

**Highlights**

**2012**  
annual summit

# **Seamless Transport: Making Connections**



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annual summit

# Seamless Transport: Making Connections

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## Highlights



2-4 May 2012,  
Leipzig, Germany

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# About

## the International Transport Forum

**T**he International Transport Forum is an intergovernmental organisation with 54 member countries that work together to shape transport policies for the 21st Century. As a strategic think tank, it provides evidence-based insights on transport issues for the world-wide transport community. The International Transport Forum's Annual Summit of transport ministers, held each year in May on a topic of strategic importance, has established itself a major global meeting place for policy-makers, business leaders, top academics and civil society representatives.

The goal of the International Transport Forum is to ensure that transport policy contributes to economic growth, environmental protection, social inclusion and the preservation of human life and well-being. Member countries of the International Transport Forum include most of the member states of the Organisation for Economic Co-operation and Development (OECD) as well as many countries in Central and Eastern Europe, Russia, India and China. Chile became the Forum's latest member country in May 2012.

The creation of the International Transport Forum in 2006 was driven by the desire to foster constructive, relevant and forward-looking debate about the future of transport on a global level and across all modes. It reflected the fact that numerous challenges to transport cannot be addressed on a national level.

Issues like climate change, oil dependency, economic fluctuations, infrastructure investment and maintenance, fighting congestion, accessible mobility, safety and security,

among others, are global in scope and are best tackled in close collaboration across borders and among all stakeholders.

It is the involvement of a broad range of actors from the world of transport and beyond that make the International Transport Forum a truly unique platform for a global conversation on the future of mobility.

In-depth research carried out by the International Transport Forum's Research Centre supports transport policy making in member countries and provides high-quality input for the Annual Summit, contributing to an unrivalled level of debate.

The meeting of ministers is at the heart of the Annual Summit. Declarations emanating from this meeting are important signals to policy makers, the transport sector and society at large. The high-level political aspect is integrated into a thematic setting of expert panels and debates that help link policy to practice. An exhibition, live demonstrations, side events organised by partner organisations, technical and cultural tours and a wide range of social events provide countless opportunities to learn, exchange ideas and to network.

The presidency of the International Transport Forum alternates among member countries on an annual basis. Following Japan, Norway will preside over the International Transport Forum in 2013. The 2013 Summit on "Funding Transport" will take place on 22-24 May 2013 in Leipzig, Germany, on the theme of "Funding Transport".

**International  
Transport Forum**



# A Look Back at the Summit



**José Viegas**  
Secretary-General  
of the International Transport Forum

I participated in the International Transport Forum's 2012 Summit in two different roles, and hence with two distinct perspectives. I came to Leipzig as one delegate among many, a transport professional expecting the Summit to provide added value for my work and also as a candidate for the post of Secretary-General of the Forum. As the Summit drew to a close, I had been elected to that position by ministers in their session on 3 May.

So my perception of the Summit was shaped by this double perspective, as a customer on the one hand and on the other hand as that of the prospective chief executive, possibly about to take responsibility for shaping

the Summit's value proposition for the future. What did I observe in Leipzig between 2 and 4 May 2012?

Foremost, I witnessed a dynamic event that clearly has put itself on the map as a major meeting place for top decision-makers in transport. More than half of the Forum's member countries were represented by the ministers themselves. China took part as a full member for the first time. Chile was admitted as the Forum's 54th member country. Several non-member states – Indonesia, Thailand, Oman – attended at ministerial or vice-ministerial level. The top echelons of International Organisations participated in active roles: the EU, the World Bank, IMO, the OECD, UNECE. Not least, this year's Summit set a new attendance record: for the first time, more than 1 000 delegates met in Leipzig.

I also noted the growing number of bilateral and multilateral meetings in Leipzig. These are less visible to most delegates, but they are a good barometer of the value ministers place in the Summit as a perfect venue to engage their peers. One minister confided that he had no less than ten bilaterals on his agenda. The countries of the Zurich Process, a group of nations from Europe's Alpine region, held their bi-annual meeting on the fringe of the 2012 Summit, and Korea and Germany signed a maritime transport agreement during the event. The political dynamic everywhere was palpable.

The 2012 Summit also offered a significant number of innovations. For the first time,

the Ministerial was held partly in open session. During this, three industry leaders presented their take on seamless transport for debate by ministers, and all delegates were invited to witness the debate in the room. A transcript of this session is made available here from page 74.

The new Ministers' Roundtables introduced a format for confidential discussion of topical issues among ministers and other actors. Three of the four roundtables issued joint statements - which were then presented to the ministerial meeting and noted by ministers -, indicating the pertinence of such a format. Many of the sessions and panel discussions offered something that set them apart - from articulate presenters and highly competent moderators to video clips and even a presentation on visualising transport data delivered as a song and accompanied on the guitar.

On the input side, a compendium of seamless transport case studies from member countries was compiled by the Secretariat. Stakeholder organisations and the Forum's Advisory Board channelled their thematic input into well-structured, concise documents that helped to focus the debate in Leipzig. All these innovations offer much food for thought on how to develop the Summit in ways that create more visibility and are relevant to member countries and stakeholders.

The presence of the private sector in Leipzig was impressive. More companies took part in the exhibition than ever before, showcasing their products and services;

many CEOs and Managing Directors participated actively in panels and roundtables. Clearly the Summit has become an important venue for private sector leaders to interact with policy-makers. "For me, the meeting in Leipzig is one of the most important ones of the whole year", Deutsche Bahn CEO Rüdiger Grube said. "This is really the benchmark."

So, much has already been achieved, and this publication documents not only the debate about seamless transport that was at the heart of the Summit in 2012, but also how far the event as such has come. Forum member countries have all the reason in the world to be proud of what they created in 2008.

And there is plenty that I can build on as the new Secretary-General. One of my priorities will be to keep and to foster the Summit's spirit of innovation: we will continue to seek out new ideas that can make it more interesting, more relevant, more visible and more valuable to the people who shape tomorrow's world of transport. The objective is to establish the Summit as the one event that no decision-maker in the transport and related sectors will want to miss, and I look forward to working with you all towards this goal.

See you in Leipzig in 2013!



**José Viegas**  
Secretary-General of the International Transport Forum





# Debating the Issues

What are the key enablers for more seamless mobility? Which barriers – technological, regulatory or political – need to be overcome? And how can leaders foster a mindset in which seamless transport initiatives can thrive? These were some of the issues at the centre of three days of debate in plenary sessions, panel discussions and workshops at the International Transport Forum's 2012 Summit. Stimulating input came from three keynote speakers: Giuseppe Sciarrone, Managing Director of Italy's private high-speed train

operator Nuovo Trasporto Viaggiatori, mapped the road to seamlessness on Day 1. Day 2 was kicked off by Angel Gurría, Secretary-General of the Organisation for Economic Co-operation and Development (OECD) focusing on efficient transport as a driver of economic growth. On Day 3, Professor Catherine Ross of the Georgia Institute of Technology expounded the challenge of megaregions for transport systems. Keynotes and panel sessions are documented on the following pages.



## KEYNOTE SPEECH

# Giuseppe Sciarrone

## From Here to Seamlessness



A development that is compatible with the environmental recovery of our planet and with the reduction of energy consumption must be one of the main objectives of economic policy of this century.

The transport system, which is one of the major pollutant and energy consuming industries, must play a key role in this context.

A new goal has recently been added to these, following the economic recession in Europe and other parts of the world, which has diminished the willingness to pay on behalf of consumers: the reorganisation of the transport companies aimed at the reduction of production costs.

There are at least three ways in which the transport system can contribute to the objectives set:

- > The first is the production of environmentally friendly means of transport.
- > The second issue is the development of more efficient modes of transport in terms of energy.
- > The third is that of the maximum integration between different modes of transport.

It is the latter which is the theme of the Summit this year, and it is on this theme that I will dwell on with some general considerations, which can be considered as a possible introduction to a thorough debate.

### **Maximum efficiency and coordination**

A transportation system is effectively integrated when the individual modes are employed in their areas of maximum efficiency and managed in a strictly coordinated manner. In this type of context, connections have a fundamental role, through which you can connect all the different modes of transport so as to ensure that users, whether

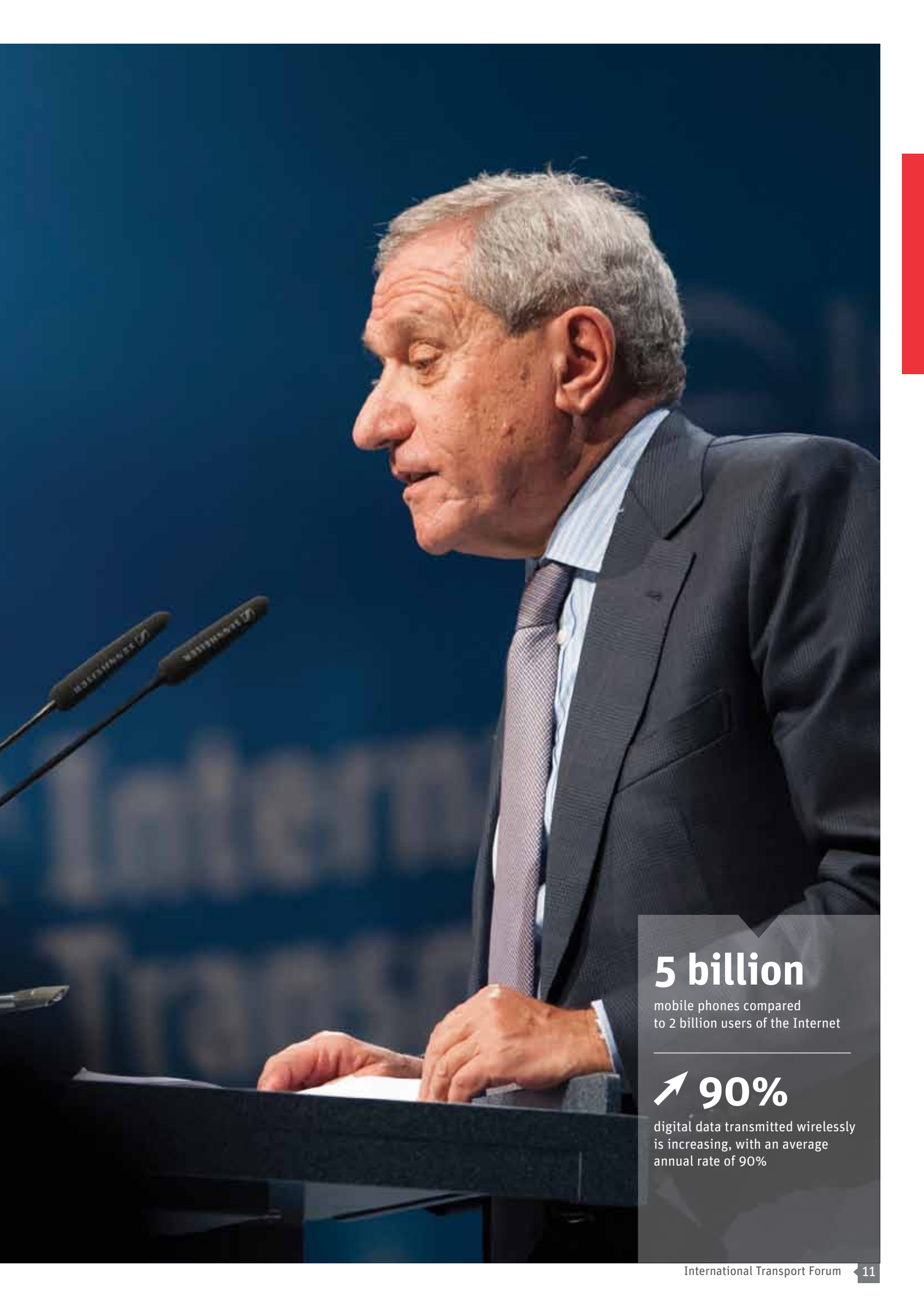
passengers or goods, have the opportunity to move along the entire territory without interruption.

A modern integrated transport system requires at least four levels of connections:

- > The infrastructure connection, which consists of the construction of major interchanges (airports and railway stations for passengers, ports and terminals for intermodal freight) designed to minimise transfer time between modes.
- > The management connection, which consists of the coordinated planning of the service times of different management companies, defined so as to minimise waiting times.
- > The tariff connection, which consists in offering passengers the possibility to move using multiple modes of transportation, even if operated by different carriers, with a single ticket.
- > The information technology connection, which is the real point of the coming years and which, therefore, I consider appropriate to discuss a little longer.

The digital connection can only be based on the intensive use of wireless technologies, which are part of a well established development. The number of people that use a mobile phone is already well above the number of Internet users from a fixed computer point, with more than 5 billion mobile phones compared to 2 billion users of the Internet. The amount of digital data transmitted wirelessly is increasing, with an average annual rate of 90%, and this phenomenon will be further enhanced with the beginning of the fourth-generation wireless networks (LTE).

Wireless technologies represent a new opportunity to adjust and optimise a complex and integrated system of transport as it can combine the needs of travellers, equipped with smart phones, and transportation offers that are provided by different companies at the interchanges.



**5 billion**

mobile phones compared  
to 2 billion users of the Internet

**↗ 90%**

digital data transmitted wirelessly  
is increasing, with an average  
annual rate of 90%

With the use of wireless technologies, the transport system becomes an interconnected set of people, things, and means of transport, which develops an enormous mass of information available in real-time.

Such information will allow:

- > Passengers to calculate in real-time the best solution for transport and be able to readily detect, for example, the risk of congestion.
- > Operators to plan and manage resources, to define interoperability agreements with other operators, to provide ancillary services to travel, and to perform analysis of user profiles, in order to understand and better meet their needs.

### Reorganisation of the transport system

The implementation of an integrated transport system, which I tried to outline very briefly in terms of design and management, cannot be separated from a reorganisation of the system from the institutional and administrative structure point of view, which must cover the individual countries and Europe as a whole. In the first place, a transportation system without continuity requires that the planning of investments be carried out at a level that analyses the system as a whole and not at the level of the analysis of individual modes.

This means that the programming skills and the financial means to help fund investments should be merged into a ministry that is responsible for the entire system and not lost, as sometimes happens, in different ministries each responsible for individual components of the system.

I also believe that it is essential that we proceed with greater rapidity and more uniformly towards the liberalisation of services, which has been in past years, and still is, at the basis of the European Union's transport policy.

Some fields have gone ahead - air transport, maritime transport - and the results are clear for everyone: those countries that have liberalised more services have recorded growth rates of demand well above those of countries that have proceeded more slowly.

Other fields have remained behind, in particular, although with some exceptions, rail transport. Something has been done for cargo, but much less, we could say almost nothing, for passengers.

Regarding this, please let me recall, with a bit of pride, that our country is at the forefront, because it has anticipated European decisions and has liberalised the long-distance railway market for passengers, as well as the domestic market. An Italian company - Nuovo Trasporto Viaggiatori (New Passenger Transport) - of which I am the founding partner, has, only a few days ago, broken a monopoly that had lasted over 100 years in the transportation of people on middle and long distances, and has finally offered the market a chance to choose who to travel with.

It is now necessary that the very different situations of opening toward the market that are going ahead in individual countries be aligned as soon as possible, with the help of the European Union, in order to move towards a truly European system of transport in every sense.

Finally, an integrated and truly liberalised transport system cannot do without a proper regulation of the field, which should be entrusted to a third party, respect to the actors of the field which are represented by the ministries, the infrastructure managers and the transport companies. That controller should be given the task of defining the costs of infrastructure use, the control of market access, and the verification of compliance to the rights of consumers. National regulators must operate according to rules which must be as much as possible unified at a European level.

A transport system that is organised in this way requires, as I have already stressed, a strong commitment of the European Union and of individual countries, so as to design it, and substantial investments to implement it. And regarding this point I must conclude, referring to the difficult period that Europe is experiencing on an economic point of view and the need to rebuild growth, that all countries need.

The investments that the transport sector needs would have a double positive effect: a significant contribution to economic growth and the creation of a modern transport system, essential for the efficiency of our enterprises and for the quality of life for our citizens.

**Giuseppe Sciarone**

Managing Director  
Nuovo Trasporto Viaggiatori



**Osamu Yoshida**  
Senior Vice-Minister for Land, Infrastructure,  
Transport and Tourism, Japan



**Peter Ramsauer**  
Federal Minister, Transport, Building and Urban  
Development, Germany

# From Here to Seamlessness

## Defining the Roadmap for 21<sup>st</sup> Century Transport

Seamless transport is a powerful and ambitious strategic vision for the future of our transport systems. This session considered the broad perspective of transport and how establishing policy and institutional frameworks, as well as continued co-operation among all levels of government and across industry sectors, can engender inter-governmental and private sector co-operation and define the roadmap towards seamless transport.

### **Seamless transport in all modes and for all parts of society**

**Osamu Yoshida**, Senior Vice-Minister for Transport of Japan and representative of the Japanese Presidency, gave the opening remarks highlighting the importance of the International Transport Forum through its coverage of member countries and transport modes. The Forum plays a central role in the transport community, especially in terms of policy dialogue and international co-operation.

Mr. Yoshida shared national experiences and issues surrounding seamlessness in Japan while calling for international co-operation in order to successfully face such challenges of both national and international dimensions.

For Japan, he emphasised the rural and urban dimensions of transport and the importance of creating connectivity between these regions. Genuine seamlessness is vital for the smooth transport of people, raw materials and products and in this way is central for economic growth. Often it is intercity transport that is the missing link of transport systems. The ageing of society is also a major challenge that will need to be addressed in terms of mobility and social participation in both developed and developing countries. Pricing policy, especially, should accommodate the different financial means and transport needs of different demographic groups. Transport systems should be viewed as a whole. Financial capabilities should be well-aligned with institutions that are experienced in carrying out operations.

Seamlessness is especially important for Japan in the aviation sector because of its geography. This has called for the government to negotiate open-sky policies with other states to bring in private sector participation and to find ways to ensure that the aviation system is disaster resistant.

### Seamless transport is important in all regions of the world

Representing the host country of the Summit, **Peter Ramsauer**, Germany's Federal Minister, Transport, Building and Urban Development, highlighted the challenges different regions of the world are facing in achieving seamlessness in transport. For developed countries it is about making existing systems more efficient and in developing countries it is about creating systems to cope with rapidly growing demand. This in itself presents opportunities for developing countries to establish well-functioning systems with a long-term perspective of serving their citizens.

There are natural hindrances to the construction of transport systems in terms of finance, geography and speed of travel. Smart investment choices can allow systems to become safer and more reliable providers of mobility. The provision of more infrastructure may not solve all problems faced by networks today. More information on user profiles and better information management are needed to better understand consumer behaviour and allow better provision of services. For example, seamlessness is also about putting the rail sector to use more effectively by proper integration in transport networks. In the case of Germany, hub development has contributed greatly to seamlessness by allowing freight volumes to increase strongly.

### Seamless service saves time, money and the environment

**Catharina Elmsäter-Svärd**, Minister of Infrastructure of Sweden, pointed out that one of the main advantages of seamlessness is saving time, and time is something that we lack. This means that a minimisation of transfer times and a provision of high-quality mobility from door-to-door is akin to a minimisation of the cost function of travel.

Integrated transport systems can become viable competitors to private transport and are at the same time better for the environment by emitting less carbon per passenger or tonne moved. In order for this to be achieved, public transport systems and the infrastructure itself need to open up to competition and be deregulated. As of 2012, passenger rail traffic is fully deregulated by legislation in Sweden, a result of healthy co-operation between public and private actors. As CEO of Italy's new deregulated high-speed rail service, **Giuseppe Sciarrone** shared his personal

experiences of making connections in transport work. Connections are the fundamental rules of seamlessness. Careful coordination and the possibility of different modes of transport playing out their own comparative advantage means achieving more efficient mobility. There are four main levels of connections to be considered when striving towards seamlessness.

The first level is connections in infrastructure which should be created in order to minimise transport times between modes.

The second level is connections management which should intend to minimise waiting times. The third level is about tariff connections which should foster the use of many transport modes with one single ticket. Lastly, there is the information and technology connection level, which should take advantage of high-level wireless technology. National operators need to work according to regulations that must be, as far as possible, coordinated at a regional level.

### Seamless transport for trade and growth

Georgia's Minister of Economy and Sustainable Development **Vera Kobalia**, shared her country's experience of rapidly integrating into world markets by realising the important role that transport has played in this. Access to larger markets and a range of new business opportunities can be especially important for small countries. Close international co-operation with neighbouring countries is necessary to make international transport systems work as a whole.

A recently-introduced rail line going through Azerbaijan, Georgia and Turkey has promoted the integration of these regions and created opportunities for economic interaction. The availability of real-time information on the transport activity of both passengers and freight and high quality IT services can allow smoother operations at borders, ports and airports and allow for more efficient time management. They can also be used to create transparency.

**Koji Miyahara**, Chairman of NYK Line, Japan, pointed out that one of the very best utilisations of IT services is enhancing connectivity in the transport sector. It can allow for better global management of inventories of goods through precise information on the location of containers to allow in-time preparation of ports and

## The Panel



**Vera Kobalia**  
Minister, Economy and Sustainable Development, Georgia



**Catharina Elmsäter-Svärd**  
Minister for Infrastructure, Sweden



**Osamu Yoshida**  
Senior Vice-Minister for Land, Infrastructure, Transport and Tourism, Japan



**Peter Ramsauer**  
Federal Minister, Transport, Building and Urban Development, Germany



**Pat Cox**  
Moderator



**Koji Miyahara**  
Chairman, NYK Line, Japan

infrastructure. Smoother operation of supply chains will allow us to reap the gains of free trade.

It is, however, equally important to invest in the education of engineers and technical graduates as well as in the skills of general employees, as they are crucial to the proper functioning of physical infrastructure.

A key point highlighted by several speakers is that international co-operation is vital to overcoming challenges to seamless transport. This is true for international network systems but also important in relation to sharing national experiences and addressing the challenges of international transport through policy dialogue.

Each connection point in a network is a seam that requires careful management. Hindrances to seamlessness such as piracy at sea have necessarily to be addressed in an international context as stakeholders in the smooth operation of global transport lines are diverse, and impacts are felt globally.

Repercussions from disruptions to supply chains can affect global markets, as recently witnessed after the earthquakes in Japan. This highlights the need for international co-operation. Seamless transport in

itself is also a way to work around such disasters and to speed up recovery. The contributions of seamless transport to the economy are diverse.

The recently established container rail link for the transport of auto parts between Leipzig, Germany and Shenyang, China, cuts transport times down to 23 days, half of the time taken by the maritime link. This is a good example of how co-operating in building international networks can bring advantages to economic activity.

Lower cross-border barriers have effects on the re-organisation of markets and employment and can be important in promoting economic development. Nationally and regionally, more seamless transport systems can promote growth, and infrastructure investment undertaken now is key to achieving growth tomorrow. Making transport more seamless and networks more efficient is also critical to adhering to targets for moderating energy consumption and CO<sub>2</sub> emissions if these are not to curb mobility growth, which is essential to economic performance. In short, transport systems must advance from patchworks to networks and supply chains need to become supply streams. ■



# Urban Connectivity:

## Improving the Door-to-Door Journey

The core challenge in providing seamless urban mobility is overcoming the mismatch between the way in which citizens approach their urban trips – as single, end-to-end journeys – and the way in which authorities plan and allocate resources to separate transport networks. Participants in this session discussed new approaches, models and initiatives that are bridging the gap between how citizens seem to prefer to travel in cities and how transport operators and authorities deliver services to meet this demand.

### Seamless urban travel

**Rosina Howe-Teo** noted that whilst almost every trip starts and ends with walking, and most trips involve one or several other modes, transport is rarely organised along the lines of one single, seamless, door-to-door transport trip. Arguably, cars and two-wheelers (and the roads on which they run) most closely approach the “seamless transport” ideal, which helps to explain their compelling and enduring attraction. However, the car or motorcycle first approach to urban mobility has reached its limits in many areas.

Panellists stressed that people seem to want choices but too often policy has favoured only a few modes. That, **Sue Zielinski** says “is like God telling us: heart, lung or pituitary gland – choose one. I don’t know about you but I want all three and I want them working together seamlessly.”

Walking or operating a car or a two-wheeler

in an urban environment imposes cognitive requirements but these are relatively predictable, single tasks and don’t require scheduling or payment considerations. Crossing a city using many modes multiplies this cognitive load considerably. In many cities, numerous travel options are available to citizens but their combined use is rarely as convenient as simply driving a car or other single mode use. **Wilhelm Lindenberg** cautioned that “seamlessness” doesn’t stop at the door-to-door trip, it extends up and downstream to trip planning and invoicing. Payment systems and schedule information, he says, should be bundled with physical transport services if the service is to be as compelling as the car. The key is to simplify things for the user and to ensure that back-office complexity never poses impediments for the traveller. This requires creating new habits for authorities and operators. Initiatives, such as the HANNOVERmobil card (see box) are one answer to improving seamless travel. Such initiatives seek to lighten the burden of multimodal travel by providing a single-window service.

### Keep it simple

The key unresolved question, Lindenberg asked, is who will become the service aggregator – the “Amazon.com” – of mobility and what new structures and partnerships are necessary for this vision to be achieved? Funding models for such distributed mobility services are just emerging but in many cases they involve complex negotiations – for example, the HANNOVERmobil card required an agreement with several thousand individual taxi operators. In the end, stated **Serge Amabile**, all of the complex interactions between operators, IT systems and authorities must allow travellers to answer a very simple question “How do I conveniently get from point A to point B?” This is the philosophy that drove the design of the Autolib’ e-car sharing system introduced in Paris (see box).

## The Panel



**Rosina Howe-Teo**  
Chief Innovation Officer and Group Director, Innovation and InfoComm Technology, Land Transport Authority, Singapore



**Tetsuo Akiyama**  
Visiting Professor, Hokusei University, Japan



**Serge Amabile**  
Director, Marketing and Sales, Société Autolib', France



**Conny Czymoch**  
Moderator



**Sue Zielinski**  
Managing Director, Sustainable Mobility and Accessibility Research and Transformation, (SMART), University of Michigan, USA



**Wilhelm Lindenberg**  
CEO, Greater Hannover Transport Association, Germany

### HANNOVERmobil

Initiated in 2004, the HANNOVERmobil card is an integrated mobility service card that allows access to, and payment for, public transport, regional and national rail, car-sharing and taxis. The card also covers some bicycle and urban logistics services (e.g. grocery delivery, discounted bicycle repair and bicycle parking). The core services are invoiced jointly in a monthly "mobility" bill.

[www.hannovermobil.de](http://www.hannovermobil.de)

### Autolib'

Autolib' is a station-based electric car-sharing service allowing users to pick up and drop off cars at any of the system's stations for short-term use. As of May 2012, subscribers have access to 1 700 self-service electric cars (3 000 at full deployment) docked at 1 000 stations in Paris and 45 surrounding communities. The service was inaugurated in December 2011 and is operated under a public service delegation concession, currently granted to the Bolloré group.

[www.autolib.fr](http://www.autolib.fr)

### New technology or talking together: What matters most?

Sue Zielinski stressed her belief that "achieving seamless transport is not essentially a technology issue, it requires moving minds as much as moving people." The means for seamless transport – common ticketing, combined payment, coordinated scheduling, cross-mode reservations and even developing co-located exchange facilities – all exist today. Operators and authorities, however, generally have little incentive or experience in working together to offer a single cross-modal transport service package for travellers. "There are a wide range of existing technical solutions that are never attempted" said Lindenberg, "you need a real political vision and leadership to get them implemented."

In the future, mobility in urban areas may well be provided by hybrid, individual-collective transport systems that will be quite different from the

car and public transport systems that currently dominate. Speakers raised the possibility that a “third-way” may already be emerging that capitalises on extensive information technology infrastructure and mobile, location-aware platforms of smart phones and in- or on-vehicle communication devices. Bicycle sharing systems, especially when they are integrated with other mobility services, are one emerging signal of this trend towards ubiquitous but shared individual mobility. They also highlight the contribution of bicycles to efficient urban mobility.

### Innovative services, new actors

Serge Amabile described how station-based car-sharing fits into the aspirations of urban dwellers: “Owning a car can be a hassle, especially for young professionals living in city centres, Autolib’ and other car-sharing systems give them a more flexible option that increases their choices without tying them down with a car.” He notes that many of Autolib’s clients use the service because of its convenience, especially concerning parking, not necessarily for its environmental merits. Such “partial ownership” models incentivise users to select the best adapted transport mode for their immediate trip-related needs.

Innovation for seamless transport can also come from exploring new linkages with services that already exist. Sue Zielinski stressed that “there is no need to wait for systems we don’t yet have, we can start with what is on the ground and move from there.” Tweaking existing services, such as Singapore’s peak hour express “premium buses”, can provide new options that otherwise might be overlooked by looking only at new systems.

Professor **Tetsuo Akiyama** of Hokusei University also noted that equity needs to be built into seamlessness. That means ensuring that new services do not exclude segments of the population due to income, age or impairments and that existing systems need to be adapted for use by all these groups.

### Big data, open data: Innovation multipliers

“Seamless transport is about applications and applications need data”, Howe-Teo reminded the audience. Daily travel generates massive amounts of data relating to traffic, flows,

locations and services that, for first time in history, are logged into exploitable but often unconnected data sets.

The capacity to mine “big data” to deliver insights and, more importantly, new travel information services is rapidly developing yet many data owners are reluctant to release their data. This is understandable since such data does not come free of costs and can also be used as the basis for revenue-generating services.

At the same time, there is a growing trend for public authorities to provide open access to public data sets. Singapore’s LTA adopted this approach when launching its one-stop travel information website ([mytransport.sg](http://mytransport.sg)). Opening access to its “treasure trove” of real-time traffic and public transport data has, according to Howe-Teo, unleashed a much greater range of creativity than could have ever been mustered in-house by the LTA. Within three months, over 150 applications for data access had been produced and third-party developers had quickly rolled out a number of highly successful commercial applications allowing travellers to navigate Singapore’s roads, public transport networks and taxi services. Cost savings, in the sense that commercial providers have now taken over application development from LTA, have resulted and the quality of smart phone applications has increased.

### What infrastructure matters?

Panellists noted that travellers value reliability and quality of service over all else – simply connecting or providing better information about inadequate transport services will not win them over. It is better to ensure that the range of mobility options fits users’ expectations. Frequent or ubiquitous access to services allows users to forget about schedules and individual mobility options and helps users to escape from crowding at peak hours. This level of quality, however, requires sometimes significant levels of investment on the part of transport operators, the private sector and authorities.

Physical proximity matters, pointed out Professor Akiyama, and reducing physical separations between modes at interchanges should be a priority when building new, or retrofitting existing, stations. As an example, “cheek-to-cheek”



Moderator Conny Czymoch (r.) leading the panel discussion

**“Seamless transport is about applications and applications need data”**

Rosina Howe-Teo



An attentive audience follows the debate on Urban Connectivity

interchanges where buses and rail or different rail modes are separated only by a common quay greatly facilitate transfers. Seamlessness also concerns those travellers that have physical impairments that impact their mobility. Designing interchanges for older or mobility-impaired travellers by incorporating “universal design” approaches ultimately enhances mobility for all.

**What role for transport authorities?**

The discussion highlighted that perhaps authorities should step away from the production of mobility and move more towards the management of mobility, ensuring that system performance across modes and across the city meets societal expectations and goals. This means setting the right performance objectives and monitoring progress but also ensuring the role of “link-tank” bringing together mobility service providers under a common

framework and set of expectations. Central to creating a mobility market in this way is the need to ensure that authorities are not blocking innovation with ill-adapted regulatory structures that constrain the offer of services. Authorities have a central role in creating an environment that encourages novel approaches and this will require a change in institutional culture for many agencies.

Implementation speed is also a concern as mobility entrepreneurs often operate in a much more agile environment under tight overheads and project horizons. Serge Amabile told the audience that “the private sector is ready to provide innovative and creative solutions but needs rapid and predictable decisions on the part of public authorities”. Nevertheless, where such leadership is lacking, action is still possible, noted Sue Zielinski, citing examples of pilot projects in Chennai that preceded government policies to support integrated transport. ■

# Rethinking the Last Mile: New Approaches to Urban Logistics

Growth in population, increased urbanisation and living standards are the main trends that will shape the living conditions of the future. According to UN and World Bank forecasts, 70% of the world's population will be living in cities by 2050. The economy of tomorrow will be characterised by competing megacities where goods delivery will be a major challenge. Panellists in this session identified the keys to meeting this challenge.

## City logistics

City logistics will become an increasingly key issue in maintaining sustainable cities and logistics providers will have to be proactive, developing intelligent options. Many research initiatives have already underlined the most pertinent questions: finding solutions that optimise freight flows and that reduce GHG emissions, noise and congestion from urban freight traffic. Electrification has emerged as a viable innovation, although on a relatively small scale up to now, but promises to play a part in future urban freight solutions. From recent experience, no single, stand-alone solution seems appropriate: city logistics master plans with tailor-made solutions to local constraints must be established. In this context, it is difficult to find universal win-win situations. In order to build a viable business model, strong relationships among different partners are needed. Collaboration among competing partners, though difficult to achieve, is essential. A leadership vision is key in achieving this process.

A rethinking of logistical structure is fundamental, argued **Wim Bens**. Just-in-time delivery with the elimination of warehousing and the growth of home delivery services have both led to an increase in the number and flow of vehicles on the streets. Collaboration among logistics providers and smart use of IT promises to facilitate "cargo bundling", with different supply chains sharing distribution systems in metropolitan areas.

Bens pointed to the low rate of capacity utilisation of urban freight vehicles calling for some rationalisation in the use of vehicles with the potential for major savings. Incentives for making smarter use of infrastructure through, for example, congestion charging as in the case of London, can help drive this kind of rationalisation and achieve greater efficiency.

## New concepts for city deliveries

**Petra Kiwitt** of DHL saw the future for freight transport in cities as "hybrid, electric and multimodal", underlining a strong need for innovative schemes to develop these future models now. She added that logistics operators such as Deutsche Post DHL monitor their costs and fleet emissions and are in constant search of operational and technological improvements to reduce their environmental footprint. Such logistics companies are central to developing and proving solutions.

The increasing demand for cycle-based urban delivery systems was highlighted by **Manfred Neun**. The economic perspective for cycling and e-cycle delivery systems is relatively bright: cargo cycles may ensure freight deliveries into city centres at low cost and competition to achieve reliable goods transport in city centres may strengthen the prospects for cycle-freight. These are systems that require low initial investment with little or no contribution to congestion, noise and greenhouse gas emissions, oriented to quality, flexible services. This is where the

## The Panel



**Manfred Neun**  
President,  
European Cyclists'  
Federation



**Michael Browne**  
Professor,  
University of Westminster,  
UK



**Hans Van Der Werf**  
Deputy Secretary-General,  
Central Commission  
for the Navigation  
of the Rhine



**Wim Bens**  
Director, DINALOG,  
Netherlands



**Robert Wright**  
Moderator



**Petra Kiwitt**  
Executive Vice-President,  
Deutsche Post DHL,  
Germany

economic and sociological dimensions can coincide with a potential source of new, entrepreneurial community employment. Bicycles contribute a flexible solution to the liveability of cities. Even if urban freight traffic represents a small proportion of the overall greenhouse gas emissions from the transport sector, the potential savings in emissions through bicycle use are valuable.

### Creating a framework for urban freight transport

The panel also underlined the potential for use of inland waterways to distribute freight in cities served by navigable waterways. Volumes currently transported are modest but inland waterways already play a useful role with regard to building materials, where transport costs are a major consideration in relation to weight. But consumer goods may also be brought into city distribution centres by inland waterways in special

containers. **Hans Van Der Werf** cited Monoprix in Paris as a successful example of a major freight customer maximising this potential.

The panel emphasised that though there are a diversity of approaches to improved freight delivery, developing a framework for sustainable urban freight transport within which individual schemes can be considered and monitored is important. Without such a framework, the range of initiatives on offer and proposed to public authorities can be daunting and impossible to manage. A framework is needed to establish some order of priority. City-wide mobility plans, used now in many jurisdictions, need to consider freight as well as passenger mobility. **Michael Browne** stressed that although this may sound rather obvious and simple it is not so easy to implement. Fundamentally, more transparency and visibility are needed concerning the costs of delivering freight in urban areas, requiring research specific to local contexts.

Many solutions may be envisaged but often there is a lack of information and data to assess different schemes or proposals. A great number of actors and stakeholders are involved, and due to the complexity of cities, ideas for one city centre cannot easily be transferred to another.

In developing frameworks and getting ideas implemented, strong leadership from city officials is required. Eminent personalities and high-level politicians may be able to unlock difficult situations where private-private and private-public partnerships are the key to successful schemes. The panel underlined several reasons for the challenges and difficulties involved:

- > There are numerous actors/stakeholders (from both the public and private sectors). This in turn leads to complicated trade-offs where it may be hard to find solutions where everyone wins.
- > Despite much good work there is often a shortage of data on urban freight, which is required for detailed planning and transparent decision-making.
- > The complexity of cities in terms of urban form and activity patterns. As a result it can be difficult to transfer a successful scheme from one place to another without significant adaptation. Scale gains can be hard to achieve.

### Creating decision-making structures

In attempting to find a way forward, it is essential that city authorities define a means to engage with the many stakeholders involved in planning processes where there are implications for urban freight. The approach needs to be both 'top down' and 'bottom up'. So it is essential that the strategic decision-making level in the city takes freight seriously and that local associations and companies, trade associations and others contribute to planning.

City planning needs to take account of the decision-makers at several levels. City authorities need to find ways to engage with the operators and listen to their concerns while finding the means to encourage innovation and improvements, whether through regulatory initiatives or tax incentives. Receivers – retail shops, bars, restaurants, offices etc. – need to better understand their importance in determining the logistics patterns that give rise to transport activity in the city.

At present, many receivers are passive in the urban supply chain and see little opportunity to change the way they work. More should be done to show the art of the possible with respect to 'out of hours' delivery and planning for deliveries. Cities are highly complex systems and the need for partnerships is evident – but partnerships can take time to develop and they require care and nurturing. Partnerships also need 'champions' or leaders and it is thus essential that urban freight attracts attention at the highest levels in order to create new forms of dialogue and unlock previously set patterns that have prevented change and improvement.

### “In the city, it is hard to find win-win solutions”

Michael Browne

An example in London was described by Michael Browne, spurred by preparations for the 2012 Olympic Games. There will be a major impact on day-to-day urban freight transport. Transport for London (TfL) holds strategic responsibility for London's road network and transport system. It has built on the existing London Freight Plan to respond to the challenge and in a number of key presentations, TfL Commissioner Peter Hendy has emphasised how seriously TfL takes the challenge of freight transport. This has already influenced the nature and detail of discussions about freight transport operations, and will change freight planning both during the Games period and beyond.

In the panel's opinion, the way ahead is to avoid the temptation to search for single solutions, accept complexity and concentrate on leadership, and focus on the process and structure of dialogue to build a framework for making better decisions about urban freight. Optimisation can be seen on different levels.

### Consequences of the economic crisis on city logistics

The panel and members of the audience underlined that the economic crisis has resulted in a scarcity of resources and initiatives for improvements to city logistics. There is a risk that environmental impacts may be seen to be of secondary importance. But less demand and less traffic may also lead to more willingness to co-operate among actors and to exploring ways of optimising the different flows.



Petra Kiwitt of DHL (centre) making a point during the panel on Rethinking the Last Mile

ECF president Manfred Neun (centre) advocates the use of cargo-bikes



## “The future in city logistics is multimodal”

Petra Kiwitt

Cooperation to achieve better use of capacity, economies of scale and achieving critical mass may become central to survival. Low-cost schemes, smart infrastructure and exploring know-how may be seen as opportune solutions for addressing the economic downturn. In the extreme Greek context, logistics suppliers are reported to be increasingly willing to cooperate to reduce costs, sharing capacity and information through access to IT systems.

While the economic downturn preoccupies Europe, elsewhere economic growth and urbanisation are still leading forces, strengthening the need for achieving more sustainable urban goods delivery. ■



# The Future of Travel: e-Ticketing, Smart Phones, Data Sharing

Innovation in information technologies has brought about change in the use of public transport, for example regarding information provision, fare payment models and reduction of waiting and boarding times. This session examined the innovations in public transport markets from both a supply and demand perspective and identified the policy interventions necessary to promote the application of information technologies.

## Global application of interoperable e-ticketing

E-ticketing is the most successful application of information and communication technologies in the public transport sector. More and more cities around the globe are introducing e-ticketing services, and people usually find this a revolution in convenience compared to conventional paper ticketing. Chile's Minister **Pedro Pablo Errázuriz Domínguez** noted that in surveys of attitudes to the initial stage of reform of public transport in Santiago "people responded that smart card operations were very popular and so far the only satisfactory change perceived."

Wide application of e-ticketing naturally demands interoperability not only between transport modes within cities but ultimately across the nation and also internationally. Some smart card operators in Asian cities including Seoul, Hong Kong and Singapore have been developing a common payment scheme for several years, aiming to issue a single card for multiple cities. However, this innovative international co-operation has not been easy to implement as the participating

parties each have incentives to keep their own payment protocols in a new standard.

Nonetheless, it appears very likely that an interoperable e-ticketing scheme for public transport between Seoul and Hong Kong will be available soon, using NFC (Near Field Communication) technology in smart phones. This technology has the advantage of being able to accommodate different payment protocols, and thus avoids significant change in the existing e-ticketing systems. By the end of this year, Seoul's citizens should be able to pay for the bus in Hong Kong using their own smart phones, and vice versa. **Youngwook Park** believes that "it is better to integrate multiple and diverse payment protocols into the one single payment system rather than making one single standard that every stakeholder must follow" based on his experience with the difficulties of drawing up agreements between different operators.

## Post-payment systems

A new approach to e-ticketing is now turning pre-payment systems into bank account-based post-payment systems. This combines ease of identification of payments for the operator with user convenience. Users do not have to charge money onto this kind of smart card before using buses or metros but pay fares with a personal credit card. This has been made possible by the introduction of credit cards for low-value transactions by some of the major retail banks. Some Asian cities like Seoul have already introduced this system and travellers responding to surveys usually prefer this system to traditional pre-payment cards. Transport for London plans to introduce this user-friendly payment system shortly.

One of the big advantages of a post-payment system is that it can facilitate global application of e-ticketing since credit cards are already being

The Panel



**Scott Belcher**  
President and CEO,  
ITS America,  
USA



**Mitsuo Higashi**  
Director of the International  
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Railway Company,  
Japan



**Pedro Pablo Errázuriz Domínguez**  
Minister, Transport  
and Telecommunications,  
Chile



**Thom Brenner**  
Vice-President,  
Nokia Gate 5,  
Germany



**John Verity**  
Chief Advisor,  
ITSO Limited,  
UK



**Monika Jones**  
Moderator



**Youngwook Park**  
Chief Technology Officer,  
Smart Card Corporation,  
Korea

used globally and the risks of fraudulent smart card operation can be transferred from public transport operators to banks. Agreements have to be negotiated between the issuing bank and the transport operators but banks are much more adept at making such agreements than public transport operators.

**John Verity**, Chief Advisor of ITSO, reported that “some key organisations in Europe have already started to take an action to develop a unified smart ticketing system that can incorporate a post-payment system.”

**Simplicity and accessibility are key**

Simplicity is important to users as technologies advance rapidly. People naturally have difficulty using complicated applications on their smart phones, and this is particularly the case for

e-ticketing and travel information provision. The environment for using these systems on the move is difficult with noise and distraction, time pressure and sometimes erratic reception. Applications must be simple to use and to understand. Switching will not take place if the new payment system is more complicated than paper tickets.

**Thom Brenner** says that “when it comes to e-ticketing with mobile phones, just keep it as simple as using paper tickets. Travel information in mobile phones also needs to be as simple as the arrival/departure information board in train stations.”

Travel information needs to be accessible in a variety of ways including via simple SMS texts, mobile web browsers, Twitter, etc., as **Mitsuo Higashi** underlined, noting that “what travellers want is timely notice of delays, accidents, and alternative routes and modes regardless of operator.”

Today, the Train Information Centre in Tokyo provides a real-time train information service from different operators by internet, SMS texts, information boards, and on-board information signs in trains.

### Costs and privacy issues

Real-time data transaction on smart phones often entails high costs especially when roaming charges apply, which can reduce the public accessibility of travel information.

For this reason, some background information such as maps and transport networks can be downloaded in advance, free of charge, to minimise the size of data transaction.

**“Global markets require us to make the barriers that separate us disappear – smart cards and smart phones can help do this for transport”**

John Verity

Sharing transport data requires some exposure to issues of privacy. Smart phone and smart card operators need to know where people are and what specific modes they use to produce travel information based on tracking users.

**Scott Belcher** remarked that “making private information available is unavoidable to some extent in order to enjoy the benefits of data sharing but technology is also evolving to protect privacy better than ever before.”

### Governments need to take the lead

Government has played important roles in making e-ticketing possible, beginning with fundamental research in public research laboratories on the technologies brought to market by the private sector. Governments have had a crucial role to play in creating the partnerships for the revenue and data sharing agreements that underpin most current e-ticketing and information systems.

It is difficult for private companies and even government-owned transport operators to enter into agreements that involve pooling revenues.

Governments need to take the lead in brokering agreements and at times making participation in seamless ticketing and information systems a condition of public transport concessions.

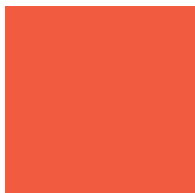
Government is also best placed to see the value of common technical standards and actively broker conflicts of interest between various stakeholders, although industry ultimately has to show leadership here.



The panel discussion on The Future of Travel underway

Minister Errazuriz and Scott Belcher

Concerning the new post-payment cards, governments may need to work together internationally to take a catalytic role in ensuring that the banks make arrangements to cover liabilities for using their cards on as broad a range of public transport systems as possible, in towns large and small, for the convenience of travellers and for the benefit of all their public transport systems. ■



Mobile phones are increasingly used for e-ticketing

Youngwook Park explains Seoul's smart card system



# From Supply Chain to Supply Stream: Creating Seamless Logistics

Globalisation has seen the emergence of business models that build on new opportunities to develop comparative advantages. Technological advances and investments in infrastructure have lowered transport costs and increased average transport speeds. With the opening of new markets and the closer harmonisation of economic models worldwide, trade has become more complex, developing into a constant flow of goods in what has been called the global supply chain. The panellists in this session discussed their views on how supply chains are changing and on the critical factors for sustaining economic growth.

**G**lobal supply chains and transport networks form the backbone of the world economy, fuelling trade, consumption and economic growth. They are, more than ever, characterised by just-in-time production. Time has become a critical factor as timely delivery of components has replaced traditional stock-holding. Broadening trade links have brought greater volumes of goods, moving further and in an increasingly complex and interdependent way.

While providing opportunities for increasing productivity, the greater industrial interconnection of the global economy has also created faster channels for the propagation of adverse external shocks. A specific feature of the trade fall during

the 2007-2008 crisis was the globally-synchronised nature of the trade collapse. The global reach of supply chains means that any impact on each production stage is multiplied. International supply chains and advanced information technologies also imply that producers in different regions react to changes in market conditions rapidly, wherever they occur. The complexities of today's economic environment and expanding global supply chains mandate new guidelines for performance. Volatile global market conditions and customer demand variability require optimal supply chain configurations to synchronise supply and demand.

## Slow supply chains create problems

Governments recognise the strategic importance of effective supply chains to economic growth. This is reflected in the priority attached to investment in key transport infrastructure by many governments even in times of severe financial stress. And APEC ministers, for example, have endorsed a 10% over-arching target for improvement in international goods transport in terms of time, cost and reliability by 2015.

In response to volatility in oil prices, slack demand and increasing pressure for greenhouse gas emission reductions, many shipping lines have reduced the operating speeds of their vessels (a practice called slow steaming).

As **Ron Widdows** put it "the big, ugly thing in the middle of the supply chain is slowing down." This has resulted in companies facing challenges with long-term implications for the logistics business. The biggest impact is on the inability to deliver goods on time. Inventory levels are also affected because when companies cannot get parts in time, more (costly) stocks are held in compensation. Poor information on delays compounds the problem for cargo owners facing uncertain delivery schedules.

The Panel



**Peter van Laarhoven**  
Director Corporate Development, Schiphol Group, Netherlands



**Oral Erdoğan**  
Advisor to the Minister of Transport, Maritime Affairs and Communications, Turkey



**Jeff Langenfeld**  
Vice-President, International Logistics, Walmart, USA



**Catharina Elmsäter-Svärd**  
Minister for Infrastructure, Sweden



**Melinda Crane**  
Moderator



**Ron Widdows**  
CEO, Rickmers Holdings, Germany, and Chairman, World Shipping Council

Companies and logistics managers need to adapt their operations either through changing the way they operate or by building in buffer stocks of components and finished goods. Companies also need to adapt their logistic operations through active supply chain management schemes.

### Reliability carries a premium

The changing patterns of global trade have increased the importance of schedules – and of keeping to those schedules – putting a premium on transport reliability. In addition to speed, predictability is the key issue for the supply chain. In the words of **Jeff Langenfeld**, “we like speed but spend most of our time making the supply chain predictable.”

Any delay may have ripple-effects or snowballing effects, affecting other activities or stages in the logistics chain. While logistics chains are built in such a way as to reduce their vulnerability to individual events, delays in individual

consignments can still reverberate through the chain. Because the transport task is part of a chain, a break in any part of it is a break in the entire chain. An assembled television set with only 99 of its 100 components is an incomplete product that can be neither shipped nor sold.

### Port and hinterland connections

The rapid expansion of trade has led to fast growth of throughput in many ports. Hinterland connections are increasingly central to the competitiveness of ports and the overall efficiency of the supply chain.

High quality road, rail and inland shipping links greatly extend the reach of ports. Investing in these intermodal connections is therefore important. High volume connections offer the possibility of locating key services – warehousing and even customs processing – away from constrained waterfronts to so-called dry ports. Effective competition and coordinated access



“People don’t ask how goods got to the store, they want good service.”

Catharina Elmsäter-Svärd



to essential port facilities, particularly for rail operators, is critical to coping with increasing volumes of international trade. While a lot of emphasis was put on intermodal connectivity at ports, the panellists also focused on improving intermodal connections across metropolitan areas for delivering goods for the customers – often the final leg of the global supply chain – which is critical to overall supply chain efficiency.

**Oral Erdoğan** stressed that “port systems should be integrated in line with the master plan for the regions.” All this has to provide a seamless transport service, with Minister **Elmsäter-Svärd** remarking that “people don’t ask how goods got to the store, they want good service.”

### Choosing the low-hanging fruit

A key policy challenge is to create incentive structures that encourage cost-effective solutions – the option that delivers a given level of supply chain improvement for the lowest cost. The objective is to ensure that option is chosen ahead of the less effective options, regardless of whether the responsibility for adopting the option lies with the network provider or the network user. Indeed, improvements can be delivered by both users and network providers. It should not be presumed that the infrastructure (or service) provider/government

always has to be the source of enhancements. The low-hanging fruit of cost-effective supply chain improvements may come from network users.

That said, supply chains operate across countries and modes. Governments can enhance connectivity across borders, regions, industries and modes by providing necessary harmonisation and standardisation. Land-side solutions include infrastructure development and government regulation to speed up flows, including customs procedures and information flows. High quality infrastructure greatly extends the reach of ports and improves connections. Central government can help by making decisions on strategic investments for key links.

In emerging economies, such as Turkey and India, governments have been investing heavily in improving the hinterland connectivity and improving supply chains but where transport systems are already well developed, Minister Elmsäter-Svärd stressed that “before building new infrastructure, we need to make sure the existing infrastructure works as it was meant to be.”

### The role of information

Different tools exist for delivering information to users of the network enabling them to mitigate the adverse effects of poor predictability.



Ordal Erdoğan making a point

Ron Widdows addresses the panel on Seamless Logistics

Providing information can be a cost-effective way to improve supply chain performance. There is a need for better information on the movement of goods through supply chains. With better information, the supply chains become smarter and more dynamic. Increasing availability of data about the location of goods at different phases of the supply chain is an opportunity that can significantly improve performance. Transparent data is also critical to reducing the carbon footprint of transport operations.

Governments can assist in developing open information systems, such as the Neutral Logistics Information Platform in the Netherlands. This system provides data between customers and transport operators and is based on existing port community systems. In the future, all businesses and government authorities will be able to communicate between each other in a standardised way via this platform.

For information to be disseminated, firms must choose to provide information. Firms choose to provide information only if it is in their business interest. If it is not in their business interest, they will opt out unless required to report by government. However, if one can identify and standardise a set of key indicators that drive industry and investment decisions, there is likely to be less concern about the possible misuse of

commercially sensitive company specific data required to generate these indicators.

### Need for a platform for stakeholders

Governments are faced with an increasingly complex challenge in managing risk across global supply chain and transport networks. The political, economic and security implications of regulating in a complex environment have necessitated new approaches for public-private collaboration.

There is a gap between academic research and industrial practice. One of the ways to bridge that gap is to put industry in the lead for defining future research agenda, as done in the Logistics Top Institute in the Netherlands.

This type of platform is useful also for discussing what are the most cost-effective solutions to enhance supply chain connectivity and reliability and who – government, shippers, transport companies, others – is responsible for implementation.

The panellists made a plea for all stakeholders (government, industry and academia) to work together at all levels to improve supply chain performance and to identify priority research issues, with a growing recognition that logistics is a top priority transport policy concern. ■



# Facilitating Global Trade: Connectivity Across Borders

International trade drives economic development, creates jobs and improves quality of life, and transport is essentially the backbone of this exchange.

In today's globalised economy, the flow of goods and people across borders continues to increase. Well-connected and efficient transport systems and networks facilitate reliable and seamless transport, increase cross-border trade and foster prosperity.

## Lengthy border crossing times

Despite their importance to efficient trade, border crossings remain a problem for transport. While there has been steady progress in simplifying procedures to reduce border crossing times and associated costs, border delays are still very high in most parts of the world.

Following the 11 September 2001 attacks, measures to increase transport security were tightened around the world. In this context, security at border crossings was enhanced, and controls have become increasingly stringent. While trade volumes have continued to grow during this time, so has congestion and delays at borders, often impeding cross-border trade. On average, a one-day delay in transit reduces trade by over 1%.

Losses from the delays worldwide are huge, according to **Andreas Kopp** of the World Bank: a ten-day delay reduces national income on average by 1.25%.

According to Minister **Denis Lebel** of Canada, "in the days immediately following the terrorist attacks of September 11, 2001, our (Canada-USA) interconnected trade and transportation network was challenged. There was a thickening at the border. And the implications were severe. Cargo trucks were backed up for dozens of kilometres for days at our major border crossings. Congestion and delays posed serious threats to our economy. Security concerns on either side of the border resulted in a tightening of controls, while at the same time, trade volumes continued to grow."

**Pere Padrosa**, the president of the PADROSA Grup pointed out that 40% of road transport time on the Silk Road is lost because of long waiting times at borders. In addition, Deputy Minister of Transport of Lithuania **Raimvydas Vastakas** noted that it is not uncommon for trucks to wait a week to cross the borders between Lithuania and Russia. These delays significantly increase operating costs. Moreover, longer waiting times at borders also present safety and security risks for drivers and goods.

## Reasons for delays

Protectionism is one of the reasons leading to long border delays. Swiss Minister of Transport **Doris Leuthard** underlined that the economic downturn is one of the reasons for the increasing border delays currently observed: in times of economic slowdown, countries may retreat to a more protectionist stance, promoting to a lesser degree open cross-border flows and imposing protectionist measures on their local markets. It may also be perceived that open borders between developed and developing countries are not "interesting", since they may promote unfair competition to industries and labour markets.

Lack of coordination among different national agencies is another reason for border delays. Very often, each agency or department pursues its goals independently of the others. While the Ministry of

## The Panel



**Andreas Kopp**  
Lead Transport Economist,  
The World Bank



**Kamen Kitchev**  
Deputy-Minister  
of Transport, Information  
Technology  
and Communications,  
Bulgaria



**Gaozhang Zhu**  
Director, Compliance  
and Facilitation,  
World Customs Organization



**Doris Leuthard**  
Federal Councilor, Federal  
Department of the  
Environment, Transport  
and Communications,  
Switzerland



**K.L. Thapar**  
Chairman, Asian Institute  
of Transport Development,  
India



**Denis Lebel**  
Minister, Transport,  
Infrastructure  
and Communities,  
Canada



**Conny Czymoch**  
Moderator



**Pere Padrosa**  
President, Grup PADROSA,  
Spain

Transport's role is, for example, to improve the physical aspects of transport networks as well as the regulatory environment to facilitate fast and efficient movement of people and goods, Customs or the Interior Ministry which normally oversees immigration matters and national security, have different objectives and responsibilities. Bridging different administrative functions to ensure fast and seamless border control definitely requires strong political will from all sides.

Lack of coordination and incoherent procedures between neighbouring countries or regionally is another contributor to cross border delays. Regional co-operation, including joint or juxtaposed border controls, remains crucial for improving the efficiency and effectiveness of border crossings.

"Often different administrations do not talk to each other. They need to co-operate closely as well as consult non-governmental actors and industry" emphasised Deputy Minister **Kamen Kitchev** from Bulgaria. "Good co-operation between neighbours is crucial for success" he added, referring to recent successful investments in border infrastructure between Turkey and Bulgaria.

**K.L. Thapar** pointed out that in many developing countries, artificially created borders between historically interconnected areas contribute to poverty and increase security risks at the border area. The "attempted" controls imposed on borders are bundled with long and complicated administrative procedures. This leads to huge volumes of informal trade across borders, which in turn fosters corruption and crime in border areas.

Simplification of procedures to reduce border delays requires strong political will. According to Doris Leuthard, “economic interest” is the strongest argument for politicians to support measures promoting more efficient border crossings.

**“If the traders comply more, then customs can loosen”**

Gaozhang Zhu

### Moving forward

Mr. Denis Lebel presented the Canada-USA example as part of the discussion on “moving forward”. Two of the world’s largest trading nations have started an initiative to upgrade borders’ physical infrastructure, streamline procedures and supply chains, and improve security integration by means of targeted investment and strategic use of technology. The Beyond the Border Action Plan focuses on four key areas:

1. Addressing threats early
2. Facilitating trade, economic growth and jobs
3. Building on successful cross-border law enforcement programs
4. Enhancing cross-border critical and cyber infrastructure

As a complement, the Action Plan on Regulatory Cooperation has been launched attempting to align regulatory approaches in areas such as agricultural and food, transport and environment (<http://www.actionplan.gc.ca>). This will lead to better regulatory harmonisation and help to reduce border barriers and lower costs. But it is worth stressing that sometimes “we are adding layers and layers of regulations in the name of harmonisation”, said Mr. K.L. Thapar. Precisely to avoid this from happening, Denis Lebel commented on the Canadian example of “one new regulation introduced, one regulation scrapped.”

Whilst decision-makers and government authorities must redefine their policies at borders to reduce delays and improve efficiency, traders

and transport service providers share an equal responsibility in reducing border delays on the ground by complying with existing rules and regulations.

Most customs authorities apply risk management practices instead of 100% controls in order to reduce border delays. The stringency of control depends very much on traders and transporters’ compliance. “If the traders comply more, then customs can loosen” was the message from Mr. **Gaozhang Zhu**, Compliance and Facilitation director of the WCO. ■

Deputy Minister  
Kitchev speaks  
during the panel  
on Connectivity  
Across Borders





Minister Lebel listening to Pere Padrosa

“.. We are adding layers and layers of regulations in the name of harmonisation”

K.L. Thapar

KEYNOTE SPEECH

# Angel Gurría

## Transport for Growth



Ministers, Ladies and Gentlemen,

It is great to be in beautiful Leipzig, for the 2012 edition of the International Transport Forum. International dialogue and co-operation is crucial, particularly in times of crisis; it is especially so in transport, the circulatory system of our economies.

This Summit is taking place in a context of prolonged uncertainty. According to the OECD's last Interim Economic Assessment, while we just moved away from the cliff's edge, the recovery remains deeply fragile. Growth is strengthening in North America and Japan, but in Europe it is still weak. Unemployment remains high and growing in many countries and the threat from sovereign debts persists in the Euro area. World trade growth remains muted and emerging markets are also showing signs of slowdown. Protectionism threatens and inequality keeps rising.

### **The transport sector challenges: Going seamless!**

Our countries need to do more to boost recovery and achieve long-term sustainable growth. With very little space left for fiscal and monetary policy, our main recommendations have been to "Go Structural", to "Go Social" and to "Go Green". Recent OECD studies show how structural reforms and policies can deliver short-term economic and social benefits while at the same time laying the foundations for long-term sustainable growth.

One particular sector where structural reforms, innovation and smart technologies can have a decisive impact on growth and employment is the transport sector.

The transport sector needs a rapid and radical transformation. Our Transport Outlook 2012 shows how the demand for transport is going to increase considerably in the coming years: By 2050, global passenger transport volumes could be 2 to 2.5 times as large as they are now, a figure that could rise up to 3.5 times in non-OECD countries. Freight transport volumes could rise by a factor of 3 or more on the global level.

Transport activities are already a big source of CO<sub>2</sub> emissions as 23% come from combustion. And they are set to rise to 27% of total CO<sub>2</sub> emissions by 2050. Our recent Environmental Outlook to 2050 projects that, without immediate action, by 2050 we will see a 50% increase in greenhouse gas emissions, with a disastrous impact on the living standards of people worldwide.

These prospects highlight the key challenges for the transport sector. How can we meet growing demand when funds are scarce and transport systems are already under strain? How can we ensure mobility and provide the needed infrastructure to a growing and increasingly urbanised population without further endangering our planet? How can we make sure that our decisions today will not lock in our infrastructure in a non-sustainable pattern?

The theme of our meeting today is timely: Adopting a "seamless transport" paradigm facilitates an integrated approach to dealing with these challenges.



**23%**

Transport's share of Co<sub>2</sub> emissions

**\$40 billion**

OECD estimate of welfare gains from a 1% global reduction of trade-related transaction costs.

**9.7%**

World Bank estimate of rise in world trade as result of an increase in the global trade-facilitation capacity by half

Seamlessness is about better connecting people, markets and ideas.

It is about helping the flow of goods – like the new 12 000 km freight rail route linking Germany with China.

It is about better planning our cities so that land use patterns facilitate sustainable mobility.

Seamless transport is also about equity by providing our communities better access to job opportunities through high-quality multi-modal connections and door-to-door services.

For transport to promote a long-term sustainable growth agenda, seamlessness is the way to go.

### **Seamless transport facilitates trade**

The most critical contribution of seamless transport to growth is through trade. Global value chains underscore the importance of transport services for which we must promote openness.

But we need to be able to measure openness and identify what works and what does not work in terms of regulation. I am pleased that the recently launched OECD Service Trade Restrictiveness Index project will provide you with the needed tool to assess openness of transport services regimes.

Seamless supply chains would greatly benefit from removing obstacles at the borders. A 10% increase in global trade would be achieved if only we could improve customs and security procedures. This would represent an additional 400 billion dollars to global GDP.

Borders can kill trade. There are, however, effective customs services in the world. In Australia, for instance, 99.98% of cargo was released within 15 minutes of lodging electronic import documents last year. This is an example of excellence. But unfortunately, it is quite the opposite of the slow, outdated and frankly unprofessional procedures that persist at some of our borders and in many of our ports.

Quality infrastructure is another pillar for seamless supply chains. I know that our German hosts are vying with Singapore, Sweden and the Netherlands

for the title of the world's logistics champion. New figures on the performance of national logistics systems were presented here yesterday and hopefully all of our member countries will be competing to be on the top in that list.

### **Seamless transport for green growth**

Thinking seamless can also help to foster growth in a more sustainable, greener way.

Deep cuts to greenhouse gas emissions from transport will require reducing the carbon intensity of travel. This is partly a matter of changing the energy basis of transport away from oil, which implies increasing integration of transport and electricity systems. The IEA estimates that rapid development of electric vehicles could shave around 12% off transport CO<sub>2</sub> emissions by 2050, although the biggest reductions will come from fuel economy improvements in conventional vehicles.

Technology is key to reducing emissions but technology alone will not do the job. We need to convince users to adopt less energy-intensive mobility habits. This means greening mobility but it often also means better mobility.

For example, using buses and trains more often where currently cars are the default choice. Japan, Switzerland and the Netherlands are admired as models of integration of transport modes but there are many other successful examples all over the world, from Madrid's intermodal exchange stations to Frankfurt airport's rail/air services - that some of us used to get here.

### **Going beyond: What can public policy makers do?**

In a period of budgetary pressures and austerity, transport ministers need to think even more creatively how to invest in the future. Let me share a few thoughts.

First, efforts to reform the regulatory environment in transport can already make a vital difference. We are seeing today the enormous opportunities from the introduction of direct competition on tracks for high speed train services in Italy.

Angel Gurría highlighting OECD work.



From right to left: Norman Baker (UK), Zhenglin Feng (China), Rüdiger Grube (Deutsche Bahn) and Michael Kloth (International Transport Forum)

Improving planning and coordination among levels of governments and across line ministries is also crucial for providing more effectively connected and seamless transport modes and facilitated private sector participation. Policy integration and coordination is a prerequisite for seamless transport and for putting transport on a green growth path.

Second, thinking seamless helps us make smart investment choices with large payoffs at modest cost. One example is the smart Oyster card used on all of London’s public transport. The smart card radically speeds up access and reduces crowding. It is now used for around 90% of journeys for the underground rail. Today, a new generation of contactless-payment bank cards offers travellers the prospect of using a single card to access transport in any city in the country. Smart phones are also in the picture, already used to pay for bus and metro rides in Korea and Japan, Hong Kong and Singapore, as well as for the more usual airport check-in services.

Third, although successful implementation of smart card and smart phone payment systems is very much a private sector role, governments have the essential responsibility of brokering to take the revenue sharing agreements between transport

companies that make smart cards interoperable. They can also make their use a condition for awarding public transport concessions.

Thinking and acting seamless should be part of a new approach to our economic challenges.

More seamless transport is critical to driving growth, especially through trade, and helps identify smart investment opportunities for greener growth.

Seamless transport can improve the everyday lives of all our citizens, determining their access to jobs and education.

Making transport seamless is therefore a part of our core business at the OECD, of making “Better Transport Policies for Better Lives”.

Have a wonderful, fruitful and “seamless” Forum!



**Angel Gurría**  
Secretary-General  
Organisation for Economic Co-operation  
and Development (OECD)



# Transport for Growth: Developing Connectivity

Macroeconomic conditions have greatly deteriorated since 2008 and prospects for growth with them. Many policy-makers face the dilemma of having to reduce debt while also needing to invest in their country's long-term growth potential. Transport facilitates economic growth, and the more so when it is seamless and highly efficient. Debate in this session focused on how the sector's potential to drive sustainable economic recovery can be best harnessed.

The scene for debate was set by **Angel Gurría**, Secretary-General of the OECD. In his opening speech Gurría pointed out how promoting seamless transport contributes to much needed economic recovery in times when the scope for traditional monetary and fiscal policy is very limited. The most direct and critical contribution of seamless transport to growth is through trade. Global value chains underscore the importance of transport services for which we must promote openness. Seamless supply chains would greatly benefit from removing obstacles at borders. A 10% increase in global trade would be achieved if only we could improve customs and security procedures to best in class regionally. This would represent an additional 400 billion dollars in global GDP.

Thinking seamless can also help to foster growth in a more sustainable, greener way. According to the International Transport Forum's Transport Outlook, global passenger transport volumes are set to increase by a factor of 2 to 2.5 by 2050. Freight volumes could rise threefold. Action is needed to contain the negative side-effects of that evolution, including environmental and health damage and effects on climate change. Technology is key to reducing emissions but technology alone will not do the job. Adopting a seamless transport

paradigm helps establish more balanced and – with the right policy steer – less carbon-intensive mobility systems.

Policies to foster seamlessness sometimes are more a matter of institutional reform than of allocating large amounts of resources. This does not make them easier to attain, but it does raise their appeal as resource constraints tighten. There is, for example, ample evidence that efforts to reform the regulatory environment in transport can make a vital difference in terms of the sector's cost-effectiveness and its capacity to innovate and respond to consumer demand.

## Seamless transport for greener growth

Improving planning and coordination among levels of governments and across line ministries is crucial for providing more effectively connected transport modes and more seamless transport services. Policy integration and coordination is a prerequisite for seamless transport and for putting transport on a green growth path. Lastly, thinking seamless and adopting a transport system view helps make smart investment choices with large payoffs at modest cost, that would be harder to identify in more traditional mode-based approaches to transport decision-making.

The situation in Ireland after 2008 illustrates points raised in Angel Gurría's keynote rather starkly. Minister **Leo Varadkar** started from the observation that there is very little public money to invest in transport, and that private funding has dried up as well. This has induced an attitude shift towards smarter transport policy, with a focus on maintaining what exists and focusing on low cost improvements, including integrated ticketing, installing wifi in public transport, better information, etc. These are exactly the types of improvements that the seamlessness perspective encourages, and they mainly improve service quality in public transport and in that way contribute to a more balanced mobility system as well as – conceivably – a more sustainable one.

The Panel



**Doris Leuthard**  
Federal Councilor, Federal Department of the Environment, Transport and Communications, Switzerland



**Norman Baker**  
Parliamentary Under-Secretary of State, Transport, UK



**Susan Kurland**  
Assistant Secretary, Aviation and International Affairs, Department of Transportation, USA



**Rüdiger Grube**  
Chairman and CEO, Deutsche Bahn, Germany



**Yoshiyuki Kasai**  
Chairman and Representative Director, Central Japan Railway Company, Japan



**Melinda Crane**  
Moderator



**Zhenglin Feng**  
Vice-Minister, Transport, China



**Leo Varadkar**  
Minister, Transport, Tourism and Sport, Ireland

A similar connection between going seamless and the crisis context is observed in the USA. Ms **Susan Kurland** noted how the USA is embarking upon a more intermodal approach towards transport policy and transport funding, instead of the prevailing context where modes have their own financing streams, in order to achieve the broad policy goal of more integrated and sustainable communities. The American Recovery and Reinvestment Act of 2009 is a post-crisis stimulus measure, but also rewards innovative, multimodal and multijurisdictional initiatives, thus aiming to contribute to better integrated policy and better integrated transport systems. The USA is also leveraging technology to increase the productivity of transport infrastructure, e.g. by encouraging the introduction of Intelligent Transport Systems and the NextGen navigation system in aviation.

Adopting these technological improvements often necessitates an overhaul of governance and organisational structures, a key feature of going

seamless. With regard to sustainability, the focus on liveable communities and efforts like increased stringency of CAFE standards show that going green is not abandoned as a policy goal despite more difficult macroeconomic circumstances.

The need for continued investment in transport to ensure future growth and the need to go green are at the core of the UK transport policy strategy. As **Norman Baker** said, in the current economic context the UK cannot afford not to invest in transport. For this reason, transport investments will go through despite considerable cutbacks in public spending overall. But the decision to maintain key projects is not the entire story. In addition there is an increased cost-awareness and here too the seamlessness view helps identify high value for money investment opportunities. Furthermore, the UK Government is making a concerted effort to attract private investors to the transport sector.

The Memorandum of Understanding between UK pension funds and the Government is one important example, as it helps overcome the fragmentation among pension funds that has limited their ability to consider transport investment opportunities.

### Overhaul of governance

There are strong efforts to reduce the transport sector's greenhouse gas emissions. Meeting the large demand for rail, by reopening lines or increasing capacity, improves service and mitigates emission growth. Tax advantages for electric vehicles also contribute to climate change targets, and boost UK industry competitiveness. These examples illustrate the ambition to boost growth and go green, instead of trading-off these goals.

The condition of the Chinese economy differs strongly from that of most OECD economies, with public finance constraints notably less tight. China has responded to the 2008 shock with strong stimulus measures, not least in the transport sector. Vice-Minister **Zhenglin Feng** pointed to a need for investment in connectivity that remains elevated, particularly in rural regions, suggesting that risks of overinvestment or investing too soon, in the sense of making uneconomical investments for stimulus reasons alone, are limited. In Vice-Minister Feng's view, there is no trade-off in China between stimulus, long-run growth policy and rational investment choices in transport.

Whereas investment needs in rural areas relate mainly to connectivity, the focus in urban areas shifts towards system integration and optimisation, with increasing attention to safety, environmental impacts, energy demand and congestion. China's twelfth 5-year plan, 2011-2015, adopts an integrated planning perspective to ensure the development of a seamless and balanced transport system.

### Towards integrated systems

Switzerland's transport system is an example of integration and high quality, and its transport policy stands out through its coherence, guided by a long-term vision that has sustainability at its core. Federal Councilor **Doris Leuthard** stressed the need to continue along this path, even if budgetary pressures make it harder. Introducing a long-term strategy into policy requires protecting

transport funds from annual changes that may be caused by political and business cycles. This is not only for sustainability reasons – maintaining high quality infrastructure is a key element of Switzerland's international competitiveness.

The need for coherence and stability was confirmed by **Rüdiger Grube**, who sees Deutsche Bahn not so much as a supplier of rail transport but as a provider of mobility and logistics services. Mobility and logistics are not a matter of a single mode but of an integrated system. The more seamless, the better that system. The economic crisis is accelerating the shift towards an integrated system approach because it rewards efforts to improve performance at low cost. This shift is indispensable if the sector is to reduce its carbon footprint, and public sector execution (not just commitment) is needed to clean up transport's act – at present transport emissions are increasing whereas those of other sectors are in decline. The merits of integration are clearly showcased by the Japanese railways.

**Yoshiyuki Kasai** explained how in serving a large and ever increasing demand, the Tokaido-Shinkansen high-speed rail network is fully integrated with urban rail services and metro operations, so as to maximise system output. The seamless approach permeates the entire system design, which includes fully standardised rolling stock in order to save on costs and increase system performance, easy to understand train timetables, high frequencies, and punctuality to keep users' schedule delay costs low and avoidance of mixed operation of trains of different speeds. Rising demand for high quality services will be met by the Maglev train, which will allow considerable time savings, for example halving the time for the Tokyo-Osaka connection. Transport infrastructure can be paid for from tax revenue, raised through taxes with narrow or broad tax bases and from general or dedicated sources, or it can be paid for from user charges.

Transforming funds into the right flows – financing – can be done privately or publicly. Scarcity of public funds has heightened the attention for private sector financing and, as seen above, the post-2008 economic context has intensified efforts to increase private sector involvement in some countries, including the United Kingdom. Lord **Gus Macdonald** shared his view that combined public and private funding is the recipe for success:



China's Vice-Minister Zhenglin Feng makes an intervention during the Plenary Session



Keynote speaker Angel Gurría summing up

A captivated audience

investment needs are huge, the private sector has funds to place, and its reluctance to place it in transport can be overcome. Enthusiasm about the feasibility and the desirability of increased private sector financing is not universal, partly because circumstances differ among countries and partly because of different appreciations of the advantages and drawbacks of private sector involvement.

### Who funds and who finances?

Rüdiger Grube pointed out that strong political and public sector support is crucial to convince private sector investors, because without it the risk is too high given the technical and political characteristics of transport infrastructure. At present, rates of return are generally too low for private investors to accept the regulatory weight observed in transport. Minister Leuthard observed that guaranteeing sufficient returns for private investors will lead to higher prices for users. As long as the public

sector can forego a financial return and focus on less tangible socio-economic returns, public sector financing is the more appealing option.

Minister Varadkar shared the Irish experience, where private financing is not only more costly than public financing but also the supply of private financing has dried up. Mr Kasai expressed reservation regarding the widespread feasibility of public-private partnerships. Private operation does work in Japan, although the transition out of public funding and financing was very difficult. That it works is at least partly because privatisation allowed establishing a long-run strategy horizon in management, a feature indispensable for success in the transport sector given asset lifetimes. Scarcity of tax revenues might also raise attention for the introduction of user charges or tolls. However, public support for tolls remains low in many places, including in Ireland. And Vice-Minister Feng noted a new Chinese policy initiative to phase out tolls on public expressways. ■

# Investing in Connectivity: Where, Why, When, How?

Transport volumes are expected to increase significantly during the coming decades. The International Transport Forum's 2012 Transport Outlook estimates that passenger mobility will grow by a factor of 2.5 to 3.5 outside the OECD. In the OECD, mobility is expected to be about 30% higher in 2050 than in 2010. Population and per capita income growth are the driving factors, outpacing the mitigating potential of urbanisation. Current infrastructure levels will not be sufficient to handle such mobility needs. Participants in this session debated priorities for investment in connectivity and balancing investment needs against the overall need for fiscal responsibility in the economic crisis.

**G**ateway ports and airports, and links allowing freight to move smoothly to hinterlands, play an increasingly important role in the economy and the significance of large urban areas as highly productive centres of economic activity is growing with globalisation. Global trade and travel have put some parts of the transport system, particularly in these urban areas, under severe strain and investment is a key part of the response. Investing in connectivity then means that key terminal and gateway infrastructure is built in the right place and right time to adequately cater for current and future transport needs.

Investment decisions should be thought of in terms of mobility systems rather than modes and modal networks. Indeed, seamless transport systems are highly interconnected. The degree of connectivity depends on physical, managerial

and institutional characteristics of the system. At the modal level, efficient networks connect places and allocate transport flows with just enough capacity to ensure a balance between ensuring smooth flows and avoiding excessive outlays in infrastructure. Interconnections between modes require well-placed and well-designed switching points. Transport systems are also increasingly integrated with energy and communications systems, adding another layer of complexity to their design and management.

## Strategic infrastructure

Smart investment in connectivity strikes a balance between providing high-quality service and keeping investment and operational costs under control. This is a common goal, but the path to more connectivity depends on local circumstances, including the current state of the transport system, its governance structure, and framework conditions such as the level of economic development and funding options.

Decisions on transport infrastructure investments hence need to be taken with a view to providing mobility and required service level over the life-cycle of the infrastructure in order to ensure value for money. There is an important role for national governments, both in establishing governance and market frameworks and being engaged in long-term planning processes, particularly where new infrastructure to support connectivity is of a significant scale.

## The challenge of increasing urbanisation

**Peter Hendy** underscored that "efficient and planned management of transport is critical for survival of cities and their growth." Transport plays a crucial role in city's function, connecting people to jobs and training, and providing access for businesses, their clients and suppliers. Investing in connectivity improves quality of life and helps regions to compete for jobs and growth on an international stage.

## The Panel



**Peter Henty**  
Commissioner,  
Transport for London,  
UK



**Siebe Riedstra**  
Secretary-General,  
Ministry of Infrastructure  
and the Environment,  
Netherlands



**Koji Kuroda**  
President, Japan Expressway  
Company Limited,  
Japan



**Vladimir Yakunin**  
President,  
Russian Railways,  
Russia



**Anthony Albanese**  
Minister of Infrastructure  
and Transport,  
Australia



**Conny Czymoch**  
Moderator



**Michael Clausecker**  
Chairman Managing Board,  
Bombardier Transportation,  
Germany

In building and maintaining transport infrastructure in urban areas value is added to the economy, and not just in the city itself. Indeed, interconnectivity is key to the survival of cities. Urban, regional and long-distance transportation need to be much more integrated with each other in the future and will likely merge. Investment in transport, and the connectivity it creates, drives economic growth, and economic difficulties should not therefore be allowed to bring investment to a halt.

### Need for mass transit systems

The ongoing urbanisation and development of megacities reinforce the need for mass transit systems as the scope for car-reliant mobility is limited. Challenges are particularly serious in some emerging economies, especially in Asia, where

infrastructure needs to be updated but resources are limited and transport solutions based on cars are no longer a viable option as congestion is already major obstacle. Rail, one of the fastest growing markets in the world, has a potential to deliver mobility but will need to provide the connectivity needed by users of the transport system. Smart regulatory solutions, such as congestion charges and regulated access to urban centres for cars are needed to support sustainable growth of cities. Examples from Singapore, London and Stockholm have proven that urban congestion can be managed in a cost-efficient way.

Planning for future growth of cities requires the development of a comprehensive transport strategy. The public transport system needs to be connected not only within cities but also between cities and with cities' peripheries.

Suburban rail lines interconnected directly to metro lines, as in Japan, provide users with seamless services par excellence. **Michael Clausecker** stressed that “connectivity is the key to increased demand for public transport” and **Koji Kuroda**, looking at the issue from the opposite side, acknowledged that developing “seamless transport systems requires growth to accommodate investment needs.”

### Ageing infrastructure

Transport infrastructure is a major national asset representing a very large investment with an average lifetime of more than 50 years. Infrastructure requires continuous attention (in terms of maintenance, operation and development) to counter deterioration, or because of a need for upgrading. However, funding for road maintenance is often postponed, especially when budgets are tight, because a lack of maintenance does not lead to immediate failure of the network. This is entirely counterproductive. The levers for promoting growth are costs and productivity, both of which suffer if the quality of transport infrastructure declines.

Minister **Anthony Albanese** underlined that “it is not only new infrastructure that matters but getting more out of existing systems.” It is becoming more and more important to make better use of existing capacity and to interconnect transport modes smoothly and seamlessly. Many countries face the challenge of ageing infrastructure and maintaining the service level of existing infrastructure is critical. It is increasingly clear that investing in connectivity should not only focus on new infrastructure.

### Investment in ICT

The mobility concept is evolving from connectivity as bricks, mortar and steel to include issues of information, communication and seamless management. Integration of transport systems and communication systems helps provide smoother mobility for transport users with easier access to information before and during their journey. Investment should not only be directed at traditional infrastructure but also at modern information and communication technology (ICT) to facilitate intermodal travel.

This will also help manage and improve the efficiency of the existing infrastructure. Fast and reliable travel information for public transport enables travellers to plan their travel across transport modes. The introduction of transport smart cards improves seamless connections as passengers can use one card to pay their travel by train, bus and tramway - in the Netherlands across the whole country. India is developing a similar universal system and a new generation of smart bank cards offers prospects of international payment systems at reasonable cost. Good ICT systems also help attract passengers to public transport as an alternative to the car. Minister Albanese concluded that “communication technology is a form of transport infrastructure.”

### Designing public-private partnerships

Transport suffers from a “funding gap” between needs and available public funds. The evidence is that this gap will widen as public finances are stretched in the longer term. The private sector also faces stringent constraints in securing funding for transport infrastructure investment and transport services.

Public-private partnerships (PPPs) with pension funds and insurance funds, where interest in relatively low-risk, long-term returns coincide with the characteristics of transport infrastructure investments, was offered by former UK Transport Minister Lord **Gus Macdonald**, intervening in the debate, as a potential new source of funding. Effective risk management is the key to good PPP design and governments must ensure that there are powerful incentives for efficiency in PPPs through the way that risks are assigned. Many failures of PPPs have occurred where demand risks have not been managed well and Peter Hendy confirmed that “you need to identify risks properly both for public and private sector” for successful transport infrastructure investments.

### Maintaining support for investment

As investments have a lifetime of more than 30 years, long-term planning is important. The challenge then is to break the nexus between political cycles and investment cycles, and to maintain the support from government, the business community, wider stakeholders and

“Connectivity is the key to increased demand for public transport”

Michael Clausecker



Australian Minister Albanese driving home a point



Vladimir Yakunin of the Russian Railways speaks during the panel on Investing in Connectivity

the public for continued investment. Mobilisation of all stakeholders, governments, regions and private sector is the key. Panellists gave a number of examples of how mobilising support from the business community can help to maintain support for continued investments.

Transport for London has actively worked with business to make the case to government for investment in London’s transport system. Peter Hendy stressed that “we need to continually make the case for investment in connectivity” and Minister Albanese agreed that “you need to mobilise support from the business sector to make sure the political battle is won.” In the Netherlands, public-private platforms have been established to bring different stakeholders together and to find an innovative solution to connecting different information systems providing logistics services. **Vladimir Yakunin** concurred that “mobilisation of all stakeholders, governments, regions and private sectors is a key.”

### Seamless governance

Many of the underlying difficulties in meeting infrastructure challenges can be attributed to governance issues that span infrastructure

planning, policy, regulation, financing, procurement and management. Indeed, the key to making progress is governance. Good governance at all government levels and internationally in co-operation with the private sector is needed to improve decision making and create incentives to invest in connectivity.

“Communication technology is a form of transport infrastructure.”

Anthony Albanese

There is a need to think in terms of mobility systems rather than modes and modal networks. For that, integrated governance is critical and this can be established by a political champion (such as in London), an integrated authority (such as the new ministry in the Netherlands) or stronger national government involvement (such as in Russia). **Siebe Riedstra** commented that “sharing experiences on good governance during this conference would prove important in making progress”, and Peter Hendy closed by saying that politicians and “Mayors in particular have to have a long-term vision for growth and transport is central to that vision.” ■



# Smart Grids: Powering the e-Mobility Future

Electrification is a promising route to low-carbon transport. As the use of electric vehicles (EVs) grows, this new electricity load will need careful management. Although electricity demand for EVs is likely to remain small relative to overall load in most regions for many years to come, it could have a much bigger impact on peak load as motorists seek to recharge their batteries at the end of the working day. Existing electricity systems will need to be reconfigured to meet these needs without increasing reliance on fossil fuels. Debate in this session shed light on how EVs might be integrated into the power supply system for seamless electric mobility.

Electric utilities have begun to deploy “smart grid” technologies to better manage demand. A smart grid is an electricity network that uses digital monitoring technologies to efficiently deliver electricity wherever and whenever it is needed. Smart grid technology can enable EV-charging (grid-to-vehicle, or G2V) load to be shifted to off-peak periods, thereby flattening the daily load curve and significantly reducing both generation and network investment needs.

Advanced metering equipment is an essential component, enabling a two-way flow of information and providing customers and utilities with

real-time data and enabling customers to schedule charging intelligently.

In the longer term, there may be potential for smart grid technology to enable EVs to be used as local, distributed electricity storage devices, feeding electricity stored in their batteries back into the system when needed (vehicle-to-grid, or V2G, supply). This could help to reduce electricity system costs by providing a new means of regulating supply. In this way, EVs could both benefit from and drive forward investment in smart grids.

However, there are a number of technical, practical and economic barriers to such development and the session brought together key players to shed light on the critical issues for integrating electric mobility seamlessly into the power supply system.

## Smart grids and electric vehicles

The way electric vehicle technologies are expected to develop, a vision generally shared by the panellists, was sketched by **Patrick Oliva**. The current decade will see a diversity of experimentation in e-mobility systems, creating the conditions for the take-off of electric vehicles in the 2020s. Battery technologies are a pivotal issue for road vehicles as batteries are currently expensive.

However, all the other EV drive components are potentially much cheaper than their equivalent on a conventional car. The costs of EVs can therefore come down despite high battery costs.

Commercial scale production of EVs, which has now begun in a number of automobile companies world-wide, should see costs cut rapidly as the full resources of production engineers are applied to making more competitive vehicles.

At the same time battery costs are expected to reduce by a third in the next five years and to come down to 2 000 Euros for each 100 km of autonomy in the next decade.

## The Panel



**Mitsuhiko Yamashita**  
Executive Vice-President,  
Member of the Board  
of Directors, Nissan Motor,  
Japan



**Henri  
Poupart-Lafarge**  
President, Alstom Transport,  
France



**Sergio Monteiro**  
Secretary of State for Public  
Works, Transport and  
Communications,  
Portugal



**Patrick Oliva**  
Senior Vice-President,  
Strategic Anticipation and  
Sustainable Development,  
Michelin,  
France



**Melinda Crane**  
Moderator



**Pat O'Doherty**  
CEO, Electricity  
Supply Board (ESB),  
Ireland

Smart grid technologies that match supply and demand in real-time will be needed when EVs take-off. The batteries in EVs offer the potential to store electricity, especially from variable, low-carbon wind and solar power, for supply to the grid or to homes at peak demand. One of the problems with solar and wind power is that supply is intermittent, depending on weather conditions, and not necessarily available when needed most.

### Low-carbon electricity

Storing electricity is generally prohibitively expensive, except in the form of "pumped storage" where mountain reservoirs hold water pumped uphill in off-peak periods, releasing it to generate hydro-electricity in periods of peak demand. V2G

supply offers power companies a rare prospect of additional storage capacity, located moreover close to where electricity is needed.

So, is integrating EVs into smart grids a solution to reducing transport sector CO<sub>2</sub> emissions or a solution to power sector problems with the reliability of low-carbon renewable energy? In practice they go hand in hand. Vehicle batteries could also serve to make homes and commercial buildings equipped with solar panels and wind turbines more self-sufficient.

Independence from the grid is a potential element in marketing strategies for electric vehicles in some regions and, as Mr. Yamashita explained, Nissan already sells a version of its mid-range car, the "Leaf", equipped to provide electricity to the home during scheduled power cuts. This feature was developed in response to the electricity

“It can no longer be a question of either growth or a clean environment”

Sergio Monteiro



supply problems in Japan following the 2011 earthquake and tsunami but could be attractive much more widely.

### Smart visions

There are two contrasting visions for the development of e-mobility. For **Henri Poupart-Lafarge**, the model is a centralised, collective system that is standardised continent-wide, to provide seamless interoperability based on long-term public support. This would be something like the model for passenger railways today. After all, railways already provide a near 100% electrified mobility system in many parts of the world. Other panellists expect to see a diversified set of systems suited to different circumstances, including slow charging EVs, fast charging EVs, battery-swap systems, car-share EVs and also plug-in hybrids to bridge the gap to fully electric vehicles. **Pat O'Doherty** stressed the importance of competition between systems and looked forward to competition to supply the grid from vehicle batteries between vehicle owners.

New business models need to be developed for EV systems because the benefits and costs accrue to different stakeholders over different time scales. A long-term view is needed so that the upfront investments in charging infrastructure can be made with public support until use levels increase to commercially viable levels.

**Sergio Monteiro** stressed that all relevant stakeholders have to be closely involved in setting up e-mobility systems, saying you cannot just provide charging facilities and expect customers to arrive unless you work with them from the beginning. This is what happened to some extent with Portugal's Mobe-e project providing charging facilities across the nation's highways. The infrastructure investment has been made but a lot of work remains to be done to get adequate numbers of users.

### Subsidies or sales success?

Nissan is planning on the basis that subsidy cannot be relied on forever, explained **Mitsuhiro Yamashita**. EVs therefore have to become a commercial proposition. The standard experience in industry is that new vehicle technologies, whether they be airbags or engines, usually take a decade to achieve a halving of the initial costs of production when the technology is first introduced commercially. With volume production there is no reason that the car industry cannot do the same to the cost of an EV. But during these ten years, some public support will be needed.

Electric cars will have to be competitive with conventional vehicles on cost and in every other respect and they will only take off when they are a superior product, Mr. Yamashita underlined that “car customers are very realistic – they don't dream – they always compare cost and value.”



“Car customers are very realistic – they don’t dream – they always compare cost and value.”

Mitsuhiko Yamashita



Nissan’s Mitsuhiko Yamashita expounds e-mobility

The panellists from the auto and power industries agreed that standardisation of charging systems is essential. Multiple plug types increase costs and cause problems when cars cross borders. There is a role for government in formalising standards and bringing competitors to the table but they concurred that agreement on standards can only be based on industry stakeholders leading the way.

Electricity market structures and regulatory frameworks will need to adapt to facilitate the demonstration and commercial deployment of smart grids, including the specific technologies needed to make G2V and V2G technically and commercially viable. It is vital that regulatory frameworks be adapted to allow tariffs to be set to provide incentives for electricity transmission and distribution companies to invest in appropriate smart grid technologies, for system operators to take decisions that ensure economically efficient operation of the entire system and for EV owners to optimise G2V and V2G load.

### Railways at the heart of e-mobility

Henri Poupart-Lafarge noted that trains already supply power to the grid, with a number of railway companies installing regenerative braking on

some of their trainsets. A train can produce 3 megawatts of electricity when braking to feed to the grid. For charging electric cars, direct current (DC) networks will be needed for high-power, fast recharging points. Normal electricity networks use alternating current (AC) but metro systems run on DC and effectively already provide city-wide DC micro-grids. Metro systems and rail stations can therefore relatively easily provide key EV charging facilities, and exactly where they are needed city-wide and for seamless intermodal passenger transport that includes a leg in an electric car.

In Patrick Oliva’s view “the game-changer for e-mobility will be an intergovernmental decision to halve CO<sub>2</sub> emissions by 2050.” He also underlined the significance of trade deficits from importing oil in driving policy. “This will be our next big economic concern as we come out of the current crisis”. Mayors will also increasingly find popular support from establishing zero emission cities and green policies more generally.

Sergio Monteiro underlined that a joint economic and environmental perspective is needed in developing both transport and electricity systems, concluding that “it can no longer be a question of either growth or a clean environment”, it has to be both. ■

# Transport Innovation Talks

## Exploring the Future of Mobility

The Transport Innovation Talks provided a stage for innovative thinkers and practitioners to present some key insights on what seamless mobility looks like and how it can be delivered.

### Sensing seamlessness

A world increasingly populated by sensing devices that allow unparalleled insight into our cities was described by **Carlo Ratti**, Director of the SenseAble City Laboratory at the Massachusetts Institute of Technology (MIT). These sensors, embarked for example in cell phones, vehicles and traffic control devices, are not just passive but increasingly can dynamically adjust systems to real-time changes. This “sensing-actuating” function provides new insights and opportunities in our relationship with the urban metabolism – our cities not only “talk back” to us, they can also “act back”.

They also tell us unexpected stories. This was the case when MIT tagged several hundred items being disposed of in Seattle’s waste collection system. One month later, many items were still on the move revealing unexpected national and international waste processing flows extending far beyond Seattle.

**“Our cities not only “talk back” to us, they can also “act back”**

Carlo Ratti

Another series of projects undertaken by Ratti’s laboratory have sought to capture and exploit very large data sets from cell-phone sensors. New insights into long-distance commuting and daily urban flows have emerged from this work including innovative use of cell phone accelerometer data to automatically match cell phone signals to specific transport modes (walking, cycling, bus/metro or car driving) using motion detection algorithms and cross-referencing real-time public transport



Peter Miller explaining how IT advances change mobility behavior



Martin Austwick's take on a day in the life of a London Boris bike - in song format



Peter Hendy explains how London tackled public transport for the 2012 Olympic Games



Carlo Ratti of MIT presenting insights from data gained with sensors

and traffic data sets. "Real-time Singapore" takes these technologies to a new level and allows unprecedented insight into the daily transport and energy flows within Singapore and the city-state's connection to the rest of the world via maritime and air transport.

Bringing it back to individual users and their role in generating transport-improving data, Ratti finished by describing the "Copenhagen wheel" project built around a sensor-enabled bicycle that not only allows users to receive information about its surroundings but to broadcast information to other users on, for example, cycle traffic speeds and street pollution levels.

## Movement data

**Martin Austwick** picked up on the importance of open and shared data by presenting one of the visualisations he and colleagues at University

College London's Centre for Advanced Spatial Analysis have made using open data on the London shared bicycle fleet released by Transport for London. According to Austwick, this data set offers new insights into how people use the shared bike scheme and how they travel around the city. He illustrated the types of stories emerging from the data by singing a song describing the day of one hired bicycle as it made its way from user to user across London's neighbourhoods as its movements were projected on screen.

### An Olympic challenge

Moving on from bike-sharing, **Peter Hendy** sought to discuss another kind of partaking: sharing the city of London with millions of spectators and athletes during the Olympic summer games of 2012. The London Olympics are both an opportunity for London and a very real challenge as they are set into a dense urban environment generating an additional 3 million trips per day on a saturated network already handling nearly 24 million trips.

These are significant constraints with 30% of road trips and 40% of public transport trips potentially impacted by the influx of spectators and the management of the 175 km Olympic Route network.

Additional impacts come from freight traffic and goods delivery services. In response, TfL has undertaken significant infrastructure investment for new metro stations and station upgrades as well as additional transport services, including a third metro peak service.

The bulk of TfL's response, however, is an innovative multi-pronged series of actions helping individuals and businesses effectively manage transport demand during the games. TfL has actively engaged businesses to develop contingency planning for ensuring staff commuting and goods distribution. At the same time, a series of campaigns and information resources have been deployed to help travellers get around the city even at the most crowded periods.

The key, according to Hendy, is to ensure that those who can "re-time, reduce, re-route or re-mode" their trips, while TfL manages expectations about travel for those who cannot. The durable transport legacy of the London Olympics, hopes Hendy, will be a long-term change in travel behaviour that capitalises on the transport

demand management strategies rolled out for the summer of 2012.

### More sharing

**Peter Miller** described how the current car-dominated transport system looks to someone with a background in information technologies. If IT traffic were managed as we manage our urban transport networks, said Miller, the internet would be useless. He expects that transport in the information age will be as different from transport in the industrial age as the transport in the industrial age will be from transport in the agricultural age.

One issue is that while we have seen several IT service providers rapidly emerge from modest beginnings to dominant global positions in just a few years (Google, Facebook, Twitter, etc.), it is not yet clear what shape IT-rich 21<sup>st</sup> century transport services will take.

Citing how a change in the way people access information in the Internet age contributed to the recent demise of the printed version of Encyclopaedia Britannica, Miller asked what might change in transport as people adopt new behaviours based on IT technologies. His answer: more sharing, more individual public transport and innovative re-use of existing transport infrastructure.

For example, Miller highlighted the often neglected role that coach travel can play in inter-urban transport. Premium services, on-board wifi and express schedules have allowed many such services to develop in spite of public policy leading Miller to question why these services, and bus services in general, are often seen as secondary adjuncts in the national mobility mix. In closing, Miller also underscored the importance of open data in providing new insights into how transport is changing and providing early signals to decision-makers on emerging trends.

### Innovative mobility services

**Jaehak Oh** wrapped up the session by presenting three projects undertaken by the Korea Transport Institute (KOTI) in support of more seamless transport. Oh prefaced his comments by stressing that "seamless" travel – adapting infrastructure, operations, fare structures and information in support of more convenient travel – must

## Presenters



**Peter Hendy**  
Commissioner,  
Transport for London,  
UK



**Carlo Ratti**  
Director, MIT SENSEable  
City Laboratory, USA



**Monika Jones**  
Moderator



**Martin Austwick**  
Lecturer, Centre for  
Advanced Spatial Analysis,  
University College London  
Bartlett Faculty of the Built  
Environment,  
UK



**Jaehak Oh**  
Vice-President,  
Korea Transport Institute,  
Korea



**Peter Miller**  
CEO, ITO World Ltd,  
UK

necessarily focus on travellers' needs and expectations rather than on supplier or operator performance criteria. With this understanding, Oh presented work underway to develop integrated IT information services to help users navigate around and access services in transport terminals. These services, centralised via a single operations room, allow real-time information to be delivered to travellers and coordinate the delivery of on-demand travel-related services (e.g. wheelchair delivery, personalised and geo-located taxi reservations, etc.).

**“The trend is towards owning less and sharing more.”**

Jaehak Oh

The second project presented by Oh seeks to extend the idea of cloud computing to a “cloud” transport system. This system allows personalised access to a broad range of mobility services

(car-sharing, bicycle-sharing, public transport, etc.) via a single virtual interface. Highlighting the trend towards “owning less and sharing more”, Oh described how such integrated mobility services fit the aspirations of an emerging share of the population.

Finally, Oh described KOTI's work to develop a national public transport system extending, connecting and integrating existing public transport networks into a seamless “network of networks”. The backbone of this system is based on hub-and-spoke networks deployed from intercity bus, high speed and other rail terminals. A key hurdle is the negotiation of integrated fares and coordinated schedules with revenue allocation being a fundamental challenge. The “One nation, one transport city” provides an ambitious vision of what seamless transport could mean for an entire nation, according to Oh. ■



## KEYNOTE SPEECH

# Catherine L. Ross

## Megaregions and Transport Connectivity



Good morning and welcome Ministers, service providers and special guests. I am delighted to speak with you about the opportunity to achieve greater connectivity and seamless transport.

Our challenge is how we make that connectivity smooth. How do we make it continuous with minimum disruption? You will notice that I did not say with no disruption.

I would like to give a broad overview of megaregions. Megaregions are networks of urban centres and surrounding areas connected by economic, social, and infrastructure relationships. They capture economic and network interactions in a spatial context.

### Transport is connectivity

They are one answer to the new economic relationships operating in national, regional and world markets. They offer the opportunity to achieve more seamless transport and support economic growth but they also present a number of challenges. It is an appropriate method to help us achieve more unified transport.

The world's largest 40 megaregions currently cover only a tiny fraction of the habitable surface of our planet. They are home to fewer than 18% of the world's population, but they account for 66% of all economic activity and about 85% of technological and scientific innovation. This is the economic and spatial reality we live in but we do not plan in this way. This is very evident in the United States and so it was out of a sense of concern and perhaps a bit of panic that myself and others around the globe began work to identify

megaregions and relevant metrics to measure them, to explore both their usefulness and potential.

### The emergence of megaregions

Just over half the world now lives in cities but by 2050, over 70% of the world population will be urban dwellers. By then, only 14% of people in rich countries will live outside cities and 33% in poor countries. The biggest mega regions are:

- > Hong Kong-Shenzhen-Guangzhou, China, home to about 120 million people.
- > Nagoya-Osaka-Kyoto-Kobe, Japan, expected to grow to 60 million people by 2015.
- > Rio de Janeiro-São Paulo region with 43 million people in Brazil.

We can see evidence of the same trend in fast-growing urban corridors, for example the 600 Kilometres linking Nigeria, Benin, Togo and Ghana and in India the fast-growing corridor linking Mumbai to Delhi.

Over the next 30 years approximately 70% of the US population will live in or close to the country's ten megaregions.

The major issues and tasks in megaregion transport planning include the development of the regional vision and goals, development of a regional identity around which to organise different stakeholders, financing tools applied to infrastructure across jurisdictions, and development of standardised data sharing, analytics and information collection systems. Cities anchor megaregions. For example, Greater London, Shanghai and Paris are dominant



**120 million**

Number of inhabitants of the Hongkong-Shenzen-Guangzhu area in China, the world's largest megaregion

**66%**

Share of economic activity concentrated in the world's 40 largest megaregions

global cities influencing big geographic areas that influence surrounding regions and global markets.

Megaregion transport planning may generate significant economic, social and mobility benefits with a great potential to prove seamless transport. Some of the areas that would benefit are:

- > Freight and passenger movements.
- > Economic development and competitiveness.
- > Infrastructure investment decisions.
- > High-speed and intercity rail and highway improvements.
- > Greater accessibility to economic centres and global markets.
- > Natural resources management.
- > Disaster planning.

The spatial boundaries of megaregions are not rigid blueprints. In fact, different criteria may be used to accomplish different objectives and goals. They reflect regional growth and prosperity, but are also quite flexible. A primary challenge for this and future efforts is how to combine the effectiveness of federally or regionally proposed projects with those developed locally that may serve different and sometimes competing mobility needs.

### Spacial boundaries of megaregions are not rigid blueprints

Efforts to define and plan for megaregions are happening throughout the world. In the United States; new organisations like the Piedmont Alliance for Quality Growth (PAQG) composed of six states in the Southeast have been created through public private partnerships to work across jurisdictions to implement water, energy and transportation projects in the Piedmont Atlantic Megaregion (PAM). Mayor Shirley Franklin, Former mayor of the City of Atlanta, is very supportive of the megaregion and demonstrated this by lobbying the United States Department of Transportation to fund construction of a bridge in North Carolina. Both Georgia and North Carolina are located in the PAM. The membership is largely composed of private companies, mayors and universities.

European and Asian countries are establishing strategies to respond to rapidly increasing



A packed auditorium in the Gewandhaus concert hall on the last day

Catherine Ross delivers her keynote

transportation demands and to promote economic growth while preserving “green” environments. The European Union (E.U.)’s transport policy and China’s practice to encourage transport decisions that are made at the level of the Beijing and Shanghai megaregions are examples of international approaches to megaregion planning.

What is the architecture of the megaregion? How do we move past geographic boundaries and corridor-based planning to link centres that drive our economies? How do we form regional identities and service agreements across borders? How do we shape our transport system to meet more complex demands with multiple objectives?

### The architecture of the megaregion

There is evidence that a megaregion framework might result in significantly different and better investment decisions across all modes.

For example, high-speed rail (HSR) alignments might vary as much as 25% under a megaregion approach in the United States when compared to location decisions based on conventional regional and corridor-level planning. This culture of collaboration demands an incentive-based financing system that supports projects which cross jurisdictions and address regional interests.



One idea, the “new regionalism”, shifts the institutional structure from government to governance, and emphasises public and private sector partnerships and joint ventures. This includes a shift away from traditional hierarchical planning towards a horizontal and network-based planning that ignores or overcomes constraints presented by existing political boundaries.

### A shift from government to governance

The following few examples represent cross-region transport planning:

- > The Seoul mega-region with more than 20 million people in South Korea has increased its interactions with the Busan metropolitan area and opened a high-speed rail network, forming the Seoul-Busan corridor.
- > The EU level of infrastructure planning is transnational planning at the scale of the megaregion.
- > Partnership between the US and Canada to “build the Bridge to the Future” has the Michigan Department of Transportation building a connection to the Ambassador Bridge, the busiest US-Canada crossing and connecting two interstate highways.
- > The Yangtze River Delta includes a signed agreement between major cities to work together on different issues including transport.

- > Coordinated planning between the Republic of Ireland and Northern Ireland.
- > The Great Lakes compact (an agreement among states around the Great Lakes region in the northern United States to work together to reinvigorate the economy of the region).

Future population and economic activities are expected to be concentrated in these new and emerging megaregions. This is true in low, medium and highly developed countries. Megaregion planning offers the opportunity to create greater connectivity and smooth the connections between towns, cities, regions and countries. They are capable of responding to challenges presented by the need to manage natural resources, climate change, and transport planning and investment. Megaregions include core areas and their areas of influence that support expanded economic opportunity beyond jurisdictions. Megaregions offer us a greater possibility to develop seamless connected transport.

”

**Dr. Catherine L. Ross**

Director and Harry West Professor  
Georgia Institute of Technology's Center  
for Quality Growth and Regional Development, USA

# Collaboration in Connectivity

## Focus on Regions

Transport policy aims to achieve strong connectivity and seamless transport where there is demand. But the economic and social geography that determines demand for mobility differs from the jurisdictional geography that underlies policy-making. This mismatch needs to be addressed and policy aligned with the spatial distribution of mobility to develop connectivity and seamlessness in the right areas. Providing seamless transport between cities or across borders requires co-ordinated responses to technical, institutional and financial issues from a variety of stakeholders. Based on practical case studies from Europe, India and the United States, the session examined how these issues can be addressed across institutional boundaries.

### Connectivity in megaregions

A keynote by **Catherine Ross** addressed the challenges of megaregions and transport connectivity. Large megaregions with fast-growing urban corridors offer opportunities for enhancing connectivity in the transport sector.

"Megaregion transport planning may generate significant economic, social and mobility benefits with great potential to provide seamless transport", Ross said.

To achieve these benefits, improved, integrated governance among different authorities and agencies is essential.

At the megaregion scale, new governance structures need to be adopted with public and private partnerships and cross-sectoral alliances to pursue a common vision and common interests. In Northern California, for instance, researchers have emphasised adaptive and innovative forms of governance that function alongside existing governing authorities to provide structure and guidance on a greater scale than the single municipality or metropolitan area. Examples of new thinking in megaregion co-operation and coordination can also be found in a number of international initiatives, such as the Oresund Committee in Sweden and Denmark.

### Connectivity across borders

International cross-border connectivity requires not only adequate transport infrastructure, but also a coherent institutional framework, especially as concerns customs procedures. According to **Manoj Singh**, "customs facilitation in Europe is the heaven of integration" and much effort is still needed between India and its neighbouring countries.

But significant progress has been made recently to better connect the North East of India with Bangladesh, where people share a similar culture and the same need and desire for a smoother exchange of goods and travel for people.

Administrative boundaries at all levels can constitute a barrier to connectivity. "Customers of public transport do not care about administrative boundaries," said **Alain Flausch**, and "regional identity can be a positive factor in fostering community support for institutions and projects that enhance regional mobility." Governance

## The Panel



**Alain Flausch**  
Secretary-General,  
International Association  
of Public Transport (UITP)



**Monika Jones**  
Moderator



**John Horsley**  
Executive Director,  
American Association  
of State Highway and  
Transportation Officials,  
USA



**Sven Morlok**  
State Minister for Economic  
Affairs, Labour  
and Transport, Saxony,  
Germany



**Manoj Singh**  
Transport Advisor,  
Planning Commission  
of the Government of India

**“Customers of public transport do not care about administrative boundaries.”**

**Alain Flausch**

structures that support cross-border transportation must establish a collaborative regional identity and develop multi-layered institutional and governance structures, from national and federal to local level. Effective cross-border collaboration also requires the identification of common metrics and points of agreement on levels of customer service, on finance for projects of common interest and on information technologies to support seamless services. This is a continuous process that needs to be the focus of collaboration.

### Collaboration among stakeholders

Strengthened and transparent collaboration between the public and the private sector can accelerate the uptake of innovative technologies to facilitate the travel of customers. As an example, Alain Flausch noted that public transport operators collect huge amounts of information and data on passenger travel habits and needs; sharing this information with private service providers can accelerate the development of innovative

tools – such as smart phone applications – which contribute to smoother travel.

**John Horsley** agreed that co-operation among all levels of authority, and also between public and private sectors, is essential to foster connectivity. He underlined that “smooth traffic flow between Canada and Michigan will become reality only because of true collaboration”, referring to the ongoing construction of the new bridge connecting Detroit in Michigan and Windsor in Ontario – the largest single point of entry to the United States. True collaboration between the governments of the State of Michigan in the United States and the Province of Ontario in Canada ensured successful achievement of this project, which required years of planning and approval by the respective metropolitan planning organisations to reach agreement on design, construction and financing.

Obtaining co-operation means crafting an arrangement that is acceptable to all parties involved. If there is a good transport project, i.e. one for which total benefits are larger than total



Manoj Singh and Alain Flausch with Leipzig mayor Burkhard Jung (left to right).

An intervention from the floor by K. L. Thapar



**“Customs facilitation in Europe is the heaven of integration”**

Manoj Singh

costs, this is possible in principle. But in practice, arriving at a distribution of net benefits that all parties can agree with can be very hard. This is because the starting point of the negotiations is often very different from such a broadly acceptable outcome, so some parties will need to be convinced to forego some share of benefits. The difficulties of such negotiations explain, at least partly, the lengthy procedures that are common with multi-jurisdictional and multi-stakeholder transport projects.

### **Long-term vision, strong institutions**

Co-operation among all levels of authority – and integration of land use, social, environmental and fiscal policies – are essential to a sustainable regional mobility policy. This requires strong institutions with long-term vision and planning cycles as well as effective leadership. The social and economic geography that shapes demand for mobility shifts more rapidly than governance structures do, and governance structures do not exist for transport’s sake alone.

As a result, there is often a lag between the real mobility or infrastructure needs and actual policies.

In some countries, for example, lack of national-level legislation enabling the application and enforcement of paid parking in cities or road pricing is delaying implementation of these demand management policies. So what can be done to address this problem? Practical experience suggests that leadership and strong institutions are crucial to establishing, or at least facilitating, integration of a wide range of interests from different stakeholders. And institutional strength requires legitimacy, which is much easier to obtain if institutions are rooted in regional identities.

One challenge is to agree on a shared vision among the different stakeholders, at national, regional and local level, which may have different cultures and different short-term objectives. With strong institutions, it is possible to introduce long-term planning for transport policy, which is highly desirable given the long lifetimes of the assets involved. With a long-term horizon, it becomes easier to evolve toward more integrated and sustainable mobility, because mobility, land-use, social, and environmental considerations can be jointly considered.



The panel takes a question from the audience

Burkhard Jung,  
Lord Mayor of Leipzig



Strong institutions also make it easier to access funding and financing, because they introduce stability and clarity of purpose into transport policy, and this reduces risk for private as well as public providers of funds and financing.

### Funding seamless regional transport

Developing seamless regional transport requires adequate funding, which cannot be dependent only on national or supra-national funding sources, but also on strong commitment from local institutions.

**Sven Morlok** reported on the development of the Berlin-Dresden-Prague-Vienna corridor, involving road, rail and waterways development, and which is embedded in the Trans-European Network. This project has required a fully coordinated funding mechanism, with financial support from the European Union, the Federal German government and the governments of the German states along the corridor. Securing funding from the local level can only be achieved through full support of the community. This required, in particular, thorough consultation — which altered initial plans —, and sound appraisal of long-term impacts of funding with clear indications of the benefits that regional citizens would gain.

In some cases, securing public funding for a major infrastructure project requires years of concertation before reaching a solution for all parties involved. This can delay projects, but without adequate consultation the risks of costly delays in the middle of a project are exacerbated. The question of funding transport systems and the question of how mobility can and should be paid for will be the focus of the International Transport Forum's Annual Summit in May 2013. ■



## Young Researcher of the Year Award 2012

Ms. Wing Yee Winnie Lam of Hong Kong University's Department of Geography was awarded the International Transport Forum's 2012 Young Researcher of the Year Award for her work on improving walkability. Jury member Dr. Andreas Scheuer (r.) presented the prize together with China's Vice-Minister of Transport Zhenglin Feng (centre right) and Michael Kloth, Acting Secretary-General of the International Transport Forum (l.)



“Smart ticketing is a great way for operators to make public transport the mode of choice for passengers.”

Norman Baker





“Walking is a natural part of a holistic understanding of mobility. Because it is so natural, it is often not in the focus.”

Andreas Scheuer



## Transport Achievement Award

London’s Transport Commissioner Peter Hendy (centre) received the International Transport Forum’s 2012 Transport Achievement Award for Transport for London’s achievement in developing its Oyster Card into a state-of-the-art smart ticketing system. The award was presented by UK Parliamentary Under-Secretary for Transport Norman Baker (l.) and the Acting Secretary-General Michael Kloth. Special mentions went to Singapore’s Land Transport Authority and Karnataka State Road Transport Corporation of India.



International Transport Forum

International Transport Forum

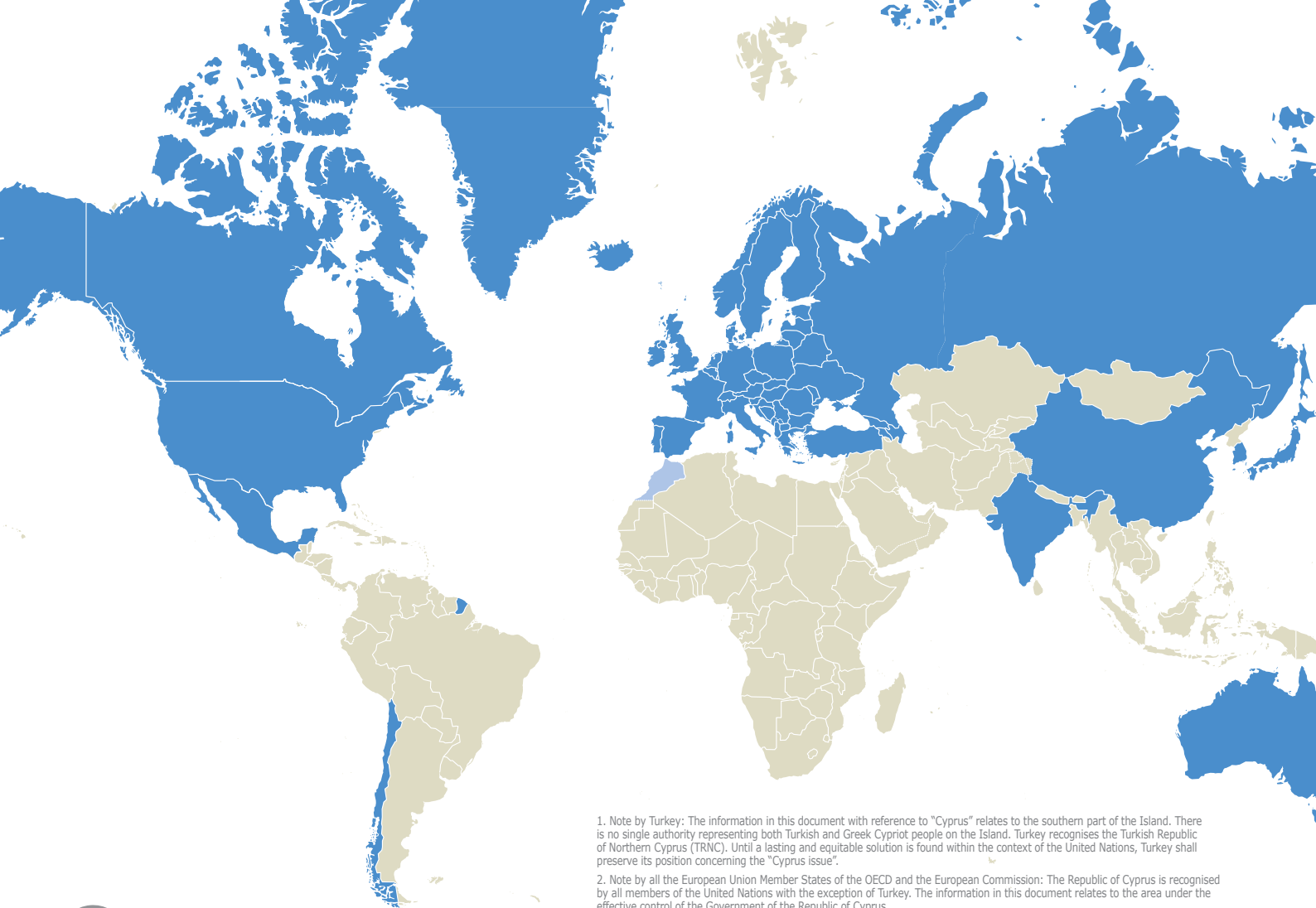
International Transport Forum



# Driving Policy Forward

The Ministerial Meeting is at the heart of the Annual Summit. Discussing the issues at the highest level provides a unique opportunity to foster convergence in strategic areas. The Ministerial Declaration and the transcript of the open part of the 2012 Ministerial Meeting, addressed for the first time by senior business leaders, are documented on the following pages.

Ministers' Roundtables, another innovation, brought together political leaders and other key players to help forge common approaches to urgent challenges in transport.



1. Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

2. Note by all the European Union Member States of the OECD and the European Commission: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

# International Transport Forum

## Member Countries and Ministers

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Sokol Olldashi
- Armenia**  
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- Austria**  
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Ana Pastor
- Sweden**  
Catharina Elmsäter-Svärd
- Switzerland**  
Doris Leuthard
- Turkey**  
Binali Yıldırım
- Ukraine**  
Borys Kolesnikov
- UK**  
Justine Greening
- USA**  
Ray LaHood

(As of 3 May 2012)

# Declaration from Ministers

issued at the 2012 Summit

Seamless transport is a powerful and ambitious strategic vision for the future of our transport systems. Seamless transport is highly interconnected and provides top-quality integrated service. It drives the development of better mobility and sustainable economic growth.

**T**he structure and dynamics of transport systems – often involving complex modal transfers, multiple ownership structures, international border crossings and security threats – makes overcoming the inherent friction within the transport system a constant challenge. This challenge can only be met through co-operation across borders and modes. Transport systems are also increasingly integrated with communications and energy networks, and this integration needs to be managed.

It is in this spirit that ministers assembled at the 2012 Summit of the International Transport Forum. Small groups of ministers held in-depth discussions on issues of pressing importance today: the Automotive Future, Piracy at Sea, Safety of Cruise Ships, and Volcanic Ash and Other Crises.<sup>1</sup>

Discussions among all ministers from member countries and transport actors across the world on Seamless Transport: Making Connections concluded as follows:

**Recognising:** that a sustainable transport system is important for economic prosperity, environmental protection, safety and security of society;

**Acknowledging:** that the ability to travel and move goods, using a variety of transport modes and with minimal impediment, is a primary desire for transport users across modes and sectors;

**Underlining:** that there still exist substantial discrepancies in the development of transport systems between countries and regions;

**Noting:** that bottlenecks still exist, which impede the efficiency of transport systems; that enhanced coordination and integration of transport policy and planning across modes and borders is required to capture the benefits of seamless transport, especially as economic systems become increasingly integrated, both functionally and spatially;

## Ministers:

**Re-affirm** their responsibility to establish policy and institutional frameworks that engender effective inter-governmental and private sector co-operation – one of the key factors in seamless, sustainable transport services;

**Commit** to continued co-operation among all levels of governments and across industry sectors in their countries and across borders; with the intent to provide more effectively connected transport modes and systems that better serve people, markets and trade.

.....  
<sup>1</sup> Conclusions of these Ministers' Roundtables will be annexed to this Declaration as applicable.

**Agree** that enhancing transport connectivity by reducing the “seams in transport” will contribute to the achievement of the following priority policy goals:

**Bolstering the Economy:** Investing in transport infrastructure can help shape the way cities and regions develop and connect, and can boost productivity in the process. It can also create jobs and opportunities for business.<sup>2</sup> Improved and secure information exchange enables increased connectivity for transport and for society, which allows for greater productivity and use of capacity.<sup>3</sup>

**Further** system interoperability and appropriate levels of standardisation and technology innovation will also support long-term efficiencies and benefits for the community, business and the environment. Alternative vehicle propulsion technologies and integrated payment systems accepted across modes are two areas where this could be applied. Supporting interconnected systems requires new policy approaches and innovative business models to allow sharing of information, cost and revenue among transport actors.

**Enhancing Trade Facilitation:** Enhancing trade facilitation and adopting efficient border controls could significantly increase global trade. Improvements at borders can be made with relatively little investment. Integrated border management processes should be adopted everywhere to reduce delays, simplify procedures and facilitate trade. Improved coordination among authorities within and between countries, and adoption of risk-based approaches to customs and security inspection can, amongst other measures, significantly improve seamlessness at border crossings, reduce barriers to trade, and realise potential savings.

**Improving Access to Employment, Education and Community Services:** Access to employment, education opportunities and community services through more connected transport requires greater integration and stronger coordination among governments, authorities and private transport actors.<sup>4</sup>

Better alignment is required between the aspirations of transport users for door-to-door mobility and the way authorities plan for, allocate resources to, and manage separate transport networks and services.

Identifying cost-effective opportunities to improve connectivity is helped by close scrutiny of end-to-end journeys, including “the last mile” and transfers between modes. Implementation often requires policy coordination as much as investment. “Thinking seamless” can sometimes improve performance at lower cost than expanding capacity or building new connections.

**Delivering a Fluid Transport System for Movement of People and Goods:** Natural disasters (for example volcanic ash clouds, tsunamis, and abnormal weather phenomena); accidents, malicious acts (for example piracy at sea and terrorist attacks) and elevation of sea levels due to global warming compromise the safety and security of passengers, transport workers and goods, as well as disrupt transport services.

Consistent and coordinated action between governments and business – in particular on accident prevention policies – is required to ensure a safer, more secure, reliable transport system. Contingency plans – at local, national and international levels – should be developed to coordinate information and services involving alternative modes of transport.

**Providing for a Sustainable Transport Future:** Effective connections between the transport system and renewable and sustainable energy sources, such as smart energy grids, are required for powering vehicles and rolling stock that will serve future generations.

## In conclusion

All ministers of the International Transport Forum declare their determination to pursue policies toward greater connectivity and seamless transport.

.....

<sup>2</sup> Ministers made reference to and re-affirmed the Key Ministerial Messages from the 2009 Summit on *Transport for a Global Economy: Challenges and Opportunities in the Downturn*.

<sup>3</sup> Ministers made reference to and re-affirmed and the Key Messages from the 2010 Forum on *Transport and Innovation: Unleashing the Potential*

<sup>4</sup> Ministers made reference to and re-affirmed the 2011 Summit *Key Messages from Ministers on Transport and Society*.

## Annexes to the Declaration of Ministers

### Joint Statement of the Ministers' Roundtable on the Safety of Cruise Ships

Ministers and high-level representatives from industry met for a roundtable discussion at the 2012 Annual Summit of the International Transport Forum in Leipzig for an exchange of views on passenger ship safety following the unfortunate events that led to the grounding of the Costa Concordia in January this year.

Roundtable participants:

- > Agreed that lessons to be learned from this incident can only be drawn from the accident investigation report - the conclusions of which are wished as early as possible. Nevertheless they agreed to support a review of passenger ship safety under the auspices of the International Maritime Organization (IMO), including the human element and the suitability of current training standards.
- > Encouraged IMO's Maritime Safety Committee to consider proposals to strengthen the current provisions on safety of all cruise ships.
- > Discussed proposals made by Germany as regards mandatory evacuation simulation, improved Rules on lifesaving appliances, strengthened International Safety Management (ISM) provisions and improved electronic charting, and welcomed these proposals for further discussion within the IMO.
- > Agreed the common objective to achieve global mandatory requirements that:
  - provide for flexibility in application of these for different sizes of ships and their specific needs,
  - follow a goal-based approach for enhance ship safety, and
  - allow for transparency in compliance.

### Joint Statement of the Ministers' Roundtable on Piracy at Sea

Ministers and high-level industry representatives exchanged their views on piracy. Somalia-based piracy especially is still a serious threat to the maritime transportation industry as well as to the global trade system as a whole. The participants commended the presence of the Military counter-piracy operations in the region, noting that they are crucial in containing the piracy situation off the Coast of Somalia, as well as the highly beneficial initiatives taken by the International Maritime Organization (IMO) to prevent piracy, including the provision of interim guidance to flag states on private maritime security companies. Expectations were expressed that the IMO Piracy Meeting scheduled in mid-May will give an important momentum to the solution of this item. While the participants recognised they were a short-term solution, the

participants identified the need to consider establishing an international basis regarding the private armed security guards issues, including the accreditation of private maritime security companies (PMSCs), the use of firearms and their carriage on ships entering the territory of port/coastal states, and urged the participants at the IMO to deliberate this as a matter of priority at their upcoming meeting. It was recognised meanwhile the only sustainable solution would be stability on land in Somalia.

It was agreed to continue the close co-operation on the matter of piracy.

### Joint Statement of the Ministers' Roundtable on Volcanic Ash and Other Crises

The participants of the Ministers' Roundtable at the International Transport Forum's Annual Summit on 3 May, 2012, acknowledged that crises always present unforeseeable challenges, but agreed, that the responsible bodies at national and international levels should prepare for a broad range of scenarios in advance by taking effective crisis management measures, including:

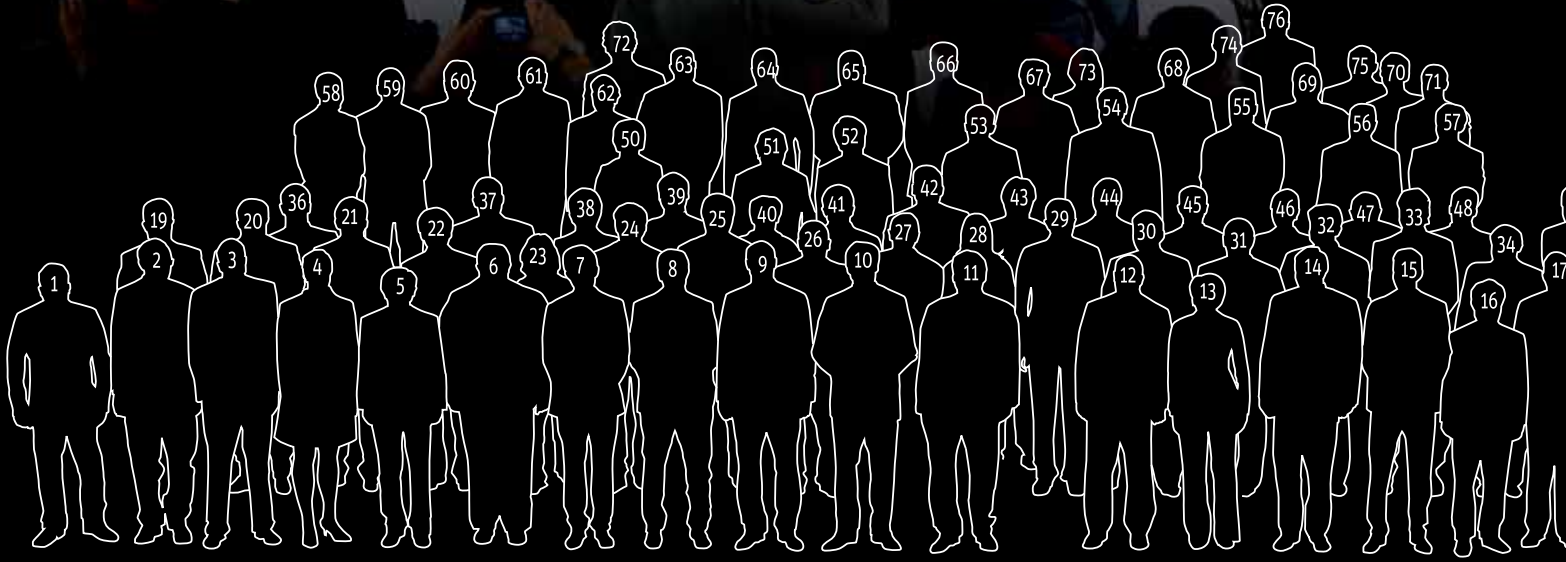
- > ensuring an effective communications strategy is in place to keep the public informed throughout the crisis;
  - > giving priority to the safety of air transport at all times;
  - > ensuring communication and coordinated action of the bodies involved in crisis management [such as the Europe-wide coordination by the European Aviation Crises Coordination Cell (EACCC)];
  - > ensuring up-to-date contact details are available for the responsible persons in all public and private bodies involved in transport (modes of transport concerned, institutions and industry representatives);
  - > maintaining a dialogue between policymakers and industry representatives (aviation industry – air carriers, air navigation service providers, manufacturers and airports - and other modes of transport);
  - > developing and providing contingency plans in the event of a failure of a transport mode;
  - > that national government explore mechanisms by which travel visas may be extended on a force majeure basis when crises occur;
  - > ensuring a joint international approach in case of future disruptions or other incidents;
  - > considering the development of binding international standards to provide efficient crisis management.
- The representatives of government and industry agree to take the abovementioned aspects into account in continuing the work launched. This will ensure a more coordinated approach in the future.



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1. Ahmed Mohammed Salem AL-FUTAISI, Minister, Oman, 2. Andrija LOMPAR, Minister, Montenegro, 3. Leo VARADKAR, Minister, Ireland, 4. Catharina Elmsäter-Svärd, Minister, Sweden, 5. Zhenglin FENG, Vice-Minister, China, 6. Gerry BROWNE, Minister, New Zealand, 7. Raymond COINTE, France, 8. Lars Erik BARTNES, State Secretary, Norway, 9. Hans Michael KLOTH, International Transport Forum, 10. Peter RAMSAUER, Federal Minister, Germany, 11. Osamu YOSHIDA, Senior Vice-Minister, Japan, 12. Angel Gurría, OECD, 13. Doris LEUTHARD, Federal Councilor, Switzerland, 14. Siim KALLAS, Vice-President, European Commission, 15. Sergio MONTEIRO, Secretary of State, Portugal, 16. Do-Youp KWON, Minister, Korea, 17. Anthony ALBANESE, Minister, Australia, 18. Burkhard JUNG, Lord Mayor Leipzig, 19. Sokol OLLDASHI, Minister, Albania, 20. Yaqub NOVRUZALIYEV, Azerbaijan, 21. Mile JANAKIESKI, Minister, FYROM, 22. Mitsuhiro YAMASHITA, Nissan, 23. Susan KURLAND, Assistant Secretary, USA, 24. Norman BAKER, Under-Secretary of State, UK, 25. Pedro Pablo ERRÁZURIZ DOMÍNGUEZ, Minister, Chile, 26. Binali YILDIRIM, Minister, Turkey, 27. Denis LEBEL, Minister, Canada, 28. Vera KOBALIA, Minister, Georgia, 29. Aivis RONIS, Minister, Latvia, 30. Kostiantyn YEFYMENKO, First Deputy Minister, Ukraine, 31. Sergei ARISTOV, Deputy Minister, Russia, 32. Chadchart SITTIPUNT, Deputy Minister, Thailand, 33. Andreas SCHEUER, Parliamentary State Secretary, Germany, 34. Evert Erenst MANGINDAAN, Minister, Indonesia, 35. Anatol SALARU, Minister, Moldova, 36. Carsten FALK, Denmark, 37. Aliaksandr SHYSHKO, Deputy Minister, Belarus, 38. Tadeusz JARMUZIEWICZ, State Secretary, Poland, 39. Igor ŠALAMUN, State Secretary, Slovenia, 40. Eva MOLNAR, UNECE, 41. Rimvydas VAŠTAKAS, Vice-Minister, Lithuania, 42. Jan MÜCKE, Parliamentary State Secretary, Germany, 43. Siebe RIEDSTRA, Netherlands, 44. Kamen KITCHEV, Deputy Minister, Bulgaria, 45. Manoj SINGH, India, 46. Ragnhildur HJALTADÓTTIR, Iceland, 47. Agustín GARCÍA-LÓPEZ, Ambassador, Mexico, 48. Enrico FINOCCHI, Italy, 49. Gus MACDONALD, Macquarie, 50. Minna KIVIMÄKI, Finland, 51. Manfred NEUN, European Cyclists' Federation, 52. Satoshi SEINO, East Japan Railway Company, 53. Rüdiger GRUBE, Deutsche Bahn, 54. Vladimir YAKUNIN, Russian Railways, 55. Marc ROMAN, Belgium, 56. Koji SEKIMIZU, International Maritime Organization, 57. Jaehak OH, Korean Transport Institute, 58. Markus BIEDERMAN, Liechtenstein, 59. Peter HENDY, Transport for London, 60. Yoshiyuki KASAI, Central Japan Railway Company, 61. Ron WIDDOWS, World Shipping Council, 62. John LU, Asian Shipper's Council and Singapore National Shippers' Council, 63. Scott BELCHER, ITS America, 64. Markus RADL, Austria, 65. Emanuel DELIA, Malta, 66. Guy STAUS, Luxembourg, 67. Paolo COSTA, Venice Port Authority, 68. Alain FLAUSCH, UITP, 69. Gabriel GUTIERREZ, Cintra, 70. Koji MIYAHARA, NYK Line, 71. Jean-Luc DI PAOLA-GALLONI, Valeo, 72. Peter MILLER, ITO World, 73. Catherine ROSS, Georgia Institute of Technology, 74. Eero PÄRMÄE, Estonia, 75. Lazar COMANESCU, Ambassador, Romania, 76. Predrag DOKIC, Ambassador, Bosnia and Herzegovina



# Open Ministerial Session

## Connections Between Air, Road, Shipping and Rail

For the first time since the inception of the Summit, the Ministerial Meeting was in part held in open session. Several hundred conference delegates in Hall 1 of Congress Center Leipzig followed the debate among ministers and heads of delegation on how to create the conditions for more seamless transport. Presentations from three senior transport industry executives – another first – injected a private sector perspective and added to a lively and focused exchange of ideas. The following transcript, slightly edited for readability, documents the proceedings of the Open Ministerial.



Chairman  
Senior Vice-Minister  
**Osamu Yoshida**  
(Japan)

**T**hank you very much for your introduction. Mr. Kallas, the Vice-Commissioner of the European Union, Minister Mangindaan of Indonesia, Minister al Futaisi from Oman, Deputy Minister Chadchart Sittipunt from Thailand, Mr. Sekimizu, Secretary-General of the International Maritime Organisation, I would like to welcome you all as observers. I also would like to welcome the speakers during the sessions, Mr. Seino, Chairman of East Japan Railway Company, and Mr. Bill Meahl, Chief Commercial Officer of DHL, as well as Mr. Nic Nilsen, Managing Director of Oslo Airport.

I would like to announce the new members of the International Transport Forum: China has joined and became the 53rd member of the Forum as of November 11th. And today, I have the pleasure to introduce to you Mr. Zhenglin Feng, the Vice Minister of Transport. I welcome you from the bottom of my heart, Mr. Feng.

Also, during the Closed Ministerial Session of today, Chile's application for membership was approved, so therefore, Chile became the 54th member of ITF, and from Chile, we have Mr. Pedro Errázuriz Domínguez, Minister of Transport and Telecommunications. Welcome, Minister. I would like to welcome you from the bottom of my heart.

Therefore, we have now very important members from Asia and South America and, as such, with these strong and important members, the International Transport Forum is becoming an important and global international organisation. And I expect that there will be more substantial policy debate and fruitful discussions within this Forum, in order to solve various issues and challenges that are faced by the transport sector. So now, I would like to invite Mr. Feng, the Vice Minister of Transport from China, to say a few words.



Vice-Minister  
**Zhenglin Feng**  
(China)

**T**hank you, Mr. President, Your Excellencies, dear colleagues, ladies and gentlemen. First of all, I am very honoured and privileged, on behalf of the Chinese government, to express China's great pleasure on becoming a full member of the International Transport Forum. Hereby, I would also like to extend our sincere gratitude to the Presidency and all of the International Transport Forum member countries for supporting China's membership. My thanks also go to the Forum Secretariat, and its entire staff, for rendering generous

assistance during China's accession process, as well as my participation in this Summit.

ITF is the most important intergovernmental organisation in the transport sector in the world. It serves as an important platform for the transport ministers to explore issues critical to the present situation and the future direction of the sector. Meanwhile, ITF also provides a precious opportunity to the industry to have face-to-face dialogues and exchanges with senior officials from transport authorities.

China, as one of the rising economies in the world, values the significance of ITF, and we will continue to work closely with other members to make due contributions to the future direction of ITF. Taking this opportunity, I am also very pleased to extend our congratulations to Mr. Viegas, the ITF's Secretary-General-elect, and I wish you every success in your future work. Thank you very much.

#### Chairman

#### Senior Vice-Minister Osamu Yoshida (Japan)

Thank you very much, Mr. Feng. Now, I would like to ask the representative from Chile, Minister Domínguez, to make a few remarks.



Minister **Pedro Errázuriz Domínguez**  
(Chile)

Thank you Mr. President. Dear colleagues and members of ITF, after Chile became, officially, a member of the OECD in May 2010, my government decided that one of the priorities would be to join the International Transport Forum.

Joining our 52, now 54-member organisation, with a focus on transport policy was seen as an important step, because the Forum's role in shaping

global transport policy is crucial for a small and open economy like Chile's, which is very dependent on long-haul transportation because of the distance to its major exporting markets. Chile shares the goals of a transport policy that contributes to economic growth, is environmentally sustainable, increases connectivity and inclusion, and aims at protecting human life. Chile's transport industry has grown significantly in the last decade, and now we have global players, such as Sud Americana de Vapores, in sea transport as well as land and air transport.

Anyone who has been to Chile or has seen Chile on a map, a 4 500-kilometre-long narrow strip of land between the Pacific Ocean and the Andes Mountains, can immediately conclude that the logistics of transportation is a challenge. Distance between the centre of the country and the extremes are long. As Minister of Transport, I am working hard to improve connectivity, reduce the sense of isolation of regions in the extremes, and making a more efficient use of our infrastructure. Therefore, transportation in all its modes is a vital element, not only for economic growth reasons, but also for a better geographical integration of the country and the well-being of our citizens.

Chile will benefit from the policy insights provided by the research and analysis done in Forum's Research Centre and use them as guidance when designing and implementing new transport policies. There are many areas in which we can do better: road safety, adoption of new information technologies, etc.

We are looking forward to read what the Centre's research has to say about Chile. I would like to thank you all, ministers of ITF member countries, for unanimously accepting us as a full member. We will work hard to contribute to the Forum's transport agenda with the lessons, both good and bad, from our own transportation policies. I would also like to thank the Secretariat of the ITF, particularly Mr. Michael Kloth and Ms. Mary Crass, for the support provided in the process of becoming a member of ITF. Thank you very much.

## Chairman

### Senior Vice-Minister Osamu Yoshida (Japan)

Thank you very much, Minister. Now, I would like to introduce the Ministerial Declaration that has been adopted at the Closed Session, as a basis of our further discussions.

The theme of this Summit is Seamless Transport. Seamless transport means that goods and people can move to their final destination without any stumbling blocks. This is the most ideal form of transport. If we can realise this, people's lives will take a giant step forward, in terms of convenience, but it will also contribute to the development of local economies. However, in reality, as you know, there are many "seams": frontiers for example, the lack of alliances between different transport modes, threats to security and lack of transport infrastructure.

This Declaration states ministers' determination to pursue policies towards greater connectivity and seamless transport. The Declaration suggests measures to this end. In particular, it emphasises the importance of co-operation. It suggests co-operation among countries, between central and local governments, between governments and transport companies, and among transport companies, in order to solve the issue of the "seams."

Since we have Mr. Seino here, I will take railways as an example. Railway services for users can surely be improved enormously if there is a tie-up of the different modes of transport, such as air and bus services, as well as among the railway operators. Also, the airport operated by Mr. Nilsen, is the very spot where air and land transport meet. If those involved at the airport co-operated to improve transfers, seamless transport will take a huge step forward. Also, the international logistics companies, such as the one run by Mr. Meahl, have international distribution networks. If governments and the companies co-operate to reduce the barriers created by border controls, this would greatly benefit the global economy.

Today, as a first try, we have made the Ministerial Session an open session, and invited the participation of the leaders from the industry to discuss policy matters. I hope we will be able to conduct a fruitful session. I will now hand over to the Moderator, Mr. Pat Cox.

### Mr. Pat Cox (Moderator):

Thank you very much, Mr. President. I should like to invite to take his place at the speakers' podium

Mr. Satoshi Seino, Chairman of East Japan Railway Company. He will address us for ten minutes, and his theme, of course, is seamlessness in transport, in this case, the Japanese experience of competition and co-operation. Mr. Seino, you have the floor.



**Mr. Satoshi Seino,**  
Chairman, East Japan  
Railway Company

I would like to take this opportunity to thank many of you from the railway and transport sector for the kind words, support and encouragement you have given us in the aftermath of the March 11 earthquake last year. Although both high-speed rail and conventional lines in the area were greatly damaged by the earthquake and tsunami, there were no casualties among passengers. The Tōhoku Shinkansen was running at 270 kilometres per hour at that time, but it was successfully able to make an emergency stop without de-railing. Some conventional lines were washed away by the tsunami but fortunately there were zero passenger casualties. I believe that this is thanks to our past efforts of steadily implementing anti-seismic measures and undertaking staff training on a daily basis. We will continue to strive to provide safer, and more secure, service to our customers.

In order to realise a seamless network, we need integration between rail, air and buses. Among railway companies, there are various differences and seams, such as differences in companies and fares systems so we also need integration among companies.

The JR East is a vertically integrated company established in April 1987 by the division and privatisation of the Japanese National Railways. Our area of operation is the Tokyo metropolitan area, and the eastern half of the Honshu Island.

We are perhaps one of the few companies in the world who provide high-speed rail as well as regional and urban services. Every day, about 17 million people use our services. The share by mode of transport in the Tokyo metropolitan area (a 50-kilometre radius from Tokyo Station) of JR East is approximately 24%. The overall share

of railway including the subway is 58% which is perhaps the highest share in the world.

In order to reduce the seams existing in the Tokyo metropolitan area, we have implemented four measures. Firstly, airport access improvement. In October 2010, the international terminal of Haneda Airport opened, and a new station for Tokyo Monorail was created within this terminal. Now it takes only a minute for our customers to reach the airport check-in counter, without encountering any steps or barriers. In the station, we adopted movable steps in order to reduce the gap between the train and the platform, and we also created a platform with minimum pillars and obstacles. This allows mobility-reduced passengers, as well as travellers with large luggage, to move smoothly.

Next, we introduced an interoperable fare management system. JR East has used a smart card called SUICA, since November 2001. PASMO is another smart card issued jointly by other railway and bus operators in metropolitan Tokyo area, a service that started in March 2007. These two cards came into mutual use. At the time, it was the world's first interoperable fare management system and it is still the world's biggest. The total number of cards issued is over 58 million as of February 2012. The card can be used not only for railways and buses but also as electronic money in shops.

I would now like to introduce the Through Operation service. The operators involved calculate beforehand the mileage they use on other operators' infrastructure, to make sure that this mileage is the same among the operators, thus, offsetting any infrastructure costs, so that the additional costs incurred become almost zero.

Finally, I would like to present to you the system of information dissemination used during transport disruptions to provide information on alternative routes to the final destination and on the re-opening of services. Along with other railway operators in the Tokyo metropolitan area we have developed a system that displays all the operating information of all railway operators. This kind of display has begun to be introduced in many other parts of Japan, and is a centre of interest among European and American railway operators.

So, today, I have introduced various measures that Japanese railway operators have been implementing for the realisation of a seamless transport system. I hope my presentation will

contribute to the development of railways and public transport around the world. Thank you.

**Mr. Pat Cox (Moderator):**

Mr. Seino, we thank you for your presentation. I should like now to invite a number of the ministers to make contributions. Let me start with the Minister of Transport, Infrastructure and Communities from Canada, the Honorable Denis Lebel.



Ministers, business leaders, and members of the international community gather in Leipzig because we understand the important role transportation plays in driving our economies, creating jobs and improving our quality of life.

Transportation is key to international trade, economic growth and the prosperity of all trading nations. The many players and stakeholders across the system and supply chain, each with their own set of circumstances, can be seen as a challenge. And yet, in a very fundamental way, all of the players transportation providers, logistics professionals, small business owners, and politicians have the same interest, improving the transportation system, and there is a role for everyone in this endeavour.

In Canada, we have asked the question: What is the best role for government in creating greater collaboration and seamlessness between all stakeholders? The answer has been to take a leadership role to involve all levels of government and the private sector, and to implement the national framework for strategic gateways and trade corridors.

Canada's three major gateways and trade corridors – the Atlantic Gateway, the Continental Gateway, and the Asia Pacific Gateway – are integrated systems of transportation infrastructure and key drivers of international trade.

Our strategy in developing our Gateways has been a systems-based approach, focusing not on one mode in isolation, but on an integrated system of transportation modes and infrastructure.

While we have made significant improvements to transportation infrastructure across the country, our government recognises that supply chain efficiency does not rest entirely on a port, a bridge, or a highway, but rather on how well all of these parts work together.

Strategic partnerships with the public and private sectors have also been instrumental to our success.

We have learned that bringing diverse interests to the table and leading competitors to view each other as partners is possible when shared goals and benefits are clear. The purpose of partnership is that those ideas can be leveraged to help us move forward together.

In Canada, significant investments have been leveraged, and it's critical that we ensure a sustainable funding model to future transportation infrastructure. I have the clear mandate of our Prime Minister to build a new infrastructure plan for the years after 2014, and to develop business with all of your countries.

In addition, innovation and competitive measures help to ensure transportation networks meet the needs of today and the future. Advanced technology applications, including intelligent transportation systems, help transport providers improve efficiency and provide our users with better options. The benefits of greater efficiency also extend to the environment. The more efficient our systems are, the greener they become.

Let me conclude by saying that the opportunities for dialogue and collaboration here, at the International Transport Forum, are key to building stronger relationships and addressing joint challenges. Strong partnerships at home, and with our international partners, are essential to achieving Canada's transportation and international trade objectives. Thank you very much.



Deputy Director-General  
**Ingolf Schädler**  
(Austria)

Today's conference concentrates on the theme of Seamless Transport. I think that is exactly

what we have to talk about now on a global scale, but specifically also in Europe. Our 19th ITS World Congress will concentrate exactly on this theme, not only by talking and presenting research results, but also showing what ITS will come soon, and by demonstrating its possibilities. We expect more than 300 exhibitors to come to Vienna to present to you the latest research that industry can provide to contribute to a new and intelligent transport system.

But that is not all. We have launched a global call for cutting-edge demonstrations so that everybody can see that it is not only an exhibition but happening in the real world. We will provide, for the first time, a real telematics field where you can see the possibilities brought by these technologies.

Ladies and Gentlemen, the last point and probably, a very important point, is the Ministerial Roundtable, where we not only invite you, as ministers, but also invite CEOs and distinguished speakers to reflect how we, on a global scale, can support the implementation of ITS. We think that it is now the time to do so and, as I have said before, the theme of this conference is pointing to that fact.

On top of all these technical issues we will of course provide a cultural programme and as a highlight, if nobody really feels tempted to come to see all these beautiful things, we are going to organise a true Viennese ball, and this is one of the most interesting attractions to come for. Thank you.

#### Mr. Pat Cox (Moderator):

Thank you for your intervention. It is my pleasure now to call on the Secretary of State for Transport of the United Kingdom, Mr. Norman Baker, to address you.



Parliamentary  
Under-Secretary  
of State for Transport  
**Norman Baker**  
(United Kingdom)

Imagine the following journey: you leave your house, perhaps go a mile to the railway station where you pick up a train which takes you 200 miles. You then have another mile to go at the end when you get off the train.

Sometimes, that last mile presents an obstacle to people who are uncertain how to get from the destination station to their final port-of-call. These people will take the car for the whole journey, because the last mile is not settled.

In this example transport and ticketing are not integrated. Were there a connection all the way from door to door, people could have the confidence to leave their car at home.

We want to see the integration of the journey plan from start to finish, involving a rail journey, perhaps a bus at either end, or a tram, or a cycle, or car-hire at either end. We also want to simplify the process so passengers have one transaction to make for the entire journey.

Smart ticketing can make this possible. At the International Transport Forum in Leipzig I had the honour of presenting Peter Hendy, from Transport for London, with an award for the Oyster Card. This has transformed transport in London and the British government is keen to bring the benefits of Oyster to the rest of the country.

We have already established ITSO, the common technological platform. ITSO is used by transport operators and local authorities across the country in a way that suits their local needs. But in the future, the common specification means that the technology is already in place to allow the same card to be used to catch the bus in one part of the country, to use the Underground somewhere else, to get cycle-hire or a train ticket, all with the same transaction card or even using a mobile phone.

We have recently allocated £15m to develop a service which will encourage small and medium sized bus operators to equip their buses with the technology needed to support better integrated door-to-door journeys.

When we let our train franchises, allowing a particular company to run a section of line for a period of years, we make it a requirement that they must introduce this ITSO platform for rail tickets on that franchise. So, we are gradually making the country's entire transport network smart. Just last year the Chancellor provided £45 million to help with London and the south east. Our objective is that the majority of public transport journeys will be achievable through smart ticketing by the end of 2014, and we're on target to meet that.

The introduction of smart ticketing has two advantages. Firstly, it enables us to increase the use of public transport. It makes public transport more accessible, more friendly, easier to use, quicker to use, and the days of arriving at a bus stop, not knowing how much the bus is going to cost, and not having the correct money, are over.

The second advantage relates to the ability to price public transport journeys in a far more sophisticated way than has been done so far. Traditionally we have had an arrangement in Britain whereby you pay a peak fare to travel during the morning and evening rush hours, and you pay less to travel outside those hours. That's a very clumsy division, and not very sophisticated. It means, for example, that the first train after 09:30 is usually packed.

Smart ticketing allows for arrangements to be put in place whereby you can price each journey far more sensitively. We could, perhaps, give a discount for people who travel to work early in the morning. Or if there's a train that's always crowded we could perhaps, charge slightly more for that particular train, and encourage people to move on to the trains either side.

This has major implications for transport investment because, like many countries, we have tended to invest in infrastructure that is to be used at maximum capacity for maybe three or four hours a day, and is then used well below maximum capacity for the remaining 20 hours a day. That is not a good use of public money. If we can use pricing encouraging people to use different times and therefore spread the use of the transport over a bigger period, the need for some investment in infrastructure is reduced, and we provide a better journey experience for passengers.

We're going to make it easier to use public transport, and that is good for the economy, good for social mobility and good for the environment.

**Mr. Pat Cox (Moderator):**

Thank you, Minister. Your remarks fully bear out the observations of Mr. Seino about the benefits of the interoperable fare management. Permit me now to invite our second intervention this evening, Mr. Bill Meahl, to take the floor. Mr. Meahl is Chief Commercial Officer of DHL, the global logistics company.





**Mr. Bill Meahl,**  
Chief Commercial  
Officer, DHL

I am pleased to talk to you tonight from the perspective of a global logistics and transport company, one that operates in, and out of, 220 countries around the world, with 470 000 people, and one that's concerned every day with building seamless transport and logistics solutions for our customers.

The role of the logistics industry is often underestimated in the discussion about economic development, prosperity and other important societal issues. Indeed, logistics connects the world; it is the backbone of global trade, and has an important role to play in economic growth and the development of prosperity around the world. In the EU, for example, the logistics sector has revenue of over 1 trillion Euros, while the digital economy generates about 660 billion Euros. Efficient logistics is crucial for maintaining competitiveness and the answer for many of the challenges facing us.

Companies like DHL help distribute wealth through trade, we assist emerging nations to develop, we deliver critical medicines to people in need, and we use increasingly innovative technologies and intelligent logistics solutions that are the key in the fight against global climate change. DHL recently completed its first Global Connectedness Index study, which finds vast potential for further economic growth and prosperity through globalisation. It ranks 125 countries, according to the depth and breadth of the integration into the world economy, and also examines the relationship between global connectedness and global welfare. A few key findings: The actual extent of global connectedness is far more limited than commonly understood. The degree of cross-border integration also varies widely among countries.

Thus, the opportunities are huge for countries to generate billions of Euros in additional growth by promoting globalisation through public policy, and also through business strategies. Seamless transport is a key element to facilitating the

sustainable growth, and it is the most essential part of global supply chains.

What happens when supply chains are interrupted? In the automotive sector, critical components not arriving on time can halt an entire production line, causing hundreds of thousands of dollars in lost production. 45% of the world's computer disc drives are manufactured in Thailand, and industries worldwide were impacted last year during the terrible flooding there. Another example: In the life sciences sector, critical studies can be interrupted, and launches of new medical products significantly delayed, if clinical trial samples do not arrive when they should.

Seamless transport is, therefore, a real thing, a real issue and, therefore, one of the core goals of the logistics industry. We are committed to using all forms of transportation, deploying them wherever feasible, to create the most efficient supply chains and sustainable solutions for our customers. It is also important for us to consider the environmental impact of what we do. DP DHL's goal is to reduce emissions by 30%, per item shipped, by the year 2020. It is, therefore, of great importance to us to choose the most carbon-efficient modes of transportation that are feasible. Switching from air to sea, road to rail, and using less container, less truckload services that help us and our customers create efficiencies and, also, emissions savings, are important. Many of our global customers are very receptive to switching between modes and, due to the significant cost savings, of course, they can reap, as much as 50% savings by switching to ocean freight and rail. Important, fragile and very valuable shipments will always continue to go by air, but there are other offerings that are available today.

There is a host of different combinations of modes that span the gamut between the cheapest and the most expensive ways of moving cargo. These are facilitators to seamless transport and to economic growth, connecting our customers with their customers across the world in the most efficient manner possible.

One example might be a customer wanting to ship with DHL from Chengdu, China to Hamburg, Germany. They can now choose from a whole suite of modal solutions, often in combination, ranging from a simple air shipment, which is, virtually, overnight, to a combination of rail and air, which

might take nine or ten days, to a sea and air choice that might take 20 days, to a pure ocean move that would take 30 days, or more. Plus, there are now international rail services, combined with road freight in Europe, our new "Door to More" service, a new intercontinental air and freights combination.

With 60% of the earth's population expected to live in urban settings by the year 2030, and with new mega-cities developing rapidly, we continue to develop our city logistics concept, to benefit the environment, congestion in cities and to generate savings, in terms of supply chain savings, for consumers. The focus here is on consolidation, collaboration, and finding the most efficient final-mile logistics.

The demand for multi-modal service is very strong; sea, rail, road and air all have key parts to play. Seamless connections between all modes are an essential part of keeping the supply chain moving and, thus, facilitating economic growth and aiding development in emerging nations. They are also essential in helping to safeguard the environment.

The logistics sector needs to play its part, by continually investing in infrastructure and innovation, and the right facilities and equipment. It also needs to encourage modal shifts to more efficient and greener modes, wherever possible, and to optimise the trade-offs in seamless ways.

Speaking for DHL, we are committed to playing our part but, of course, we cannot do it alone. Politicians and regulators need to deliver their fair share. A more consistent policy and regulatory framework will cut complexity, synthesise innovation and facilitate seamless shifts between all transport modes.

Seamless supply chains require governments and regulators to move away from modal approaches to an integrated 21st century strategy. Co-operation and collaboration between public and private sectors is essential. Supply chains need modern and well-maintained transport infrastructure. We are ready to invest in our own logistics infrastructure, and do so, every day. In 2011, we spent more than 1.7 billion Euros on logistics infrastructure in our business. But planning and co-ordination of infrastructure and network must also be a priority of governments.

I would also like to stress that harmonised processes and standards are essential to smooth

supply chain, for example, at borders and customs, and with consistency in the application of tariffs. So, in closing, in global business our customers ask us for simple, sustainable solutions, and for a "can-do" attitude. We would ask ministers and governments to strive for these, too, to ensure that we all continue to derive sustainable growth for the benefit of global prosperity, for the development of nations and people and for the environment. Thank you.

**Mr. Pat Cox (Moderator):**

Thank you, Mr. Meahl, for that presentation. I am struck by your observation about the need for regulation and government to move from silos, an appeal from the private sector to have seamless decision-making in the public sector and the public arena, along with seamless logistics in transport. It is my pleasure now to invite to address us the Parliamentary State Secretary in the Federal Ministry for Transport, Building and Urban Development of Germany, Dr. Scheuer.



Parliamentary  
State Secretary  
**Dr. Andreas Scheuer**  
(Germany)

I would like to start giving a political response to Mr. Meahl's comments. Germany, of course, as an export nation, has a strong interest in expanding and maintaining its logistic power, so it is all the more important that we, at the International Transport Forum, put our thinking caps on and find a way to improve interfaces and coordinate them in a more intelligent manner. This is a national job for each of us but of course it is also an international task.

We need uniform, harmonised standards in order to make logistic processes easier to plan for companies. We have a national promotion programme of distribution centres that work in a tri-modal way. We all want the intelligent coordination of transport, and I think it is a mistake when transport policy talks about avoiding traffic. I think what it is about is managing traffic in an intelligent, smart, way. And, here, we could use waterways as an alternative.

We have talked a lot about urban mobility and urban transport. I think, especially in logistics, that there is a major trend to come up with door-to-door solutions, provided by large companies. Mr. Meahl has mentioned that, and the Leipzig Airport is a good example. The connection to road and rail between the airport and other regions has become a success model, where an aviation hub was created, and different modes of transport are closely connected here, so it is all the more important to come up with smart systems, and it is an opportunity for innovation for our industries.

I think Mr. Kallas visited DHL yesterday, and I think we can all be thrilled by the move towards green logistics that we can see there. It's an innovation of the German industry as well, and we are bringing it to the world in order to show that we can manage a better logistic system that will allow us to improve the image of logistics worldwide. I think that transport politicians are economic politicians, because they guarantee economic growth by means of infrastructure. Logistics has to work, infrastructure needs to work, and this, then, guarantees the success of the economies of the different nations. Thank you.

**Mr. Pat Cox (Moderator):**

Thank you. We have heard from Mr. Seino about the Japanese railways, we have heard from Mr. Meahl about global logistics; we come now to Mr. Nic Nilsen, the Managing Director of Oslo Airport in Norway. So we are going from the global to the local, but this local has a wonderful example of seamlessness. Mr. Nilsen, you have the floor.



**OSL** 

**Mr. Nic Nilsen,**  
Managing Director,  
Oslo Airport

I would like to start by saying that an air-rail inter-modality at the airport is a reality. In Europe, we find many good examples, such as Paris-Charles de Gaulle, Frankfurt, Zurich and the new airport in Berlin. We see various products, like CTXS, local and regional train services, as well as high-speed train services.

I would like to use my own airport, Oslo Airport, as an example. Norway is a small country. In terms of population, with only five million inhabitants, yet, we produced 45 million air passengers in 2011 in our 46 airports. Bear in mind that Norway is a long, narrow country, that flying is, by far, the best mode of transportation for distances over 300 kilometres.

We are the most frequent flyers in Europe, and we need inter-modality between transport modes to bring the country together. Oslo Airport is the hub in our system. It was opened in 1998, so a relatively new airport, and handled 21 million passengers in 2011.

Oslo's former airport, Fornebu, was very popular among the passengers for its vicinity near the city centre. The new airport, which is located 50 kilometres north of the city, was met with scepticism, both from passengers and the airport employees. However, the Parliament made a very wise and strategic decision: they decided to build a new railway line from the city to the airport, which could handle trains with speeds up to 210 km/h, and made sure that the railway station at the airport was built as a centrally located, and fully integrated, part of the terminal.

They also started a new airport express train company, with brand new equipment, with the purpose of providing an efficient and seamless connection to and from the Oslo area. The journey from Oslo Central Station to the airport takes 19 minutes, and there is a train departure every ten minutes. Also, local, regional and long-distance trains serve the airport through the same station.

The Norwegian Parliament, when voting to build the airport, expressed expectations of the system by setting a goal of at least 50% public transport share to and from the airport. This goal has served as a strong, driving force to us at Oslo Airport, in our efforts to further develop the concept.

In addition to the air/rail connectivity, we also have an extensive network of bus services, local shuttle services, and long-distance services operating more than 200 departures per day, from designated bus lanes, next to the terminal.

In 2011, we saw a public transportation share of 36% for the airport's express train, 8% for the other trains and 20% for the buses, adding up to 64%, which is the best in Europe, only beaten by Tokyo Narita and Nagoya on the global scene - far better than what the Parliament had set as a goal for us.

What lessons can be learned from our experience? Real integration of the railway station with the terminal, right in the middle, with efficient, natural logistics streams; frequencies - departure every ten minutes you can forget about timetables punctuality and regularity are impressively high, and the passengers are willing to pay for this; the airport express train company has good financial results; continuous development of the product - the airport has encouraged airport express train company to extend its operating schedule by supporting it financially in start-up periods.

Today, more than 50% of the passengers travel ticketless, by sweeping their credit card at the departing station and doing the same at the validator, at the airport. If they need a receipt, they can have it delivered, as an e-mail, to their mailbox. During the train ride, they have updated information on flight departures, as well as expected waiting time in the security control, as they arrive at the airport.

As an airport operator with good relations to airlines, as well as train companies, we are well-positioned to arrange forums for airlines and transport companies, so that they can coordinate their strategies. Our focus on high-share public transport gives the airport, and the industry, a positive public reputation.

What are the forces behind the drive for better connectivity air/rail? Increased catchment area, as a result of efficient rail connections, will result in higher passenger volumes through the airports. Consequently, airports are very eager to develop their connectivity with the rail industry. Competitive edge: airlines do prefer airports with efficient public transport systems. In negotiating with airlines about new routes, our seamless connections to the rail system has proven to be important. Travel by car to the airports is increasingly plagued by uncertainty, due to delays caused by road capacity, which favours the railways.

We see a strong increase in high-speed train operations in Central Europe; they replace travel by air for short and medium distances. This, again, creates the need for connections to our airports where, for long-haul travel for example. High-share in public transport is positive environmentally reducing CO<sub>2</sub> emissions. Aviation is, in some respects, negatively focused with regard to emissions. We need license to grow, and high public transport share will support this.

So, where is the potential for providing even better seamless connections? I would like to point out the following: seamless and efficient baggage handling is a challenge. Both logistic and security obstacles must be overcome. Security issues often block new ideas and concepts. I hope that new technology, and more risk-based approaches to security regimes, can develop new concepts for passengers and their baggage. Timetable coordination between airway and rail can be improved, co-ordination in reservations systems that will make it easier to book the whole itinerary, rail and air, in one process, must be a target. Ticketing cooperation between airlines and rail operators: there is the potential to do better; and I would like to say that quality of train stations needs to be upgraded.

Financing of the infrastructure that we need, to create seamless connectivity is often significant, and not always available. Governments have an important role here. At Oslo Airport, we have reached capacity for the existing terminal. We have, since 2007, planned a major expansion project, and started construction last year. In the concession given to us by the Ministry of Transport for this project, it is stated clearly that the share of public transport should exceed 65%. The only way we can achieve this is through an efficient, seamless connectivity between rail and air and, consequently, that is where we have our focus. Thank you.

**Mr. Pat Cox (Moderator):**

Thank you Mr. Nilsen. It is my pleasure now to invite the Deputy Minister of Russia, Mr. Sergey Aristov, please, to take the floor.



Deputy Minister  
**Sergey Aristov**  
Russia

**T**ransport sectors are becoming more and more complex. What is important is not only that people arrive on time, but also have a top-notch quality service. We need to offer new routes, new technologies, and new IT systems.

In order to have practical and viable results at the end, we have to get away from competition among

different modes of transport, towards co-operation. We need to co-operate more, in order to integrate different modes of transport. To organise transport in a better way, we need new ways of working among different countries, for instance, documentation at customs points.

Our transport strategy in Russia is geared towards the fact that Russia is a transit country, and we develop technologies, as well as infrastructures. We also pass new laws regarding transport. There is new documentation, used by the rail systems, enabling shipping of goods between different states. Also, the transport regulations have been modified, and we continue to work on our national transport regulations.

As far as infrastructure is concerned, the main corridors in Russia are being modernised, as we speak, especially between Russia, the Ukraine and Belarus, and also the corridors to the ports. We work together with Kazakhstan and China, and are working on an international transport project to link Europe and western China, a corridor between St. Petersburg and the Yellow Sea. Together with our partners, we are working on a whole chain of logistics centres, multi-functional terminals, which will serve the purpose of offering top-drawer, quality services to our customers: as well as commercial services. This is about co-operation among different modes of transport, this is about improving customs procedures, this is about improving the integration between different modes of transport.

Our Russian railway company has started to build new railway terminals, to set up new railway infrastructure. At the moment, 50 logistic centres are being built. We want to set up intermodal logistic centres in the so-called dry ports dry-docks in the west and south of Russia and the Black Sea, where there are junction points of international transport corridors, a project which will be finished by 2015. One centre being built covers 100 hectares where the roads and railway systems will come together.

Colleagues, I would like to stress the following: As you know, when you develop ports, there is always a weak point, namely, the roads leading to those ports. And here, there is only one way of developing infrastructure, even though that may not be sufficient. In 2012, in Russia, we are planning to enhance port capacity by 75 million tonnes, so that by 2016, we will be able to have a capacity of 770 million tonnes per year at our ports.

This is not just about the development of ports, infrastructure, but also the integrity, or integration, of port terminals with the railway system and the roads, and that is very important. When you talk about technical solutions, when we talk about the development of container transport, there is a lot of technical innovation which could make it possible for us to ship goods over 9 000 kilometres in seven days.

Urban planning and transport is also very important. Over the last couple of years, we have worked on those complex questions. This is about the development of transport, and this is about holistic urban development: Moscow, Novorossiysk and St. Petersburg, those are the towns where we do that.

Another point which we consider crucial: today we have heard about aviation, and the problems we had with the eruption of the volcano in Iceland, and how we should act in those situations. We have already got a programme, and we are happy to talk about that with our colleagues abroad, so that we can co-operate better in the future. Thank you very much.

#### **Mr. Pat Cox (Moderator):**

Deputy Minister Aristov, thank you.

Our session draws to a close. Let me thank our three guest speakers. Mr. Seino reminded us of the power of integration, intermodal and also between competing private railway companies. He emphasised the importance of airport access in seamless mobility; he drew our attention to a very sophisticated interoperable fare management system and talked to us about real-time information display during disruptions.

Bill Meahl from DHL talked about the role of logistics as a connector. I was fascinated to learn that the European logistics industry is a one-trillion Euro industry, compared to the digital economy of 660 million Euros. He emphasized DHL's highly ambitious target on emissions reductions, 30% by 2020, which would make his company leading-edge.

Mr Meahl also talked about the need to cut regulatory complexity and incentivise innovation, and called for harmonised standards. I was impressed with what you described as the "can-do" attitude and, I guess, also an appeal to the public policy-makers to meet you with a "can-do" capacity.

And then, Mr. Nilsen, who came from a local perspective but with global themes: the real

integration of airport and rail; the emphasis on punctuality, quality and payment methods; finally the continuous development of a product, with submissions about security and new technology, and how that might develop.

These have been great contributions, and we thank you for them. I thank the ministers for their interventions, I thank the guests for their contributions, and I return the floor to the Presidency and Mr. Yoshida.

#### **Chairman**

#### **Senior Vice-Minister Osamu Yoshida (Japan)**

Thank you very much indeed to the Moderator.

Today, for the first time, we have had the participation of industrial leaders in the Ministerial Session debate. We have had a fruitful debate on the realisation of seamless transport and co-operation among different modes of transport.

I would like to take the opportunity to thank the delegations of each country, headed by their ministers, as well as the presenters and the Chairman of JR East, Mr. Seino, and the CCO of DHL, Mr. Bill Meahl, Mr. Nic Nilsen, Managing Director of Oslo Airport. I would very much like to extend my thanks to all of you. And I also thank the Moderator, Mr. Pat Cox, for his effort, and I would also like to ask the Acting Secretary-General Michael Kloth to say a few words.



**Hans Michael Kloth,**  
Acting Secretary-General,  
International Transport  
Forum

Ministers, country representatives, I would like to start with a thank you to Pat Cox, who has plunged into unknown waters with us and held the show together in an admirable way.

This open Ministerial Session was one of the innovations at this year's International Transport Forum. My personal impression is that it has worked well. We will look forward to hearing from you, whether or not you liked this format.

Thank you all for coming to Leipzig. Thank you for contributing to the success of this Summit. This year we have more delegates, we have more media, and we have more ministers than ever before. It proves that we are a dynamic, evolving event.

I would like to thank you all personally for seeing us through some difficult decisions during the closed part of our meeting. I am inclined to quote William Shakespeare here: "All's well that ends well." Some other Shakespeare quotes would have come to mind for different outcomes, but, fortunately, this one wins the day.

You have given the new Secretary-General a strong mandate, and that is something he will be able to build on and take the Forum to the new level that we all think it deserves.

I would like to thank the Japanese Presidency, who found more on its plate than any Presidency previously has. I would like to thank Minister Yoshida personally for coming here at very short notice. I would like to ask him to please commend his team to Minister Maeda.

Finally, as the out-going Acting Secretary-General, I would like to express my hope that ministers will give good guidance to the Transport Management Board. What we will be able to do in the next year will, to some extent, depend on the way we can take decisions. The International Transport Forum has enormous potential. If we really want it to fly, we may need to lighten the weight a little bit. Thank you very much.

#### **Chairman**

#### **Senior Vice-Minister Osamu Yoshida (Japan)**

Thank you, Mr. Kloth. Mr. Kloth fulfilled his Acting Secretary-General post in such a wonderful manner. I thank you very much for all your efforts and your co-operation, and I am very happy to say that we were able to conclude this Session.

My heartfelt thanks to all of you, and I now declare this session closed.

# Ministers' Roundtables

As a first in the history of the International Transport Forum, four Ministers' Roundtables were held during the 2012 Summit in Leipzig. These high-level and confidential discussions gave ministers an opportunity to engage with industry leaders and heads of international organisations in a dynamic and open exchange on a variety of current transport issues. The pertinence of this new format was demonstrated by the fact that, as a result of their discussions, three of the roundtables issued joint statements. These were noted by the Ministerial Session, annexed to the Ministerial Declaration and will contribute to shaping future policy.

## The Automotive Future

The first of the roundtables looked at **The Automotive Future**, in the context of crowded cities, connected cars and intelligent infrastructure. Cars driven and produced today are safer, more efficient and more affordable than at any time in history – and yet the “DNA” of the car has remained essentially unchanged for over a century – while the world has changed dramatically. When cars first appeared, societies were largely rural; today, over half of the world’s population lives in cities and urban areas have become the dominant “ecosystem” in which cars operate.

The discussion hence focussed on how the car will have to develop to fit into a changing, urban and increasingly congested world. Will the convergence between cars, telecommunication networks, real-time location data and smart phones help the car adapt to the cities of the 21<sup>st</sup> century? Ministers were keen to learn about trends and new services the automotive industry sees on the horizon, while industry representatives were interested in regulatory changes that policy makers envisage. Ultimately, the degree of convergence between these two will shape the future of the car.



**Participants (left to right):** Zhenglin Feng, Vice Minister, Transport, China - Patrick Oliva, Senior Vice-President, Strategic Anticipation and Sustainable Development, Michelin, France - Hiroyuki Watanabe, Chairman of ITS Japan and Senior Technical Executive, Toyota Motor Corporation - Jean Todt, President, Fédération Internationale de l'Automobile (FIA) - Ivan Hodac, Secretary-General, European Automobile Manufacturers Association (ACEA) - Monika Jones, Moderator - Andreas Scheuer, Parliamentary State Secretary, Federal Ministry of Transport, Building and Urban Development, Germany - Santoso Eddy Wibowo, Policy Advisor, Ministry of Transport, Indonesia - Helmut List, Chairman and CEO, AVL List, Austria - Jean-Luc di Paola-Galloni, Group Corporate Vice-President, Valeo, France - Nick Allen, Vice-President Downstream Management Consultancy and CO<sub>2</sub>, Shell International - Chadchart Sittipunt, Deputy Minister, Transport, Thailand - Gerry Brownlee (not pictured), Minister, Transport, New Zealand



Nick Allen of Shell and Michelin's Patrick Oliva



Jean Todt with Chadchart Sittipunt and Andreas Scheuer



Minister Do-Youp Kwon  
Minister E. E. Mangindaan and Bernhard Meyer



## Safety of Cruise Ships

**Safety of Cruise Ships** was the focus of the second Ministerial Roundtable. Recent incidents involving cruise ships have raised awareness of the vulnerabilities of cruise ships to catastrophic events, notably the sinking of the Costa Concordia off the Italian coast in January 2012. Over the last decade the average size of passenger vessels has increased significantly, with some carrying 10 000 persons or more on board. In view of this, and of cruise ships increasingly navigating remote areas such as the Arctic Sea, the concept of a ship being its own best lifeboat is becoming more important.

In a joint statement, participating Ministers joined by senior executives of the shipping industry and the Secretary-General of the International Maritime Organisation (IMO), Mr Koji Sekimizu, agreed to support a review of passenger ship safety under the auspices of the IMO. They welcomed proposals by Germany regarding, inter alia, mandatory evacuation simulation and improved Rules on lifesaving appliances, for further discussions within the IMO.

[The full text of the joint statement can be found on page 71.](#)



**Participants (left to right):** **Torkild Torkildsen**, Deputy CEO, Hurtigruten ASA, Norway - **Thomas Strang**, Vice President, Carnival Corporation, USA - **Michael Thamm**, President, AIDA Cruises, Germany - **Gerry Brownlee**, Minister, Transport, New Zealand - **Peter Ramsauer**, Federal Minister of Transport, Building and Urban Development, Germany - **Robert Wright**, Moderator - **Michael Crye**, Executive Vice President, Cruise Lines International Association, USA - **Stefan Jäger**, President, European Cruiser Association (EUCRAS) - **Koji Sekimizu**, Secretary-General, International Maritime Organization (IMO) - **Evert Erenst Mangindaan**, Minister of Transportation, Indonesia - **Do-Youp Kwon**, Minister, Land, Transport and Maritime Affairs, Korea - **Andrija Lompar**, Minister, Maritime Affairs, Transport and Telecommunications, Montenegro - **Bernard Meyer**, Managing Director, Meyer Werft, Germany - **Peter Hinchliffe**, Secretary-General, International Chamber of Shipping



## 2-3 May | Ministers' Roundtables

Rear Admiral Potts with Peter Hinchcliffe and Koji Miyahara



Senior Vice-Minister and Ron Widdows



Sahattu Simatupang and John Y. Lu



### Piracy at Sea

Another challenge facing global shipping, namely **Piracy at Sea**, was at the centre of the third Ministerial Roundtable held as part of the 2012 Summit. Disruptions caused by pirates pose an increasingly serious threat to the maritime transport industry and to the global trade system as a whole. Hundreds of vessels have been attacked, thousands of seafarers have been taken hostage, and the economic damage on international trade is estimated at USD 7 to 12 billion per year.

Armed protection of ships and military counter-piracy operations are crucial to contain the threat of piracy. There was agreement that

a sustainable solution will require creating a stable situation on land, e.g. in Somalia. Support to local communities is needed to tackle the underlying cause of piracy.

In a joint statement, participants emphasised the importance of these measures and expressed their expectation for a forthcoming IMO meeting on piracy to give an important momentum towards a solution. In particular, participants called on IMO members to consider establishing an international basis regarding the role of private armed security guard on ships.

[For the full text of the joint statement please refer to page 71.](#)



**Participants** (left to right): Peter Hinchcliffe, Secretary-General, International Chamber of Shipping - Do-Youp Kwon, Minister, Land, Transport and Maritime Affairs, Korea - Denis Lebel, Minister, Transport, Infrastructure and Communities, Canada - Koji Sekimizu, Secretary-General, International Maritime Organization (IMO) - Kamen Kitchev, Deputy Minister of Transport, Information Technology and Communications, Bulgaria - Robert Wright, Moderator - Vera Kobalia, Minister, Economy and Sustainable Development, Georgia - Jan Mucke, Parliamentary State Secretary, Federal Ministry of Transport, Building and Urban Development, Germany - Ron Widdows, CEO, Rickmers Holdings, Germany, and Chairman, World Shipping Council - Chadchart Sittipunt, Deputy Minister, Transport, Thailand - Osamu Yoshida, Senior Vice Minister of Land, Infrastructure, Transport and Tourism, Japan - Sahattua P Simatupang, Transportation Attache, Embassy of the Republic of Indonesia, London - Duncan Potts, Operation Commander, EUNAVFOR - Koji Miyahara, CEO, NYK Line, Japan - John Y. Lu, Chairman, Singapore National Shippers' Council, SNSC, Founder and Chairman, Asian Shippers' Council, ASC - Norman Baker, Parliamentary Under-Secretary of State for Transport, UK



Pat Cox (L.) with Susan Kurland and Angela Gittens



Klaus-Peter Siegloch (L.) and Lars Erik Bartnes



Ministers Brownlee and Varadkar

## Volcanic Ash and Other Crises

**Volcanic Ash and Other Crises** was the fourth topic debated in the setting of a Ministerial Roundtable, with a focus on implications for aviation. Eruptions of volcanoes, earthquakes, tsunamis, war, terrorism and other force majeure events can all result in airspace and airports being rendered unusable or closed across a wide geographic area for an uncertain length of time, thus compromising the continuity and safety of air travel.

With the importance of aviation to the global economy growing, measures must be taken to minimise any economic impact of unanticipated major disruptions. Participants agreed that advance preparation for the unforeseen requires identifying

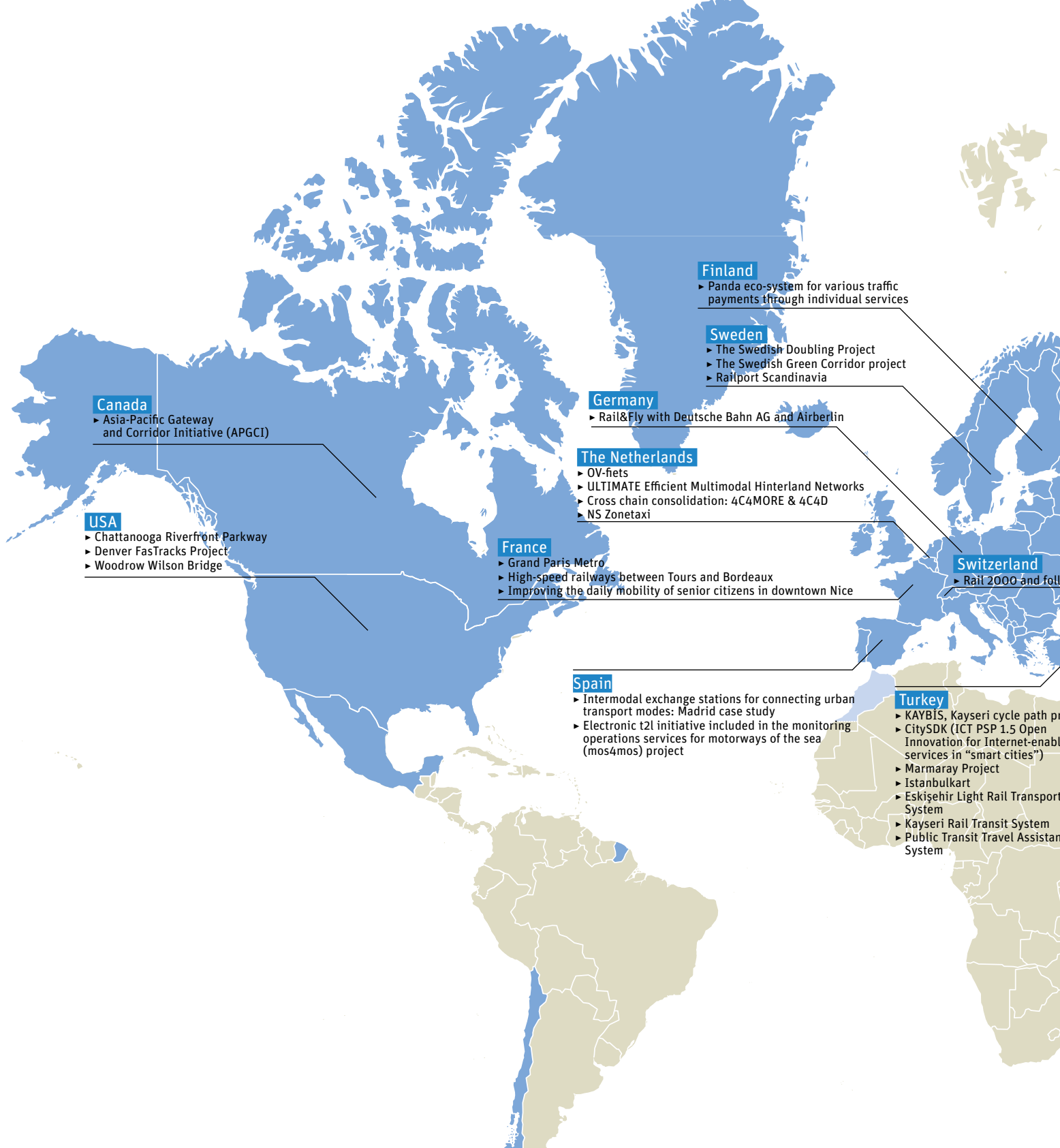
effective crisis management measures for a broad range of scenarios. Many of these major disruptions occur across national boundaries, and participants urged governments in their joint statement to enable an international approach to such incidents by, inter alia, creating binding international standards for effective crisis management.

Other recommendations included ensuring efficient communication of all bodies involved in managing a crisis and exploring mechanisms by which travel visas may be extended in the event of the failure of a transport mode.

[The full text of the joint statement can be found on page 71.](#)



**Participants (left to right):** Gerry Brownlee, Minister, Transport, New Zealand - Leo Varadkar, Minister for Transport, Tourism and Sport, Ireland - Pat Cox, Moderator - Gerhard Adrian, President, German Weather Service - Jean-Pierre Loubinoux, Director General, International Union of Railways (UIC) - Lars Erik Bartnes, State Secretary, Norway - Susan Kurland, Assistant Secretary for Aviation and International Affairs, Department of Transportation, USA - Andreas Scheuer, Parliamentary State Secretary, Federal Ministry of Transport, Building and Urban Development, Germany - Angela Gittens, Director-General, Airports Council International - Klaus-Peter Siegloch, President, Bundesverband der Deutschen Luftverkehrswirtschaft (BDL), Germany - Sergey Aristov, Secretary of State, and Deputy Minister, Transport, Russian Federation



## Case Studies from International Organisations

### Age Platform Europe

- ▶ Establishment of an end-user platform on public transport issues at EU level
- ▶ Mediate – Tools for accessible public transport
- ▶ Aeneas Project

### Center For Innovation in Transport (Cenit)

- ▶ New Bus Network for Barcelona City

### Community of European Railway & Infrastructure Companies

- ▶ E.RailFreight

### Deutsche Bahn Mobility Logistics Ag

- ▶ Alternative Routes Service (ARS)
- ▶ Touch&Travel
- ▶ BeMobility
- ▶ bahn.de

### Eurocities

- ▶ Future Ticketing Project (FTP)

### European Conference of Transport Research Institutes

- ▶ Renewability
- ▶ AMITRAN
- ▶ COFRET
- ▶ Regional bundling of material flows to optimise transports
- ▶ eCoMove
- ▶ Seamless public transport door-to-door navigation
- ▶ Application and Benefit of Electrical Transportation in Industrial Infrastructure
- ▶ PalletFlow

### Eurocontrol

- ▶ Information for the Single European Sky
- ▶ Challenges of Growth in Aviation
- ▶ Performance in Air Traffic Management
- ▶ Total Airport Management
- ▶ Airport Collaborative Decision Making (CDM)

### Federal Highway Research Institute

- ▶ RETISS Real Time Security Management System for Road Infrastructures
- ▶ SeRoN Security of Road Transport Networks
- ▶ Security Risk Management Processes for Road Infrastructure

# Case Studies

The challenge of making transport more seamless is generating a multitude of responses around the globe. New technologies, forward-looking forms of co-operation, improved planning and innovative policies are implemented everywhere to improve connectivity. For the 2012 Summit, the International Transport Forum surveyed

member countries and stakeholder organisations for case studies to help share knowledge and identify best practices. The Case Studies Compendium presented at the Summit contains nearly 100 projects. It is also available online at [2012.internationaltransportforum.org/outputs](http://2012.internationaltransportforum.org/outputs)

## Georgia

- ▶ Implementation of Open Sky Policy and integration of Georgia into the European Common Aviation Area
- ▶ Opening of new grain terminal in Poti Sea Port

## Korea

- ▶ Technology for Transport Connectivity and Transfer System

## Japan

- ▶ Improving Accessibility in Transport
- ▶ Improving Bus Punctuality
- ▶ Improvement of Cycling Environment
- ▶ Earthquake countermeasures for infrastructure (railways and roads)
- ▶ Promoting Electric Vehicles (EVs)
- ▶ Construction of high-speed railways
- ▶ Securing Safety of Intermodal Container Transportation on Road
- ▶ ITS (Intelligent Transport System) Spot Services
- ▶ Intelligent Transport System (ITS)
- ▶ Low Carbon City Development Guidance
- ▶ Compact City Development Using Public Transport (case of Toyama City)
- ▶ Highway Bus and Rail Ride
- ▶ Improving Railway Stations as Transport Hubs
- ▶ Ensuring Transportation to/from a Remote Island
- ▶ Railway-station-based Community Rental Cycle System in urban area
- ▶ Road development and improvement of access roads to airports and harbours
- ▶ Encouraging Safety Management of Transport Operators
- ▶ Introduction and Interoperability of Smart Card System
- ▶ Smart Inter Change

## New Zealand

- ▶ Northern Busway project
- ▶ High Productivity Motor Vehicle (HPMV) system

## Fédération Internationale de l'Automobile

- ▶ Advanced Multi-Platform Traffic Information Service
- ▶ Public information and research
- ▶ RACC Infotransit Traffic Information Services

## International Chamber of Shipping (ICS)

- ▶ IMO Safety and Pollution Framework
- ▶ International Convention for Safe Containers
- ▶ Rotterdam Rules

## International Civil Aviation Organisation (ICAO)

- ▶ ICAO States' Action Plans on CO<sub>2</sub> Emissions Reduction Activities

## International Road Federation

- ▶ A14 Urban motorway Paris

## International Road Transport Union (IRU)

- ▶ Taxi – Anytime, Anywhere
- ▶ TRANSPark
- ▶ IRU TIR Electronic Pre-Declaration (TIR-EPD) and Real Time SafeTIR (RTS)
- ▶ Smart Move
- ▶ New Eurasian Land Transport Initiative (NELTI): Phases 1 and 2
- ▶ IRU Border Waiting Time Observatory (BWTO)

## Transport Corridor Between Europe, Caucasus And Asia

- ▶ TRAX TRACECA Route Attractiveness for Seamless Connection

## Vbb Verkehrsverbund Berlin-Brandenburg Gmbh

- ▶ EU-SPIRIT: European travel information network

Ebene  
Vortragssäle  
Lecture Rooms

Ebene +1  
Vortragssäle  
Lecture Rooms

Ebene +1  
Säle  
Halls

Ebene +1  
Säle 1-5  
Halls 1-5

Ebene 0  
Mehrzweckflächen  
Multi-Purpose Areas

Ebene 0  
Mehrzweckflächen  
Multi-Purpose Areas



# Around the summit

From technical tours to networking receptions, a host of events accompanied the 2012 Summit. The exhibition with a record 37 participants presented projects and products related to the Summit theme. Interesting side events by partner organisations highlighted related issues.

The Childrens' University gave local school children the opportunity to quiz transport experts. And a Leipzig by bike tour explored the Summit's host city, led by the Lord Mayor.



## Crash simulation

A demonstration on the importance of wearing a seatbelt.



## Golden rules



Agreeing to abide by FIA's Golden Rules at the Children's University are, from left to right : Arndt Birkigt, Dekra Technical Expert; Jean Todt, FIA President; Jan Mücke, German Parliamentary State Secretary; Michael Kloth, International Transport Forum, and Andreas Kraus of Dekra.

## Käpt'n Blaubär



Käpt'n Blaubär (right) and side-kick Hein Blöd (left), characters from a well known German television series arrive at the Children's University to distribute the Käpt'n Blaubär transport safety comic.





## Children's University

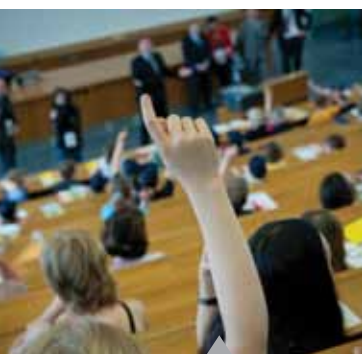
An ever popular event, the annual Children's University this year drew over 250 pupils between the ages of 8 and 12 from Saxony to hear about safety in transport from politicians and special guest experts.

Parliamentary State Secretary Jan Mücke evoked the work underway by the German Transport Ministry to improve safety on the roads and impressed upon the children the importance of wearing a helmet while cycling.

Great excitement heralded the arrival of special guest Jean Todt, President of the International Automobile Federation (FIA). Todt highlighted ten "Golden Rules" for safety that are part of FIA's Action for Road Safety campaign and presented the Dean of Leipzig University's Medical School with a genuine racing helmet signed by drivers Michael Schumacher and Sebastian Vettel. This will be publicly auctioned, with the proceeds going to the Children's University educational programme.

Mr. Arndt Birkigt of DEKRA, the sponsor of the Children's University event, gave a lecture on children as active users of road transport, and Michael Kloth, Acting Secretary-General of the International Transport Forum, introduced the young audience to the Forum and its role in gathering road safety statistics and influencing transport policy.

After the presentations, the children made extensive use of the opportunity to quiz the experts, have autographs signed and take part in the various outside activities offered by DEKRA, the German Road Safety Association and ADAC, the German Automobile Club.



Jean Todt, FIA President, demonstrates the importance of wearing a helmet during his lecture on safety. This helmet was signed by Formula 1 drivers Michael Schumacher and Sebastian Vettel and later presented to the University of Leipzig.

Hands held high – children ask questions of the experts.





## DHL

The tour of the DHL Logistics Hub at Leipzig-Halle airport was again popular with Summit delegates, despite taking place late in the evening. At this time the action is just starting to happen at the hub - around 60 planes take off and land during the night, and within a few hours over 1 500 tonnes of parcels and documents are sorted and shipped to every corner of the globe from here.

## Toll Collect



BMW's Leipzig plant, designed by Zara Hadid, opened for delegates again this year. In 2011, the plant celebrated production of one million cars, and extension plans for future production of electric vehicles and CFK lightweight bodies are underway. The tour provided fascinating glimpses of the stages of production, from welding robots in the body shop to final performance tests.



## Porsche

The Leipzig Porsche plant incorporates the latest advances in car manufacturing. During their visit, Summit delegates were introduced to the production of the Cayenne and the Panamera models. Porsche is investing EUR 500 million to expand the plant for the production of the new Porsche Cajun, creating around 1 000 new jobs.

Toll Collect operates the world's first satellite-based toll system. Exclusively for delegates, the Summit's Gold Sponsor offered a 30-minute bus tour with a live demonstration of its road charging technology.





## Technical Tours and Cultural Visits

The 2012 Summit provided rich opportunities for delegates to gain insights into a broad range of innovative entrepreneurship in the transport sector and to see how policies translate into new solutions. As in previous years, technical tours to DHL's European air-freight hub at Leipzig-Halle airport and visits of the high-tech car production at BMW and Porsche's Leipzig plants provided fascinating insights into different state-of-the-art transport services and products. A new element in the Summit's offer of technical tours was an excursion to the Goldschmidt-Thermit production site in the city of Halle, with a demonstration of highly innovative technology for the construction, repair and maintenance of railway infrastructure.

The cultural programme included a guided tour around Leipzig and, as a first, an excursion to Berlin. In Leipzig, Summit delegates were invited to visit the spectacular 360° Everest panorama at the Asisi Panometer, an historic gasometer converted to house this extraordinary exhibition. Other highlights included a walking tour of the town centre with its Renaissance buildings and visit of the Monument of the Nations. The 91-meter high monument commemorates the 1813 Battle of Leipzig in which Napoleon's troops succumbed to forces of a dozen allied nations in a struggle that with 600 000 participants remained the greatest land battle of history for more than 100 years.

The excursion to Berlin included a boat tour along the river Spree, a walking tour including the famous Brandenburg Gate and ended with a guided visit of the German Parliament, the Bundestag.

## Goldschmidt-Thermit

Goldschmidt-Thermit-Group offers products and services for railway infrastructure systems. It is the inventor of the Thermit® welding method for continuously welded tracks. During a tour of the group's Halle factory, delegates witnessed a fascinating welding demonstration, as well as live on-track rail maintenance with a two-way grinding vehicle and a new measurement product for track safety.



DEKRA's Gulliver Autos: oversized inflatable cars which demonstrate to adults how children perceive cars.



Rüdiger Grube, CEO of Deutsche Bahn (centre right), welcomes Vice-Minister Feng (centre left) of China to the DB stand.

Trying out a cargo bike at the exhibition stand of the European Cyclists Federation.



Ship safety as a core theme of the German Federal Ministry's exhibition stand.





A birds-eye view of the exhibition hall.

## Exhibition

37 exhibitors, more than ever before, showcased their products and services at the 2012 Summit. Several member countries featured stands, highlighting diverse issues such as high-speed rail at the stand of Japan and ship safety at the German Federal Ministry's stand. The Netherlands focused on logistics with a DIALOG stand, while Austria used the exhibition to promote the ITS World Congress in Vienna in October 2012. A research exhibition on the ground floor featured 10 transport research projects and institutions.

The Forum's partners from industry also turned out in force. Summit Platinum sponsor DHL demonstrated how seamless logistics can improve door-to-door service. Gold sponsor Toll Collect offered a glimpse into the future of road tolling based on satellite technology. Deutsche Bahn put their rail freight link from Leipzig to Chengyang at the centre of an interactive display which fascinated visitors including China's Vice-Minister Zhenglin Feng.

The outdoor exhibition offered demonstrations of innovative ideas, ranging from Valeo's smart phone based self-parking system via Michelin's fuel-cell concept car to the inflatable oversized "Gulliver's car" used by DEKRA to show how children perceive cars. Eco-driving courses offered by FIA and the International Automobile Association, were another eye-opener.

See page 111 For full Exhibitors' list



Delegates visit Dresden University's stand at the research exhibition



Live demonstration of Valeo's Park4U remote self-parking system.



European Cyclists' Federation President Manfred Neun, German State Secretary Jan Mücke and ECF Secretary-General Bernhard Ensing (l. to r.) try out cargo bikes.

Delegates at the Japanese stand, which featured displays by the Ministry of Transport, Japan Rail Central, Japan Rail East, Mitsubishi Aircraft Corporation and the Japan International Transport Institute.



Bill Meahl (l.), Chief Commercial Officer of DHL Global, welcoming German Minister Ramsauer (r.) at the stand of DHL, the Summit's Platinum sponsor.



Discussing road charging systems at the AGES stand.



Jean-Luc di Paola-Galloni (l.), Vice President of Valeo and Forum Advisory Board member, at the European Commission stand.



Ministers Bures (Austria) and Leuthard (Switzerland) meet at the ITS Vienna stand

The Michelin stand



Smiling faces at the stand of the International Transport Forum



Nextbike showcasing its bike-sharing system



At the stand of Gold sponsor Toll Collect, delegates take a break from talking road charging technology.

See page 111 For full Exhibitors' list

Leipzig's Lord Mayor Burkhard Jung at the assembly point outside the Gewandhaus.



## Baumwollspinnerei



The tour included a stop at the Baumwollspinnerei, an ancient cotton mill converted into a centre for contemporary art.

## Cargo bikes



Cargo bikes helped the media to cover this outdoor event in glorious sunshine





## Leipzig by Bike

In glorious sunshine, Lord Mayor Burkhard Jung led around 100 guests on a bicycle tour around Leipzig. The tour had been organised jointly with the local chapter of the European Cyclists' Federation and the bicycles, branded in the colours of the 2012 Summit, provided courtesy of NextBike, a Leipzig based bike-sharing company that operates around 10 000 share-bikes in seven countries on three continents.

The leisurely tour led past some of the lesser known beauties of the Summit's host city. Mayor Jung, an expert tour guide, pointed out impressive urban development projects, notably the redevelopment of an industrial site on the Weisse Elster river into a waterside residential area for young families, even including a small pleasure port.

The tour ended with a guided visit of Baumwollspinnerei, a former cotton mill. The once derelict red-brick workshops and warehouses from around 1900 have become a focal point of Leipzig's contemporary art scene. Participants enjoyed a picnic lunch in the garden before returning to the city centre aboard a brand-new tram train specially provided by LVB, Leipzig's public transport operator.



Irish Minister Leo Varadkar (left) was among the delegates participating in the bike tour of Leipzig





# Presidency Reception



Senior Vice-Minister Yoshida (c.) and Japan's Ambassador to the OECD Motohide Yoshikawa (l.), toast with Leipzig Mayor Jung (r.)



Minister Ramsauer and Mrs. Ramsauer congratulate Secretary-General Jose Viegas (from left)

From left to right: Ministers Kwon, Ramsauer, Yildirim, Yoshida and Elmsäter-Svärd



Minister Leuthard arrives at the Ministers' dinner

# Gala Dinner



## Networking

The 2012 Summit provided rich opportunities to talk business in informal and relaxed settings, to renew existing contacts and meet new people from around the world. On the invitation of Japan, the Forum's 2012 Presidency country, delegates gathered in the Leipzig Opera House on the first evening for the traditional Presidency Reception, where they were welcomed by Senior Vice-Minister Osamu Yoshida and Japan's Ambassador to the OECD, Mr. Motohide Yoshikawa, as well as the Lord Mayor of Leipzig, Burkhard Jung.

A Ministers' Dinner at the Falco restaurant, hosted by Ministers Ramsauer (Germany) and Yoshida (Japan) on the evening of the opening day, offered an opportunity for informal discussions among Forum ministers. On the second day, the 2012 Summit Cocktail Reception and Gala Dinner united all delegates in the gigantic Glass Hall of Congress Center Leipzig. The bar was again an after-dinner focal point for delegates to meet and continue conversations with colleagues over a drink after a long day of panels and workshops.



# Zurich Process

## FIATA and CLECAT



GFEI



## Side Events

More partner organisations than ever before used the 2012 Summit to highlight their activities - from transport-related research and promotion of best practices to policy initiatives. Among those complementing the main programme with their own side events were international organisations such as the World Bank, the UNECE, industry associations, research bodies and foundations. For the first time, a regional inter-ministerial group met on the fringe of the Summit: Ministers of the Zurich Process, a group comprising the countries of the Alpine region in Europe, held their bi-annual conference on the opening day of the 2012 Summit.



OSCE



ITS



WCTRS

Dinalog



Airbus

## World Conference on Transport Research Society (WCTRS)

Organised by Professor Michael Browne of the University of Westminster, UK, this workshop looked at Seamless Urban Freight Transport: The need for a new policy approach. Urban goods movement involves many actors making it difficult to achieve seamless transport. The discussion noted the importance of taking a metropolitan-wide view of competition, congestion, energy supply, climate change and safety. Public authorities are often uncertain how to address freight issues and there is a clear need to engage public and private stakeholders. The event did just that - bringing together a wide range of actors with different strategic and operational perspectives, and it was recommended to continue with this dialogue. The WCTR Special Interest Groups intend to convene sessions at the next WCTR Conference in Rio de Janeiro in July 2013.

[wctrs.ish-lyon.cnrs.fr/](http://wctrs.ish-lyon.cnrs.fr/)

## Future Requirements and Needs for Humanitarian Air Service

Since the year 2000 more than 120 major earthquakes around the globe have resulted in about 800 000 casualties. So is there a need for a provider of humanitarian air services? Airbus Corporate Foundation organised this panel to discuss this question and to consider to what extent humanitarian aid can be improved by combining adequate organisational structures, appropriate air transport means, simplified practice and cooperation of the different organisations involved.

[www.airbusmilitary.com/Missions/MissionsCivic/Humanitarian.aspx](http://www.airbusmilitary.com/Missions/MissionsCivic/Humanitarian.aspx)

## Follow-up Zurich Process

The Zurich Process is the formal platform of cooperation of the Ministers of Transport of the Alpine countries (Austria, France, Germany, Italy, Slovenia, Switzerland) and the European Commission. It was created after a tragic accident in the Gotthard tunnel in October 2001 and is named after the 2001 Declaration of Zurich that agreed to improve co-operation in transport safety, harmonisation of data collection and heavy vehicle transport management. At their Leipzig meeting, the ministers created a new web-based information system on traffic disruptions on Alpine transit routes, a European first, and agreed to further develop the Toll+ concept, which comprises demand-driven tolling. Ministers also welcomed the Principality of Liechtenstein as a new member of the Zurich Process. After adopting the Leipzig Conclusions, which set out the group's agenda for the coming two years, Swiss Minister of Transport Doris Leuthard handed over the presidency to her German colleague Peter Ramsauer for the for 2012-14 period.

[www.zuerich-prozess.org](http://www.zuerich-prozess.org)

## Global Fuel Economy Initiative

The Global Fuel Economy Initiative is a partnership of the IEA, UNEP, ITF and FIA Foundation which works to secure real improvements in fuel economy, and the maximum deployment of existing fuel economy technologies in vehicles across the world. The Initiative promotes these objectives through in-country policy support, analysis and advocacy. This event examined the GFEI's workplan for 2012-15 and examined projects that could be developed with partners in industry. It was marked by the formal association of the International Council on Clean Transportation as the fifth partner in the GFEI.

[www.globalfuelconomy.org](http://www.globalfuelconomy.org)

## ITS World Congress Vienna 2012

From 22 to 29 October 2012, the 19th ITS World Congress 2012 will take place in Vienna, Austria. The theme for this major transport congress is "Smarter on the Way", and will go beyond exhibitions and a conference by including extended demonstrations of intelligent transportation applications as well as a high-level Ministerial Roundtable. The Leipzig workshop collected input for the upcoming Ministerial Roundtable that will discuss ways of implementing ITS in real transportation systems and how common political efforts can help achieve this goal.

[2012.itsworldcongress.com/content](http://2012.itsworldcongress.com/content)

## E-documents for Co-modal Transport of Goods

The International Federation of Freight Forwarders Associations (FIATA) together with CLECAT, the European Association for Forwarding, Transport, Logistics and Customs Services organised panel debates on how to facilitate digital transactions in the exchange of information between stakeholders in the supply chain whilst reinsuring the sufficient interoperability. It also discussed the complexities of digitalising FIATA documents and whether digital collaboration would benefit all parties in the logistics chain.

[www.clecat.org](http://www.clecat.org)

## Logistics Performance Measurement

How high are logistics costs? And what are their main drivers? These were just some of the questions addressed during this side event organised by the World Bank, the Turku School of Economics and the International Transport Forum. Logistics costs and performance are key components of seamless supply chains, and affect virtually all sectors in the economy. How performance measures can help in the development and pursuit of efficiency and reliability was at the heart of this session which also reviewed the most recent research on logistics costs and performances around the world.

[www.internationaltransportforum.org/jtrc/DiscussionPapers/DP201204.pdf](http://www.internationaltransportforum.org/jtrc/DiscussionPapers/DP201204.pdf)

## Synchromodal transport: Modal Shift is Mental Shift

This event organised by the Dutch Institute for Advanced Logistics (Dinalog) and the Netherlands Organisation for Applied Scientific Research (TNO) challenged the audience about their transport habits, to help identify ways in which the supply chain can evolve in a sustainable way and collaboration between transport modes and nodes can be improved. In order to make changes, information and trust are crucial. To stimulate different ways of transport, a mental shift needs to take place.

[www.dinalog.nl/en/home/](http://www.dinalog.nl/en/home/)

## Best Practice at Border Crossings

This event organised by the United Nations Economic Commission for Europe (UNECE) and the Organisation for Security and Co-operation in Europe (OSCE) presented key messages from the Handbook of Best Practices at Border Crossings: A Trade and Transport Facilitation Perspective which aims to assist the 56 OSCE participating States and UNECE member States in the development of more efficient border and customs policies through the promotion of existing best practices in this field.

[www.osce.org/eea/88200](http://www.osce.org/eea/88200)

# Shipping agreement

Ministers Ramsauer and Kwon sign the German-Korean shipping agreement



A camera team interviewing an exhibitor



Journalists of the Forum's Media Travel Grant programme



Media Travel Grant Journalists



## In the News

125 journalists from 25 countries, more than ever before, came to Leipzig to cover the 2012 Summit. Media presence was truly global, with journalists from all five continents present.

Media Highlights at the Summit included the election of José Viegas as new Secretary-General of the International Forum by ministers and the launch of the 2012 Transport Outlook. The Outlook, entitled “Seamless Transport for Greener Growth”, was presented to a packed auditorium by OECD Secretary-General Angel Gurría and Forum Chief Economist Kurt Van Dender.

Another well-covered book-launch was the presentation of the IRTAD Road Safety Annual Report 2011 by Forum expert Véronique Feypell-de la Beaumelle and Head of Research Stephen Perkins, highlighting new data from the 32 countries co-operating in the Forum’s International Traffic Safety Data and Analysis Group (IRTAD).

The signing of an Agreement on Maritime Shipping between Korea and Germany by Ministers Do-Youp Kwon and Peter Ramsauer on the fringe of the 2012 Summit was reported in both countries’ media. The agreement includes provisions on free trade, mutual recognition of shipping documents, and shipping incidents. Both countries signed their first trade and shipping agreement as early as 1883.

Platinum Sponsor DHL offered two highly interesting press briefings. One focused on DHL’s study “Delivering Tomorrow: Logistics 2050”, the other showcased DHL’s role as service provider for Leipzig’s Gewandhaus orchestra. The late-night tour of DHL’s European logistics hub at Leipzig-Halle airport was another draw for journalists.

A Press Book containing coverage of the Summit is available from the Secretariat.



German national television interviewing Minister Ramsauer

# Sponsors

The International Transport Forum would like to thank its sponsors and partners for supporting the 2012 Summit:

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Gold Sponsors



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# Exhibitors

**AGES Maut System GmbH & Co. KG**

**AustriaTech –  
Federal Agency  
for Technological Measures Ltd.**

**Central Japan Railway  
Company**

**CIVITAS**

**Connekt**

**CycleLogistics**

**Deutsche Bahn AG**

**Dinalog**

**East Japan Railway Company**

**EUROPEAN COMMISSION**

**European Cyclists' Federation**

**European Investment Bank**

**European TK'Blue Agency**

**FIA**

**Ministry of Ecology,  
Sustainable Development,  
Transportation and Housing,  
France**

**Federal Ministry of Transport,  
Building and Urban Development,  
Germany**

**International Association  
of Public Transport  
(UITP)**

**International Union  
of Railways  
(UIC)**

**ITO World Ltd**

**Japan International  
Transport Institute  
(JITI)**

**Japan National Tourism  
Organization  
(JNTO)**

**Michelin Challenge Bibendum**

**Ministry of Infrastructure  
and the Environment,  
Netherlands**

**Mitsubishi Aircraft Corporation**

**Netzwerk Logistik**

**Nextbike**

**The Organisation for Economic  
Co-operation and Development  
(OECD)**

**TRACECA  
TRANsport Corridor Europe Caucasus  
Asia**

**United Nations Economic  
Commission for Europe  
(UNECE) – Transport Division**

**Valeo**

**VDV-Kernapplikations GmbH & Co. KG**

## Research Exhibit

**Association  
for European Transport  
(AET)**

**Connecting Authorities  
for Safer Heavy Good Traffic  
in the Baltic Sea Region  
(CASH)**

**Chalmers University  
of Technology**

**German Institute  
for Economic Research  
(DIW Berlin)**

**Dresden University  
of Technology**

**Oxera**

**Planung Transport Verkehr  
(PTV)**

**TRANSED**

**Transport Research Board  
(TRB)**

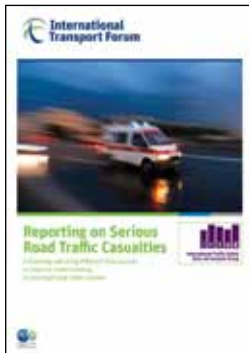
**World Conference  
on Transport Research  
(WCTRS)**





# Recent Publications

## from the International Transport Forum



**Reporting on Serious Road Traffic Casualties**



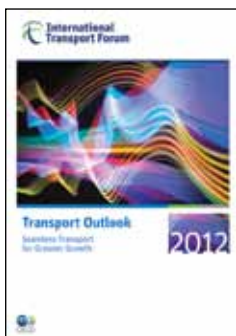
**Car Fleet Renewal Schemes: Environmental and Safety Impacts**



**IRTAD Annual Report 2011**



**Trends in the Transport Sector 2012**  
ISBN 978-92-821-0371-5 May 2012



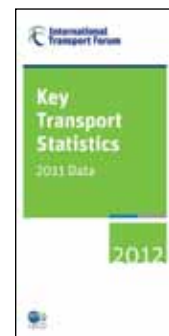
**Transport Outlook 2012**  
Seamless Transport for Greener Growth



**Pedestrian Safety, Urban Space and Health**  
ISBN 978-92-821-0364-7



**Sharing Road Safety**  
Developing an International Framework for Crash Modification Functions  
978-92-821-0375-3  
(Forthcoming)



**Key Transport Statistics 2012**



**Motion Magazine**



**Case Study Compendium**



**The JTRC Discussion Paper Series'**  
aim is to contribute to the understanding of the transport sector and to provide inputs to transport policy design.  
Full list available at:  
[www.internationaltransportforum.org/jtrc/DiscussionPapers/jtrcpapers.html](http://www.internationaltransportforum.org/jtrc/DiscussionPapers/jtrcpapers.html)

# Mark your diary

with the dates for the  
**2013 Summit**  
**Funding Transport**  
**22-24 May Leipzig, Germany**

The demand for high-quality transport networks and services is growing fast.

Meeting it requires continued expenditure and investment. But scarcity of public funds amplified by rising public debts brings into question traditional funding structures. With transport investment a long-term venture, robust, sound and credible funding propositions that will support trade, growth and long-term sustainability are urgently needed.

The Annual Summit of the International Transport Forum is the leading global platform for debate on the future of transport. At the Summit, Ministers from more than 50 countries engage decision-makers from industry, civil society and research to explore the trends that will shape mobility in the 21st century.

The International Transport Forum's 2013 Summit on "Funding Transport" will consider all aspects of funding and financing transport to answer: How will transport infrastructure, services and systems in general be funded to meet current and future demands? Key questions to be explored include:

- > In a competitive environment for private capital, where will the money go across regions and sectors: Europe, America, Asia, Africa? What are the key attraction factors?
- > How can the various types of funds and other sources of capital combine to provide the most efficient financing of the highest priority projects?
- > What are the pitfalls of Public/Private Partnerships and how can risks be managed to ensure the taxpayer does not bear any excess burden?
- > How should investment and operating costs of transport systems be split between tax payers, users and beneficiaries?
- > What do airlines and other actors of the air transport sector need to do to adapt and stay viable in a low-cost environment?
- > What is the right balance in allocation of scarce funds between services and infrastructure when both are equally important?
- > How can funding challenges be overcome to better connect global logistics networks across borders?

**Mark your diary now for this must-attend event**

## **Why You Should Participate**

- > Find out how decision-makers are planning for the new era of mobility.
- > Identify trends that will drive future breakthroughs in transport.
- > Explore ways of overcoming barriers between systems, networks, modes and regions.
- > Network with top players, understand their views, influence decision-making.

## **How You Can Participate**

- > **As a delegate:** To request an invitation for this exclusive event, please contact [rachael.mitchell@oecd.org](mailto:rachael.mitchell@oecd.org). Registration will open in January 2013.
- > **As a sponsor:** Raise your profile among top transport decision-makers as a sponsor of the 2013 Summit. Please contact [sharon.masterson@oecd.org](mailto:sharon.masterson@oecd.org) for details.
- > **As an exhibitor:** Put your products and ideas on display where Ministers and top decision-makers meet. Please contact [sharon.masterson@oecd.org](mailto:sharon.masterson@oecd.org) for details.
- > **For Media and Press opportunities,** please contact [michael.kloth@oecd.org](mailto:michael.kloth@oecd.org)

# Speakers List

## **Adrian, Gerhard**

President,  
German Weather Service,  
Germany

## **Akiyama, Tetsuo**

Visiting Professor,  
Hokusei University,  
Japan

## **Albanese, Anthony**

Minister,  
Infrastructure and Transport,  
Australia

## **Allen, Nick**

Vice-President  
Downstream Management  
Consultancy and CO<sub>2</sub>,  
Shell International

## **Amabile, Serge**

Director, Marketing and Sales,  
Soci te Autolib',  
France

## **Aristov, Sergei**

Secretary-of-State,  
and Deputy Minister,  
Transport,  
Russian Federation

## **Austwick, Martin**

Lecturer,  
Centre for Advanced Spatial  
Analysis, Bartlett Faculty  
of the Built Environment,  
University College London,  
UK

## **Baker, Norman**

Parliamentary  
Under-Secretary of State,  
Transport,  
UK

## **Bartnes, Lars Erik**

State Secretary,  
Ministry of Transport  
and Communications,  
Norway

## **Belcher, Scott**

President and CEO,  
ITS America,  
USA

## **Bens, Wim**

Managing Director,  
DINALOG (Dutch Institute for  
Advanced Logistics),  
Netherlands

## **Birkigt, Arndt**

Director,  
Technical Control Centre,  
DEKRA,  
Germany

## **Brenner, Thom**

Vice-President,  
Nokia Gate 5,  
Germany

## **Browne, Michael**

Professor,  
Logistics, University of  
Westminster,  
UK

## **Brownlee, Gerry**

Minister,  
Transport,  
New Zealand

## **Clausecker, Michael**

Chairman of the  
Management Board,  
Bombardier Transportation,  
Germany

## **Cox, Pat**

Moderator and Journalist

## **Crane, Melinda**

International Journalist

## **Crye, Michael**

Executive Vice President,  
Cruise Lines International  
Association,  
USA

## **Czymoch, Conny**

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## Highlights 2012

Seamlessness in transport is the physical expression of one of the megatrends of the 21st century: complete connectivity. Seamlessness is about better connecting people and markets, but also about linking sectors, business cases and ideas. Not least, seamlessness is about the convergence of traditional transport infrastructure with the digital sphere, a process that is already changing the way we think about and use transport.

Seamless transport is a powerful strategic vision for our future. Wherever people and goods move in highly connected ways, transport has proved a dynamic engine for growth and well-being. Seamless connections between cities and regions, notably through high-speed rail, have had huge impact on national and regional economies. Seamless access to transport improves citizens' access to schools, universities, labour markets and leisure activities. Being able to move between geographic locations and transport modes with minimal impediments is a prime desire of all transport users.

Yet the structure of our transport systems with modal transfers, different ownership, international border crossings and security threats makes overcoming the inherent friction in our transport system a permanent challenge. How can we improve seamlessness? To what extent is complete connectivity ultimately feasible? What approaches should be taken politically, institutionally, and technologically?

These are the issues that transport leaders from government, public administration, business and academia explored at the International Transport Forum's Annual Summit on 2-4 May 2012 in Leipzig, Germany. This publication condenses their main findings.

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