# EUROPEAN CONFERENCE ON

 $\mathbf{co}$  4 TRANSPORT LOGISTICS  $\mathbf{\leftarrow}\mathbf{\leftarrow}$ 

Intelligent logistics solutions – a catalyst for digital economy

05th – 07th October 2015 Bordeaux (FRANCE) (Rue Jean Samazeuilh, 33030 Bordeaux Cedex)



Intelligent logistics solutions – a catalyst for digital economy

05th – 07th October 2015 Bordeaux (FRANCE) (Rue Jean Samazeuilh, 33030 Bordeaux Cedex)

# **FOREWORD**

# WELCOME

#### BY ALAIN JUPPÉ (PRESIDENT OF BORDEAUX METROPOLIS MAYOR OF BORDEAUX)

# **DEAR CONFERENCE PARTICIPANT,**

It is with great pleasure that I welcome you to Bordeaux and, quite naturally, with a certain pride. Our city is one of the most widely known in the world. It owes this renown to the Bordeaux vineyards, of course, to their great wines and appellations, but also to its historic role as a crossroads between different spheres of influence for over 2,000 years, in particular since the 12th century thanks to its ties with Britain and the Netherlands. The historic centre of Bordeaux is an outstanding urban and architectural ensemble featured on the UNESCO World Heritage List since 2007.

Bordeaux has long been a region with an international dimension, one that is open to the world and has launched a variety of innovations in transportation: the roll-out of Gertrude, one of the first urban traffic regulation systems, the complete reorganisation of the bus network linked in with the introduction of a self-service bicycle hire system - VCub – plus a boat service on the Garonne -BatCub – and more recently an electric vehicle sharing service – BlueCub. In 2003, the operational launch of the three tram lines was also the driver of a genuine cultural revolution in mobility, with the redevelopment and enhancement of the city's public spaces, backed by the introduction of a groundlevel power supply system for the tram, a world first that has been widely exported around the world since then. In 2017, with the completion of the high-speed rail line, Bordeaux will be a key hub on the rail network, with a fully-renovated station just 2 hours from Paris. In 2018, a new bridge over the Garonne River, in addition to the one built in 2013, will bring the two banks of the river even closer together. Finally, the work to widen the ring road on the left bank to three lanes in each direction should be completed by 2020-2022.

Large-scale projects are also underway to boost the city and create jobs, representing exceptional amounts of public and private investment in coming years.

Our city must keep pace with the times by being an ambitious and innovative metropolis at the service of its citizens, yet with its sights set on Europe and the world. To achieve this, the CUB must provide easily-accessible, smoother-running, smarter mobility. This ambition implies restricting the use of cars in the city centre, pushing ahead with the development of urban transport of the highest standard and rethinking the way we move around the city to make sure that this mobility is sustainable.

To make our metropolitan area more attractive, we must achieve more seamless mobility, including digital mobility. Our objective is to support the multi-faceted development of digital technologies





and their uses, and to place them at the service of the local territory and its power of attraction, of its users, businesses and quality of life. The metropolitan area of Bordeaux therefore plans to be at the forefront of the French Tech initiative, to boost the digital transition of our economy and support the emergence of "technological champions".

The 8th European Conference on ICT for Transport Logistics (ECITL) is an event of prime importance to Bordeaux. It is the opportunity to enhance the deployment of ITS for the entire logistics and supply chain network and to engineer more robust and resilient supply chains. The ITS sector can also be a driver for local expertise and business. We must boost the development of this new industry by fostering excellence and economic growth, promoting local know-how and innovation, supporting businesses and stimulating the creation of companies in the sector.

This conference will provide an ideal opportunity to share our experience with that of other regions all over the world. I hope that all the participants will be able to make the most of their stay in Bordeaux to discover or rediscover the city and its metropolitan area, its heritage, talent and culture, to savour some of the wine and food that have built its reputation and, of course, to make use of its transport system.

#### Alain Juppé Mayor of Bordeaux President of Bordeaux Metropolis

# **FOREWORD**

# WELCOME

#### BY VORARLBERG UNIVERSITY OF APPLIED SCIENCES (FHV)

# **DEAR PARTICIPANT,**

We welcome you to the 8th ECITL conference in Bordeaux. This year's ECITL focus on how "ICT drives transport logistics cooperation". This years theme should highlight the growing importance of efficient and effective logistics and supply chain management and operation.

As every year, we've invited industrial practitioners, scientists and politicians from all over the world as partners for discussion. These specialists will present you logistic and supply chain challenges, business needs, trends and solutions from different perspectives.

The concept of alternating the ECITL conference with its Scientific Day is now well established and we are delighted to have a strong cooperation with the "International Journal of Advanced Logistics". Since two years, the International Journal of Advanced Logistics produces a special edition about the ECITL conference including the best papers submitted.





This year we received 24 papers from all around the world (South Korea, Russia, Europe, etc.). All submitted papers were peer reviewed by two experts from the ECITL Scientific Board. For this year's Scientific Day, eight researchers have been invited.

One success factor of past ECITL conferences has been the interactive discussion from presenters and the audience. Therefore, we would like to encourage you for pro-active conference participation. Please feel free to ask questions and confront the presenters with your perspectives and views.

At this place, we would also like to take the opportunity to express our sincere thanks to all the sponsors, key note presenters, peer reviewers, session moderators, presenters and guest speakers for their valued contributions. We would also like to express our gratitude to the events team at ERTICO and CO-Gistics project for their valuable support and help in organizing this event.

Jens Schumacher Vorarlberg University of Applied Sciences

Florian Maurer Vorarlberg University of Applied Sciences



# **FOREWORD**

# WELCOME

**BY ERTICO** 

# **DEAR FRIENDS OF ECITL,**

It is a great pleasure for me as CO-GISTICS coordinator to welcome you at the 8th European Conference on ICT for Transport Logistics (ECITL) on behalf of the 34 partner companies, public authorities, fleet operators, trucks, freight forwarders, terminal operators and logistics providers that contributed to the work of CO-GISTICS in the past two years. The results of this work are presented to you here in Bordeaux in the three elements of the event conference, exhibition and demonstration.

In cooperation with Fachhochschule Vorarlberg, ERTICO - ITS Europe and CO-GISTICS Consortium, and thanks to the support of the European Commission, we have put together a programme with a focus on intelligent logistics solutions such as ITS, electronic freight, intelligent cargo, etc. which are the main catalysts for innovative Transport Logistics and Supply Chain Management.



The 8th ECITL will highlight the emerging trends in the field of the deployment of (co-operative) Intelligent Transport System for Logistics. CO-GISTICS is the first European project fully dedicated to the deployment of cooperative intelligent transport systems (C-ITS) applied to logistics I am very happy to be here in Bordeaux, one of the CO-GISTICS pilot site which is an important logistics hub in Europe with the city of Bordeaux been one of the early adopters of cooperative ITS thanks to CO-GISTICS and also another EU co-funded project, Compass4D.

A special thank you to the local organizers, André Perpey from Geoloc systems and Klaus Grabert from T-systems that ensured the ECITL event and CO-GISTICS demonstration is a success.

On behalf of the consortium, I would like to invite you to experience the CO-GISTICS demonstration which constitute the cutting applications in Cooperative ITS Mobility, and will give us all a flavour of the future of logistics in Europe.



Lina Konstantinopoulou,

CO-GISTICS Coordinator ERTICO - ITS Europe

# VORARLBERG UNIVERSITY OF APPLIED SCIENCES (FHV)

The Vorarlberg University of Applied Sciences (FHV) is a public post-secondary university and is located in Dornbirn / Austria. The FHV was founded in 1989 and is owened by the State of Vorarlberg.

The University has a total of 12 bachelor and master degree programs in the field of business, engineering and technology, design and the social sciences. Six of these degree programs are at the bachelor's level and six at the master's level. The high levels of didactic skills of the lecturers guarantee a universal quality of instruction throughout the campus. These quality standards are supported by state-of-the-art laboratories, in which students and staff work on current research topics. The immediate connection between research and studies means that students come into contact with current research questions early on. Also, the FHV maintains strong relationships and cooperates with more than 100 universities worldwide.

The FHV conveys knowledge and skills at university level in teaching, research and training to ensure the regional living space and make an important contribution to economic and social development in Vorarlberg. The university connects local business strengths through the FHV-network of international partners in science, business, economy and politics.



Prof. (FH) Dr-Ing. Jens Schumacher e-mail: jens.schumacher@fhv.at tel: +43 (0) 5572 792 – 7118

Florian Maurer, MA e-mail: florian.maurer@fhv.at tel: +43 (0) 5572 792 7128

# **ERTICO – ITS EUROPE**



ERTICO – ITS Europe is a public/private partnership of 115 companies and organisations advocating and actively working on the deployment of Intelligent Transport Systems and Services (ITS) through 6 Programmes and a wide range of activities (events, projects, interest groups).

The ERTICO work programme focuses on initiatives to improve road safety, security and network efficiency whilst taking into account measures to reduce environmental impact. Currently the ERTICO partnership is working on 5 programmes:

- Connected & Automated Driving
- · (Urban) Mobility as a Service
- · ITS for freight and logistics
- eMobility
- Emergency Call

Each program has identified activities according to short, mid and long term goals. In addition, an emphasis is given to 6 different enablers as the ERTICO Partnership acknowledges that the technology development does not lead to implementation alone. Also interoperability, policy, organisational, financing and the international aspect needs to be taken into account.



www.ertico.com

# **PARTICIPATING PROJECTS**

We would like to take the opportunity to express our sincere thanks to all sponsors, which are:

# LOGICON

Lean Secure and Reliable Logistics Connectivity for SME's: an European research project aimed at enabling logistics SMEs to take part in international trade and commerce flows.

Project ambition is to develop simple and pragmatic targeted solutions for data exchange in trade and logistics that improve communication through digitisation of documents exchange. Logicon aims to enable SMEs collaboration with advanced platforms by providing them with solutions (apps, communication platforms, market places), removing technological barriers and establishing partnerships with existing logistic platforms.

The project activities are carried out in four national living labs, each one with specific objectives, dealing with three main challenges: enabling connectivity for SMEs acting in logistics market, engaging communities, either cargo communities around port and inland terminals or business networks and preparing for cooperation in a global freight ecosystem.

The Polish Living Lab implemented an innovative communication platform for intermodal transport collaboration. It enables information sharing for the hinterland planning processes by all parties involved – Logistics Operators, Rail Carriers & Container Terminal. The functionality includes among others exchange of bookings for intermodal transport, allocation of bookings to rail wagons, exchange of loading and unloading plans and status, monitoring of execution.

The Dutch LL created a light-weight, low-cost and flexible infrastructure for sharing data including dedicated apps and services. These apps and services enable e.g. lock planning supporting both barge operators and Rijkswaterstaat and an advanced connection to existing systems where real-time information of terminal services becomes available.

The Spanish Living Lab enabled small transport service providers automatic data exchange with large forwarders. LogiCon developed apps for web and smart devices for truck drivers to support service information exchange, e.g. tracking of truck departure and arrival, creating and sending of transport orders and invoices.

The Italian Living Lab LogiCon delivered a web-based transport market place where SMEs can offer their transport services to potential customers engaging new business opportunities.

For more information on LogiCon project: http://www.logicon-project.eu







# BESTFACT



The objective of BESTFACT is to develop, disseminate and ebrochurenhance the utilisation of best practices and innovations in freight transport that contribute to meeting European transport policy objectives with regard to competitiveness and environmental impact.

BESTFACT builds upon the work of the projects BESTUFS, PROMIT and BESTLOG and integrates four interrelated areas of the key freight logistics challenges the European Union is confronted with. The resulting three main working areas (clusters) are:

- Urban Freight
- Green Logistics & Co-modality
- eFreight

To get in contact with us, please make use of our contact form or send us an e-mail to info@bestfact.net

The BESTFACT consortium includes 18 partners made up of European research institutes, universities, international associations and industry partners. The projects 4 years development will lead to the production of a public-oriented knowledge base, conferences and workshops, to promote the best practices that contribute to European transport policy objectives.

BESTFACT receives funding from the EC's 7th Framework Programme.



# **PARTICIPATING PROJECTS**

# **CO-GISTICS**

CO-GISTICS is the first European project fully dedicated to the deployment of cooperative intelligent transport systems (C-ITS) applied to logistics.

CO-GISTICS services will be deployed in 7 logistics hubs, Arad (Romania), Bordeaux (France), Bilbao (Spain), Frankfurt (Germany), Thessaloniki (Greece), Trieste (Italy) and Vigo (Spain).

With 33 partners including public authorities, fleet operators, trucks, freight forwarders, terminal operators and logistics providers, the CO-GISTICS consortium will install the services on at least 325 vehicles (trucks and vans) and will run for 3 years (until January 2016).



Contacts:

Lina Konstantinopoulou I.konstantinopoulou@mail.ertico.com

Andrea Toth a.toth@mail.ertico.com

# iCARGO

"Intelligent Cargo in Efficient and Sustainable Global Logistics Operations" (short: iCargo) is a four year collaborative project funded under the European 7th framework program between twenty nine organizations with expertise in logistics and ICT, including commercial operators, trade associations, research organizations and public authorities. The iCargo project aims at supporting the evolution of the logistic industry towards a mature business ecosystem, based on cooperation between specialized actors to offer competitive and efficient door-to-door logistics solutions.

The project will build an open affordable ICT infrastructure that allow real world objects, existing systems and new applications to efficiently cooperate, enabling mores cost effective and low CO2 logistics through improved synchronization and load factors across all transport modes. By targeting improved interoperability between different organizations' systems and taking cargo centric view of logistics processes the project aims at advancing and extending the use of ICT to support new logistics services that:

- Synchronize vehicle movements and logistics operations across various modes and actors to lower CO2 emissions
- Adapt to changing conditions through dynamic planning methods involving intelligent cargo, vehicle and infrastructure systems
- Combine services, resources and information from different stakeholders, taking part in an open freight management ecosystem.

Central to this purpose is the Common Framework, the core reference model allowing ecosystem member to interact, by mediating between the different standards and systems in use. iCargo follows the vision:

"By 2020, efficient, low-carbon end-to-end transport and logistics services will be planned, executed and completed cooperatively in a global freight business ecosystem, based on fully interoperable cargo, vehicle, infrastructure and freight management systems, supporting optimal resources usage and real-time alignment of intermodal plans with ongoing operations".

# **PARTICIPATING PROJECTS**

iCargo focuses on the following business-level innovations:

- Collaborative planning, mainly supporting pooling and sharing resources across the logistic chain. The ecosystem will support the user in deciding the services to be used to compose the final logistic chain.
- Logistic chain composition based on services, providing automatic support in composing and orchestrating the different available transport and logistic services.
- Re-planning of logistic chains by (or on behalf of) the client, in case of goals changes or events happen during the execution time.
- Optimization of the use of resources of the logistic chain, allowing the Logistic Service Providers to be more situational aware and so to optimize the use of transport resources.
- Monitoring the environmental footprint, providing smart tools and shared methodologies for environmental data gathering and reporting.

Further information are available from the project website http://www.i-cargo.eu/ or from the iCargo representatives.



Contacts:

Administrative Germán Herrero e-mail: german.herrero@atos.net

Project Leader Servet Balcioglu e-mail: servet.balcioglu@atos.net

Dissemination Jens Schumacher e-mail: jens.schumacher@fhv.at

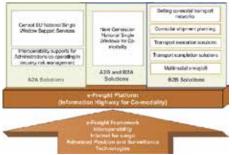
Florian Maurer e-mail: florian.maurer@fhv.at

# e-Freight

# Capabilities for Co-modal transport Paperless Freight Transport and Logistics in a co-modal context.

e-Freight is a research and development project co-funded by the European Commission under the 7th Framework Programme. The project has 31 partners from freight transport related industries and research. 14 Member States and Norway are represented. It started January 1st 2010 and was extended to finish at the end of 2013. In the White Paper for Transport published in March 2011 by DG MOVE, the e-Freight policy initiative is key action 7, advocating 'creation of the appropriate framework to allow tracking goods real time, ensure intermodal liability and promote clean freight transport'. The e-Freight policy initiative will take into account outcomes of the projects presented at the ECITL, and in particular the e-Freight R&D project. Indeed, the e-Freight R&D project outputs are in line with the White Paper 2011 aims:

- 1. A standard framework (e-Freight Framework) for freight information exchange covering all transport modes and all stakeholders.
- 2. A multimodal e-waybill (MWB) for all carriage of goods, irrespective of mode.
- 3. Single Windows, i.e. national one-stop administrative shops for businesses to report to authorities in all modes based on standardized data model in compliance with EU and international regulations called the Common Reporting Schema (CRS).



The project implements the vision of paperless planning, execution and completion of transport and logistics operations. It also provides an efficient and secure mechanism for seamless connectivity between all modes (Access Points). All these are key determinants in achieving co-modality and in providing a competitive European freight transport system whilst promoting environmental sustainability.

The project has developed an e-Freight plat-

form that facilitates efficient development of e-Freight Solutions (software applications to deploy the e-Freight Framework) based on a Service-Oriented Architecture (SOA). The e-Freight platform facilitates, additionally, integration with SafeSeaNet (SSN) and e-Customs to support cooperation between administrations in security, safety and environmental risk management.

# **PARTICIPATING PROJECTS**

#### **Project Achievements**

The impact of the project's value proposition for seamless connectivity and interoperability among Logistics Services Providers and Clients, Transport Network Managers and Transport Regulators, has been positively evaluated in four Business Cases and eight different European countries involving all surface transport modes represented by 10 individual consortium partners including large and small businesses and authorities.

The effectiveness of the Next Generation Single Window capabilities were demonstrated by means of deployment of a National Single Window for Latvia.

Recently, the e-Freight project created links between surface and air transport through a pilot case which has been designed to demonstrate the e-Freight connectivity and interoperability capabilities based on the use of the e-Freight Access Points and the exchange of the multimodal e-waybill information.

The e-Freight project worked closely with all major standardisation organisations in order to ensure that its results contribute to global interoperability: Partners of the e-Freight consortium have been active members of OASIS's ubl, GS1's eCom Logistics Group and ISO and UN/CEFACT relevant Technical Committees. As a result:

- The main e-Freight Framework messages are included in OASIS/UBL 2.1 version being published in 2013.
- GS1's Transport Instruction message was co-branded with the e-Freight project.
- ISO 28005, "Security management systems for the supply chain Electronic port clearance (EPC)" was made compatible to e-Freight's Common Reporting Schema.
- e-Freight's Single Window approach was recognized at the UN/CEFACT Forum in 2013 as a logistics orientated option for a Single Window solution in Europe.



Contact:

Project Coordinator Mary Vayou, BMT Group Ltd. e-mail: efreightpm@bmtproject.net www.efreightproject.eu

# FUTUREMED

FUTUREMED is a project funded under the MED Programme that aims to improve the competitiveness of port systems in the MED area by improving accessibility through technology and procedural innovations, and guaranteeing sustainability of transport. The idea focuses on the realization of interoperable management information systems and on the reduction of externalities.

The project intends to define and implement, by means of concerted territorial actions and pilot projects, sustainable middle- and long-term development strategies. These will be focused on:

- · the removal of the current barriers concerning accessibility of ports (seaside and landside);
- · the integration of ports with the hinterland;
- · the development of logistics activities and intermodal transport connected with ports;
- the development of infomobility aiming at fostering attractiveness and making port system more efficient;
- the specialization of port systems.

Specifically, the project addresses three currently strategic sectors for the MED area: freight, passenger and touristic traffics. The project intends to make freight and passenger flows seamless by means of experimental activities and pilot projects concerning interoperable information systems which integrate port systems with inland logistics infrastructures and with transport and service operators.

Within the project, two specific platform targeted towards professional working in the port-hinterland environment will be developed:

The Visibility Platform: will provide visibility on available intermodal services of the Mediterranean ports towards their hinterland, including a maritime-rail intermodal planner. Port-hinterland integration will be further supported by an Intermodal Dashboard on Mediterranean ports' intermodal connectivity.

The Cruise Platform: will mainly address the needs of national and regional policy makers, providing information on the development of cruise services in the Mediterranean regions including KPIs. It will also incorporate standardized interfaces with relevant platforms following the concept of a cruise ecosystem.

In the framework of the FUTUREMED project, 6 national platform have been set up for the 6 countries represented in FUTUREMED (Italy, France, Greece, Cyprus, Spain, Slovenia), gathering stakeholders interested in the project, which are validating and advising our work. These same stakeholders,

# **PARTICIPATING PROJECTS**

belonging to the Port-Hinterland area, together with the FUTUREMED partners, will create by the end of the project the FUTUREMED Observatory; a EEIG which aims to provide expertise and to be a key driver of change in the improvement of port-hinterland integration.



Contacts:

Project coordinator: **Andrea Campagna** e-mail: coordinator.futurmed@regione.lazio.it Project Communication : **Stefano Dondi** e-mail: sdondi@regione.emilia-romagna.it



Projet cofinancé par le Fonds Européen de Développement Régional (FEDER) Project cofinanced by the European Regional Development Fund (ERDF)

# MODULUSHCA

#### **Modular Logistics Units in Shared Co-modal Networks**

The objective of MODULUSHCA is to achieve the first genuine contribution to the development of interconnected logistics at the European level, in close coordination with North American partners and the international Physical Internet Initiative. The goal of the project is to enable operating with developed iso-modular logistics units of sizes adequate for real modal and co-modal flows of fastmoving consumer goods (FMCG), providing a basis for an interconnected logistics system for 2030.MODULUSHCA integrates five interrelated working fields: (1) developing a vision addressing the user needs for interconnected logistics in the FMCG domain, (2) the development of a set of exchangeable (ISO) modular logistics units providing a building block of smaller units, (3) establishing digital interconnectivity of the units, (4) development of an interconnected logistics operations platform leading to a significant reduction in costs and CO2 emissions that will be (5) demonstrated in two implementation pilots for interconnected solutions. MODULUSHCA will establish a robust and replicable methodology to develop and evaluate solutions for interconnected logistics looking at other elements of the supply chain. Two implementation pilots will be executed integrating key MODULUSHCA developments in significantly different supply chains: (1) a closed pilot evaluating the benefits on a inter-site supply chain addressing handling and transportation of iso-modular logistics units within one company, and (2) an open network pilot will evaluate the impact of iso-modular logistics units in cross docking and transshipment processes. MODULUSHCA efforts will lead to the development of a road map towards a fully interconnected logistics system in 2030. The road map will address the changes and necessary steps to change the logistics system gradually, exploiting progresses in digital, physical and operational interconnectivity, building on current players, assets, and infrastructures.



Contacts:

Marcel Huschebeck e-mail: marcel.huschebeck@ptvgroup.com

Giancarlo Tretola e-mail: giancarlo.tretola@meware.it

# **PARTICIPATING PROJECTS**

# CORE

CORE (CONSISTENTLY OPTIMISED RESILIENT SECURE GLOBAL SUPPLY CHAINS - www.coreproject. eu) is one of the largest European research and demonstration projects so far. Around 70 Partners aim to demonstrate that supply chain security and transparency innovations researched and developed in previous projects such as CASSANDRA and INTEGRITY can work in practice. CORE is strongly supported by a number of EU-Directorates, particularly DG-ENTERPRISE (security policy), DG-TAXUD (customs risk management and security policy), DG-MOVE (e-freight policy) and DG-JRC (scientific support in policy implementation). The daily management of this 4-year project is done by an Executive Committee consisting of the European Shippers' Council (ESC), Netherlands Organisation for Applied Scientific Research (TNO) and BMT Group Ltd.

In cross-border operations with third countries still a lot of improvements can be achieved. For example, unexpected delays at export and import can be the difference between a successful order fulfillment and a disaster. Within CORE, the partners have committed to work together with the objective of maximizing the speed and reliability as well as minimizing the cost of fulfilling global trade transactions, making supply chains more transparent and resilient and bringing security to the highest level. To reach this challenging target, various demonstrations for transporting goods with different trade compliance requirements, with different transport modes and from different geographic scopes are focused in the project.

Within many demonstrators, a challenge is capturing high quality data along the transport chain and enabling data sharing. This would allow businesses along the supply chain to better control their risks and optimize their processes. On the other hand, control agencies like Customs can improve their risk analysis allowing for alternative ways of supervision (and by doing this reduce physical checks). Moreover, CORE contributes to a more sustainable transport throughout the supply chain by supporting co-modality and applying carbon footprint optimizations. With regard to global supply chains especially with involvement of governmental bodies, innovative solutions require collaboration. In CORE, the business community, border control agencies, governments and academia cooperate in finding practical solutions. Opposite to many earlier projects, CORE will focus on demonstration of those practical solutions to be implemented within the current legislative framework. Thus, the results also provide input for drafting future legislation.



# WIDERMOS

The new TEN-T guidelines design the transport infrastructure in two layers, the general network called "comprehensive network" and the core network covering the main transport streams between capitals, large urban nodes, major ports and border crossing points.

Specifically, 9 multimodal core network corridors will be the main tool to develop the EU TEN-T network of the future, with a specific focus on modal integration, interoperability, as well as on a coordinated development and management of infrastructure.

Motorways of the Sea will remain the maritime dimension of the TEN-T network and, by improving Maritime and Ports operations, will allow the development of the underlying skeleton of the new multimodal core network corridors.

As an operative and policy supporting framework, WiderMoS will improve the interface between maritime transport and other modes (mainly rail), developing new port/ship/train interfaces and efficient port-hinterland connections, connecting ports and integrate origins and destinations and bridging gaps in and between different trade corridors. In other words, WiderMoS aims at facilitating the homogeneous connection between Motorways of the Sea and the TEN-T core network corridors throughout several activities:

- a MoS prospective study in 2020 and beyond, setting options and opportunities for the future deployment of MoS and assessing its potential as the maritime dimension of TEN-T as the 11th Corridor in the TEN-T Network
- •
- an in-depth analysis of 4 topics (including customs procedures and logistic processes) linked to the deployment of the future governance model of the core network corridors

A number of 5 pilot projects in the Mediterranean, Atlantic and the Baltic sea focused in the development of an IT Corridor Management Platform acting as a Logistic Single Window for the integration of sea ? based transport services in the logistic chain, considering all types of freight operations, in order to allow a seamless shipment management and communication between all the actors of the supply chain; the pilots aim at overcoming specific bottlenecks with a focus on paperless logistics / e-customs processes and with priority for the integration of inland terminals and rail.



Contact person:

David Cipres e-mail: dcipres@itainnova.es

# **PARTICIPATING PROJECTS**

# **CO-GISTICS DEMONSTRATION**

The CO-GISTICS project invites you to take part in a comprehensive demonstration showing the first results of real deployment of C-ITS infrastructure, vehicles and services in the area of logistics, piloted in 7 European cities.

The demo runs on Tuesday, **6th October 2015**, **16:30** – **18:30** h in Bordeaux, France. ECITL delegates and ITS Congress participants are welcome to pre-book the demo while registering for the event.

CO-GISTICS partners Geoloc Systems (France), T-Systems (Germany) and CTAG (Spain) will bring 4 light vehicles in Bordeaux to run on the city public roads in real conditions. Some of the 5 services deployed in CO-GISTICS such as eco-drive support and CO2 footprint estimation, will be demonstrated.

For any practical information about the demo please come visit the ERTICO stand (B95) where you will receive a short pre-tour debriefing together with your seat assignment. The estimated time for the outdoor tour demo will be approximately 20 minutes. About CO-GISTICS:

CO-GISTICS is the first European project fully dedicated to the deployment of cooperative intelligent transport systems (C-ITS) applied to logistics. CO-GISTICS services are deployed in 7 logistics hubs, Arad (Romania), Bordeaux (France), Bilbao (Spain), Frankfurt (Germany), Thessaloniki (Greece), Trieste (Italy) and Vigo (Spain).

#### **Priority & Speed advice**



**Benefit:** 13% reduction of fuel and CO2 emissions for heavy goods vehicles.

This application shows a truck interacting with cooperative roadside equipment at traffic lights and experience: GLOSA (Green Light Optimal Speed Advice) which will indicate the speed permitting to avoid stopping at a traffic light.

Partner: Geoloc systems.

#### **Cargo transport optimisation**



**Benefit:** Support planning and synchronization between different logistics operations and the information exchanged among them.

This application will virtually show a complete container delivery from the port of Bordeaux to a warehouse optimized with cooperative ITS technologies (delivery control and planning, traceability and geo-fencing, real-time road events, CO2 footprint estimation).

Partners: Geoloc systems, NOVACOM.



#### Welcome to the CO-GISTICS Demo featuring Cooperative ITS (C-ITS) applied to logistics services

The CO-GOTICS proped invites you to take part in a compartentive demonstration showing the first results of real deployment of C ITS infrastructure, vehicles and services in the area of legistics, priored in 7 functional cites.

moundhan articl Production with the Renderman, Neur BCTL delegates and it's Congress participants are writtene to pre took the dense while registering for the cross.

CO-GETEES partners General Research Discourse Discourse Research and COM Second will bring 4 light valledes in Biochaus to wan on the CMy public reads in wai conditions. Second the 5 second-and excipation in CO-GETES such as see while segment and CO2 Surgent estimation, will be demonstrated.

Nor any practical information about the demo please come stat the (1710) mixed brok where you will receive a short pre-train deforating together with your seat assignment. The estimated tense for the outdoor tour demo will be approximately 15 etimates.

CO-GSTICS is the first functional project fully dedicated to the deployment of cooper fire intelligent transport systems IC-VTI applied to legislatic, CO-GSTICS services are deployed in **7 legislates hules**. And funcantal, Biotexan Piranol, Bilan Spann, Fran And Commany, Branslow Mill Device, Scientis Hulpi and Vigo Dovid.



Priority & Speed advice



and QO2 make

GLOVA Garrie 1 ager Ch detail when the will industry ed many input a traffic light

1 - 12% mile

mphon and CO

And married

#### Eco-driving Support



the web the bag at app that conversingles in seal time, does any poor conduct battlack in true och filters ther during made it.

Partners, Paulicea, Cital





-

in intern Which

matte he stat analysis, et as officiency modelle Parties Desilents

.....

of plan ing much little



Benefit: 5 - 12% reduction on fuel consumption and CO2 emissions.

This application will show how with the help of an app that communicates in real-

time, drivers are given constant feedback on how ecofriendly their driving mode is.

Partners: T-systems, CTAG.

#### **CO2** monitoring and footprint



Benefit: Measuring the CO2 output of the vehicles operating in the pilots (fuel consumption based on CANBUS estimated consumption and sensor consumption).

This application will show how after ending the trip, the fuel consumption results are readily available for cost analysis, carbon monitoring, as well as efficiency modelling.

Partner: T-systems.-

# **Eco-driving Support**

# **INDUSTRIAL TOUR**

#### 7 TH OF OCTOBER 16:15 - 18:40 H

# IT TRAFFIC MANAGEMENT CENTRE OF THE CITY OF BORDEAUX – GERTRUDE DEPARTURE FROM THE BORDEAUX EXHIBITION CENTRE

Visit the IT Traffic Management Centre of the City of Bordeaux, the hotspot of mobility supervision. Here, specialists are engaged in providing online and offline vigilances and analysis related to measurement of quality of services, benefits, trends, evaluation of risks and reactions to events.

GERTRUDE Real Time is in charge of the traffic management of the Bordeaux Metropolis Area. Developed with ITS technologies and ITS concepts, this solution takes place inside Real Time Adaptive ITS category. Its main activities consist on supervising and optimising permanently urban traffic management, priority for trams, priority for buses, parking management, and users information on web supports. The IT System applies politic and general strategy to organise mobility in the area reaching the best balance between private traffic flow and smart modes.

Different IT technologies compose the global solution. Virtual servers, automatic security process, incident detection, serial and IP communication on physical and wireless networks, passive and active detection, and traffic management decision's process.

The traffic management centre is the hotspot of mobility supervision. Using last generation informatics tools and software, the centre's specialists provide online and offline vigilances and analysis related to measurement of quality of services, benefits, trends, evaluation of risks and reactions to events.

Since the year 2014, the traffic management centre is also in charge of deploying and evaluating the innovative strategy, designed to increase efficiency of Public Transports and mixing priority for trams on junctions and hierarchical priority for all structuring bus line.

Price: € 33, VAT excl. Fee includes transport from the Bordeaux Exhibition Centre and return.

7 TH OF OCTOBER 15:00 – 17:10 H

#### KEOLIS BORDEAUX MÉTROPOLE, OPERATOR OF THE PUBLIC TRANSPORT NETWORK OF THE CITY OF BORDEAUX – PC TRAM DEPARTURE FROM THE BORDEAUX EXHIBITION CENTRE

Visit two control rooms that manage tram and bus operations with an Intelligent Transportation System at the Bordeaux Bastide Operations and Maintenance Centre, the nerve centre of the city's network. Additionally, experience a tram simulator that reproduces all aspects of real tram driving conditions in a virtual environment.

Since 2003, following 11 successive launches, the implementation of three tram lines has helped to generate a cultural revolution in terms of travel, with the development and aesthetic enhancement of public spaces in the city of Bordeaux.

The transformation was further strengthened by the deployment of a ground-level power supply system (APS). This system led to the suppression of all overhead power supply cables in the centre of Bordeaux.

The Bordeaux Bastide operations and maintenance centre is the nerve centre of the network. It is comprised of technical and operational buildings, storehouse rails, a servicing depot and a siding-hall with a capacity for up to 14 trams. Workshops are dedicated to the maintenance of rolling stock, fixed equipment, electrical and electronic equipment, as well as the tram's 'APS' system.

During the visit you will also discover two control rooms which manage tram and bus operations. Vehicles are located in real-time and the network is controlled remotely with the help of an Intelligent Transportation System (ITS).

Finally, you will have the opportunity to experience a tram simulator, an innovative training tool developed by Keolis (the public transport operator of the Bordeaux Metropolitan area), that reproduces all aspects of real tram driving conditions in a virtual environment.

Price:  $\in$  33, VAT excl. Fee includes transport from the Bordeaux Exhibition Centre and return.

# **INDUSTRIAL TOUR**

#### 7 TH OF OCTOBER 14:50 - 18:10 H

#### RESEARCH CENTRE – EUROVIA DEPARTURE FROM THE BORDEAUX EXHIBITION CENTRE

Inaugurated in 2003, the Eurovia Research Centre is the newest research centre in the road industry of Europe. The team of this 4,000 sqm laboratory will introduce you to astonishing innovations such as depolluting pavement (NOxer®), low noise pavement (Viaphone®), intelligent pavement (SMARTVIA®, NOVATHERM®), and new generations of road equipment among others.

Discovering exceptional test devices used in several fields of research to make the road safer, more durable, and more environmentally friendly. The visit will also be an opportunity to discuss about the roads of the future: the connected and functionalised road.

Based in Merignac, the Eurovia Research Center is located 5 minutes from the airport and 20 minutes from the Bordeaux Congress City.

Price:  $\in$  18, VAT excl. Fee includes transport from the Bordeaux Exhibition Centre and return.

# **SCIENTIFIC DAY**

Dear Scientific Community, Dear Friend.

We are proud, beginning the "European Conference on ICT for Transport Logistics" with the "Scientific Day". In the meantime, the "Scientific Day" is a well-known and established part of the conference. This year is the 4th edition and we are proud that we received 24 papers from all over the world. We are very delighted welcoming young and established researchers from all over Europe and South Korea. The presentations about their research in the field of Transport Logistics and Supply Chain Management in conjunction with ICT is an essential success factor of the ECITL's Scientific Day. You definitely can be curious about interesting presentations and exciting discussions.

Basically all papers were double-blind reviewed and carefully selected for an orgal presentation. Anticipated, all papers had a high quality and our reviewers were really challenged submitting their decisions. Selection criterias were:

Quality of Content	15 %
Originality and level of innovativeness	20 %
Significance for theory or practice	15 %
Quality of presentation	10 %
Appropriateness of research methodology	10 %
Decisive overall for full paper	30 %
Total	100 %

At this place, we would like to take the opportunity to express our sincere thanks to all authors and their contributions. Also, we would like to thank all reviewers of the "International Journal of Advanced Logistics" and the ECITL scientific board, which are:

Jens Schumacher	Vorarlberg University of Applied Sciences
Bernhard Holtkamp	Fraunhofer ISS
Evangelos Mitsakis	Centre for Research and Technology Hellas
Florian Maurer	Vorarlberg University of Applied Sciences
Jannicke Balsrude-Hauge	Bremer Institut für Produktion und Logistik GmbH
Lina Konstantinopoulou	ERTICO – ITS Europe
Thorsten Klaas-Wissing	University of St. Gallen (Switzerland)
Walter Ukovich	University of Trieste
Yoon Seok Chang	Korea Airospace University

All submitted papers have the possibity getting published in the ECITL's co-operating scientific journal "International Journal of Advanced Logistics (IJAL)".

Jens Schumacher, Flrorian Maurer

# **SCIENTIFIC DAY**

# MON 5.10 12:45 - 12:50 H

# **SESSION CHAIR: WALTER UKOVICH**

Walter graduated in Electronic Engineering at the University of Trieste in 1970. He is currently full professor of Operations Research at the Faculty of Engineering of the University of Trieste. The scientific activity of Walter Ukovich has produced since 1970 over one hundred papers in different areas, such as: vector, multi-criteria and multi-objective optimization, management of distribution networks and systems, traffic control, public transportation systems, organization and management of health systems, production planning and control, logistics, innovation and evaluation problems.

# MON 5.10 12:50 - 13:15 H

# Network Northamptonshire: Total Transport Smart City Procrement Theoretical Framework for Sustainable Economic and Social Change

# **Presenter: Liam Fassam**

Authors: L. Fassam, S.Copsey, A. Gough

Culture, governance and procurement remains under researched in current academic literature within a smart city transportation context, with evidence suggesting that procurement is a much needed aspect of bringing about change at local government level, however little evidence exists to support this. This paper showcases the research based upon the 'Network Northamptonshire' total transport project, whereby a review of the county's transportation both public and private is being undertaken in order to gain greater economies of scale across a shared cross border knowledge exchange in the UK.

The research team have through the process of 'Network Northamptonshire' identified and created a theoretical framework 'total transport smart city procurement' that brings together much needed elements of peer reviewed research that purport success in the delivery of the smart city concept, allied to identifying gaps in literature relating to best in class business practice that could in tandem to 'Network Northamptonshire' transportation network deliver a horizontally aligned network of private, public and voluntary bodies allied to a sustainable solution that eradicates challenges associated to culture, governance and procurement to deliver economic and social good. Furthermore, the paper demonstrates that there is a disconnect between the ideals of the smart city and actual development needs, having identified that purported risks such as population movements to areas of low to high technology can actually be leveraged as an asset in sustainable development. Therefore, the authors support the need for further research in the area of smart cities connection to culture, governance and procurement through the framework in order to convey the wider European smart city concept and continue the sharing of best practice to bring about economic and socially connected conurbations.





## MON 5.10 13:15 - 13:40 H

# Evaluation framework in Cooperative Intelligent Transport Systems (C-ITS) for freight transport: the case of the CO-GISTICS speed advice service

# Presenter: Josep Maria Salanova Grau

Authors: Josep Maria Salanova Grau, Andrea Rusich, Evangelos Mitsakis, Walter Ukovich, Maria Pia Fanti, Georgia Aifadopoulou, Massimiliano Nolich, Elisabetta Scala

The transport sector has relevant impacts on economic and social aspects in the European Union. Freight transportation acted an increasing role in this context with road transport that covers 45% of the total billion ton-kilometers in 2012. C-ITS are promising solution to adopt in order to increase the efficiency and reduce the environmental impacts of freight road transportation. In recent years, the European Community has founded several project concerning C-ITS applications in freight transportation. A valuable evaluation of their impacts represents a new challenge. The current paper overviews the impact assessment methodologies applied in recent founded projects with the aim of defining an evaluation framework for the on-going 7th Framework Programme project "COoperative loGISTICS for sustainable mobility of goods (CO-GISTICS)". Moreover, a complete case study of the Priority and Speed Advice service is detailed highlighting both qualitative and quantitative aspects.

MON 5.10 13:40 - 14:05 H

# Intelligent Transportation System for Traffic and Road-infrastructure related Data

# **Presenter: Princess Nyamadzawo**

Authors: Princess Nyamadzawo, Andreas Pell, Oliver Schauer

The aim is to show advantages of the Intelligent Transport Systems (ITS) when different traffic, road infrastructure and users are combined and updated. Through the servicing and maintenance of transport infrastructure, detection and reduction of environmental impacts, the risk minimization and increased traffic safety and the increasing efficiency in road transport. The different information is presented in order to evolve a new, innovative and online-usable Intelligent Transport Systems (ITS)service for transport management and logistics application.

# **SESSION MODERATOR: WALTER UKOVICH**

### MON 5.10 14:05 - 14:30 H

# Semantic technology for enabling logistics innovations – towards Intelligent Cargo in the Physical Internet

# **Presenter: Wout Hofman**

Authors: Wout Hofman, Matthijs Punter, Harrie Bastiaansen, Erik Cornelisse, Simon Dalmolen

Supply visibility is a prerequisite for increased capacity utilization, avoiding unnecessary bottlenecks, supply chain resilience, and compliance. Capacity utilization is both on the level of transport means such as trucks, trains, and barges, as well the optimal usage of the underlying infrastructure. Hubs like terminals, railway stations, locks in inland waterways, and warehouses, are facing a potential large number of transport means and cargo thus increasing turnaround times and delays. Utilizing infrastructure -, capacity -, distribution -, and movement data in planning is commonly denominated as synchromodal planning. Supply chain resilience implies predictive actions on handling exceptions like accidents and (major) incidents. Compliance implies timely access to data to assess potential risks and take corrective measures.

In such complex environment, data sharing has to be configured dynamically. Semantics is a prerequisite to address these issues. It requires support of an infrastructure. To enable, to increase, and to improve the level of cooperation between enterprises, the ability to share data between organizations is crucial. Ontologies can lower the semantic barriers between organizations and enable IT infrastructures to support new business relations faster at lower.

# **SCIENTIFIC DAY**

### MON 5.10 15:00 - 15:05 H

#### **SESSION CHAIR: FLORIAN MAURER**





Florian, born in June 1979, is a research assistant at the Vorarlberg University of Applied Sciences. Florian received his Bachelor degree in Business Administration and his Master degree in Business Process Engineering at the Vorarlberg University of Applied Sciences. Additional, Florian holds a diploma in Politics of the University of Salzburg. Currently, Florian is working for his PhD at the "Universität der Bundeswehr" in Munich. His field of research comprises organizational robustness and resilience in transport logistic networks and supply chains. Before his academic career, Florian was working for several companies in the field of transport logistics, supply chain management and ICT (e. g. Austrian Railways, Transflow (Imtec), Government of Vorarlberg, etc.).

### MON 5.10 15:05 - 15:30 H

# Towards paperless transport for consolidated shipments

# Presenter: Lorena Sáez Carramolino

Authors: Lorena Sáez Carramolino, Miguel Llop Chabrera, Jorge Lara López

The European Union promotes the application of emerging and existing technologies together with efficient communication procedures and collaborative information exchanges among public and private stakeholders to create higher quality multimodal services. The European Union enacted Directive 65/2010<sup>1</sup> to simplify and harmonise the administrative procedures of maritime transport by standardising the electronic transmission of information, thus ensuring the smooth functioning of the European maritime transport space without barriers. In order to achieve this objective, the EU e-Maritime initiative aims to foster the use of information technologies that promote interoperability between all stakeholders in the maritime transport sector.

Despite the progress made in recent years in maritime transport information systems, there are still a number of underlying maritime transport issues affecting efficiency, performance and the quality of services. Administrative procedures are complex and time-consuming and, even nowadays, paperless transactions are far from being the norm.

For consolidated shipments, the manual processing of the information needed to authorise a shipment wastes resources and is a source of errors and this has negative repercussions on safety, security and performance. This paper describes an electronic solution for customs documents authorising the shipment of consolidated container cargoes in an agile, paperless environment, thus saving both time and money.

The paper is structured as follows: Section 1 provides the context for the development of an electronic system for consolidating cargo, examining current issues and identifying bottleneck concerns; Section 2 describes the technological solution that would decrease the paperwork needed to authorise the shipment of consolidated container cargo; Section 3 provides an investment, cost and benefit estimate derived from implementing an electronic system for the different agents involved in the process. Section 4 contains the conclusions

# Enhancing Awareness on the Benefits of Supply Chain Visibility through Serious Gaming

# **Presenter: Tijmen Joppe Muller**

Authors: Tijmen Joppe Muller, Rainer Müller, Katja Zedel, Gerwin Zomer, Marcus Engler

Improving both efficiency and security in international supply chains requires a new approach in data sharing and control measures. Instead of managing supply chain risks individually, supply chain partners need to collaborate in order to exchange cargo information and implement control measures on the level of the entire supply chain. Governmental agencies, having access to this up-to-date and complete information, can implement alternative risk assessment policies, resulting in less disruptive ways of supervising entire trade lanes. However, this paradigm shift requires awareness of these supply chain visibility concepts and increased collaboration between partners in a value chain. In order to disseminate these new concepts and initiate cooperation between stakeholders, a serious game called 'The Chain Game' was designed, implemented and evaluated.

#### **SESSION CHAIR: FLORIAN MAURER**

#### MON 5.10 15:55 - 16:20 H

### Data Quality Assurance in International Supply Chains: An Applica-tion of the Value Cycle Approach to Customs Reporting

#### **Presenter: Yuxin Wang**

Authors: Yuxin Wang, Joris Hulstijn, Yao-Hua Tan

With increasing international trade and growing emphasis on security and efficiency, enhanced information and data sharing between different stake-holders in global supply chains is required. Currently data quality is not only problematic for traders, but also for various government agencies that are in-volved in border control, such as customs authorities, food and health inspection agencies, or border force. We adapt principles from the value cycle modelling in accounting, and show how these principles enabled by ICT can be extended to supply chain management to ensure quality of data reported to customs. We then describe a typical application scenario based on a real case but anonymized, to show that value cycle monitoring can be applied (feasibility), and if applied, what the expected benefits are (usefulness).

MON 5.10 16:20 - 16:45 H

### A conceptual methodology for the prediction of an electric delivery vehicle's battery SOC and SOH

#### Presenter: Y.H. Choi

Authors: Y.H. Choi, Y.S. Chang , Y.H. Choi, N.U.Kim

With increasing concerns regarding the environment, electric vehicles (EVs) have been focused on to a greater extent than conventional internal combustion engine vehicles due to their improvements in energy efficiency and eco-friendly performance. In terms of delivery systems, solutions to environmental issues are deemed as very important. One of the most important issue areas that EV developers are currently paying attention to is the accurate estimation of battery residual lifecycles. Battery life is shortened by various factors such as current, impedance, temperature, voltage and resistance. Many researchers have proposed battery estimation methods by focusing on these factors. These methods try to solve battery life estimations using mathematical models considering internal factors. However, they face limitations in explaining factors affecting battery degradation and estimating battery residual life with real time data collected while driving. Therefore, there is a need for a method that can consider factors that emerge under real driving conditions, including vibration, payload and road type. We believe that batteries are affected when they are exposed to certain levels of vibration and payload. Also, road type can affect the battery, particularly when vehicles stop multiple times. Therefore, this paper proposes a new method of estimating battery conditions for delivery vehicles after reviewing previous research on factors affecting batteries and methods for battery life estimation.

#### **INDUSTRY DAY 1**

#### **DIGITAL TRANSPORT AND LOGISTICS FORUM**

Our first key note session is about "Digital Transport and the new Logistics Forum". It contains presentations about past, ongoing and future approches in the field of Transport Logistics and Supply Chain Management in conjunction with ICT. This session gives deep insights in research actions coordinated by the European Commission and shows the benchmark to Asian and South Korean activities.

The first presentation will highlight past research actions. Joost de Bock, an experienced researcher and commission officer, will summarize the past and highlight the results and impacts for the logistics, supply chain and ICT sector as well as the society. The second presentation is about research actions in Asia and South Korea. In his speech, Professor Yoon Seok Chang will introduce recent government driven R&D research programs and industrial activities of Korea on the advanced logistics area. The third and the fourth presentations are about ongoing and future actions in particular field: Fleur Breuillin will present the "Digital Transport and Logistics Forum" (DTLF). The Forum brings together Member States and stakeholders from transport and logistics communities to identify areas where common action in the EU is needed, to provide recommendations and solutions, and to work on their implementation where appropriate. Florent Frederix will present "Cybersecurity in logistics and transport". In his presentation, he will give insights to the cybersecurity domain and comment on the concrete steps the European Commission is planning to increase the resistance and preparedness of the European logistics and transport industry, as well as other industries.



#### **Moderator: Jens Schumacher**

Jens received his Master Science in computer science in 1992 at the University of Bremen. He started as research Engineer at BIBA in 1992 and was work package leader for the Esprit III PASHA project:" Parallel Software - Hardware Application" EP#7074 (from 1992 to 1994) at BIBA PLT. Then he was work package leader for the ESPRIT III LOCOMOTIVE project: "Logistic Chain Multidimensional Design Toolbox with Environmental Assessment" EP#8615 (from 1994 to 1997). In 1997 he became Manager of the "Centre of Research for Electronic Commerce in logistics" (FOLO) at the University of Bremen. From 1998 onwards he was Head of Department "Logistics and Globally Distributed Production" at BIBA PLT/IKAP and responsible for managing over 50 Projects for BIBA including over 10 Projects funded by the European Commission. From March 2003 until October 2005 he was a research assistant in the production technology faculty at the University of Bremen. From 2005 on he has been appointed to a research professorship in the research centre for product and process engineering at the University of Applied Sciences Vorarlberg where he successfully continues his research activities in several EU-funded projects like EURIDICE, L4Life, Perimeter, etc.



### Have the Framework Programme results conquered Europe and beyond?

Many EU funded projects presented themselves in the 7 preceding editions of the ECITL. The primary purpose of the conferences was and is to make IT serve the efficiency and effectiveness of transport logistics. And here IT plays a kind of double role On the one hand it has led to an unstoppable growth of the demand for transport services; on the other hand the same IT is called upon to manage this growth in a way that the physical transport is not choking our infrastructures and keeps the cities, where most of the world population is, liveable. Transport demand & transport services are all a private issue. But they need to be performed on public infrastructure according to public rulings such safety, congestion Ergo public and private interests need to be aligned also in our EU projects.

Many a project on (multi) journey planners, on architectures, security, green and lean with an EU stamp have been executed. Many of the projects have the same "core group" that "hops" from project to project. In the specific domain of urban logistics this may run into 50%. Once a project has ended, and the project partners have obtained their individual benefits from the project, some project dissemination actions might continue but the project network and collective knowledge usually seems to be lost. Horizon2020 bears here a big responsibility in providing a unique opportunity to a breakthrough and rally the active support of the transport industry and authorities.



#### **Presenter: Joost de Bock**

Joost has been a life-time civil servant. After finishing his studies of political science at the University of Amsterdam he has been working for more than 20 years with the European Commission. All those years were spent on transport research covering a wide range of issues such as railway noise, design of innovative inland waterway vessels or logistics. He has been the "project officer" of many of the projects that have presented themselves at ECITL over the years.

Before joining the Commission he had already a 10 years experience at the ministry of transport in the Netherlands.



### **R&D** research programs and industrial activities of Korea on the advanced logistics area

Logistics companies in Korea suffer from inefficient labor intensive operations, poor visibilities in supply chains, inaccurate information, slower revenue growth, untrained workers and poor working environment. Korean government has put a lot of efforts on the development of advanced ICT technologies to provide a better business environment for industry. Especially, in preparation for the future logistics service, Korea government have been supporting various R&D program for applying smart logistics technology, that is convergence technology involving IoT, robotics, material handling, artificial intelligence, big data and railway technology, to industrial logistics area as well as national logistics area. In this presentation, Yoon will introduce technology trend for logistics industry in Korea including national R&D programs in line with global technology trend and market situations.





#### **Presenter: Yoon Seok Chang**

Yoon is a professor of School of Air Transport & Logistics and a director of Ubiquitous Technology Application Research Center, at Korea Aerospace University. He is also a director of Convergence IT Research Center (ICT-Unmanned Aerial Vehicle and Logistics Convergence Research Center) designated by Ministry of Science, ICT and Future Planning (MSIP, Republic of Korea). He was served as dean of information system and service at Korea Aerospace University and was a visiting scholar at the department of computer science, Caltech, USA. Prior to joining Korea Aerospace University, he was a visiting professor of KAIST, a senior research associate of Cambridge University, a senior application engineer of i2 and a visiting professor of Arizona State University. He finished his PhD from Imperial College London. UK, 1997 majoring manufacturing system at the department of Mechanical Engineering. He was the editor of the Evolution of Supply Chain Management, published (Kluwer Academic Publisher) and is currently serving as an editorial board of members of Human Factors and Ergonomics in Manufacturing and Service Industries (Wiley, USA) and International Journal of Advanced Logistics (Taylor & Francis). His research interests are ICT applications in logistics area and smart machine design.

#### **Digital Transport – New Forum on Digital Transport**

European Commission President Juncker identified 'Jobs, Growth and Investment' and 'A Connected Digital Single Market' as the first two priorities for EU policy. The goal is to foster growth, competiveness, jobs and the internal market, in particular through making better use of the opportunities offered by digital technologies. Specifically in the transport sector, such tools could improve the use of existing resources and the daily life of citizens. Further to a "simple" translation of paper documents into their electronic form, digitalisation of transport is also an opportunity for stakeholders to improve current business processes.

That entails for instance the possibility of reusing data submitted by a stakeholder along the whole logistics chain instead of repeatedly submitting it when changing transport mean or reporting to a different authority.

Thanks to digitalisation, stakeholders would also have more easily and more quickly access to a wide range of data on the logistics chain and would be able to use it to improve efficiency of their processes. Shippers would benefit from more information on available transport services. Transport operators would be able to optimise transport operations in real-time or to create new value added services, making the entire logistics system more efficient. And public authorities could benefit from more accurate and reliable information on transport volumes and infrastructure use, thereby contributing to better efficiency and operational safety of networks.

In this context, the European Commission launched on 1 and 2 July the Digital Transport and Logistics Forum (DTLF). The Forum brings together Member States and stakeholders from transport and logistics communities to identify areas where common action in the EU is needed, to provide recommendations and solutions, and to work on their implementation where appropriate.



#### **Presenter: Fleur Breuillin**

Fleur is a policy officer at the European Commission. At the General-Directorate for Transports, she develops the e-Freight policy initiative, building on the results of related R&D projects. Fleur holds a Master Degree in Civil Engineering with a specialisation in Transports, as well as a degree in business management. Previously, Fleur worked at the French Transport Ministry. She was responsible for the road safety group of Predit (the national transport research programme), and then worked on the French ecotax for trucks. In the past, she also developed traffic management models for the transport research laboratory of the University of Florida.

#### **Cybersecurity in logistics and transport**

Logistics and transport industries embrace at a fast pace Information and telecommunication technologies. Much of today's progress in the domain can be attributed to the opportunities created by the Internet and new wireless technologies. But when the Internet and wireless technologies open access to a world of information they also open up the logistical chain and chosen means of transport to hackers and cyber-criminals. Sophisticated cyber-attacks can have devastating effects, not only lost data but also compromised transports and safety incidents can be a direct result.

Logistics and transport is one of the critical sectors that are sensitive for cyber-attacks and therefore more priority for these issues should be part of every important logistics project.

The "Cybersecurity in logistics and transport" presentation will walk through the cybersecurity domain and comment on the concrete steps the European Commission is planning to increase the resistance and preparedness of the European logistics and transport industry, as well as other industries.



#### **Presenter: Florent Frederix**

Florent is currently serving the Trust and Security unit of the Directorate-General for Communications Networks, Content and Technology as a principal administrator. In this capacity he is responsible for a portfolio of research and innovation projects in the domain of cyber security and involved in related policy development such as the Network Information Security directive.

Before joining the cyber security team, he was Head of the RFID Sector from 2006 to 2012 at the European Commission. This sector was responsible for the RFID policy and the emerging Internet of Things.

Since January 2012 he is also Editor-in-Chief of the International Journal of Advanced Logistics.

In his 20+ year career before joining the EU Commission he held positions in industry. For over 10 years he was Research Programmes Manager at Alcatel and in that role he contributed as initiator of some of the more important projects, to Alcatel's success in ADSL (broadband over telephone). Prior to joining Alcatel in 1991, Florent was also co-ordinator of the team that developed the AESTHEDES computer aided design system for pre-press applications.



#### **INDUSTRY DAY 1**

#### PARALLEL A

### DEPLOYING COOPERATIVE ITS SOLUTIONS FOR EFFICIENT AND SUSTAINABLE LOGISTICS

The integration of currently existing freight and transport systems and services, with innovative solutions such as cooperative ITS services and intelligent cargo, will lead to increased energy efficiency and more sustainable mobility of goods. The presentation will focus on the CO-GISTICS pilot project and how it can help making operation of goods, trucks, roads, harbours, airports and rail terminals more sustainable, i.e. reduce CO2 emissions and improve cost-efficiency.



#### Moderator: Lina Konstantinopoulou

Lina is a Head of Department (PRINCE 2 Project Management Certified) of Logisticsd and Traffic Management, at ERTICO from November 2008, As Head of Sector, she leads a team of 5 project managers and assistants developing and coordinating) innovation and deployment initiatives. As part of the management team at ERTICO, she participates in developing the strategy of the ERTICO programmes. Responsible for managing and supervising European Commission co-funded projects in the field of both passenger and freight transport. In particular she is coordinating a portfolio of programmes and activities including ITS for Freight Transport and Logistics programme and Emergency Call and I am also leading the ERTICO Task Force on ITS for Freight Transport and Logistics which develops the roadmap and work plan on ITS for freight transport for the ERTICO partnership. In terms of activities she is leading and contributing to several EC funded projects in the domain of Cooperative ITS and also Logistics (e.g. CO-GISTICS, CityLog, CVIS, iCar Support, iMobility Challenge, PROS and NOVELOG) and also Innovation and deployment platforms such as TM2.0 and TISA. She holds a Master's Degree in International Trade and European Integration with focus on freight transport and Bachelors in European Economics from the University of Staffordshire. In terms of policy, advocacy and stakeholder mobilization, she participates in the newly created Cooperative ITS Platform (C-ITS Platform) "Working 8 on User acceptance", to provide policy recommendations for the development of a roadmap and a deployment strategy for C-ITS in Europe in the field of Transport and Logistics. She is a member of the Digital Transport and Logistics Forum (DG MOVE) in order to provide advice and technical expertise to the Commission on the development of standards, legislation, policies, projects and programmes in the field of Digital Transport and Logistics; she is acting as steering group member of the ALICE European Technology Platform and active member of the WG3 Information Systems for Interconnected Logistics to provide advice and technical expertise to the Commission on future roadmaps and work programs such as Horizon 2020.



### Implementation of Cooperative Intelligent Transport Systems for for freight transport in Bilbao City

This presentation will focus on implementation of ITS solutions and sustainable logistic practices in order to improve the urban freight distribution in Bilbao city.

### **PARALLEL A**



#### **Presenter: Pablo Isusi**

Pablo holds a degree in Computer Engineering by the University of Deusto and a Master degree in Robotics and Automation by the University of the Basque Country. He has been working within the traffic management department of Bilbao Council since 2003 participating in the implementation of the City ITS Plans as well as the Open Data Platform for Urban Mobility.





# **Evaluation framework for the assessment of Cooperative Intelligent Transport Systems for freight transport applied to the speed advice**

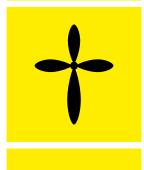
Transportation is one of the most significant key enablers of the European economy accounting for a significant part of the energy consumption, employments and economic activity. Road transportation is the maximum exponent of the transport sector, especially of the freight transport sector. The framework for the evaluation of Various attempts for developing and deploying cooperative freight transport technologies services based on cooperative Intelligent Transport Systems are is presented in this paper, focusing on the CO-GISTICS project and the provision of speed advice to truck drivers based on the Energy Efficient Intersection Service. The speed advice algorithm is applied to the simulation environment of the city of Thessaloniki, obtaining fuel consumption and CO2 emissions reduction of up to 4%.

#### **PARALLEL A**



#### **Presenter: Josep Maria Salanova**

Josep Maria was born in Barcelona in 1983 and graduated from the Polytechnic School of the University of Catalonia (U.P.C.), Department of Civil Engineer in 2007. In 2008-2009 he acquired the MSc on Design, Organization and Management of Transportation Systems of the Aristotle's University of Thessaloniki. In 2010-2013 he conducted his PhD research in the Polytechnic School of the University of Catalonia (U.P.C.) with dissertation title "modelling of taxicab fleets in urban environment". The year 2007 he worked for the CENIT (Center for Innovation in Transport) in Barcelona. He works in the Hellenic Institute of Transport since 2008. His scientific interests concern research and developments in transport and mostly in algorithm and model development, mobility, intermodal transport and logistics. He speaks fluently Catalan and Spanish and very well Greek and English.



### **INDUSTRY DAY 1**

#### Deployment opportunities and barriers for C-ITS in logistics, IRU, International Road Transport Union (taxis and truck operators all over the world)

The presentation is focusing on analysing deployment opportunities and barriers for C-ITS in logistics.

#### **PARALLEL A**



#### **Presenter: Zeljko Jeftic**

Zeljko is head of IRU Projects. Zeljko started his career as many of us, as engineer. His first job was at Volvo where he was developing new vehicle active systems for increased road safety and energy efficiency. Some of these systems you can buy on new Volvo cars. Following that he spent 6 years at ERTICO – ITS Europe where he held position of Senior Project Manager. For many of us he is better known as Mr. FREILOT.

Since 2013 Zeljko heads IRU Projects where he is responsible for company's involvement in all EC activities, including co-funded projects, technology platforms, such as ERTRAC and Advisory Groups, such as EU Urban Logistics Advisory Group.

IRU Projects itself is representing global interests of bus, coach, taxi and truck fleets and works closely with the International Road Transport Union and its 170 members in 75 countries.



#### **INDUSTRY DAY 1**

#### PARALLEL B

## INTELLIGENT LOGISTICS SOLUTIONS FOR URBAN FREIGHT AND SMART CITY LOGISTICS (1)

The European commission highlights, 78% of European citizens live in cities, and 85% of the European Union's GDP is generated in cities: "Cities are central to delivering on key challenges for Europe's society and economy: jobs, growth and investment, innovation, energy- efficiency, low-carbon development and CO - reduction - to name a few".

The challenges for smart cities are manifold. For example, markets are often fragmented, missing out on their full economic potential. Many innovative solutions require new business models and financing solutions for decreasing risk. Since demand for better infrastructures and services is high and still increasing but public budget is under pressure, knowledge needs to be shared effectively and capacities developed. In contrast, the opportunities are promising: Linking and upgrading infrastructures, technologies and services in key urban sectors (transport, buildings, energy, ICT) in a smart way will improve quality of life, competitiveness and sustainability of our cities. This is a strong growth market, estimated globally to be worth []1.3 trillion in 2020 - a great export market for European business.

The focus of this session is on applied innovation, better planning, a more participatory approach, higher energy efficiency, better transport solutions, intelligent use of Information and Communication Technologies (ICT) to maintain logistics solutions for urban freight and smart cities.



#### **Moderator: Jens Schumacher**

Jens (Dr-Ing.) received his Master Science in computer science in 1992 at the University of Bremen. He started as research Engineer at BIBA in 1992 and was work package leader for the Esprit III PASHA project:" Parallel Software - Hardware Application" EP#7074 (from 1992 to 1994) at BIBA PLT. Then he was work package leader for the ESPRIT III LOCOMOTIVE project: "Logistic Chain Multidimensional Design Toolbox with Environmental Assessment" EP#8615 (from 1994 to 1997). In 1997 he became Manager of the "Centre of Research for Electronic Commerce in logistics" (FOLO) at the University of Bremen. From 1998 onwards he was Head of Department "Logistics and Globally Distributed Production" at BIBA PLT/IKAP and responsible for managing over 50 Projects for BIBA including over 10 Projects funded by the European Commission. From March 2003 until October 2005 he was a research assistant in the production technology faculty at the University of Bremen. From 2005 on he has been appointed to a research professorship in the research centre for product and process engineering at the University of Applied Sciences Vorarlberg where he successfully continues his research activities in several EU-funded projects like EURIDICE, L4Life, Perimeter, etc.



#### **Cooperative Business Models for Freights in the Cities**

The objective of NOVELOG is to enable knowledge and understanding of freight distribution and service trips by providing guidance for implementing effective and sustainable policies and measures. NOVELOG will innovate by progressing beyond the state-of-art in urban freight and city logistics within a triple helix of (1) evaluation framework development, data collection, and empirical analyses, (2) specific demonstrators and case studies and (3) guidelines for Europe-wide take-up of the best policies and solutions.

#### **PARALLEL B**



#### **Presenter: Georgia Aifandopoulou**

Georgia is a senior researcher at the Centre of Research and Technology Hellas (CERTH) in the Hellenic Institute of Transport (HIT). Her professional and research expertise covers the fields of: Freight transport & Logistics, Traffic & Mobility Management, Transport Systems Optimization and ICT applications in Maritime and Multimodal Transport. She holds a civil engineer diploma, Master degrees in Operations Research and in Transport Management and a PhD in Freight Transport Optimization. She is Head of Sector at HIT, undertaking implementation projects and supervising research projects in the Domain of Intelligent Transport Infrastructure and Demand Management. She has a more than 25 years involvement in European research projects, related to new technology applications in transport & logistics management and control, being responsible for systems specifications, pilot projects implementations, evaluation & results exploitation. She acted as project manager for various Greek and International Research and Development Projects. She is currently Managing Director of the Thessaloniki Technology Park SA, an organization aimed at innovation taken up by industrial stakeholders for regional economic development.



#### **INDUSTRY DAY 1**

#### iCargo – catalyst for intelligent cargo

The European Union Research-Project iCargo aims to promote and further the use of information technologies and sciences in the production of logistics services by developing a platform that will enable:

- To synchronize vehicle movements and logistics operations across various modes and actors to lower CO2 emissions,
- To be adaptable to changing conditions through dynamic planning methods involving smart loading vehicles and infrastructure systems and
- To combine services, resources and information from different stakeholders, taking part in an open freight management ecosystem.

iCargo designs and implements a decentralized ICT infrastructure that allows real world objects, new planning services including CO2 calculation capabilities and existing systems to co-exist and efficiently co-operate at an affordable cost for logistics stakeholders.

iCargo infrastructure will include Intelligent Cargo items to facilitate automated reactive decisionmaking and to integrate information obtained from on-going execution (all modes) into planning processes to optimize environmental performances, including real-time information about traffic and transport infrastructure conditions. iCargo involves representatives of the main stakeholders in three main areas of activity:

- research and technological development, involving leading ICT companies and institutes to integrate in iCargo the necessary technology
- components, including results from key related EU projects, and to develop innovative approaches and business models for co-modal transport environmental optimization and dynamic planning;
- implementation, demonstration and validation of three extensive pilots in end-to-end multi-actor intermodal chains, involving
- · users from logistics companies, shippers and public authorities;
- extensive dissemination of research results, demonstration and pilot cases validation activities, aimed at transferring iCargo results to the international transport logistics community and supporting take-up and extensive exploitation immediately after the project.

#### **PARALLEL B**



#### **Presenter: Germán Herrero Carcel**

Germán joined Atos in March 2006, where I now serve as Head of the Transport & Trade Logistics sector, responsible for all technology research and development activities for supply chain and logistics projects in Atos (ARI). Germán is in charge of develop new business opportunities with technology approach in innovation on global supply chain development, urban logistics, Green logistics, Food supply chain optimization and Big data in logistics. During the last years, Germán has been working in several FP7 projects related to logistics and electric vehicle as Cassandra, iCargo, or Co-gistics EU projects and transfer the acquired experience and research results to the market. His career includes research and development in areas like Semantic Web technologies as he was involved on several semantic Web R&D projects, as the FP6 NeOn project.



## NOSCIFeL platform meets CO-GISTICS' European project objectives

CO-GISTICS' European project goal is to include freight sector in a sustainable development perspective, thanks to cooperative intelligent transport systems deployment (C-ITS), applied to logistics. With NOSCIFeL, a multimodal secure interoperable platform, Geoloc Systems meets CO-GISTICS' European project objectives, particularly with the following services:

- SERVE Booking service vehicles
- STEGE Service traceability and Geofence
- SECC02 SErvice CO2 Calculation.

### **PARALLEL B**



#### **Presenter: André Perpey**

André is head of GLS. He is an engineer specialized in project definition, specification and coordination. He is an expert in data standards like DATEXII. He participated in different national and European R&D projects such as Easyway, Compass4D, CO-GISTICS, MobinetIP and Fitman. He is also a European expert and part of the organization team (EPC vice-chair) of the next ITS WC in Bordeaux.



## Towards efficient, sustainable and interconnected city logistics enabled by the Physical Internet / Modulushca

The Modulushca project (Modular Logistics Shipping Units in Shared Co-Modal Networks) is funded by the EU under the FP-7 program and has the aim to develop a set of standard isomodular containers of sizes adequate for real modal and co-modal flows of fast-moving consumer goods (FMCG), which can be "clicked" together and will be used throughout the E2E Supply Chain, providing the basis for an interconnected logistics system. MODULUSHCA is about a new concept for logistics operations. The project is a key building block for the Physical Internet vision, which proposes to use a framework of interconnected logistics especially designed for open resource sharing notably thanks to open standards on load units, real time identification and routing through open facilities. In this framework, potentially all goods are encapsulated in smart, Iso - modular, eco-friendly and standard unit loads at the production line and are handled, stored and transported as best fit in these unit loads through shared facilities and across open networks up to the stores (regular trade) and the homes of the end-consumers (E-commerce).

#### **PARALLEL B**



### Presenter: Máximo Martínez Ávila

Maximo got his bachelor's in Economics at the University of Valencia, Spain. From 2004 to 2012 worked for ITENE a Packaging, Transport and Logistics Technological Institute where he gained experience in the field of Logistics and Supply Chain Research and Innovation. At the beginning of 2012 he joined the P&G Global Supply Network Innovation Center. Today, among other responsibilities, he is leading the Coordination team of Modulushca (www.modulushca.eu), a European innovation funded project aimed to develop a set of Standard Iso-Modular Reusable logistic units, one of the pillars to enable the creation of the "Physical Internet" (www. physicalinternetinitiative.org)

#### **SMARTSET** and City Logistic Solutions in Graz

Transport of goods is the circulatory system of economic development and with the growth of the world economy and global specialization and division of production, the demand for urban freight transport is constantly increasing. Thus, transport of goods generates up to 20% of traffic, 30% of street occupation and 50% of greenhouse-gas emissions. At the same time, low load factor and an unjustified amount of tonne-kilometres represents a vital lack of efficiency in urban freight transport due to insufficient coordination between the involved actors.

The presentation will cover the main measures of the City of Graz aimed at increasing the efficiency and decreasing the environmental footprint of urban logistics. The speaker will share the successful experience of Graz in previously implemented projects within CIVITAS and tell about the continuation of the taken strategy within a current urban logistic project – SMARTSET. Namely, an e-cargo-bike delivery service in the city centre, "Bring mE", has become a very good example of sustainable city logistic measures.

As the City of Graz is not resting on its achievements, the audience will also learn about the future plans of the City to extend and develop the implemented urban logistic solutions.



#### Presenter: Olga Slobodova

Olga holds a degree in International Economic Relations at MGIMO University in Moscow and has recently graduated from INSEEC MSc&MBA Bordeaux with a Master degree in Project Management. For her Master thesis, she made a research on the current and the potential role of project management in the context of Smart City development. Besides, she took a course on Green Economy at Lund University following her professional interest in sustainable development.

Currently, Olga is working in the City of Graz as Assistant EU Project Manager in the Unit of International Cooperation and EU Programmes, where she is closely engaged with such EU project of the City as SMARTSET and NOVELOG on urban logistics, TIDE and CIVINET on transport and mobility measures, RURBANCE on urban-rural connections, etc. In 2011, Olga volunteered for Russian Green Building Council in Moscow and in 2014 worked for a transnational producer of building thermal insulation, Soprema SAS, in Strasbourg. Besides, she also has entrepreneurial experience. In 2012 she accepted an offer to lead a business development project of a Russian company MV&F in Europe, which she has successfully completed in two years, having achieved its objectives. Olga fluently speaks in three languages: Russian, English and French.



#### **INDUSTRY DAY 1**

#### PARALLEL B

### INTELLIGENT LOGISTICS SOLUTIONS FOR URBAN FREIGHT AND SMART CITY LOGISTICS 2

The European commission highlights, 78% of European citizens live in cities, and 85% of the European Union's GDP is generated in cities: "Cities are central to delivering on key challenges for Europe's society and economy: jobs, growth and investment, innovation, energy- efficiency, low-carbon development and CO - reduction - to name a few".

The challenges for smart cities are manifold. For example, markets are often fragmented, missing out on their full economic potential. Many innovative solutions require new business models and financing solutions for decreasing risk. Since demand for better infrastructures and services is high and still increasing but public budget is under pressure, knowledge needs to be shared effectively and capacities developed. In contrast, the opportunities are promising: Linking and upgrading infrastructures, technologies and services in key urban sectors (transport, buildings, energy, ICT) in a smart way will improve quality of life, competitiveness and sustainability of our cities. This is a strong growth market, estimated globally to be worth €1.3 trillion in 2020 - a great export market for European business.

The focus of this session is on applied innovation, better planning, a more participatory approach, higher energy efficiency, better transport solutions, intelligent use of Information and Communication Technologies (ICT) to maintain logistics solutions for urban freight and smart cities



#### Moderator: Máximo Martínez Ávila

Maximo got his bachelor's in Economics at the University of Valencia, Spain. From 2004 to 2012 worked for ITENE a Packaging, Transport and Logistics Technological Institute where he gained experience in the field of Logistics and Supply Chain Research and Innovation. At the beginning of 2012 he joined the P&G Global Supply Network Innovation Center. Today, among other responsibilities, he is leading the Coordination team of Modulushca (www.modulushca.eu), a European innovation funded project aimed to develop a set of Standard Iso-Modular Reusable logistic units, one of the pillars to enable the creation of the "Physical Internet" (www. physicalinternetinitiative.org)



### Improving efficiency in transportation by strengthening the collaboration with SME

Typically, logistics services are delivered by a combination of multiple players working together in dynamic and volatile relationships. While large Logistic Service Providers have technological means to support their business transactions, at some time, operations rely on SMEs with limited IT support, creating a disadvantage when working amongst bigger players as well as increasing the manual support to the operations for all: even a small reduction on this human support would have a major impact. This situation is applicable to other medium to big transport operators in Spain, Europe and globally, as they collaborate continuously with SME operators.

Web and mobile applications are helping SMEs transport operators and freelances in the information exchange and management in the transportation chain, enabling medium and big transport & logistics companies to engage with them (even with very low technology capabilities such as Smartphone) allowing them to access to external fleet of the smaller players but still provide the same added value services to final customers as with their own fleet (visibility, status of operations and deliveries, automated service request and approval, invoicing). It also reduces management costs of big LSPs that deal with several thousands of smaller carriers to deliver the transport services. The pay per use applications enable these SMEs and Freelances to participate in complex supply chains and allow interaction with most types of legacy systems using well know communication and information sharing standards (XML, EDI, GS1, ...). This characteristic provides universal connectivity reducing integration costs with a broad range of systems. The open approach of the application implies a variety of possibilities and opportunities for both SMEs and freelances that can connect with all their customers (bigger players) by using one application and to the bigger players as they can ensure value added services at a reduced set up and operational cost. This LL supports physical internet implementations as the developed applications enable small players enter into the Physical Internet network to provide transportation services (providing open access to their resources) and, enabling transition from current situation to the physical internet.

#### **PARALLEL B**



#### **Presenter: Stefano Persi**

Stefano is Co-founder and Director of ENIDE, a SME leader in Innovation in Logistics and Personal Mobility, based in Barcelona. He currently acts as Vice-Chair of the ALICE WG3 on Information Systems for Interconnected Logistics. Previously Stefano was Project Manager of Transport & Manufacturing Sector in ATOS. He has a Degree in Computer Engineering from the University of Modena (Italy) and he is certificated PMP from the PMI association. His previous experience is in embedded development in the fields of automotive (engine control for diesel injection systems), telecommunication and aerospace. He is experienced in Management, as well in Development and Integration areas in international projects. He participated in several projects for the European Commission. Some of them are: SETRIS, WINN, LOGICON, EUROSKY, CORE, TRACEBACK, CASSANDRA, iCargo.



### Designing New Models for Energy Efficiency in Urban Freight Transport for Smart Cities - The Valencia Case

Considering that the transport sector is responsible for 30% of the CO2 emissions in the EU, reaching to up to 40% in urban areas, the efforts for technological improvements and innovation in transportation have been increasing during the last few decades. It is evident that urban freight distribution requires innovative solutions that are capable of improving the efficiency of transport whilst promoting innovative use of renewable energy, thus reducing energy consumption and associated GHG emissions while adopting and not stifling economic development.

In this context, six Mediterranean cities (Barcelona, Bologna, Piraeus, Rijeka and Valencia) collaborated with the purpose of contributing to the improvement of energy efficiency on urban freight transport as part of the SMILE Project (SMart green Innovative urban Logistics Models for Energy efficient mediterranean cities project), funded by the MED Programme. This presentation will show the live test of a smart city urban logistics solution in the City of Valencia that consisted of combining the use of electric tricycles and Urban Consolidation Centres for the last-mile delivery of parcels and small shipments.

#### **PARALLEL B**





#### **Presenter: Carolina Navarro Correcher**

Carolina holds a degree in Industrial Engineering from the Valencian Polytechnic University specialising in Industrial Management and Organisation. She also specialises in Ports Management and Intermodal Transport by the Comillas University (ICADE). She began her professional career at the Department of Engineering Projects at the University Polytechnic of Valencia (UPV) through a research fellowship, working with Theory and Process Project team in research and scientific documentation. In 2006 she joined Improven as a consultant, developing several projects for the comprehensive reorganisation of companies in Valencia, participating in the operations division. Since 2007 she has worked as a Project Manager in Research, Development and Innovation in Valenciaport Foundation. She has been involved in national, European and international projects on port quality management, maritime-port logistics, intermodal transport, urban freight transport, trade facilitation and ICT. She is a teacher in the Master of International Trade at the University of Valencia and also in other courses and seminars conducted by the Interamerican Bank and the Distance Learning Foundation for the Economic and Technological Development (CEDDET).

#### The Sustainable Urban Logistics Plan (SULP) methodology tested in 9 Small and Mid-sized European Towns: the results IEE ENCLOSE project

The ENCLOSE project, funded by the Intelligent Energy Europe programme, faced the different critical aspects related to urban freight distribuition and city logistics the perspective of Local Authorities/ Municipalities (including 9 European Cities), by "simply" (but not always known) recognizing that the small and medium size cities in Europe are more than 1350 (vs 21 cities with over 1 ml of inhabitants) and they need specific solutions and approaches that have not been addressed by the recent large European projects and EU Commission acts, which are, on the contrary, all focused on big urban realities. For this reason, ENCLOSE project acted on different levels with specific results related to:

- Implementation and operation of pilot Services in the three "forerunner" towns Lucca, Trondheim and 's-Hertogenbosch and Soft measures, with the related impacts evaluation, in the 6 "follower" towns of Burgos, Almada, Dundee, Albalulia, Serres, Balchik;
- Knowledge and experience exchanges among the different ENCLOSE cities with the production of a portfolio collecting different training course materials, specifically addressed to the technicians of Local Authorities and stakeholders;
- Definition of Sustainable Urban Logistics Plans (SULP) methodology and its implementation and evaluation, in the 9 ENCLOSE towns, integrated in the Sustainable Urban Mobility Plan (SUMP).

In this context the presentation outlines the key findings regarding the needs and potential logistics services for SMTs, discussed with respect to the successful experience of the measures adopted by the 9 ENCLOSE towns.

Moreover the approach adopted by ENCLOSE for defining the SULP in each of the 9 European cities is presented, along with the key feedback received by local policy makers, results achieved and limits encountered by the ENCLOSE towns in the implementation and adoption of the SULPs at local level - including technical and financial requirements, limits and policy issues – as discussed in Project's deliverable "SULP Guidelines". In particular the methodology defined and adopted by ENCLOSE is presented, along with the basic elements, as the key tool for supporting city stakeholders in SULP development and in monitoring in the 9 ENCLOSE cities. SULP guidelines also address the other actors involved at different level in the freight process (including private sector, transport operators, shopkeepers associations, etc.), with the aim to allow them to well understand the mainstreams and rules followed by local administrations in planning, choosing and implementing city logistics policies and solutions - including technical and financial requirements, limits and policy issues. Furthermore, the presentation highlights the key feedback received by local policy makers, results achieved and limits encountered by the ENCLOSE towns in the implementation and adoption of the SULPs at local level. In this context, the close mutual relation between the SUMP and the SULP methodology will be introduced and summarised as follows:

- · SULP is a relevant action or part of the SUMP, dedicated to urban logistics processes;
- SULP provides real and planning workingdetails to implement the specific SUMP approach for what Logistics processes regards;
- SULP follows the participation approach and the political level involvement with a bottom up approach starting from the user needs.

#### **PARALLEL B**





#### **Presenter: Giorgio Ambrosino**

Giorgio Ambrosino has an experience of over 30 years in supporting European Public Authorities and Transport Operators in the design of services and in the implementation of Intelligent Transport Systems (ITS), City Logistics services, Public Transport and Urban Mobility systems, Its expertise covers large projects for City Logistics Services (Sustainable Urban Logistics Plan, logistics services and operators networking, B2B and B2C services, regulation framework, etc), Public Transport (Fleet Management Systems, User Information Systems, E-Ticketing, Intermediate and Flexible Services), Urban Mobility (Sustainable Urban Mobility Plan, Bus Rapid Transit Corridors, Transport Infrastructures and Network, Traffic Network Modeling and Assessment), providing assistance to Local Public Authorities also for the definition of operational/organizational impacts required to manage technologies. Moreover, in these sectors, over the last twenty five years, Giorgio has also developed a remarkable experience in the participation and technical coordination of different European projects (among others CerT&Infomobilità, 2014-2015 - "Development and validation of a module for the certification of data required to provide infomobility services" - project funded by European Structure Funds; PERHT, 2012 -2016 - "Parking green services for a better environment in historic towns" funded by the European LIFE + programme on the environment; ENCLOSE, 2012 - 2015 - "ENergy efficiency in City LOgistics Services for small and mid-sized European Historic Towns" funded by Intelligent Energy Europe; EPTA, 2012-2014 – European Model for a Public Transport Agency - funded by the European Interregional Cooperation Programme INTERREG IVC). In these projects he has been technical coordinator of activities, in charge of managing the exchange and transfer of experiences, knowledge and good practices from one area to another and of developing concrete actions plans and monitoring systems.

#### **INDUSTRY DAY 1**

#### Implementing innovative, sustainable urban mobility solutions

Cities in the world have proven successes in implementing sustainable urban mobility measures, which could be taken up by cities elsewhere. The European Union project SOLUTIONS aims to foster knowledge exchange and boost the uptake of innovative sustainable urban mobility solutions between and in cities from Europe, Asia, Latin America and the Mediterranean.

Some of the SOLUTIONS key actions are:

- · Deployment of innovative sustainable transport solutions
- Transfer to innovative transport solutions
- Dialogue among policy makers and practitioners
- · Fostering thematic dialogues and capacity building
- Promoting innovative platforms for knowledge exchange between European cities and cities across the world

#### **PARALLEL B**





#### **Presenter: Susana Val**

Susana Val is Associate Research Professor and Transport Research Group Manager at Zaragoza Logistics Center (ZLC), a research and educational center of excellence that is part of the MIT Global Scale Network. She holds a PhD and MSc degree in Industrial Engineering by the University of Zaragoza (Spain). Furthermore, she also studied the Master of Engineering and Logistics at MIT (Massachusetts Institute of Technology) as a visiting student.

Her current research activities are city logistics and urban distribution; in particular best practices, new policies development, innovations and modeling of urban areas for goods distribution. She is involved in European projects in the field, such as SOLUTIONS and, at local level is quite concerned about the innovative measures for freight distribution in the city of Zaragoza; a proof of this is the agreement between the Municipality and the ZLC to develop projects related to this topic. This fruitful cooperation led to the Diagnosis of the city of Zaragoza in terms of Urban Logistics, the design of pilots for urban freight distribution and the involvement of the city in several H2020 proposals. Also, she has participated in various projects and studies related to multimodal transport and green corridors with a special focus on railway promotion and carbon footprint. Finally, she collaborates in research related to logistic infrastructures and air cargo transport and its relation to the supply chain.

#### **INDUSTRY DAY 1**

#### PARALLEL A

#### **BEST PRACTICE FACTORY FOR FREIGHT TRANSPORT**

Digitalisation of transport and supply chain processes is a major trends in the sector providing the basis for significant improvements both, in efficiency and environmental performance. BESTFACT addresses the collection and evaluation of best practices out three different domains: urban freight, green-logistics & co-modality and eFreight. The session will provide insight into recent best practice cases on digitalisation of the transport chain as well as new concepts of sychromodality and give insight into the comprehensive evaluation approach as carried out within BESTFACT.



#### **Moderator: Marcel Huschebeck**

Marcel received his Diploma in National Economics at the University of Freiburg, Germany. He has gained more than three years' experience in the field transport, logistics and transport policy as officer for the German association Bundesverband Güterkraftverkehr Entsorgung und Logistik (BGL). Since 1999 he is involved in research and consultancy projects in the field of freight transport and transport telematics at PTV Planung Transport Verkehr AG. Today he has the position of a Manager responsible for the Logistics Systems group within the Research & Innovation unit at PTV. As project co-ordinator he has managed several EU research projects: IRIS, IDIOMA, AIMS, BESTUFS, BESTUFS II, PROMIT, BESTFACT, MODULUSHCA.

#### **Re-thinking parcel distribution in the Nordics**

PostNord is the largest Logistic Provider in the Nordic region, which is Europe's largest region with only +26 million inhabitants. Like elsewhere in Europe the rapid evolving eCommerce market has a serious impact in the way PostNord needs to service the market. A fast growing market attracts new providers and operators, which increases competition and brings new solutions and products to the market. Just as important the eCommerce receiver becomes far more important as decision makers in selection of the Logistical provider. Given these facts PostNord has decided to re-think its way to distribute parcels, logistic products and mail in order to reduce cost and increase services.





#### **Presenter: Christian Ostergaard**

Christian has the last +25 years been working in the postal business in Post Danmark (Denmark), Bpost (Belgium) and now PostNord (Nordics). He has been Head of Logistics in the Danish Parcel business and was in charge of reengineering the processes leading to a new sorting structure in Denmark. He was Program Director in charge of reconstructing Bpost's parcels business from 2005 to 2009, reengineering products, prices, processes, organization and logistical set-up and turning a loss making business profitable. The last 5 years he has been working on a corporate level in PostNord with Business Information and Production Alignment and since April 2014 he is Business Demand CIO, Technology & Infrastructure focusing on the IT aspects of PostNords Integrated Production Model. Christian has an MBA from Copenhagen Business School in Strategy and Marketing.

#### **Evaluation of freight logistics innovations in BESTFACT project**

Presentation concentrates on evaluating best practises in BESTFACT (The best practise factory for freight transport) EU-project. The impact evaluation of logistics innovations takes into account strategic targets, topics covered, transferability and novelty of the freight transport best practices. Best practices are considered as existing approaches or solutions providing an answer to a relevant problem or challenge in freight transport. Presentation also discusses a freight specific analysis and evaluation approach which was designed for the evaluation process in the project. Finally, few case examples are presented.



#### **Presenter: Karri Rantasila**

Karri obtained Ph.D. (Econ. & Bus. Admin.) in 2013 from Turku School of Economics with logistics as his major. He also holds M.Sc. (Tech) degree in real estate economics (Aalto University). Since 2010 he has been employed at VTT Technical Research Centre of Finland, where he has been involved in several EU funded and domestic research and development projects, as well as managing a research team. Currently his works as Key Account Manager of transport and logistics customer segment at VTT. His research interests include intelligent transport systems, technologies enabling visibility in supply chains, and global logistics markets. Rantasila has also published articles in journals, book chapters and conference proceedings..



#### The Advantage of Supply Chain Visibility in Real-time

The global trends in manufacturing and logistics leads to more complexity. More players, one time carriers, multimodal transports, different telematics, more and more different sensors lead to a variety of data sources.

A middleware that consolidates all sources with their individual interfaces and protocols is the answer. Data is transformed to information and enriched by additional requirements like geo fences, ETA, the digital tachograph or notifications.

With the logical pairing of shipments to assets customers can get information on their shipments with the use of only one telematics in the asset, ore sometimes even without. This leads to a disruptive solution that enhances companies to get more out of their resources and offer customers a better service.

While having all information consolidated only one interface for each software like ERP, TMS, QM, BI or other is needed.

Michael Kramer shows how a cloud based solution that starts as inventory management software with one message a day for each asset turned to one that sends Real Time status information every minute. And the shipment information can be send directly into the TMS or ERP systems to the customers of the logistics company.





#### **Presenter: Michael Kramer**

Michael is leading the partner and alliance activities in Agheera, a startup company owned by Deutsche Post DHL with 30 employees coming out of the DHL Innovation Center in Troisdorf, Germany. The cloud based middleware of Agheera is mainly sold with additional partner solutions so the Agheera partner eco system is crucial for the companies success. Michael joined Agheera three years ago as the young company was in the beginning of a restructuring and turn around. Coming from a Telematics Service Provider with own Telematics hardware now the company is a leading provider for Supply Chain Visibility in Real-time with a lot of additional services for as well logistics companies and the industry.Before joining Agheera, Michael has worked for over 15 years for IBM and SAP in business management roles. Later he developed new markets and business for American based software companies with solutions in discrete and process industries. The experience he gained while working with a huge number of customers and partners helped Agheera to transform its business. Now Agheera works with nearly 70 TSP and over 20 software and consulting partners.

Michael studied in Hohenheim and Mannheim, both Germany, has a degree in Economics and is a member of the supervisory board of a publisher specialized in ERP solutions.

#### Synchro-modal supply chain eco-net

SYNCHRO-NET will demonstrate how a powerful and innovative SYNCHRO-modal supply chain eco-NET can catalyze the uptake of the slow steaming concept and synchro-modality, guaranteeing costeffective robust solutions that de-stress the supply chain to reduce emissions and costs for logistics operations while simultaneously increasing reliability and service levels for logistics users.

The core of the SYNCHRO-NET solution will be an integrated optimization and simulation econet, incorporating:

- · Real-time synchro-modal logistics optimisation (e- Freight-enabled);
- · Slow steaming ship simulation & control systems;
- · Synchro-modal risk/benefit analysis statistical modelling;
- · Dynamic stakeholder impact assessment solution;
- Synchro-operability communications and governance architecture.

Perhaps the most important output of SYNCHRO-NET will be the demonstration that slow steaming, coupled with synchro-modal logistics optimization delivers amazing benefits to all stakeholders in the supply chain: massive reduction in emissions for shipping and land-based transport due to modal shift to greener modes and optimized planning processes leading to reduced empty kms for trucks and fewer wasted repositioning movements. This will lead to lower costs for all stakeholders – shipping companies and logistics operators will benefit from massive reduction in fuel usage, faster turnaround times in ports & terminals and increased resource utilization/efficiency.

Customers and end users will have greater control of their supply chain, leading to more reliable replenishment activity and therefore reduced safety stocks and expensive warehousing. Authorities and governmental organizations will benefit from a smoother, more controlled flow of goods through busy terminals, and reduction of congestion on major roads, thus maximizing the utilization of current infrastructure and making the resourcing of vital activities such as import/export control, policing and border security less costly. Presenter:



#### **Presenters: Santiago Blasco & Raquel Miguel**

Santiago Blasco is an Economist by the University of Zaragoza and holds an MSc in European Logistics, Transport and Distribution by the University of Westminster. He joined DHL Supply Chain in 2005 and has had diverse managerial roles in the Supply Chain Industry related with project management, operations, corporate strategy, innovation and new products and services development. Currently, he is the Head of Value Added Services and Innovation in DHL Supply Chain Iberia.

Raquel Miguel is Management Engineer by the University of Valladolid and she has a Degree in Chemistry and has a Master in Supply Chain Management of Escuela de Organización Industrial. She is Chief Innovation Project Manager in DHL Supply Chain



#### **INDUSTRY DAY 2**

#### **KEY NOTE SESSION 2**

## INTELLIGENT SOLUTIONS FOR THE FUTURE OF INTERMODAL FREIGHT TRANSPORT

The 21st century sees a renewed focus on intermodal freight transportation driven by the changing requirements of global supply chains. Each of the transportation modes (ocean, rail, and road) has gone through technological evolution and has functioned separately under a modally based regulatory structure for most of the 20th century. The knowledge of current and future intermodal operational options and alternatives are going to be presented, as well as the potential for improved Intelligent Solutions and the challenges associated with their application; and deployment opportunities and barriers, including policy and regulatory issues.

We are glad welcoming Sascha Westermann, Benjamin Demogé, Zeljko Jeftic and Michel le Van Kiem as presenters. All are established managers in particular field of freight transportation and will highlight the need, implementation and application of "Intelligent Solutions for the future of Intermodal Freight Transport". We are encouraging you to get in touch with Sascha, Benjamin, Zeljko and Michel and discuss proactively their perspectice and this future.

The session will be moderated by Lina Konstantinopoulou. Lina is a Head of Department of Logistics and Traffic Management within ERTICO-ITS Europe. Responsible for managing and supervising European Commission co-funded projects in the field of both passenger and freight transport. In particular she is coordinating a portfolio of programs and activities including ITS for Freight Transport and Logistics programme. In terms of activities she is leading and contributing to several EC funded projects in the domain of Cooperative ITS and also Logistics (e.g. CO-GISTICS, CityLog, CVIS, iCar Support, iMobility Challenge, PROS and NOVELOG) and also Innovation and deployment platforms such as TM2.0 and TISA.





#### Moderator: Lina Konstantinopoulou

Lina is a Head of Department (PRINCE 2 Project Management Certified) of Logisticsd and Traffic Management, at ERTICO from November 2008. As Head of Sector, she leads a team of 5 project managers and assistants developing and coordinating) innovation and deployment initiatives. As part of the management team at ERTICO, she participates in developing the strategy of the ERTICO programmes. Responsible for managing and supervising European Commission co-funded projects in the field of both passenger and freight transport. In particular she is coordinating a portfolio of programmes and activities including ITS for Freight Transport and Logistics programme and Emergency Call and I am also leading the ERTICO Task Force on ITS for Freight Transport and Logistics which develops the roadmap and work plan on ITS for freight transport for the ERTICO partnership. In terms of activities she is leading and contributing to several EC funded projects in the domain of Cooperative ITS and also Logistics (e.g. CO-GISTICS, CityLog, CVIS, iCar Support, iMobility Challenge, PROS and NOVELOG) and also Innovation and deployment platforms such as TM2.0 and TISA. She holds a Master's Degree in International Trade and European Integration with focus on freight transport and Bachelors in European Economics from the University of Staffordshire. In terms of policy, advocacy and stakeholder mobilization, she participates in the newly created Cooperative ITS Platform (C-ITS Platform) "Working 8 on User acceptance", to provide policy recommendations for the development of a roadmap and a deployment strategy for C-ITS in Europe in the field of Transport and Logistics. She is a member of the Digital Transport and Logistics Forum (DG MOVE) in order to provide advice and technical expertise to the Commission on the development of standards, legislation, policies, projects and programmes in the field of Digital Transport and Logistics; she is acting as steering group member of the ALICE European Technology Platform and active member of the WG3 Information Systems for Interconnected Logistics to provide advice and technical expertise to the Commission on future roadmaps and work programs such as Horizon 2020.

#### **INDUSTRY DAY 2**

#### **PARALLEL A**

## INTELLIGENT SOLUTIONS FOR EFFICIENT AND SECURE GLOBAL SUPPLY CHAINS

The session will highlight some examples which demonstrate how a powerful and innovative ecosystem implementation, integrating interoperability, security, resilience and real-time optimisation can produce cost effective, fast and robust solutions that will guarantee the efficient and secure transit of goods through the worldwide Global Supply Chain system. It will be presented how protecting and securing the Global Supply Chain, and reducing its vulnerability to disruption (whether caused by natural disasters, terrorism or other forms of undesirable or illegal activity), can be done while guaranteeing the promotion of a timely and efficient flow of legitimate commerce through the EU and other nations around the world. The presentations will demonstrate that this can be done while at the same time offering tangible benefits to involved stakeholders (transaction, transport, regulatory and financial operators), thus facilitating its adoption by commercial entities.





#### **Moderator: Yao-Hua Tan**

Yao-Hua is professor of Information and Communication Technology and head of the ICT Group of the Department of Technology, Policy and Management of the Delft University of Technology. He was also Reynolds visiting professor at the Wharton Business School of the University of Pennsylvania. His research interests are service engineering and governance; ICT enabled electronic negotiation and contracting; multi-agent modeling to develop automation of business procedures in international trade. He published five books and over 190 conference papers and journal articles. He was coordinator and/or scientific director of various research projects on IT innovation to facilitate international trade; including the projects ITAIDE, CASSANDRA and Extended Single Window. He is vicechair of the Committee on Trade of the Trade Division of the United Nations Economic Commission for Europe.

#### **Optional Dual Filing – a concept for cooperation with Customs**

Two demonstrators in CORE deal with air- and sea freight to the Netherlands. On the one hand, FloraHolland ships flowers by air and sea from Kenia to the Netherlands, whereas on the other hand Seacon Logistics is importer of trade from the far east. To reduce being selected for inspections, both provide additional information to Customs authorities according the optional dual filing concept. Beginning of October, it is planned to be ready for demonstration. The presentation will explain how it will operate and show how the underlying IT infrastructure is implemented.



#### **Presenter: Wout Hofman**

Wout holds a PhD in information technology on the development of a conceptual model for a software system to support customer driven business process orchestration in transport and logistics. He has a broad experience in interoperability between organisation and systems, especially in the trade facilitation domain that includes compliance and resilience. Wout has been coordinating IT developments in the EU FP7 SEC Cassandra project, developing the infrastructure and its business models for EU FP7 Logicon, supports the technical coordinator of EU FP7 SEC CORE project in coordinating IT, and is responsible for the IT infrastructure of EU H2020 SmartRail. He is also responsible for interoperability research for big data analytics in a large TNO funded research program. Wout has written over 100 scientific papers and is the author of three books.



#### **IBM's Supply Chain Visibility Platform**

Businesses are becoming increasingly globalized, leading to distributed and complex supply networks. Mergers and acquisitions bring about divisional complexities, with each division operating in silos. Also, because of the emphasis on continuous improvement, there is constant pressure to cut supply chain costs that extends beyond the four walls of the enterprise. The talk will present IBM's Supply Chain Visibility Platform, which instantly displays and summarizes actionable supply chain information from all electronic trading partners and communities through a single dashboard. It presents a single web interface that enables users to manage and control the business processes, including documents such as purchase orders, shipping acknowledgements, invoices, and other transactions that occur during these processes. The application also alerts users to events that disrupt information and material flow in the supply chain.



#### **Presenter: Yao-Hua Tan**

Yao-Hua Tan is professor of Information and Communication Technology and head of the ICT Group of the Department of Technology, Policy and Management of the Delft University of Technology. He was also Reynolds visiting professor at the Wharton Business School of the University of Pennsylvania. His research interests are service engineering and governance; ICT enabled electronic negotiation and contracting; multi-agent modeling to develop automation of business procedures in international trade. He published five books and over 190 conference papers and journal articles. He was coordinator and/or scientific director of various research projects on IT innovation to facilitate international trade; including the projects ITAIDE, CASSANDRA and Extended Single Window. He is vicechair of the Committee on Trade of the Trade Division of the United Nations Economic Commission for Europe.



#### Scenario-based simulation of Global Supply Chains

Within the CORE project, ISL is currently developing a scenario-based simulation environment for real operational scenarios of secure supply chains with a special focus on resilience and controls in case of disturbances. Using this environment, supply chain organizers will be able to examine the impact of possible disturbances on their supply chain and the effects of respective mitigation measures without disturbing the real flow of goods in the actual supply chain. The talk will present the concept of the scenario-based simulation environment as well as first implementation results.



# 

#### **Presenter: Oliver Klein**

Being a Project Manager at ISL, Oliver was involved in several European research projects dealing with electronic communication in inland waterway transport and co-modal transport. He was assistant technical project manager of the RISING project and led a business demo case in e-Freight. Furthermore, he is responsible for the development of intermodal software and system specifications at ISL. Currently, he is leading the development of the scenario-based simulation environment in the CORE project. Oliver Klein has extensive knowledge in software engineering, database modeling and administration as well as optimisation methods and simulation technologies with special focus on intelligent multi-agent systems.

#### **SAFEPOST Project Activities & Latest Developments**

The SAFEPOST project aims to raise the current level of postal security by integrating innovative screening solutions (suitable for the uninterrupted flow of enormous volumes of postal items) with operational postal processes, together with criminal and customs intelligence in a Europe wide cooperative distributed network.

Starting from the perspective of the partner postal operators, the project will use a cost-benefit method to identify the main security gaps and will describe security measures to maintain or augment the efficient and secure operation of these posts. After making an inventory of security gaps these will be developed into generic postal security models which will be integrated into a European Security Framework for Postal Supply Chains, which will enable postal operators, customs and other relevant actors to securely exchange information related not only to security but also optimization of postal flows.



#### **Presenter: Antonino Scribellito**

Antonino Scribellito has been working for PostEurop since June 2005 as European Affairs Senior Project Manager. He is responsible for project management and political guidance for the PostEurop Projects on behalf of Headquarters. A number of high level and important projects have been kicked off under the management of Mr. Scribellito such as the SAFEPOST Project, 29 Accord II projects (including TAIEX funding), the Leonardo Da Vinci Programme – Project "Training Partnership for a Changing Post", Leonardo da Vinci Programme – Training Partnership for Stress Management in the Postal Sector Project, UNEX 2009, Social Dialogue Committee Projects - Social Partners preparing for Change, Social Dialogue Project – Developing a Quality Postal Sector in the digital age, Mobilizing social partners in a new context and UPU – PostEurop Project 2010-2012: Improvement of Quality of Service an Integrated Regional Approach "PostEurop Methodology": Process Reviews and Process Assessment, UPU – PostEurop Regional Development Plan 2013-2016. In his previous experience he has also worked for Poste Italiane since 2001, in the field of European Affairs and Cooperation. He was an expert of Poste Italiane for financial and reporting management of European Commission (EC) projects (PIDSS; ACTIN; NEPH). He has experience in postal business strategy and organization and knowledge of the international postal environment and, in particular, of Eastern Europe. He was also responsible for the identification of opportunities for new funding from the Commission, UPU-OSF. World Bank and other International Institutions.

From 1994 to 2000, he also worked for the law company as the assistant at the University of Naples (Italy), on the subject: "International Law". He completed his university in SCIENZE POLITICHE (INTERNATIONAL and DIPLOMATIC SCIENCE) in the Oriental University Institute of Naples in Italy, in the academic year 1995/1996, discussing an Experimental Thesis entitled: "Le Convenzioni Internazionali nella legge italiana di riforma del diritto internazionale private n 218/1995" (International Conventions in the International Private Law in Italy with law of reform n 218/1995). He completed Master of Business Administration (MBA), (specialization: corporate planning), ISIDA, in the year 2000/2001, in Palermo (Italy), ASFOR Certificate. He also holds Post Graduate Diploma in Russian language, Russian National Centre of Language and Literature, in Rome (Italy).



#### **INDUSTRY DAY 2**

#### INTERACTIVE SESSION

## ICT TRENDS, EMERGING CHALLENGES AND ROADMAPS IN TRANSPORT LOGISTICS AND SUPPLY CHAIN MANAGEMENT

Information- and Communication Technologies (ICT) are essential enablers for effective and efficient Transport Logistics and Supply Chain Management. ICT enhances organizational as well as supply chain cognition: It increases communication, information and connectedness between parts and the whole supply chain parties, improves cooperation and collaboration among them and is the basis for organizational learning and knowledge management.

This session takes this approach and presenters as well as the audience are encouraged discussing pro-actively trends, emerging challenges and roadmaps in the particular fields of ICT, Transport Logistics and Supply Chain Management. For this session, we invited presenters from wellknown European Commission projects and initiatives, scholars from leading universities in the field of Transport Logistics, Supply Chain Management and ICT as well as practitioners in these particular fields. Each presenter will give a brief presentation about her or his topic and manifest it by a meaningful statement/conclusion. Afterwards, the audience as well as the other presenters are challengend discussing particular perspective. Aim of is this session is to detect trends and emerging challenges as basis for developing roadmaps.



# +

#### **Moderator: Wolfgang Höfs**

Head of Sector for "Strategic Planning and Communication" in European Commission's Directorate General CONNECT (Communications networks, Content and Technology), is focused on ICT for transport and mobility and related policy issues. He works in the Smart Cities and Sustainability unit which manages a portfolio of around 60 research and innovation projects on the information and communication technologies' aspects of transport and mobility. He is in particular engaged in smart cities and international research cooperation issues, acting as European facilitator of the EU-US-Japan cooperation on ICT for transport research.

Before joining the Commission's services, he worked for major players in transport and software industry on the implementation and integration of mission-critical IT systems in different European countries. At Schenker AG he accounted the rollout of the web-based tracking & tracing system for their European land transport network.

He studied in London [UK] and Dortmund [DE] and holds a Master's Degree (Dipl.-Inform.) in Computer Sciences (Informatik) and Business Administration from Technical University Dortmund. His personal research interests are focused on sustainable transport systems and smart mobility within the Digital Economy and Society.

#### A joint effort of Transport European Technology Platforms

The purpose of the SETRIS project is to deliver a cohesive and coordinated approach to research and innovation strategies for all transport modes in Europe. SETRIS seeks to identify synergies between the transport European Technology Platforms' (ETPs) strategic research and innovation agendas (SRIAs) and between these and relevant national platforms. The 5 ETPs are:

- 1) ACARE (Advisory Council for Aviation Research Innovation in Europe),
- 2) ALICE (Alliance for Logistics Innovation through Collaboration in Europe),
- 3) ERRAC (The European Rail Research Advisory Council),
- 4) ERTRAC (European Road Transport research Advisory Council) and
- 5) WATERBORNE.

SETRIS aims to develop a framework for long-term cooperation between actors from all transport modes, to facilitate the delivery of a truly integrated transport system.



#### **Presenter: Fernando Liesa**

Fernando is Logistics Innovation Leader at ENIDE and Secretary General at ALICE European Technology Platform on Logistics and holds a PhD since 2004 by University of Zaragoza (Spain). Since then, he has worked in the field of knowledge transfer and research management being the last 8 years linked to logistics and supply chain management. Fernando worked in Zaragoza Logistics Center (one of the MIT Global Scale Network centers and the only one in Europe) from 2006 to 2014 as Knowledge Transfer Director, from 2007 to 2014 as General Manager of the Spanish Center of Competence in Logistics, CNC-LOGISTICA and Coordinator of the Spanish Technology Platform in Logistics, Logistop. Dr. Liesa has actively coordinated and participated in several national and FP7 projects such WINN, SECURESCM, SoCool@EU, CASSANDRA, CO3, SAFEPOST, LOGICON, CORE and EUROSKY. Contribution in these projects ranked from developing research to doing technology and knowledge transfer aiming industry take up. Fernando Liesa led the creation of the European Technology Platform in Logistics, ALICE through the WINN project acting as coordinator of the former. Fernando cooperated with EIRAC in the definition of the EIRAC Strategic Agenda 2010-2030+, and with ERTRAC in the definition of the Research and Innovation Roadmap: Sustainable Freight System for Europe: Green, Safe and Efficient Corridors (2011).



### ALICE research & innovation roadmaps towards the Physical Internet

The European Technology Platform ALICE, Alliance for Logistics Innovation through Collaboration in Europe, was launched on June 11, 2013, and received official recognition from the EC in July 2013. ALICE has been set-up to develop a comprehensive strategy for research, innovation and market deployment of logistics and supply chain management innovation in Europe with the mission: "to contribute to a 30% improvement of end to end logistics performance by 2030".

One of the key elements identified by ALICE as the Vision to achieve this improvement is The Physical Internet (PI) Concept. PI is pursuing an open global logistic system founded on physical, digital, and operational interconnectivity, through encapsulation, interfaces and protocols design, aiming to move, store, realize, supply and use physical objects throughout the world in a manner that is economically, environmentally and socially efficient and sustainable.

ALICE has identified five different areas that need to be specifically analysed and addressed in terms of future research and innovation needs to achieve its mission. These areas are:

- Sustainable, Safe and Secure Supply Chains
- · Corridors, Hubs and Synchromodality
- · Information Systems for Interconnected Logistics
- Global Supply Network Coordination and Collaboration
- Urban Logistics

Five different Working Groups have been launched, one in each of these areas to further analyse and define research and innovation strategies, roadmaps and priorities agreed by all stakeholders to achieve ALICE Vision and Mission.



#### **Presenter: Dirk 't Hooft**

Dirk works as independent Senior Advisor in the Netherlands for Dinalog ( the Dutch Institute for Knowledge and Innovation in Logistics) and Argusi (an independent supply chain research advisory).

At European level he is active in research-projects and member of the Executive Group and secretariat of "ALICE", (Alliance for Logistics Innovation through Collaboration in Europe) the European Technology Platform on Logistics.

After his graduation in economics at the Erasmus University in Rotterdam, Dirk worked in several executive board positions in Publishing, Agricultural Machinery, Bulk stevedoring in Rotterdam Port, the Flower Auction of Aalsmeer and the last 11 years as CEO of HIDC (Holland International Distribution Council).

Dirk is experienced in the management of innovation projects, is able to match people and organizations, and has a broad international experience.



## Developing a road map for the UK road freight logistics sector to meet the National carbon reduction commitment

The challenges presented by climate change have prompted governments all over the world to initiate carbon reduction programmes. The UK's response to climate change is anchored in the Climate change Act (2008) which requires the government to secure an 80% reduction in carbon emissions by 2050. Road freight accounts for approximately 4-5% of the UK's total emissions, however the need to carry heavy loads long distance means that some of the technologies being considered for other road transport activities are not suitable for road freight.

Reductions in road freight carbon emissions could be secured from a number of interdependent sources including: Improvements to new vehicle technology, vehicle.

Interdependencies between potential improvement interventions such as new vehicle technology, modifications to the existing fleet, and novel logistics operations mean that sequencing of research and regulation will need to be coordinated.

This submission describes a methodology used by the Centre for Sustainable Road Freight to develop an environmental roadmap for the UK Freight sector. The resulting road map is also presented.



#### **Presenter: Philip Greening**

Philip is the Research Manager of the Centre for Sustainable Road Freight (CSRF). Prior to joining the CfSRF he enjoyed a successful career in industry and management, which included supply chain consultancy, pollution monitoring and the development of stress engineering methods in the aerospace industry.

As a supply chain consultant Philip completed in excess of 30 assignments across Europe including supply chain redesign, and warehouse design and operations. Whilst a solution architect at Manhattan Associates he was responsible for the design and implementation of innovative supply chain execution systems

Recently Philip has been focused on supply chain practice, strategies and the operation of strategy, including the abi3l project which used agent based modelling to develop a simulation of the UK freight movements and has been applied to the analysis of the impact of supply chain innovation on carbon footprints of freight movement.

Since becoming the Research Manager at the CfSRF he has worked with colleagues to attract research funding from a number of sources.



## Intelligent Cargo in the Physical Internet

The Physical Internet is a promising development for (semi-)autonomous flow of goods. Intelligence would be part of the cargo, where currently this intelligence is handled by humans with their supporting IT systems. These IT systems are more and more supporting real time planning based on situational awareness and visibility (so-called Control Towers), but what if the cargo itself is able to communicate with its environment and make decisions based on goals? What if cargo location, actions, and speed of flow at certain times can not only be detected by IT systems (Internet Of Things), but all required software and interoperability with its environment is part of the cargo? We can see these types of developments with transport means, e.g. trucks, in semi-autonomous driving. We have also demonstrated that data of cargo does not have to be duplicated, but is stored only once and references to data are shared (the iCargo project). It is the vision of the Physical Internet to construct logistics based on intelligent cargo and - nodes routing the cargo. These concepts will be introduced, as a vision for the future.

## **PARALLEL A**



## **Presenter: Wout Hofman**

Wout holds a PhD in information technology on the development of a conceptual model for a software system to support customer driven business process orchestration in transport and logistics. He has a broad experience in interoperability between organisation and systems, especially in the trade facilitation domain that includes compliance and resilience. Wout has been coordinating IT developments in the EU FP7 SEC Cassandra project, developing the infrastructure and its business models for EU FP7 Logicon, supports the technical coordinator of EU FP7 SEC CORE project in coordinating IT, and is responsible for the IT infrastructure of EU H2020 SmartRail. He is also responsible for interoperability research for big data analytics in a large TNO funded research program. Wout has written over 100 scientific papers and is the author of three books.



## **ERTICO roadmap 'ITS for Feight Transport and Logistics'**

ERTICO – ITS Europe (www.ertico.com) is a multi-sector, public-private partnership pursuing the development and deployment of ITS in Europe. With 116 partners, representing 8 different sectors, ERTICO provides a platform that brings all key ITS stakeholders together along the entire value chain. The 8 sectors are; mobile network operators, public authorities, research institutions, service providers, suppliers, traffic and transport industry, users and vehicle manufacturers. Lina Konstantinopoulou will present EU initiatives and platforms to support ITS for Freight Transport and Logistics from proof of concept to pre-deployment of ITS for Freight Transport and Logistics form an EU perspective. In addition the ITS services priorities and enablers for deployment in Freight Transport and Logistics and also Roadmap to support ITS for Freight Transport and Logistics will be presented.

#### **PARALLEL A**





#### **Presenter: Lina Konstantinopoulou**

Lina is a Head of Department (PRINCE 2 Project Management Certified) of Logisticsd and Traffic Management, at ERTICO from November 2008. As Head of Sector, she leads a team of 5 project managers and assistants developing and coordinating) innovation and deployment initiatives. As part of the management team at ERTICO, she participates in developing the strategy of the ERTICO programmes. Responsible for managing and supervising European Commission co-funded projects in the field of both passenger and freight transport. In particular she is coordinating a portfolio of programmes and activities including ITS for Freight Transport and Logistics programme and Emergency Call and I am also leading the ERTICO Task Force on ITS for Freight Transport and Logistics which develops the roadmap and work plan on ITS for freight transport for the ERTICO partnership. In terms of activities she is leading and contributing to several EC funded projects in the domain of Cooperative ITS and also Logistics (e.g. CO-GISTICS, CityLog, CVIS, iCar Support, iMobility Challenge, PROS and NOVELOG) and also Innovation and deployment platforms such as TM2.0 and TISA. She holds a Master's Degree in International Trade and European Integration with focus on freight transport and Bachelors in European Economics from the University of Staffordshire. In terms of policy, advocacy and stakeholder mobilization, she participates in the newly created Cooperative ITS Platform (C-ITS Platform) "Working 8 on User acceptance", to provide policy recommendations for the development of a roadmap and a deployment strategy for C-ITS in Europe in the field of Transport and Logistics. She is a member of the Digital Transport and Logistics Forum (DG MOVE) in order to provide advice and technical expertise to the Commission on the development of standards, legislation, policies, projects and programmes in the field of Digital Transport and Logistics; she is acting as steering group member of the ALICE European Technology Platform and active member of the WG3 Information Systems for Interconnected Logistics to provide advice and technical expertise to the Commission on future roadmaps and work programs such as Horizon 2020.

## **INDUSTRY DAY 2**

## PARALLEL B

## WIDE INTEROPERABILITY THROUGH MULTIMODAL MARITIME BASED CORRIDORS

This session describes the project Widermos, Wide Interoperability and new governance moDels for freight Exchange linking Regions through Multimodal maritime based cOrridorS. WiderMoS aims at facilitating the homogeneous connection between Motorways of the Sea and the TEN-T core network corridors throughout several activities. WiderMos will develop 4 national pilot projects, centered in the ports of La Spezia in Italy, Barcelona in Spain, Rostock and Kiel in Germany and Leixoes in Portugal, focused in the development of an IT based Corridor Management Platform (acting as a Logistic Single Window) in order to allow a seamless shipment management and communication between within the supply chain; the pilots aim at overcoming specific bottlenecks with a focus on paperless logistics / e-customs processes with priority for the integration of Inland / seaport terminals and rail contributing to the overall WiderMos objective of improving interoperability between the sea and the other transport modes by developing new port/ship/train/hinterland interfaces.



### **Moderator: Alexio Picco**

Transport Engineering by University of Genova. 15 years' experience working with politicians, policy makers, regulators, academics and third parties specifically in developing new public and private business using national and European funding. 12 years' experience in creating, building and leading major initiatives within complex public and private organizations with a track record of successful cross-functional business development processes and large scale international consortia including EU and local institutions, EU/ national/local policy-makers, industry players and a large variety of other stakeholders including non-profit groups. 12 years' experience in leading or being part of multidisciplinary team involved in innovative projects and programmes bridging technology trends and public policies in particular in the transport sector. 5 years' experience in supporting the European Commission in the evaluation of innovative projects, assessing their impacts in respect of the EU policies specifically in the domain of R&D, Trans European Network and Intelligent Energy projects.



## Widermos project, from WHY to WHAT

LThe presentation is an overview of the WiderMos project from an holistic perspective: WHY - HOW - WHAT. First of all, the presentation will show the importance of linking the Motorways of the Sea (MoS) concept with core TEN-T network corridors in the EU, to foster its effective and sustainable connection (WHY). The main concept of the project, the Corridor Management Platform (CMP) will also be presented as the mechanism to implement the interoperatibility between modes and as key factor to achieve a door to door Logistics (HOW). This presentation will set the basis for the understanding of the different pilots at European level within the project (WHAT).

### **PARALLEL B**





### **Presenter: David Ciprés**

Industrial Engineer from the University of Zaragoza and holds a Master degree in Project Management. He is also PhD candidate in simulation and planning in logistics processes. He joined ITAINNOVA (Aragon Technology Centre) in 2001, now is is working as a technological researcher in the ICT4Log centre, the Spanish Center of knowledge in the application of Information and Communication Technologies into the resolution of logistics problems in ITAINNOVA. His main research areas are modelling, simulation and optimization of logistics processes, supply chain management, warehouse operation management, demand forecasting. David has participated in many R&D national and European logistics projects along his career since 2000 in automotive, transport, distribution and retail companies. Mr. Ciprés has carried out many Regional and National Projects and is working in several European Projects. Loginn (Logistic Innovation Uptake ), MIELE (Multimodal Interoperability E-services for Logistics and Environment sustainability - FP7), SoCool@EU (Sustainable Organisation between Clusters Of Optimised Logistics @ Europe -FP7 - Regions of Knowledge), T&Tnet (Travel & Transport Solutions Through Emotional Social Netkorking - Ambient assisted living joint programme). He has worked with big companies like General Motors, Group Carrefour and BSH and also with SMEs in the logistics sector. In addition, Mr. Ciprés and Logistics Department are members of the Spanish Technology Platform on Logistics. Intermodality and Mobility (LOGISTOP) an of the European Technology Platform on Logistics (ALICE).

## **Spain Corridor Management Platform (CMP)**

The presentation will show the Spanish Corridor Management Platform Pilot developed in the WiderMoS project. WiderMos is focused in the development of an IT based Corridor Management Platform (acting as a Logistic Single Window) in order to allow a seamless shipment management and communication between within the supply chain; the pilots aim at overcoming specific bottlenecks with a focus on paperless logistics / e-customs processes with priority for the integration of Inland / seaport terminals and rail contributing to the overall WiderMos objective of improving interoperability between the sea and the other transport modes by developing new port/ship/train/ hinterland interfaces.

### **PARALLEL B**



### **Presenter: Angel Priegue**

Computer Science Engineer by the Technical University of Catalonia. Advanced Studies Diploma at the Technical University of Catalonia. Nowadays finishing a Ph.D. at the International Center for Numerical Methods in Engineering (CIMNE) in the Technical University of Catalonia. Since 2005, technical manager of the R&D department in Information Technology at the International Center for Numerical Methods in Engineering (CIMNE). His main research line is integration of simulation and computational predictive models with smart wireless sensor networks. Furthermore, he is in charge of the Web technologies development team in the ICT CIMNE department, with a wide experience in design and implementation of Web platforms for digital content management, online e-learning centers, web portals for civil engineering enterprises and online e-payment, e-commerce and e-business information technologies. Since 2001, he has participated in organization of more than 60 international conferences and congresses as technical manager and webmaster.



## **Italy Corridor Management Platform (CMP)**

The presentation will show the Italian Corridor Management Platform Pilot developed in the WiderMoS project. WiderMos is focused in the development of an IT based Corridor Management Platform (acting as a Logistic Single Window) in order to allow a seamless shipment management and communication between within the supply chain; the pilots aim at overcoming specific bottlenecks with a focus on paperless logistics / e-customs processes with priority for the integration of Inland / seaport terminals and rail contributing to the overall WiderMos objective of improving interoperability between the sea and the other transport modes by developing new port/ship/train/ hinterland interfaces.

### **PARALLEL B**





#### **Presenter: Alexio Picco**

Transport Engineering by University of Genova. 15 years' experience working with politicians, policy makers, regulators, academics and third parties specifically in developing new public and private business using national and European funding. 12 years' experience in creating, building and leading major initiatives within complex public and private organizations with a track record of successful cross-functional business development processes and large scale international consortia including EU and local institutions, EU/ national/local policy-makers, industry players and a large variety of other stakeholders including non-profit groups. 12 years' experience in leading or being part of multidisciplinary team involved in innovative projects and programmes bridging technology trends and public policies in particular in the transport sector. 5 years' experience in supporting the European Commission in the evaluation of innovative projects, assessing their impacts in respect of the EU policies specifically in the domain of R&D, Trans European Network and Intelligent Energy projects.

## **Portugal Corridor Management Platform (CMP)**

Optimization of multimodal transport chains is the objective behind the network of business interoperating platforms where shippers could potentially source and book D2D (door-to-door) solutions and control their operations throughout the formalized supply chain. Logistic integrators can offer door-to-door transport solutions to its customers, supported in a network of qualified services and service providers and where clients can define their specific requirements and search optimized transport solutions. This presentation will focus on the concept and the solution to implement the network of business interoperating platforms (logistics single windows) taking advantage of the e-Freight Common Framework (ISO/IEC DIS 19845) and results of the WiderMoS project.

### **PARALLEL B**



## **Presenter: Rui Barros**

Master of Sciences in Informatics Engineering by the University of Porto, Rui has 20 years of experience in IT complex systems and more than 13 years in the transport sector. Rui is a researcher and Area Leader at INESC TEC working in the Large Information Systems and Software field. Since 2002 he participated in many National and European Projects (FP5, FP6, FP7) focusing transports and logistics, like SCOPe – Portuguese Electronic Port Community System, PORTMOS (Integration of the Portuguese Port and Maritime System in the Motorways of Sea), OMMLX - Study for the Mobility Observatory of Lisboa and Vale do Tejo region, MIELE (Multimodal Interoperability E-services for Logistics and Environment sustainability – FP7) and WiderMos (Wide Interoperability and new governance moDels for freight Exchange linking Regions through Multimodal maritime based cOrridorS) among others.



## Germany Corridor Management Platform (CMP)(Corridor Management from the intermodal operator perspective and data interfaces)

Intermodal operators are offering terminal-to-terminal – in some cases door-to-door - based transport chains for intermodal consignments – semi-trailers, swap bodies and containers. Their major challenge is to consolidate sufficient quantities of cargoes to run at least daily trains between two terminals. These are focused on the major Trans-European Corridors or go even beyond and supply an entire network of services. A variety of customers and a certain quantity of suppliers need to be integrated into a unique transport services. The presentation will describe the physical transport processes and the underlying information and data exchange from an intermodal operators perspective and demonstrate the results of the WiderMos project.

### **PARALLEL B**





#### **Presenter: Uwe Sondermann**

Geographer (Diplom-Geograph) by Ruhr-Universität Bochum, University. More than 20 years experience in the transport sector. He has held different positions during his professional career: He has worked in Plant Making and Industrial Engineering Companies as project engineer and project and marketing manager for 8 years and he has worked as senior consultant for 2 years. Since 2003 to now he has held the position of authorised representative in International transport consultancy specializing in intermodal supply chain logistics and his main responsibilities have been project management of many european projects like Study on TEN-T Core Network Corridor Scandinavian-Mediterranean (2014), support of Presidency of Land Tirol for Aktionsgemeinschaft Brennerbahn (2013-2014) and different FP5, FP6, FP7 and Marco Polo projects (such as Cosmos or Agora).

# DAY 1 SCIENTIFIC DAY

	ТОРІС	SPEAKER
	Registration	
	<b>Jens Schumacher, Lina Konstantinopoulou</b> Vorarlberg University of Applied Sciences, ERTICO	Welcome & Introduction
	Session Moderator: Walter Ukovich (University of	Trieste)
12:45-12:50	Session Introduction	
12:50-13:15	Liam Fassam Network Northamptonshire: Total Transport Smart City Procrement Theoretical Framework for Sustainable Economic and Social Change	L. Fassam, S.Copsey, A. Gough
13:15-13:40	Josep Maria Salanova Grau Evaluation framework in Cooperative Intelligent Transport Systems (C-ITS) for freight transport: the case of the CO-GISTICS speed advice service	Josep Maria Salanova Grau, Andrea Rusich, Evangelos Mitsakis, Walter Ukovich, Maria Pia Fanti, Georgia Aifadopoulou, Massimiliano Nolich, Elisabetta Scala
13:40-14:05	<b>Princess Nyamadzawo</b> Intelligent Transportation System for Traffic and Road-infrastructure related Data	Princess Nyamadzawo, Andreas Pell, Oliver Schauer
14:05-14:30	Wout Hofman Semantic technology for enabling logistics innovations – towards Intelligent Cargo in the Physical Internet	Wout Hofman, Matthijs Punter, Harrie Bastiaansen, Erik Cornelisse, Simon Dalmolen
14:30-15:00	Coffee Break	
	Session Moderator: Florian Maurer (Vorarlberg Ur	niversity of Applied Sciences)
15:00-15:05	Session Introduction	
15:05-15:30	Lorena Sáez Carramolino Towards paperless transport for consolidated shipments	Lorena Sáez Carramolino, Miguel Llop Chabrera, Jorge Lara López
15:30-15:55	<b>Tijmen Joppe Muller</b> Enhancing Awareness on the Benefits of Supply Chain Visibility through Serious Gaming	Tijmen Joppe Muller, Rainer Müller, Katja Zedel, Gerwin Zomer, Marcus Engler
15:55-16:20	Yuxin Wang Data Quality Assurance in International Supply Chains: An Applica-tion of the Value Cycle Approach to Customs Reporting	Yuxin Wang, Joris Hulstijn, Yao-Hua Tan
16:20-16:45	Y.H. Choi A conceptual methodology for the prediction of an electric delivery vehicle's battery SOC and SOH	Y.H. Choi, Y.S. Chang , Y.H. Choi, N.U.Kim
17:30-23:59	Registration for the ITS World Congress & Opening Co	eremony

# DAY 2 INDUSTRY DAY 1

# TUE 6.10

		SPEAKER
	Registration	
09:00-09:05	Welcome, Introduction and Opening	Jens Schumacher Vorarlberg University of Applied Sciences (FHV)
09:05-09:10	Welcome, Introduction and Opening	<b>Alain Juppé</b> President of Bordeaux Metropolis Mayor of Bordeaux
	Welcome, Introduction and Opening	Hermann Meyer ERTICO-ITS Europe
DAY 2	DIGITAL TRANSPORT AND LOGISTICS FORUM MODERATION: JENS SCHUMACHER (VOR	TUE 6.10 ARLBERG UNIVERSITY OF APPLIED SCIENCES)
	Have the Framework Programme results conquered Europe and beyond?	Joost de Bock EU Commission - DG RTD
09:40-10:00	R&D research programs and industrial activities of Korea on the advanced logistics area	Yoon Seok Chang Korea Airospace University
10:00-10:20	Digital Transport — New Forum on Digital Transport	Fleur Breuillin EU Commission - DG MOVE
	Cybersecurity challenges for C-ITS and VTV	Florent Frederix EU Commission - DG CNCET
10:40-11:10	Round Table / Interactive Discussion	
11:10-11:15	Introduction to the parallel sessions	Jens Schumacher Vorarlberg University of Appl. Sciences
14.20 15.00	Coffee Breek	

14:30-15:00 Coffee Break

## DAY 2 PARALLEL A

TUE 6.10

# DEPLOYING COOPERATIVE ITS SOLUTIONS FOR EFFICIENT AND SUSTAINABLE LOGISTICS

MODERATOR: LINA KONSTANTINOPOULOU (ERTICO)

#### TOPIC

**SPEAKER** 

11:45-11:50	Introduction & Session Moderation	Lina Konstantinopoulou ERTICO-ITS Europe
	Implementation of Cooperative Intelligent Transport Systems for for freight transport in Bilbao City	<b>Pablo Isusi</b> Bilbao City Council
	Evaluation framework for the assessment of Cooperative Intelligent Transport Systems for freight transport applied to the speed advice	<b>Josep Maria Salanova</b> Hellenic Institute for Transport (CERTH / HIT)
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
	Deployment opportunities and barriers for C-ITS in for freight transport	Zeljko Jeftic International Road Transport Union
13:05-13:30	Round Table / Interactive Discussion	

13:30-14:30 Lunch Break

## DAY 2 PARALLEL B

# **TUE 6.10 INTELLIGENT LOGISTICS SOLUTIONS FOR URBAN FREIGHT AND SMART CITY LOGISTICS 1**

MODERATOR: JENS SCHUMACHER (VORARLBERG UNIVERSITY OF APPLIED SCIENCES)

1	ТОРІС	SPEAKER
11:45-11:50	ntroduction & Session Moderation	Jens Schumacher Vorarlberg University of Applied Sciences (FHV)
11:50-12:10(	Cooperative Business Models for Freights in the Cities	<b>Georgia Ayfantopoulou</b> Hellenic Institute for Transport (CERTH / HIT)
12:10-12:30 i	Cargo — catalyst for intelligent cargo	Germán Herrero ATOS
	NOSCIFeL platform meets CO-GISTICS' European project objectives	André Perpey Geoloc Systems
	Towards efficient, sustainable and interconnected city ogistics enabled by the Physical Internet / Modulushca	Máximo Martínez Proctor & Gamble
13:10-13:30	SMARTSET and City Logistic Solutions in Graz	<b>Olga Slobodova</b> City of Graz

13:30-14:30 Lunch Break

## DAY 2 PARALLEL A BEST PRACTICE FACTORY FOR FREIGHT TRANSPORT

**MODERATOR: MARCEL HUSCHEBECK (PTV)** 

#### TOPIC **SPEAKER** 14:30-14:35 Introduction & Session Moderation **Marcel Huschebeck** PTV AG 14:35-14:55 Re-thinking parcel distribution in the Nordics **Christian Oestergaard** Post North 14:55-15:15 Evaluation of freight logistics innovations in BESTFACT Karri Rantasila VTT Technical Research project Centre of Finland Ltd 15:15-15:35 The Advantage of Supply Chain Visibility in Real-time Michael Kramer Agheera GmbH 15:35-15:55 Synchro-modal supply chain eco-net **Raguel Miguel**, Santiago Blasco SYNCHRO-NET 15:55-16:15 Round Table / Interactive Discussion 16:15-16:30 Break

**TUE 6.10** 

16:30-18:30 CO-gistics demonstration at the ITS show grounds (inside & outdoor)

18:30-23:59 Conference Dinner, Networking

## DAY 2 PARALLEL B

**TUE 6.10** 

# INTELLIGENT LOGISTICS SOLUTIONS FOR URBAN FREIGHT AND SMART CITY LOGISTICS 2

MODERATOR: MÁXIMO MARTÍNEZ (P&G)

	ТОРІС	SPEAKER	
14:30-14:35	Introduction & Session Moderation	<b>Máximo Martínez</b> Proctor & Gamble	
14:35-14:55	Improving efficiency in transportation by strengthening the collaboration with SME	Stefano Persi ENIDE SOLUTIONS S.L.	
14:55-15:15	Designing New Models for Energy Efficiency in Urban Freight Transport for Smart Cities - The Valencia Case	Carolina Navarro Correcher Valenciaport Foundation	
	The Sustainable Urban Logistics Plan (SULP) methodology tested in 9 Small and Mid-sized European Towns: the results IEE ENCLOSE project	Giorgio Ambrosino MemEX	
	Implementing innovative, sustainable urban mobility solutions	Susana Val Zaragoza Logistics Center	
15:55-16:15	Round Table / Interactive Discussion		
16:15-16:30	Break		
16:30-18:30	16:30-18:30 CO-gistics demonstration at the ITS show grounds (inside & outdoor)		

18:30-23:59 Conference Dinner, Networking



# DAY 3 INDUSTRY DAY 2

WED 7.10

	TOPIC	SPEAKER
	Registration	
	Opening of Industry Day 2 - Introduction Announcement ECITL 2016	Jens Schumacher Vorarlberg University of Applied Sciences (FHV)
DAY 3	INTELLIGENT SOLUTIONS FO	WED 7.10
DAT 3	THE FUTURE OF INTERMODA MODERATION: LINA KONSTANTINOPOUL	L FREIGHT TRANSPORT
	The future of smartPORT logistics	Sascha Westermann Port of Hamburg
09:35-09:55		<b>Benjamin Demogé</b> La Poste
	Innovative Business models for the deployment of Freight Transport	Zeljko Jeftic International Road Transport Union
10:15-10:35		<b>Michel le Van Kiem</b> Port of Bordeaux
	Round Table / Interactive Discussion	
10:45-11:00	Coffee Break	

## DAY 3 PARALLEL A INTELLIGENT SOLUTIONS FOR EFFICIENT AND SECURE GLOBAL SUPPLY CHAINS

MODERATOR: YAO-HUA TAN (TU DELFT)

	ТОРІС	SPEAKER
11:00-11:05	Introduction & Session Moderation	<b>Yao-Hua Tan</b> TU Delft
11:05-11:20	Optional Dual Filing – a concept for cooperation with Customs	<b>Wout Hofman</b> TNO
11:20-11:35	IBM's Supply Chain Visibility Platform	<b>Yao-Hua Tan</b> IBM
11:35-11:50	Scenario-based simulation of Global Supply Chains	<b>Oliver Klein</b> ISL
11:50-12:05	SAFEPOST Project Activities & Latest Developments	Antonino Scribellito Post Europe
12.05_12.20	Round Table / Interactive Discussion	

WED 7.10

12:05-12:20 Round Table / Interactive Discussion

12:20-12:30 10 min break

## DAY 3 PARALLEL B

# WED 7.10 WIDE INTEROPERABILITY THROUGH **MULTIMODAL MARITIME BASED CORRIDORS**

MODERATOR: ALEXIO PICCO (CIRCLE SRL)

	ТОРІС	SPEAKER
11:00-11:05	Introduction & Session Moderation	<b>Alexio Picco</b> Circle srl
11:05-11:15	Widermos project: From WHY to WHAT	David Ciprés ITAINNOVA
11:15-11:25	Spain Corridor Management Platform (CMP)	Angel Priegue CIMNE
11:25-11:35	Italy Corridor Management Platform (CMP)	Alexio Picco Circle srl
11:35-11:45	Portugal Corridor Management Platform (CMP)	Rui Barros INESC TEC
11:45-11:55	Germany Corridor Management Platform (CMP) (Corridor Management from the intermodal operator perspective and data interfaces)	<b>Uwe Sondermann</b> KombiConsult GmbH
11:55-12:20	Round Table / Interactive Discussion	
12:20-12:30	10 min break	

## DAY 3 PARALLEL A

WED 7.10

## ICT TRENDS, EMERGING CHALLENGES AND ROADMAPS IN TRANSPORT LOGISTICS AND SUPPLY CHAIN MANAGEMENT

MODERATOR: WOLFGANG HÖFS (EU COMMISSION - DG CNCT)

#### TOPIC SPEAKER 12:30-12:35 Introduction & Session Moderation Wolfgang Höfs EU Commission - DG CNCT 12:35-12:50 A joint effort of Transport European Technology Platforms Fernando Liesa FNIDF 12:50-13:05 ALICE research & innovation roadmaps towards the Dirk 't Hooft Nederland Distributieland Physical Internet 13:05-13:20 Developing a road map for the UK road freight Philip Greening Heriot-Watt University: Centre logistics sector to meet the National carbon reduction for Sustainable Road Freight commitment 13:20-13:35 Intelligent Cargo in the Physical Internet Wout Hofman TNO 13:35-13:50 ERTICO roadmap' ITS for Feight Transport and Logistics" Lina Konstantinopoulou ERTICO - ITS Europe 13:50-14:00 Round Table / Interactive Discussion

16:15-18:40 Industrial Visit: IT Traffic Management Centre of the City of Bordeaux – Gertrude

## DAY 3 PARALLEL B

# WED 7.10 WIDE INTEROPERABILITY THROUGH **MULTIMODAL MARITIME BASED CORRIDORS**

**MODERATOR: ALEXIO PICCO (CIRCLE SRL)** 

TOPIC

SPEAKER

16:15-18:40 Industrial Visit: IT Traffic Management Centre of the City of Bordeaux – Gertrude

#### **CONTACT INFORMATION**

Contact for content and organization of the conference:

#### eMail: info@ecitl.eu

#### **ECITL FHV Team**

Jens Schumacher eMail: jens.schumacher@fhv.at Tel.: +43 (0) 55 72 792 7118

Florian Maurer eMail: florian.maurer@fhv.at Tel: +43 (0) 55 72 792 7128 Vorarlberg University of Applied Science Hochschulstrasse 1 AT-6850 Dornbirn

#### **ECITL Team ERTICO – ITS Europe**

#### Lina Konstantinopoulou

Avenue Louise 326 B-1050 Brussels Belgium eMail: I.konstantinopoulou@mail.ertico.com Tel: +32 (0)2 400 07 49

#### **Andrea Toth**

Avenue Louise 326 B-1050 Brussels Belgium eMail: a.toth@mail.ertico.com Tel: +32 (0)2 400 07 45

