40 tonnes. It is moreover planned to extend it beyond the motorways to other networks. Furthermore, intelligent signage provides motorists with information about their speed, their journey times and any hazards. It promotes safe journeys and road traffic fluidity.

In addition, discussions have been held on the development of driverless trains. This innovation, introduced in Australia several years ago, particularly concerns coal mines. In the area of air transport, it is also possible to use pilotless planes. Eventually, it is logical that we could have driverless cars.

Of course, we must reassure users about the safety of these vehicles. This congress can help to give them confidence in these new technologies and encourage the development of new ITS solutions.

I would also like to invite you to take part in the 23rd Congress in Melbourne in 2016, to be organised by ITS Australia, in partnership with the Australian government and industrial partners. Our programme will concern improving the quality of life in urban areas. The agenda will include ITS and its contribution to the road transport, freight and environment sectors. This could contribute to discussions on improving journeys in urban areas and developing connections between transport platforms.

II) Finnish contribution

Anne BERNER, Minister of Transport and Telecommunications, Finland

Ladies and Gentlemen,

Thank you for inviting me to this congress.

Mobility as a service is one of the priorities of the new Finnish government. Its aim is to develop digital services in the transport sector as quickly as possible in order to promote sustainable development and improve safety. It also meets users' mobility needs. ITS can help towards reaching these objectives. Finland's holistic approach covers all aspects of intelligent transport. Mobility as a service is at the heart of this process.

However, the Finnish authorities still have too much control over the transport sector. It is essential that users themselves appropriate the transport ecosystem according to their own needs. The regulatory actions of the public authorities in procedures and services should be limited to what is strictly necessary, particularly in the absence of a minimum service. Current models are being analysed in order to change from a subsidised system to an incentive model.

The Finnish government has begun a reform of the transport code, which will simplify regulatory provisions and cover all transport sectors. It will deal with issues such as entry to markets, data and reduction of the administrative burden. Our timetable is ambitious and the most urgent provisions will be published in the summer of 2016.

Other countries, as well as organisations and businesses, want to embark on this path. A mobility as service alliance has therefore been set up to encourage discussion about the regulatory process and harmonisation across the whole of the European Union. Open to all stakeholders, a presentation of this alliance will be given in the Finnish pavilion at 1.00 p.m. tomorrow.

III) German contribution

Tobias MIETHANER, Director for the Digital Society at the Federal Ministry of Transport and Digital Infrastructure, Germany

Ladies and Gentlemen,

Germany is redoubling its efforts to develop ITS-related activities. It is currently putting special emphasis on connected driving. Other developments should take place in the future, more particularly in three domains.

Firstly, the government is developing projects in the area of communication between vehicles themselves and between vehicles and infrastructures. Digital tests have taken place between Munich and Nuremberg, in cooperation with manufacturers. The objective is to create a "laboratory" under real conditions, taking account of the requirements specified in this field in order to study needs and optimise production and infrastructures. Data collected at the end of these tests will be available on our test bench.

The challenges posed by development of connected driving also need to be analysed. Several weeks ago, the federal government implemented a national strategy covering the fields of innovation, infrastructure, the law, responsibility issues, cyber security and data protection.

The meeting of the G7 Transport ministers in Frankfurt a few weeks ago helped to remind us that the challenges we have to meet are both national and international. Cyber security standards must be defined and some provisions of international law, such as the Vienna Convention, need to be clarified.

Eva MOLNAR

Thank you for this contribution.

Where signage is concerned, the European Union has taken two years to convince governments of the need for harmonisation. Efforts still need to be made. A comprehensive study of the Vienna Convention has been carried out in relation to road signs. A list of signs has been made.

IV) Indian contribution

Venkaiah NAIDU, Minister of Urban Development and Parliamentary Affairs, India

Madam Chair, colleagues,

Thank you for welcoming me at this conference.

Transport accounts for more than a quarter of man-made emissions. It is therefore essential that we take measures to limit them. On this basis, the Prime Minister of India wants to reduce our carbon footprint by over 40% by 2021.

This is a major challenge, all the more so as India is faced with a considerable increase in the demand for means of transport, which is growing by over 9% per year, with an attendant increase in congestion and journey times. We therefore intend to draw up action plans for this issue.

The introduction of ITS is essential to improve transport management and reduce emissions. A governmental commission has been set up for this purpose. The introduction of a new payment card allows passengers to benefit from a national multimodal transport scheme. In addition, several transit services have developed an intelligent payment card, directly linked to bank networks, which can be used on several transport networks.

We would like this economic model to be developed in other countries outside India.

With regard to buses, we have developed new information management systems (notably by GPS) and a rapid link network between several Indian cities. In my own state, Kamalaka,, 500 buses link 900 different routes together. We are giving priority to ITS and want to install centralised control stations and intelligent management systems on motorways to reduce road accidents by 23% and cut greenhouse gas emissions by 6,000 tonnes a year. Finally, a metro system is planned for Mumbai and the main Indian cities.

Many foreign companies are supporting the implementation of this extensive transport programme. They are helping to reduce congestion and garner customer satisfaction.

Some thirty private companies, in more than 25 states, will contribute to the implementation of this policy. In the long term we want to cut journey times by 30%, reduce accidents by 19% and also bring down fuel consumption and annual CO^2 emissions. India wants to serve as an example, whose "intelligent cities" will contribute towards improving quality of life and developing "green" jobs.

Eva MOLNAR

Thank you for your contribution.

I would like to remind you that the Luxembourg presidency of the European Union will host the Council of Ministers on 7th October in order to look at the question of “mobility software”. An informal ministerial meeting is also planned.

V) Luxembourg's contribution

François BAUSCH, Minister of Sustainable Development and Infrastructure, Luxembourg

Thank you for inviting me to this congress.

The subject tackled on the 7th October is particularly close to my heart. As a reminder, European Mobility Week 2015 was devoted to the multimodal system and its contribution towards solving traffic problems.

Digitisation helps to optimise transport organisation. Better coordination of the various forms of transport such as trains, trams, buses, cars or bicycles is essential. I would also like the transport white paper, which will be drafted as part of the debate organised by the Luxembourg presidency of the Council, to take account of the ITS issue.

In 2013, the Luxembourg government took the decision to launch an enormous investment programme in the telematics and ITS sectors to improve the organisation of public transport. The blueprint includes several themes.

Firstly, we want to provide users with an effective information system for public transport, private vehicle traffic, planned road works as well as unforeseen incidents and accidents that might arise. The aim is to allow users to choose the most appropriate form of transport in real time.

Secondly, we want to give users greater guarantees in relation to intra and inter-modal transfers. Management and supervision tools must also be available to public transport organisers and operators. Intelligent operating systems can actually help to significantly increase the capacity and performance of public transport. Finally, electronic ticketing must be optimised by adapting it to recent technical developments.

A long-term investment programme has been launched for the 2013-2017 period. The first phase concerned operational management and information for passengers, especially the national and regional bus network. In 2015-2016 investments will be made in the rail network. A centralised platform has been created. This will include an extension for all private and public operators within.

With regard to the functional extension of the national information system, users can view the website on their “smartphone” or digital tablet. A dynamic display system is being progressively implemented on the bus and rail network. This is a key improvement for the quality of information given to travellers.

Finally, in addition to the new electronic ticketing there is now also a mobility card. This allows users to download all information related to their journeys.

This programme will be completed by the end of 2017 or the start of 2018. ITS are now essential in all domains. I am therefore delighted that article 17 of the 2010/40/EU Directive compels EU Member States to produce a report on ITS activity.

The discussions beginning on October 7 are intended to emphasise the performance and quality of this measure.

VI) Dutch contribution

Marjolijn SONNEMA, Deputy Director General for Mobility and Transport, Ministry for Infrastructure and Environment, The Netherlands

Thank you for organising this meeting.

The appearance of autonomous vehicles brings the transport sector into a new era. In terms of mobility it is going to be a deal changer in next twenty years. This revolution will be even more fundamental than that of the last century for our societies and in the daily life of the population. It raises many questions which we must try to answer.

Currently, the various stakeholders are still relatively isolated from each other. Our initiatives are not sufficiently connected to each other. This also applies to connected driving and connections between governments and manufacturers in this sector.

During their European presidency the Netherlands entered into dialogue with the various Member States, the Commission and European Union manufacturers. We would also like to initiate fruitful cooperation and offer Member States an opportunity to sign a declaration on connected and automated driving. This will be organised in Amsterdam in April 2016.

An informal council meeting on transport will take place the same day. A meeting of transport and environment ministers will also be organised. The issue of intelligent solutions likely to be deployed to encourage sustainable mobility will be discussed

VII) Polish contribution

Martha STACHOWIAK, Advisor to the Polish Ambassador to Paris, Poland

Thank you for inviting me to this conference.

In recent years Poland has implemented significant strategic actions on transport. Users now display increased interest in the use of applications and services aimed at

vehicle sharing, developing carpooling and optimising urban transport, which is leading to an improvement in the quality of the environment.

Poland is making particular efforts to develop ITS. With the benefit of European funding, it has been able to set up intelligent transport development projects. Other investments relating to this strategy have also been made. The transport commission is currently looking at digitising transport services.

Poland is studying the development of various regulatory provisions and the implementation of several projects linked to real-time information. The Polish general directorate for motorways thus intends to launch soon a call for tender for providing users with access and information on motorways. In the context of developing a traffic management system, the ITS report of ERTICO ITS-Europe is a very important source of information. Moreover, studies have been carried out on actions taken in other countries and on the environmental impact of ITS.

In 2016 Warsaw will hold the sixth conference on transport research. This will be organised by the Polish State, the European Commission and the European transport directors. It will discuss the environment, sustainability, energy efficiency, urban mobility, long distance journeys, security of transport systems, automation and connector technology.

VIII) Swedish contribution

Eric BROMANDER, Secretary of State to the Minister of Infrastructure, Sweden

Thank you for inviting me.

Automation and the development of automated information systems in the transport sector can make a significant contribution towards reducing congestion, improving safety and meeting current challenges.

Sweden is involved in putting these tools in place and including them in an overall policy aimed at improving our transport systems. ITS can help to increase road network capacity. However, thought must not only be given to infrastructure but also to vehicle design.

As an example, a project has been set up in Gothenburg. This involves all the parties working on autonomous vehicles. Progress is such that in 2017 the residents of Gothenburg will be able to use automated vehicles to move around the town. I would therefore like to invite you to visit us in two years' time to see the changes that have taken place.

Debate (roundtable)

Herman MEYER, Chief Executive Officer, ERTICO ITS-Europe

On behalf of the three regional ITS Associations, ITS-Europe, ITS-Asia Pacifc and ITS America, I would like to thank you for participating in this round table and in the Bordeaux congress.

The areas we are involved in are mobility as service, electrification and automation. In this context ITS plays a key role.

We asked the specialist national ITS associations to supply us with evidence that the applications available on the market contribute to reducing emissions and to describe the services they provide. We have received eleven responses from Austria, Bulgaria, United States, Czech Republic, Finland, France, Greece, South Korea, New Zealand, Japan and Singapore,

This study shows that applications facilitate the multimodal mobility of users and goods and that they can help to reduce emissions. Efficient driving, the development of intelligent signage and the use of applications dedicated to parking also have a positive impact.

The associations have also sent us observations on technical issues, system maintenance, data integration on platforms and the difficulties faced by public institutions when launching calls for tender. Political support for initiatives sometimes lacks continuity. In addition, financial resources are insufficient.

According to the information submitted by the ITS associations and confirmed by an STI stakeholder group within the European Commission, STI offer on the territory of the European Union a potental emission reduction by 20% from 2015 to 2020

Eva MOLNAR

At the 2007 Forum on vehicle harmonization, there was a degree of scepticism about the implementation of public actions intended to reduce emissions. Later in 2010 a scenarioassessing model was developped for surftace transportation.

The national ITS organisations provide useful information on the technical aspect of this approach. The area covering North America, Europe and Central Asia is the only region of the world where a reduction of emissions per head of population has been observed in the last ten years. Yet this region of the world is the source of over 50% of transport-related emissions. The public authorities and the private sector have a major role to play if this progress is to continue.

Ingold SCHAEDLER, Deputy Director General to the Ministry of Transport, Innovation and Technology, Austria

Hello everyone. In 2012 I co-chaired the first ministerial conference on ITS, which was held in Vienna, Austria.

In Vienna an agreement was reached to support the deployment of ITS solutions at the global level. Our country has reached its target. In 2013 Parliament voted for a law on the deployment of ITS and an action plan was put in place. This provides for increased cooperation between Austria, Germany and the Netherlands.

In the last few years we have allocated considerable investment to technical infrastructure in the public transport sector. Nevertheless, the share of greenhouse gas emissions produced by transport has gone up. This issue is crucial for Austria, a transit country where tourism constitutes an important sector.

Development of autonomous driving could be a success if this form of transport is combined with the development of electric transport. This is why Austria supports the French presidency and the declarations of intention made in relation to ITS development and CO2 emissions reduction. We will support France along these lines through our participation in the COP21.

Eva MOLNAR

It is important that participants at this conference can raise questions and doubts. In fact, they are part of the reality we are faced with. Economic growth causes an increase in commercial activities as well as increased traffic, while we want to reduce transport-related emissions.

We must therefore specify the extent to which support for technological innovations can have a positive impact. Harmonisation of policies and standards at international level is essential.

Romain KOUAKOU, Director General of Land Transport and Traffic at the Ministry of Transport, Ivory Coast.

Hello everyone.

In Ivory Coast ITS is an important issue for transport policy. The government became involved in this sector early on. Massive investment has been made to improve the quality of the infrastructure, especially equipping some toll motorways and bridges with an electronic payment system.

In towns, urban traffic mostly consists of small vehicles. The mass transportation system is almost non-existent. Our efforts therefore concern development of this mass transport network. Two metro lines will be constructed by 2020. We would like to make the maximum use of ITS in transport.

In addition, the procedures for obtaining a vehicle registration document are now automated. An electronic payment system has been set up, which reduces the waiting time for the document from six months to 24 hours.

African countries are an important market for the sale of second hand cars from Europe. Consequently, the vehicle fleet is quite old, with an average age of fifteen years. By reducing the rate of VAT we aim to modernise this fleet. 50,000 vehicles are currently in the process of renewal.

According to a 2005 study, dysfunctions linked to traffic jams and accidents cost the community €300 billion. The government is therefore committed to improving this situation.

African countries are committed to the policy of ITS development, but their resources are limited. We would encourage operators to take an active part in the development of partnerships, especially for the implementation of projects such as tramway construction.

Eva MOLNAR

In fact, the development of advanced technologies is not enough. As highlighted by the international financial institutions, it is essential to ensure infrastructures are maintained, and technical checks and periodic maintenance are carried out on vehicles, with the support of policy decision-making bodies.

Gabriel NTSEMI GOMA, Surface Transportation Adviser to the Minister of Transport, Civil Aviation and the Merchant Marine, Congo.

The Minister of Transport for Congo cannot attend this conference. I would like to thank you for the invitation.

Congo received financial support from the European Union to develop a national transport plan. Seven years on, we are starting to take stock and update these measures.

However, the application of a policy for the development of ITS is only starting in Congo. We are having discussions with transport professionals and decision-makers, notably with a view to disseminating STI-based applications and implementing them across the country. Data collection is a fundamental issue.

Martin MATTHEWS, Director General at the Ministry of Transport, New Zealand

Over the next thirty years, the boom in intelligent transport, development of the fleet of electric vehicles and autonomous vehicles, as well as vehicle sharing and carpooling will have a significant impact on CO^2 emissions and on our daily lives.

Governments must pay attention to this paradigm shift and adapt regulatory provisions to these changes. New Zealand has begun to look into the opportunities offered by ITS and the development of the regulatory framework over the next ten years.

Eva MOLNAR

This issue affects both governments and intergovernmental organisations. The Internal Transport Committee at the UN (and its subsidian bodies) fuel discussions on the deployment of these solutions.

Conclusion

Alain Vidalies, Secretary of State for Transport, the Sea and Fisheries, attached to the Ministry of Ecology, Sustainable Development and Energy, France

I would like to thank you all for taking part in this round table and for the quality of your contributions. Representatives from several countries have stated their priorities in relation to ITS, and mentioned practical experiments currently being carried out and what they expect from them.

Jointly with the European Commissioner Violeta Bulc, we are proposing that you adopt the previously sent Manifesto. This declaration aims to promote the deployment of ITS in order to reduce greenhouse gas emissions and encourage exchanges of good practice so we can reach the targets of COP 21.

This roundtable successfully highlighted a number of convincing achievements from your respective countries. So I suggest that we will monitor this Manifesto by responding in large numbers to the invitation of Australia to the next Congress to be held in Melbourne in October 2016.

THE 2015 BORDEAUX MANIFESTO
'ITS ADDRESSING CLIMATE CHANGE'

Adopted on October 5, 2015

Currently CO_2 emissions in the transport sector account for about 23% of the total man-made CO_2 emissions worldwide within a growing trend. There is a strong need to find and deploy actions that will reduce transport CO_2 emissions while fulfilling growing mobility needs. Fortunately we are in an information age, in which cities, organisations and individuals can share more and more information which provides a basis for integrated services. Intelligent Transport Systems (ITS) is the transport part of the information age; it provides the framework to design, deploy and coordinate the efficient solutions that people need.

In this context ITS is the cornerstone of future transport and mobility policies :

- ITS can contribute to reducing CO_2 emissions and the pollution of air in cities by optimising network management, encouraging eco-driving and encouraging a shift from private personal cars to collective public transport and lower-carbon transport modes;

- ITS can be used to reduce congestion and increase safety. ITS can expand transport capacity more quickly, and using fewer resources, than extending existing physical infrastructure. In public transport advanced services, including incentives for modal-shift, can rely on ITS to leverage the efficiency of both private and public funding.

- ITS can link in the integrated approach needed to reduce the CO_2 emissions services such as: connected and autonomous vehicles; satellite-based applications for transport; electromobility; parking and park-and-ride management; urban logistics and eco-traffic management.

- ITS and mobility services generate large volumes of data which can be used to improve statistics, evaluation, forecasting, and predictive management, and also enable provision of incentives for travellers.

- ITS can provide users with personalised solutions that enable them to become partners in new intelligent mobility policies based on high privacy, highly reliable services.

- ITS will also contribute to a more inclusive transport system, by providing solutions to persons with reduced mobility and elderly people.

- ITS is a growing employment sector covering a wide range of skills and knowledge (technology, management, finance, planning, R&D, sociology, economics, law) and an innovation motor for our economies with high importance for the competitiveness in global markets.

The ITS community, gathered in Bordeaux 5-9 October 2015, reaffirms its awareness of these challenges and its readiness to cooperate at the relevant scale (city, region, nation, international) to make contributions to addressing them that are efficient and sustainable. Internationally, nationally and regionally there is a need to develop awareness and exchange experience about the scope of ITS, its achievements and its potential. In particular, local best practices need to be shared and promoted and costs and benefits need to be documented and publicised.

The participants to the minister's roundtable:

- express their appreciation for the support given by the previous Round Tables of Vienna, Tokyo and Detroit that has fostered the coherent deployment of ITS to face transport challenges;

- commit to promoting the deployment of ITS systems to reduce CO_2 and Greenhouse Gas emissions linked to transport through stepping up investments into these instruments;

- invite the experts, national decision makers, relevant international organisations and legal bodies to provide guidelines and capacity building actions to support the deployment of appropriate solutions based on ITS;

- invite both public and private sector stakeholders to come forward with 'best practice' examples of ITS deployment that contributes to the reduction of CO_2 and associated Greenhouse Gas emissions so that governments can be helped to reach the ambitious objectives to be decided during the COP21.

Attendance to the ministers' roundtable (Bordeaux, October 5, 2015): Heads of delegations

The meeting was co-chaired by:

- Alain Vidalies, Secretary of State for Transport, the Sea and Fisheries, attached to the Minister for Ecology, Sustainable Development and Energy, France
- And Violeta Bulc, European Commissioner for Transport

and moderated by:

- Eva Molnar, Director of the Transport Division of the United Nations Economic Commission for Europe (UNECE).

The following 28 countries attended the ministers' roundtable:

- **Argentina** / Guillermo Carro, Vice-Minister in charge of Normative Regulation of Transport
- **Australia** / Warren Truss, Deputy Prime Minister and Minister for Infrastructure and Regional Development
- **Austria** / Ingold Schaedler, Deputy Director-General, Ministry of Transport, Innovation and Technology
- **Azerbaijan** / Ilkin Efendiyev, Head of the Department of Coordination and Licence, Ministry of Transport
- **Belgium** / Christophe Leurident, Counselor of the Federal Minister for Mobility
- **Congo** / Gabriel Ntsemi Goma, Counselor of the Minister for Transport, Civil Aviation and Merchant Marine
- **Czech Republic** / Kamil Rudolecký, Vice-Minister for Transportation
- **Denmark** / Niels Torslov, Director of Operations, Road Directorate
- **France** / Alain Vidalies, Secretary of State for Transport, the Sea and Fisheries
- **Finland** / Anne Berner, Minister of Transport and Communications
- **Germany** / Tobias Miethaner, Director Digital Society Division, Federal Ministry of Transport
- **Hungary** / Péter Toth, Deputy Head of Transport Infrastructure Department, Ministry of National Development
- **India** / Venkaiah Naidu, Minister for Urban Development and Parliamentary Affairs
- **Indonesia** / Indrio Nugroho, Senior Expert Staff on Technology, Energy & Environment, Ministry of Transportation

- **Ivory Coast** / Romain Kouakou, Director General Surface Transportation and Circulation, Ministry of Transport
- **Japan** / Eiji Wakai, Deputy Director-General, Manufacturing Industries Bureau, Ministry of Economy, Trade and Industry
- **Kazakhstan** / Murat Nurkenov, Expert, Transport Committee
- **Luxembourg** / François Bausch, Minister of Sustainable Development and Infrastructure
- **Malaysia** / YBhg. Datuk Ismail Hj. Bakar, Secretary General, Ministry of Transport
- **Netherlands** / Marjolijn Sonnema, Deputy Director-General for Mobility and Transport, Ministry for Infrastructure and Environment
- **New Zealand** / Martin Matthews, Director General, Ministry of Transport
- **Poland** / Marta Stachowiak, Counselor, Embassy of the Republic of Poland in Paris
- **Russia** / Arkady Dyakonov, Russian Railways Delegate in France
- **Sweden** / Erik Bromander, State Secretary to the Minister for Infrastructure,
- **Tunisia** / Mahmoud Ben Romdhane, Minister of Transport
- **United Arab Emirates** / Excellency Khalid Mohammed Hashim, Executive Director - Surface Transport Sector
- **United States of America** / Gregory D. Winfree, Assistant Secretary for Research and Technology, Department of Transportation
- **Vietnam** / Hong Truong Nguyen, Vice-Minister of Transport

Equally parts of the meeting, the high representatives of the 3 regional ITS organizations:

- Hermann Meyer, Chief Executive Officer, ERTICO ITS Europe
- Jill Ingrassia, Board of Directors, ITS America
- Ikuko Okada, International Affairs, ITS Japan, representing ITS Asia-Pacific

and the 2 special speakers for a thematic perspective:

- Jose Viegas, Secretary-general, International Transport Forum (ITF)
- Patrick Oliva, Corporate Vice-President, Director for Strategic Anticipation and sustainable development, Michelin

---