

EUROPEAN CONFERENCE ON TH 6 4 TRANSPORT LOGISTICS ICT ←←

**ECITL: Solutions and Innovation
through Cooperation**

**23-25 October 2013
Aragon Institute of Technology (ITA)
ZARAGOZA, Spain**



www.ecitl.eu

WELCOME

BY ARTURO ALIAGA

DEAR CONFERENCE PARTICIPANT,

It is a pleasure to welcome you to the region of Aragon and the city of Zaragoza for the celebration of the 6th ECITL Conference. I am very happy that this important event is taking place in Aragon. Indeed, this is a result of a strategy made by the regional government of Aragon in the area of Logistics that started more than ten years ago.

The geostrategic position of Zaragoza and its region of Aragon, with 80% of the Spanish GDP within three hours by road transport, is a competitive advantage for leading logistics infrastructures. These facts made us, the regional government, create an strategic plan about logistics in the region, in which logistics were considered as a whole, from the pure research knowledge generation and training about logistics supported by Zaragoza Logistics Center (ZLC), going through the applied research for companies in the area of ICT for Logistics supported by Aragon Institute of Technology (ITA) to the physical place and infrastructures to make logistics with PLAZA, which is the largest logistics park in the southwest of Europe with 1.300 Ha surface.

The Aragon Institute of Technology (ITA) is a non-profit Technology Centre, whose main objective is the promotion of research, development and innovation in the business sector, acting as a catalyst for productivity and competitiveness in the region.

The Logistics Division of the Aragon Technology Center (ITA) is recognized by the Spanish Ministry as the National Center of Knowledge in the application of ICT in the field of logistics and our objective is to generate, adapt, and transfer knowledge, applying ICT to solve logistics problems to develop a collaborative and sustainable logistics. ITA also manages the National Public Demonstrator of ICT4Logistics with the aim of offering companies a space to demonstrate how ICT can help to create solutions in the field of logistics.

Zaragoza Logistics Center (ZLC) is a research institute established by the Government of Aragon in Spain in partnership with the Massachusetts Institute of Technology and the University of Zaragoza. ZLC mission is to create an international center of excellence for research and education in logistics and SCM that actively engages with industry and the public sector to develop and disseminate knowledge.

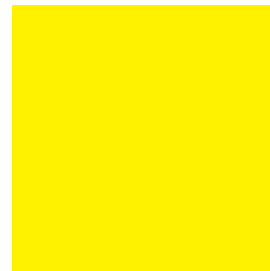
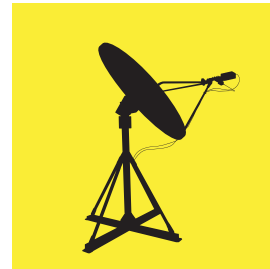


It is important to point out that as a result of this intense activity about logistics, in 2010 it was created the ALIA cluster in our region with the mission to be the meeting point for the transport and logistics organizations (Companies, Research Centers, Universities, Chamber of Commerce) in order to facilitate the synergies and cooperation for innovation.

I would like to thank ITA and ZLC to make this happen in our region of Aragon

Arturo Aliaga

Ministry of Industry and Innovation of the Regional Government of Aragon



WELCOME

BY SALVADOR DOMINGO

DEAR CONFERENCE PARTICIPANT,

It is with great pleasure that we welcome you in the facilities of ITA, in Zaragoza for the 6th ECITL Conference this year. In close cooperation with the Vorarlberg University of Applied Sciences (FHV), the Zaragoza Logistics Center (ZLC) as well as the connected EU-funded research projects and the support of the European Commission we have prepared a program that we hope stimulate interaction and dissemination for both industry and researchers. The conference will focus on "Logistics Research: Solutions and Innovation through Cooperation". Cooperation is taken into account from different points of views, cooperation between researchers and industry and cooperation among all agents involved in the Supply Chain because the more information is available then, the better decisions are taken.

The 6th ECITL 2013 will put innovation in Transport Logistics in the center of the conference. The goal is to identify the upcoming logistics challenges while taking into account solutions in development. There are many topics which will be discussed under this context:

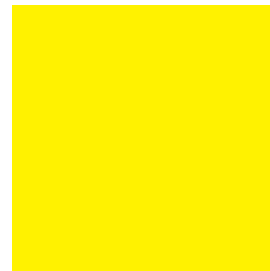
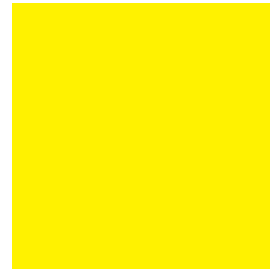
- The future role of logistics for the pan-European economy
- Innovation obstacles in the logistics sector
- Expected Impact of European project solutions on the logistics industry
- The impact of regulations on the innovation capability of the logistics industry
- Fostering the uptake of sustainable logistics operations
- Explore the potential of intelligent cargo solutions
- Identify and define the role of new Information and Communication Technology solutions for logistics operations

Additionally, this year will be the first in which we will have an investor's session. It is clear the European Commission is putting more emphasis every time in the importance to produce exploitable results by the EU-funded projects, and it is expected to be increased in the Horizon 2020. Therefore, different running projects are presenting those exploitable results and potential investors will provide feedback about how the market would accept them.



Finally, I would like to thank Professor Schumacher and his staff, our sponsors, namely many of the logistics regional SMEs, all reviewers in the scientific track and all the people that have contributed to make this conference happen.

Salvador Domingo
Director of the Aragon Institute of Technology



WELCOME

BY JENS SCHUMACHER AND FLORIAN MAURER

DEAR CONFERENCE PARTICIPANT,

Welcome to the 6th European Conference on ICT for Logistics (ECITL) in Zaragoza. This year's focus of the ECITL is on "Logistics Research: IT Solutions and Innovation Facilitating Cooperation". While new treaties between the US and the EU are negotiated it is already now obvious that the globalization requires new forms of cooperation and collaboration. Here the attributes like trust, reliability etc. needs to be established and maintained in order to get rid of the barriers. Similar to these thoughts this year's ECITL is also an interesting place to discuss about collaborations in the upcoming Horizon 2020 programme of the Commission (Framework Programme 8). This is particular of interest since the new Transport programme will be coined by several DG's (DG Connect, DG MOVE, DG RTD) working closely together in order to stimulate research and innovation in the European logistics sector.

This years ECITL has several sessions that deal with sustainability, collaboration security and innovation in logistics. A special investor's session has been organized on the first day as a new format in this years ECITL. Furthermore after some feedback from last year's ECITL we have again organized a scientific day, based on the excellent contributions form last year we were able to set-up a collaboration with the International Journal of Advanced Logistics were this year's outstanding contributions will be published. I would like to take this opportunity to thank all researchers who have actively contributed to make the scientific day of the ECITL such a success.

During the last ECITL's there has been a growing request for better interaction and networking. In order to address the first issue we have cut down on this year's presentation and allow for more discussion. In recent years we were unfortunately several times forced to quit discussions due to time constraints. This year's session thus consist only out of 3 presentation and more time to discuss with the presenters and in the audience. In order to allow for a more informal networking we are re-introducing the welcome and get together event on the evening of the scientific day (so be there or be square).



I would like to thank especially this year's co-organizers of the 'Aragon Institute of Technology' (Javier Val Alonso, Pilar Fernández de Alarcón Azón, and Raquel López Peco) and 'Zaragoza Logistics Center' (Fernando Liesa, and Cristina Tabuenca) who have worked exceptionally hard to try to make this year's ECITL a unique event.

Jens Schumacher

Vorarlberg University of Applied Sciences

**Florian Maurer**

Vorarlberg University of Applied Sciences



WELCOME

BY DAVID GONSALVEZ

DEAR CONFERENCE PARTICIPANT,

On behalf of all of us at the Zaragoza Logistics Center, I extend a very warm welcome to all of the participants in this year's ECITL conference. I hope that it proves to be an enlightening and stimulating experience and that the learning you take back is valuable in your future work in business and in research.

As Logistics Research: Solutions and Innovation through Cooperation is the focus of this year's conference, Zaragoza is a great place to host it. Aragon is a clear example of how cooperation in the field of logistics between industry, government, and research organizations drives innovation that creates regional economic growth. ZLC is proud to be part of this successful enterprise.

In collaboration with the MIT Center for Transportation and Logistics, ZLC has contributed to the internationalization and diversification of the Aragón economy through its educational and research initiatives. ZLC has succeeded in providing highly skilled employees and knowledge transfer in supply chain management for companies in Aragon and across the globe.

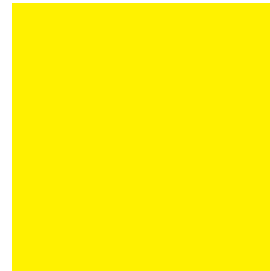
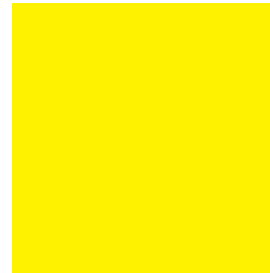
In the decade since its founding in 2003, over a thousand professionals from all over the world have passed through ZLC's classrooms and are now designing and managing the supply chains of companies in over 50 countries. More than 100 R&D projects have been carried out at ZLC with global and local companies as well as public institutions which resulted in a direct transfer of research and innovation.

As co-organizers of the 6th ECITL 2013, we have worked together with ITA and FHV to put together a program that we believe will bring new insights and knowledge to some key transport and logistics challenges that companies and governments are facing. Our sincere hope is that these insights and knowledge will lead to concrete actions that improve supply chains in Aragon, in Spain, across the EU and globally!

Finally, I would like to thank all the participating individuals, speakers, companies, sponsors, and organizations as well as all those people involved in the organization of this

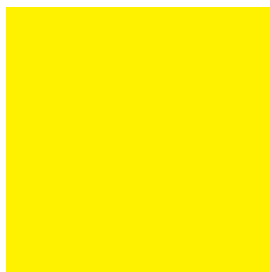
year's conference. I wish that ECITL 2013 provides a memorable experience for all of you.

David Gonsalvez
Zaragoza Logistics Center (Director)



PAOLO PAGANELLI

CEO, Bluegreen Strategy
iCargo Project Technical Coordinator



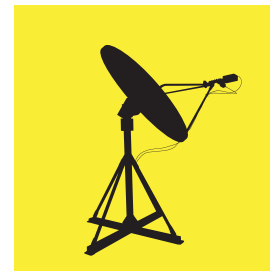
INTRODUCTION

Introducing the works of the 6th ECITL conference is for me both a pleasure and an opportunity. There is some professional pride, shared with many colleagues who have been supporting the conference during these years, for having started it and seeing it grow in participation and scope. Since its first edition, in 2008, the event has progressed in several directions. The focus has moved from projects results presentations, aimed at the research community, towards discussion of broader innovation challenges involving all the main stakeholders in the logistic sector. Industrial presence has increased, as well as international participation, with relevant contributions coming from leading companies and worldwide-recognized experts. One thing has not changed during these years: the ECITL is where the current challenges and opportunities for ICT applications in logistics are discussed. Technology advances like Intelligent Cargo and broad topics like systems interoperability have been put in relation to current socio-economic challenges, from safety and security to the greening of logistic processes. ECITL has shown practical examples and potential uses of ICT to improve the logistics industry efficiency, security and environmental friendliness. Here resides the opportunity that I would like to point out: for the future our focus should be on innovating the logistic industry itself, by means of more advanced uses of information resources. In a world where production capacity is widespread and underutilized, while demand is fragmented across a multitude of products and markets, logistics has the fundamental role to make commercial exchanges sustainable in both economic and environmental terms. While traditional commoditized transport services are destined to struggle in these market conditions, there is a huge opportunity for innovative value-added logistic services providers. These will make an extensive use of ICT to provide logistic solutions for extremely dynamic, fragmented and widespread supply-chains, meeting the customer expectations in terms of service, cost and environmental impact. This year's 6th ECITL in Zaragoza is a first step in this direction, including topics like innovation in logistics, emissions monitoring, collaborative planning and logistic services integration. We are hopeful that this work will be of help to those of you who, in industry as well as in research projects, are looking at ICT as a means not just to increase process efficiency but also to develop innovative value-added logistic services.

DEAR PARTICIPANT,

We are currently in a very exciting period just before the start of the 8th Framework Programme 'Horizon 2020'. The ECITL has, from the start, heavily built upon the individual results of projects launched under the different RTD programmes braced by the European Commission and aimed to develop a common approach and non-exclusive, partial solutions. Over the last 6 years ECITL has succeeded to give a picture of coherence in a world of competition. With the launch of the Horizon 2020 Programme just around the corner I would like to emphasize the role of research institutions in this process, their role in projects as well as major innovation drivers. Over the last years it has been quite interesting to see how research concepts shown in some sessions have been later on developed to industrial solutions deployed by various stakeholders in the logistics field.

Novel and pioneering thinking in the logistics sector requires an independent view that allows the development of disruptive technologies and innovations. We are working in a sector which is frequently classified as innovation reluctant (Monitoring industrial research: The 2012 EU Survey on R&D Investment Business Trends; EUR 25424 EN). Additionally, the logistics sector is largely coined by numerous SMEs operating in the field, thus leading to a highly fragmented logistics market. Therefore, research institutions can foster vital links between various actors as they are providing the logistics industry with out-of-the-box thinking, new visions and solutions for a new and sustainable logistics understanding. When looking at projects funded under the recent calls from DG Connect, DG Move and DG Research it becomes clear that efficiency and environmental sustainability have been the focal points of the research supported by the European Commission.



At the same time, it is important to note that especially SMEs in the logistics area are usually not capable of dealing with advanced research topics and projects that might last well over three years. Hence, the role of research institutions in the logistics sector is more and more turning into a catalyser for the implementation of new findings and results from research in the logistics market. The role of research institutions hereby has three dimensions: We help to develop new visions, methods and tools to improve logistics operations. We train highly educated logistics academics in such a way that they can act as innovation crystallizations points once they start working in industry. And lastly, we also bridge the gap between academic research and real-world solutions. The final point is especially important when thinking of the marketability of the research results. We are still facing the so called innovation gap when trying to transfer prototypes developed as part of research projects into marketable products. While the industry, especially SMEs, lacks the financial capabilities to bridge the timeframe between prototype and final product, research institutions have a longer breath and can act as major cornerstones in bringing research results to the market. This happens either in collaboration with industry but also increasingly via spin-offs that are driven by researchers and graduate students.

On the baseline of this thinking we are proud that besides the two thirds of industrial participants, the ECITL can usually welcome one third of research participants. We hope that with the foundation of the scientific day, which we introduced last year, this rate is going to increase and that networking between industry and research can be further strengthened.

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 owned 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..



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ARAGON INSTITUTE OF TECHNOLOGY

The Aragon Institute of Technology (ITA) depends to the Department of Industry and Innovation of the Government of Aragon. Its objective is the promotion of research, development and innovation (R+D+i) in the business sector, acting as a catalyst for productivity and competitiveness.

Since it was established in 1984, ITA has made a significant contribution to society in all the sectors in which it has worked. It has over the years adapted itself to the fluctuating conditions of supply and demand with the aim of making more effective use of the economic resources of Aragon by means of R+D+i. On the one hand, the ITA generates knowledge in its role of technological development while on the other it collaborates with the business community in applying this knowledge adapted to innovation needs, ranging from raising awareness, dissemination, training and undertaking R+D+I projects to providing added value technology services.

The ITA has two centers, one at the Río Ebro campus in Zaragoza (María de Luna, nº 7), and the other at the Walqa Technology Park in Huesca (R+D+i building) where the Audiovisual ICT work is developed.

ITA features as a key element in the innovation policy of the Government of Aragon, having as its aim the fostering of competitiveness in business and supporting the creation of new sectors through the generation, training, adaptation, transfer and diffusion of innovative technologies within a framework of collaboration with other organizations. ITA seeks to be the technology reference point for the industrial and service sectors, and a key player in the technology policy of Aragon.



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ZARAGOZA LOGISTIC CENTER

Zaragoza Logistics Center (ZLC), in collaboration with the Center for Transportation and Logistics at the Massachusetts Institute of Technology, the world's leader in the subject, has been carrying out research and training programs for a decade, which contribute to changes in logistics systems and supply chains through its R+D+i. Nearly a thousand professionals from all over the world have passed through ZLC's classrooms and former ZLC students are designing and managing the supply chains of global companies in over 50 countries. The center has carried out more than 100 research projects with global and local companies as well as public institutions. ZLC has participated in more than research EU projects such as CASSANDRA, CO3, FLOUE, FUTUREMED, GREENSUPPLYCHAIN2009, SAFEPOST, SECURESCM, SoCool@EU, SOLUTIONS and WINN. ZLC has also contributed to the industrial expansion and economic diversification of the region of Aragon, implementing projects to further develop the region, such as the SoCool@EU project in collaboration with ITA, AREX –the development agency of the local government, the Council of Chambers of Commerce of Aragon and the Aragonese logistics cluster ALIA. ZLC is the first center outside of the US in what was to become the MIT Global SALE (Supply Chain and Logistics Excellence) Network. ZLC promoted the constitution of the European Technology Platform in Logistics (ALICE, Alliance for Logistics Innovation through Collaboration in Europe) and is also coordinator of the Spanish Technology Platform in Logistics, Intermodality and Mobility, Logistop.

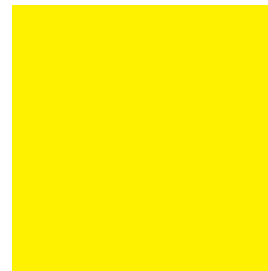


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This year we created the possibility to choose between three different industrial visits. These tours are to the rail freight logistics center in PLAZA, Novalita (Aragofar) and Caladero. Following you will find a short description about every industrial visit. The industrial visits will take place on Thursday, 24th of October 2013 from 17:00 – 19:30 h. Reserved buses will pick you up and bring you back. Afterwards the conference dinner will take place at the NH Gran Hotel Zaragoza.

Rail freight logistics center in PLAZA

The rail freight logistics center in Zaragoza PLAZA, is a reference rail freight terminal for Aragón Region. It is located 15 Km far from Zaragoza with direct access to Barcelona – Madrid motorway. It is integrated in the network of facilities managed by the Spanish rail infrastructure management company, ADIF. The facilities account for 1 Million square meters including 16 tracks to handle trains up to 750 meters. The loading and unloading bay accounts for 37.000 square meters for intermodal transshipment, 5 tracks to handle container trains up to 750 meters length.

NOVALTIA (ARAGOFAR)

NOVALTIA (<http://www.novaltia.es>) is the result of the merger of two important pharmaceutical distribution companies ARAGOFAR and VASCOFAR. ARAGOFAR (<http://www.aragofar.es>) is a pharmaceutical distribution company founded in 1967. With a regional market share of 70%, serves more 650 pharmaceutical partners from its headquarters. ARAGOFAR has an important health function, connecting more than 600 suppliers, 650 products and 26,000 pharmacies. Through ARAGOFAR, it is ensured a rapid delivery of all medicines to pharmacies, in the shortest time and at lower cost. It also ensures perfect condition and proper preservation of all products, as they are always under the supervision of a pharmacist, since its inception in the laboratory to the pharmacy dispensing.

The existing facilities of Zaragoza, inaugurated in June 2001, has a modern building of 18,500 m2, equipped with a cutting-edge robotics recently expanded in 2009, which provides total automation processing of orders. Installation of 6 types of robots and radio frequency newer systems and transportation, make it the company's most advanced pharmaceutical distribution in Europe.



CALADERO

CALADERO (<http://www.caladero.com>) plant in Zaragoza Logistics Platform (PLAZA) is specialized in fish processing and its packing in trays with controlled atmosphere. Inaugurated in 2010, the plant in PLAZA is specialized in the production of fish in trays that the company sells to Mercadona, as supplier of all supermarkets chain in Spain. The most striking CALADERO plant is its monumental size, but the degree of automation of the chain, which resembles more to the automotive industry than any other agri-food sector. And it does so throughout the process of handling the whole fish until it comes out perfectly palletizing. As an example of the automation of the process, a laser scans each piece to cut into equal slices depending on their size and density having as a result same cuts. The slices pass through conveyor to where a robot loads them into trays. Yet another machine is responsible for sealing them in a protective atmosphere. When monitoring is complete, another robot takes care of pallets preparation for the supermarkets.



The ICT Demonstrator Center for Logistics is a public space in which interested ICT companies may demonstrate how their technology products and services can help to create innovative solutions, and improve the productivity and competitiveness in the field of LOGISTICS. Additionally, the demonstrator center serves as a meeting point between innovation and business needs. The Demonstration Center is located in ITA (Aragón Institute of Technology).

The mission of the Demonstration Center is being the connection between ICT companies and technology suppliers of Logistics companies demanding solutions that increase the productivity and competitiveness of their products and processes.

The demonstrator center is divided into several areas that can be identified as the center modules considering the equipment installed.

The supply chain module consists of a plastic with the usual components of a supply chain. It includes a physical model (consisting of several suppliers or providers, warehouse and several clients) and an identification model and monitoring system (consisting of a UHF RFID system and a computer vision system). It is used to evaluate the possibilities of identification systems, monitoring and control of the flow of products common in supply chains, represented by small trays of products that move through the plastic.

The smart warehouse module is to address commonly logistics processes that normally occur in the enterprise facilities. That is, the reception and classification of the goods, their movements in the distribution center and the preparation of orders or configuration of the location and inventory for storage. At the same time of the internal flow of materials it must provide a logical flow of data, synchronized with the above. This is achieved by monitoring systems and software modules for data processing and distribution.

The demonstration equipment for storage solutions consists of two main systems: Packaging sorting system and the Smart warehouse system. Each of these systems is equipped with the technology needed to perform the functions, both physical and logical, to create internal logistics processes that are demanded by users Demonstration Centre.



Main objectives of this module are technologies for receiving, picking, shipping, storage and characterization methods of automatic goods; create a real operational scenario of an intelligent warehouse space featuring test different products and processes.

The intelligent transport module equipment is designed for the simulation of vehicle traffic. It allows static mapping and dynamic mesoscopic, microscopic and macroscopic traffic simulation including: Technologies for route and drivers planning and fleet management; Show geographic information systems analysis tools for locating and trip generation and Technologies for simulation and analysis of traffic congestion.

The smart point of sale module main purpose is to show the capabilities of several ICT solutions in the field of direct sales to consumers with a Point of Sale Terminal and automatic billing system and a Smart shelving for automatic inventory control. Main objectives are showing: Technologies for the identification and collection of products with unique customer support: target small businesses vs. large supermarkets; Innovative technologies at the point of sale pursuing more efficient logistics and procurement process more user friendly; Technologies for real-time information about the existing stock of each product on the shelf or Technologies to replace product according to claim efficiently.



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“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 more 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”.

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:



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The CASSANDRA project aims to make container security more efficient and effective. The project addresses the visibility needs of both business and government in the international flow of containerized cargo by developing a data sharing concept that allows an extended assessment of risks by both business and government. The CASSANDRA concept will improve supply chain visibility, efficiency of trade compliance and effectiveness of border control and supervision by combining E-Freight and E-Customs. CASSANDRA builds on previous EC FP7 projects INTEGRITY, SMART-CM and ITAIDE.

With increasing flows of containerized traffic and growing emphasis on (national) security, businesses and government are struggling to find efficient and effective means to ensure full supply chain control and security. A large number of research studies have been conducted to investigate supply chain dependencies, vulnerabilities and resilience. Supply chain security frameworks have been developed to support businesses in improving resilience and security. Governments are launching security programmes to involve in development of security standards and procedures.

For businesses, the strategic impact of CASSANDRA can be found in supply chain performance and cost reduction, which can be reached by reducing administrative and planning errors along the chain. CASSANDRA's final contribution to business will be a decreasing involvement of customs and possibly other supervision agencies. For government agencies, CASSANDRA will improve efficiency and effectiveness by developing a new approach for risk assessment. This Risk-Based Auditing approach will help customs to assess business processes and procedures and identify secure supply chains. By minimizing the attention given to these secure flows and businesses, customs can focus on high-risk flows resulting in a higher hit rate and greater effectiveness of security related government inspections. To provide supply chain partners and government authorities with accurate, reliable and timely data, CASSANDRA will develop a data-sharing concept, the so-called information pipeline, which can be visualized as a data pipeline that connects entities and gathers and distributes data according to predefined conditions.

Moreover, CASSANDRA will in general facilitate EU and global trade. The concept of Risk-Based approach will enhance corporate social responsibility while the data-sharing concept will improve product and societal safety. The data-sharing concept also brings possibilities to improve insight in – for example – CO2 footprints and fair trade.

In CASSANDRA, three global so-called Living Labs will be set up in order to study the innovations in complex real world settings. These are a China-EU, EU-US and EU-Africa Lab. These Living Labs will include both import to and export from the EU. Some of the larger container ports of Europe will be involved, being Rotterdam, Bremerhaven, Felixstowe, Barcelona and Setúbal. The four Freight Forwarding companies that are part of the CASSANDRA project, DHL, Kühne + Nagel, Seacon and BAP, will provide the Living Lab with actual container flows.



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Europe strives to make logistics more efficient and sustainable by launching ambitious 'CO³ Project' for horizontal collaboration. On 1st September 2011, the program "Collaborative Concepts for Co-Modality (CO³)", financed through the 7th Framework program of the EU, was launched. The mission of CO³ is to encourage a structural breakthrough in the competitiveness and sustainability of European logistics by stimulating horizontal collaboration between European shippers. To achieve this goal, horizontal flow bundling and co-modality scenarios, designed to be repeatable and scalable, will be created in a number of test cases. Bundling of goods flows as the solution Statistics show that 1 out of 4 freight vehicles are running empty and that the rest are filled only to 57% of their weight capacity. Among the several strategies to be undertaken, this project is aiming at addressing horizontal collaboration. Capacity in the European transport system is being structurally underutilized. "Carpooling for cargo", also known as horizontal collaboration or smart bundling of goods flows of different companies, offers a powerful and innovative solution to tackle this problem.

Companies who collaborate and bundle their logistic flows can achieve dramatic benefits on economic, social and environmental levels. Up to now, shippers who want to collaborate in this way are too often hindered by practical obstacles in their way. It is one of the goals of "Collaborative Concepts for Co-Modality (CO³)" to eliminate these obstacles.

Shippers who want to transport their goods across Europe with "fewer and friendlier miles", can make use of the services of the CO³ consortium to identify potential bundling partners and to set up test projects.

To achieve this, CO3 provides these companies with the necessary operational building blocks and provide active coaching during the implementation of the horizontal collaboration. The consortium will in parallel develop a legal framework for neutral 'trustees', an essential new actor in the creation of horizontal collaboration. In addition to standard multi-lateral transport contracts, also innovative concepts for gain sharing will be developed and tested.

The market relevance and practical progress of the CO³ project will be monitored by a 'High Level Industry Board', representing ca. 35 European companies from various industries. This Board will act as a steering committee for the consortium and can adjust the focus where necessary. During its lifespan, the CO3 project will implement across Europe real life test projects whose results and learning will be in the public domain. As such, the project will reach out and provide valuable information to logistics practitioners (businesses, shippers, logistics service providers). CO3 will also provide them with conferences and specific workshops and a platform where they can find potential collaboration partners.

The driving force behind CO³ is a consortium of 18 European partners who will join forces to further enhance existing concepts of horizontal collaboration and to translate these concepts into operational practices together with shippers. The project will run until September 2014 and will work with a large network of European enterprises and knowledge centers.

Consortium participants are: Holland International Distribution Council, Cranfield University, Zaragoza Logistics Center, Procter & Gamble, Heriot Watt University, TRI-VIZOR, Argusl, Kneppelhout & Korthals Lawyers, Technical University Eindhoven, ITENE, D'Appolonia, DINALOG, Mines Paris Tech, Pastu Consult, Giventis, ELUPEG, and Lindholmen Science Park AB.

Objectives of the CO³ project:

- Develop a legal framework and remove managerial barriers for horizontal collaboration
- Facilitate, launch, and coordinate test cases
- Organize workshops and seminars to educate trustees, shippers and logistics service providers



Contact:

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COMCIS is a collaborative project between multiple transport and logistics actors that generates situational awareness along global supply chains in support of enhanced logistics services.

Imagine that you're waiting to handle or receive a container of high-value cargo. It's critical that it be delivered efficiently, on time and intact. But how can you find out what is happening to your container during its long journey? With 90% of world trade being transported by sea it has never been more important to make cargo-related data flow as freely as the physical cargo itself. COMCIS delivers awareness throughout global supply chains to solve problems of data fragmentation, delay, and inconsistency. Using data drawn from the entire supply chain, COMCIS provides accurate, comprehensive logistics information.

You can find out about problems sooner and adjust your plans proactively, minimizing the impact of deviations or other exceptions and maximizing commercial opportunities. COMCIS supplies business tools that can eliminate uncertainties and raise efficiency, especially when sensitive cargo is involved. COMCIS demonstrates "Collaborative Information Services for Container Management" and ensures that such services can be used in real-world operations. The project is funded by the European Commission, General Directorate for Research, under the 7th Framework Programme for Research & Development (FP7).

This project is about collaboration & interoperability between e-freight systems that have been developed in previous EU projects as well as in commercial undertakings. We therefore show how the following e-freight systems can be integrated: The value added services platform Logit 4SEE®, the NGSW (next generation single window), data from SICIS (developed by Integrity), data from the Descartes Global Logistics Network, and commercial platforms of global forwarder DHL and terminal operator ECT. Based on this interoperable set of e-freight systems, shippers, beneficial cargo owners, LSPs as well as customs authorities will be offered information that will make logistics chains have shorter lead times and higher reliability. We will unlock valuable information that is available somewhere throughout the logistics chain. For communication between abovementioned e-freight systems, we will use the common framework that is being developed in cooperation between EU projects (Freightwise, e-Freight, Smart-CM, Integrity, Euridice, etc.) as well as harmonized with industry driven initiatives like UBL, UN/CEFACT and GS-1. Demonstrations will take place in business cases through ports of Antwerp and Rotterdam.

COMCIS creates opportunities for new models for business and operations. Currently the data for end-to-end supply chains are scattered across the globe. Looking at the entire chain is usually too complex and costly for individual businesses, which means they

miss out on commercial opportunities. COMCIS creates holistic views of supply chains, beyond the boundaries of a single actor's operational responsibilities, and offers information services that can benefit logistics service providers, terminal operators, ocean carriers, port authorities and customs administrations in their respective activities. Professional actors benefit from greater operational control.

With more relevant and comprehensive information and fewer barriers to communication they can react sooner to deviations in the supply chain, and identify opportunities for further improvement. By raising the quality of services, actors can also create added value for their customers. COMCIS is ready to help stakeholders understand the value of multiple information channels, offer advice on how to use them, and demonstrate the resulting benefits. While results are demonstrated using examples from industry leaders, COMCIS solutions have been designed to be equally useful to SME's.



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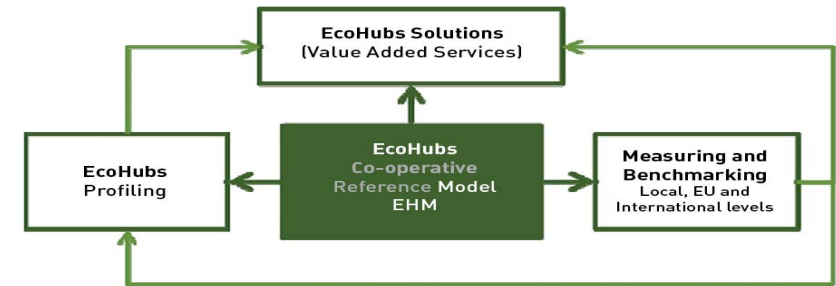
Environmentally COherent measures and interventions to debottleneck HUBS of the multimodal network favored by seamless flow of goods

EcoHubs provides models and capabilities for cooperation and communication between green hubs' stakeholders. It also establishes Value Added Services which, combined with existing services, facilitate end-to-end co-modal, low-CO2 transport solutions that maximise utilisation of terminal and logistics resources and transform multimodal terminals into Green Hubs. The project's duration is 30 months, 1/11/2012-30/4/2015. The expected outputs of the project are: Cooperative Model for Green Hubs (called the EcoHubs Model) enabling low-carbon, resource-efficient and secure transportation services through: Improved connectivity for hubs in supply chains building on the results of the Common Framework, where transport and logistics services are presented using the concept of the "Transport Service Description". Effective cooperation between hubs in a region, to balance cargo flows and to eliminate bottlenecks, by enabling a network of hubs to be perceived by supply chain organisers as an "extended hub". Ecosystem for electronically connecting multimodal terminal network stakeholders, amplifying their joint capabilities when using the EcoHubs Model. The ecosystem will facilitate interaction between new and existing logistics and terminal management systems. Furthermore, emerging cloud/internet technologies and applications may be introduced gradually, at an affordable cost for network stakeholders. Common Value Added Services to be combined with existing services, facilitating end-to-end co-modal, low-CO2 transport solutions that maximise utilisation of terminal and logistics resources. Four EcoHubs Demonstrators to be used across several representative operating scenarios characteristic of modern intermodal terminals in four Business Cases through terminals in Italy, Sweden, Slovenia and Belgium. By allowing the industry stakeholders to drive EcoHubs, the output solutions will address the real needs of this sector in a cost-effective way. Cooperation with existing research projects will enable evaluation of the approach in the overall context of co-modal transport and will provide data for measuring the actual impact.

The expected benefits from EcoHubs (identified by Business Case participants) are:

- Increased load utilisation in consignment centres
- Increased cargo volumes in intermodal terminals
- Enhanced supply chain visibility
- Reduced CO2 emissions
- Reduced lead times

Partners in EcoHubs are leading research institutions, consultants and industry representatives of a typical heterogenic transport chain that are setting standards and promoting intermodal transport:



BMT Group Ltd, Consorzio IB Innovation, KOMBICONCONSULT Gmb, HaCon Ingenieurgesellschaft mbH, INLECOM Ltd, MARLO a.s., Deutsche GVZ-Gesellschaft mbH, SINTEF, UIRR, Jernhunsen AB, Adria kombi d.o.o. Lindholmen Science Park, PE International, Interferryboats NV.



Contact

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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.

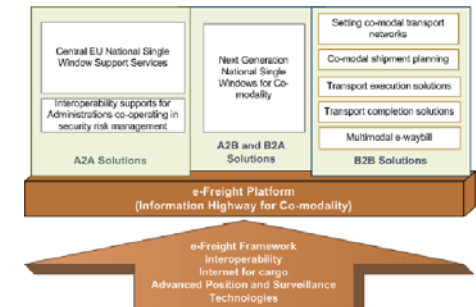
The project has developed an e-Freight platform that facilitates efficient development of e-Freight Solutions (software applications to deploy the e-Freight Framework) based on a Service-Oriented Architecture (SOA). The e-Freight platform facilitates, additionally, integration with SafeSeaNet (SSN) and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

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.



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For LOGINN, innovation in logistics encompasses three distinct and interlinked dimensions: business models, logistics practices and technological applications.

Only considering these three dimensions together, allows to effectively uptake innovative solutions. The main objective of LOGINN is to facilitate and accelerate the commercial uptake of logistics innovation, by turning knowledge and research into investment in innovation, more specifically LOGINN objectives are

- Raising the profile and understanding of innovation in logistics, by identifying current and expected market developments and defining logistics innovation in terms of drivers, critical success factors, barriers overcome and impacts achieved.
- Identifying policies, regulatory measures, financial mechanisms and socio-economic aspects that are required in support of accelerating the development and diffusion of logistics innovation.
- Encouraging greater involvement in and acceptance of innovations by promoting and disseminating the knowledge created within the project to a variety of relevant stakeholders and by establishing synergistic links to complementary initiatives at a European level.

The overall strategy of LOGINN to support the above objectives makes intensive use of social networking approaches and mechanisms through:

- The creation of an enlarged logistics community that comprehends all stakeholders involved in the value chain: the Associated Partners Group (APG)
- The establishment of a communication/collaboration platform for stimulating discussion, validating project results and achieving consensus among stakeholders and support the community: the LogisticsArena which is alive and active since February 2013.

Get engaged, be logistics! LogisticsArena.eu



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LinkedIn: <http://www.linkedin.com/groups/LogisticsArena-4793802>

Flickr: <http://www.flickr.com/photos/logisticsarena/>

Twitter: <https://twitter.com/LOGINNProject>

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 fast-moving 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.



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European Platform Driving Knowledge to Innovation in Freight Logistics, WINN, is a step forward to increase collaboration and consensus building of the different stakeholders dealing with freight transport and logistics to define and implement research and innovation measures that may be implemented through the HORIZON 2020 and member states programs in the medium-long term in the field of logistics. Estimates put the share of the logistics industry in Europe at close to 14% of GDP and the logistics industry has had growth rates above the average of European economies. Moreover, six countries out of the global top-10 logistics performers are from the EU in 2012. This basic data support the idea of a potential worldwide leadership of the European logistics industry that will also benefit the competitiveness of the industrial sectors (automotive, food industry, etc.) in which logistics represents a major cost.

The WINN project has already established the European Technology Platform (ETP) on Logistics called ALICE, Alliance for Logistics Innovation through Collaboration in Europe, as the forum to increase collaboration and build consensus in the field of logistics innovation in Europe. ALICE was launched in June 2013 and got the official recognition as a European Technology Platform by the European Commission in July. ALICE is led by industry being WINN the tool to support ETP developments and coordination initiatives. The ETP on Logistics will provide input to HORIZON 2020 program and will be the voice of the sector (industry, authorities and research) in order to channel main areas of development in RTD and Innovation in the logistics field where coordination and combination of efforts between industry and authorities is needed to ensure the leadership of the European logistics sector. ALICE will constitute discussions forum of both industry and authorities where common financial and business plans and eventually legislative actions to support the research may be agreed. One of the main aims of the project is to stimulate research and innovation through pioneering projects and programs in logistics.



Logistics innovation for a more sustainable and competitive industry

WINN project coordinator

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At the end of the 7th Framework Programme for research and technological development, it may be prudent to provide a short overview of the results of and opportunities provided by EU funded projects in the area of transport and logistics. The challenge has been, and still is, to provide businesses (particularly SMEs) and authorities with coherent, reliable, complete, timely, secure and affordable ICT solutions and information “under the wings” of a clear governance regime.

COMMON REFERENCE MODEL

When discussing issues related to transport and logistics, it is useful to have a common reference model as a basis shows the reference model now used in numerous EU funded projects. The reference model is divided into domains and sub-domains, and visualises their overall need for interoperability. Each domain identifies specific responsibilities. Each domain has associated an overall role, which is responsible for maintaining these responsibilities.

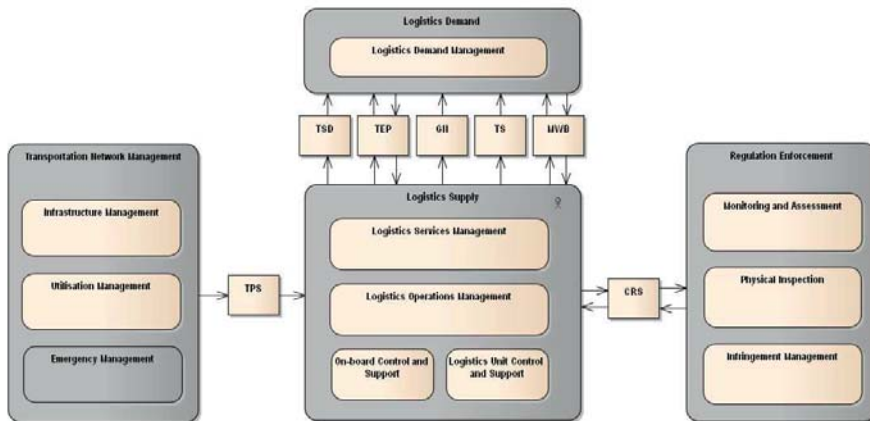


FIGURE 1: act Reference Model

The domains Logistics Demand and Logistics Supply are related to the users and providers of logistics services, while Transportation Network Management and Regulation enforcement are related to authorities. Responsibilities (roles, functions and required information) have been identified for all domains and sub-domains. This way of looking at transport and logistics has been adopted by a number of EU funded projects lately. Developed in Freightwise, e-Freight and DiSCwise, the model is applied in iCargo, COMCIS and EcoHubs.

The model in Figure 1 and the electronic documents being exchanged between the various domains (Transport Service description – TSD, Transport Execution Plan – TEP, Goods Item Itinerary – GII, Transportation Status – TS, Multimodal eWaybill – MWB, Transport Progress Status – TPS, and Common Reporting Schema – CRS) are known as the Common Framework¹.

LEVELS OF INFORMATION

Another important issue is levels of information and information exchange. In relation to the interaction between the domains in information is on what may be called a logical or “standardised” level. Examples are information about available services, requests, bookings, itinerary, status reports, waybills, reports to authorities, etc. All electronic documents (message) standards are represented at this level, the Common Framework, GS1 eCom, UNCEFACT based standards, etc. In Figure 2, the level where these electronic documents reside is called “Data standardisation”.

“Raw” data used to compose the standard electronic documents is collected on the level in Figure 2 called Data Aggregation. This is a level of information exchange much closer to the physical transport (equipment/processes/sensors). Information from the Data Aggregation and Data Standardisation are used in the Consolidated Information layer to perform business functions. On this level, we may see more differentiated layers in the future in order to further refine the context within which the information is being used. That will make interoperability even easier, because there will be less ambiguity as to how the Common Framework is being used for certain classes of applications.

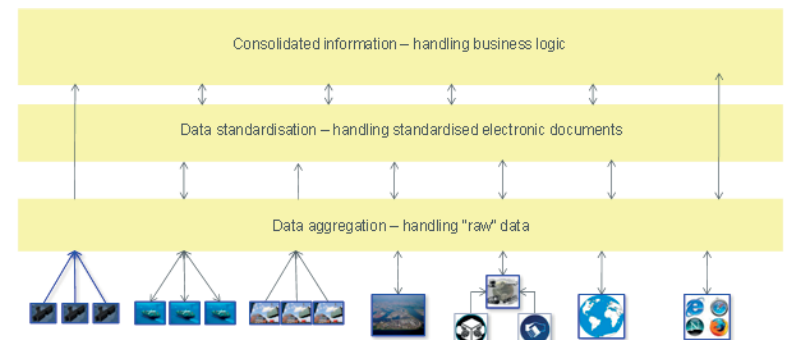
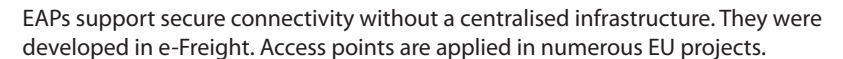


FIGURE 2: Equipment/sensors/processes

e-Freight, iCargo, EcoHubs, and COMCIS have developed or adopted the Common Framework standard electronic documents for information exchange.

One way of reducing the cost of connectivity is to apply the concept of Access Points developed in the e-Freight project, so-called EAPs. The EAP benefit is that each stakeholder connects only once, and, when connected, can communicate with all others, with whom address information has been exchanged (like e-mail). In addition, use of EAPs provides a sufficient level of security, another barrier that has been limiting the interest of electronic information exchange in the transport and logistics community.



CASSANDRA develops and applies the information pipeline concept.

² The e-freight development was inspired by the architecture developed in the EU project PEPPOL. Specifications for the communication layer are found in http://www.peppol.eu/peppol_components/transportinfrastructure/infrastructure-resources

INTELLIGENT CARGO

Based on the definition used in the project EURIDICE, iCargo defines “intelligent cargo” as the ability of software services to collect, store and share information of logistic entities with an entity-centric approach to enable:

- self-identification,
- detection of physical and organizational context and
- to play an active role in transport processes, either by using computational resources attached to the cargo or by remote software services.

What is important to notice about this definition is that it does not relate to any specific content or structure of the information about the logistics entities. Hence, implementation of “intelligent cargo” solutions can easily adopt the conceptual Common Framework, as it is being done in iCargo, since “intelligent cargo” is more of a technical architecture approach rather than a conceptual one.

INTERMODAL, MULTIMODAL, CO-MODAL, SYNCHROMODAL ...

Over the last 20 odd years, a variety of terms has been used to describe the management of freight using more than one mode. When the Infolog project was launched in 1996 (FP 4), the objective was: “For all transport orders, the chain manager (freight forwarder) should be able to choose the best possible transport mode or mode, carefully balancing time, cost and service levels.” Lately, we have seen the same term to describe what is now called synchromodality. Almost all EU funded projects in the area of transport and logistics following on from FP 4 have had similar objectives. What is new now is that, finally, the technologies and systems that have been developed over this period have matured and the transport and logistics community is in the process of gradually adopting them. All of the projects mentioned in this booklet support the concept now called synchromodality

POTENTIAL

The Common Framework electronic documents are part of the UBL 2.1 standard, which is presented for acceptance by ISO. Initiatives have been taken to secure UN/CEFACT adoption. Acceptance by standards organisations makes is a quality stamp that makes it easier for the industry to adopt it. Mechanisms for situation awareness, better utilisation of loading units and vehicles and automatic composition of logistics chains are nearing completion, demonstration and deployment. Large logistics organisations have adopted some of the results already. Simple Apps for planning, execution, and completion, using the Common Framework and the connectivity infrastructure, will soon be launched to facilitate SME involvement and connectivity. FP7 has, in the area of transport and logistics

produced innovative results, and has attracted the interest of the industry. Cooperation between industry and research communities is strengthened, providing a good basis for securing good Horizon 2020 projects and results.

Regarding the great success and the quite positive feedback of last year's ECITL scientific day, we are delight to organize the ECITL scientific day again. The call for papers opened on the 2nd of January, 2013 and closed on 31st of May, 2013. In this period, 25 papers were submitted and distributed to "internal" and "external" reviewers. The internal reviewers were:

•Bernhard Holtkamp	Institute for Software- and Systemtechnik
•Fernando Liesa	Zaragoza Logistics Center
•Germán Herrero	ATOS Research
•Jannicke Balsrude Hauge	BIBA – Bremer Institute for Production and Logistics GmbH
•Javier Val Alonso	Aragon Institute of Technology
•Jens Schumacher	Vorarlberg University of Applied Sciences
•Nils Meyer-Larsen	Institute of Shipping Economics and Logistics
•Yao-Hua Tan	Delft University of Technology

The external reviewers were the editorial board of the 'International Journal of Advanced Logistics' around Florent Frederix and Yoon Seok Chang.

For the first time, the scientific day is divided in a parallel session. In session (A) scientific related papers will be presented and contains presentations to topics around 'Supply Chain Risk Management', 'Intelligent Transport Systems', 'Transport Planning and Optimization' and 'IT / IT Infrastructure'. In session (B) scientific papers with reference to a specific project will be presented. The sessing for each presentation is: 20 minutes presentation + 10 min discussion. An interactive participation of the audience is desired and will be prompted by the session moderators.

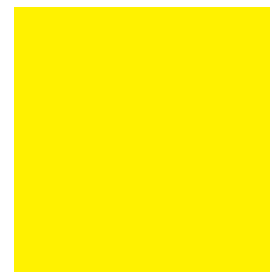
At this place we would like to take the opportunity to express our sincere thanks to all authors, reviewers and session moderators. The session moderators are Emilio Larrode (University of Zaragoza) and Bernhard Holtkamp (Fraunhofer Institute).

PARALLEL A

SESSION MODERATOR: EMILIO LARRODÉ



Emilio Larrodé-Pellicer is professor at the Department of Mechanical Engineering in the Faculty of Engineering and Architecture of the University of Zaragoza. He received his BE in industrial engineering, his MSc degree in mechanical engineering and his PhD degree in operations research from the University of Zaragoza. He is founder and director of the Zaragoza Logistics Center (2003-2004). His research interests include transportation systems analysis, operational research, project management, decision support systems, and applications in urban/road/rail/air transport and logistics engineering. He is author and co-author of several scientific books and papers published in international journals and presented at international conferences.



WED 23.10 AT 12:30 IN AUDITORIUM

Public-Private Partnership for Coordinated Supply Chain Risk Management

Presenter: Marcel van Oosterhout

Authors: Morteza Pourakbar, Rob Zuidwijk, Marcel van Oosterhout

This presentation aims at studying the coordination of risk mitigation by governmental actors, such as customs, and supply chain partners. To do so, the concepts of supply chain visibility and data pipeline are briefly revisited. One of the main challenges identified is that business partners are expected to bear the implementation costs of such systems while the benefits are not clear to them. To highlight the potential operational benefits gained through such systems we consider counterfeiting risks and study how a coordinated risk management leads to cost efficiency through the reduction of inspection costs and congestion-induced delay at ports.

WED 23.10 AT 13:00 IN AUDITORIUM

Business Intelligence for Improving Supply Chain Risk Management

Presenter: Lingzhe Liu

Authors: Lingzhe Liu, Hennie Daniels, Marcel van Oosterhout, Jan van Dalen

The risk management over a supply chain has to be founded on the risk management in each of the partner companies in the chain. The business relationship and operations dependence inevitably bind the management control efforts of the partner companies together. This proposes challenges for supply chain risk management and at the same time for the business intelligence application. In this paper we analyze the management control situations where BI technology can be applied and describe the concepts of systematic risk analysis to improve the management controls, based on causal analysis of business exceptions. A "risk template" is provided to assist analysts to fully comprehend the risk scenario in the practical business setting for evaluating and re-designing the existing controls for management improvement.

WED 23.10 AT 13:30 IN AUDITORIUM

A synergy based method for designing ITS services

Presenter: Shoaib Bakhtyar

Authors: Shoaib Bakhtyar, Johan Holmgren, and Jan A. Persson

In this presentation, we propose a method for supporting the process of designing Intelligent Transportation System (ITS) services, which utilizes on primarily functional synergies with already existing services. Using synergies between services will enable sharing of resources, such as, information entities, functions and technical resources, which in turn may lead to reduced costs for implementing services. In order to illustrate the usage of the suggested method, we have applied it for designing a new ITS service, i.e., the Liability Intelligent Transport System (LITS) service. The purpose of the LITS service is to support the process of identifying when, where and why freight has been damaged, and which actor was responsible when the freight was damaged. The LITS service may lead to better quality control of consignments and may also facilitate the identification of which actor was responsible for the freight damage, which is of particular interest in multi-modal transport. By applying our service design method we were able to identify that three out of four functions of the LITS service already exist in other existing ITS services..

WED 23.10 AT 14:00 IN AUDITORIUM

A Framework for Green Transport Logistics Process Design using best practice repositories and case based reasoning

Presenter: Bill Karakostas

Authors: Kamalendu Pal, Bill Karakostas, Takis Katsoulakos

In this presentation, we describe a web-based Carbon Footprint of Freight Transport (CFFT) Framework for understanding logistic chain management and its sustainability issues in relation to global warming. The framework uses a knowledge-based multi-modal freight transportation service composition mechanism, which consists of case-based reasoning (CBR), rule-based reasoning (RBR), for transport logistics process reengineering.

WED 23.10 AT 15:00 IN AUDITORIUM

Logistics optimization by the use of truck FCD – enhanced routing for heavy goods vehicles

Presenter: Michael Schygulla

Authors: Michael Schygulla, Thomas Engel

Standard routing engines use fixed values for vehicle speed/ travel times on different network/ road categories. The approach in this case was to improve the routing for heavy trucks through the analysis and processing of floating vehicle data from trucks. Firstly, the spread of speed values throughout Europe shows distinct influences on the driving speed. Most of these are rather obvious such as slow-downs in metropolitan areas, mountainous areas, on the last mile before ferries, and others. Secondly, linking the track points to a European road network geography allowed to calculate average speeds for each network link. These speeds can be used to improve the standard network and thus calculate more realistic travel times.

WED 23.10 AT 15:30 IN AUDITORIUM

Architecture vision for an Open Service Cloud for the smart car in logistics

Presenter: Martin Birkmeier

Authors: Martin Birkmeier, Jonas Fluhr, Marco Roscher

The Open Service Cloud platform, developed in project oscar (www.osc4car.de), is not restricted to individual OEMs or system providers, due to the Architecture of this platform. The provided interfaces designed to be normed and open. Basically the platform gathers and stores data from vehicles in real time and distributes the data to all services. Third party services can also send data back to the vehicles, drivers or other users. By providing a "in car"- system, based on common hand held tablets, applications within the vehicle can receive this data and communicate with the cloud and the third party services. Within strict limitation even remote control of non-security relevant vehicle functionalities is possible..

WED 23.10 AT 16:00 IN AUDITORIUM

Towards an IT infrastructure for compliance management by data interoperability – the changing role of authorities

Presenter: Wout Hofman

Authors: Wout Hofman, Harrie Bastiaansen

Presentation: Since 9/11, the Customs Trade Partnership Against Terrorism (C-TPAT) was an initiative to increase container security. Through the Entry Summary Declaration (ENS), authorities require shipping lines to timely submit data to the first port of call in the EC.. However, an ENS contains insufficient data for proper risk analysis. This paper presents an IT infrastructure to capture so-called upstream data that allows customs to match delivery - with container data. It proposes Semantic Web technology for secure, global trade, with a gradual migration strategy of all stakeholders. In its final stage, only export and import declaration based on commercial documents is required; all other data can be captured by various authorities for risk analysis. Transport security will increase, whilst the administrative burden will decrease.

WED 23.10 AT 16:30 IN AUDITORIUM

L/SH drivers' work outside the cab: From ergonomics and accident statistics analyses to participatory development and future scenarios

Presenter: Arto Reiman

Authors: Arto Reiman, Seppo Väyrynen

Local and short haul drivers work in various other work environments in addition to the truck cab, and the quality of these vary widely. This study includes three approaches at three time levels; accident statistics analyses (before); video observations (now) and scenarios (future) in order to provide design knowledge that can be implemented in design and management processes for work in environments other than the truck cab in the transportation industry. Even though new technologies have been and will be provided to ease drivers' work, the work that is performed in environments other than truck cabs still contain tasks that require physical activities and contain risks for occupational diseases and accidents on the part of the driver. Thus drivers' work ability issues remain an area that needs continuous development processes. The results inevitably show that relevant stakeholders' participation and continuous co-operation as regards strategic short-term and long-term goals are needed in order to succeed in improving work performed in environments other than the truck cab.

SCIENTIFIC DAY

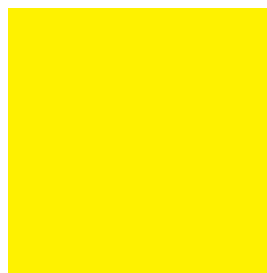
PARALLEL B

51

PARALLEL B

SESSION MODERATOR: BERNHARD HOLTkamp

Bernhard, born in 1955, got his diploma and Ph.D. in computer science from the University Dortmund. For more than 30 years he is working on applied research. He was a research assistant at the University of Dortmund, held a position as Adjunct Research Professor at the Naval Postgraduate School in Monterey, California, and was head of department in Fraunhofer ISST for more than 10 years. For several years now he is manager strategic project development for Fraunhofer ISST. A core theme of his work is cloud computing that provides the basis for the Fraunhofer Innovation Cluster „Cloud Computing for Logistics“. In this context he is involved in the implementation of the Logistics Mall.



WED 23.10 AT 12:30 IN ROOM ZERO

A service-oriented platform to achieve collaboration in the supply chain

Presenter: David Ciprés

Authors: Lorena Polo, David Ciprés

One of the key factors in supply chain management is coordination. Coordination involves aligning plans and objectives of all the individual business entities and integration of information flow and a real collaborative framework is required. The objective of this research is to design, develop and test a collaborative supply chain management prototype system for the food industry based on a service-oriented architecture. Food supply chains are subject to particular conditions, such as product perishability, traceability requirements and regulatory measures. The system proposed adapts to these features providing data sharing capabilities to the different business entities involved and, in the end, an increased supply chain visibility. Pilot tests in a real and in a simulated environment demonstrate that the use of the technological solution developed leads to enhanced efficiency in logistic processes.

WED 23.10 AT 13:00 IN ROOM ZERO

Design of SmartGate Technologies for Enhanced Material Handling

Presenter: Michael Lütjen

Authors: Michael Lütjen, Michael Teucke, Marc-André Isenberg, Hendrik Thamer, Claudio Uriarte, Stefan Kunaschk

The use of information technologies in logistic processes leads to higher automation and efficiency. Nevertheless, information of cargo is often incomplete or incorrect. This affects the material handling processes in planning as well as in operation. The SmartGate approach contains multiple technologies for identification and exploration of goods in order to provide correct information for enhanced material handling processes.

WED 23.10 AT 13:30 IN ROOM ZERO

RFID Technology Adoption In Third Logistic Operators: A Multiple Case Study

Presenter: José Antonio Alfaro

Authors: José Antonio Alfaro, Cristóbal Rodríguez

Presentation: This presentation tries to enrich the RFID literature, and more specifically, about the driving factors of RFID technology adoption in third party logistics operators, where management inventory constitutes a critical operational activity. Thus, this research will try to answer the following questions: (a) what is the degree of knowledge and implementation of RFID technology in logistics operators; (b) key processes within the activities of logistics operators where RFID technology can add value; and (c) key factors that make RFID technology be a tool to get competitive advantages for a third party logistic operator. In order, to answer these questions a multiple case study was conducted on a sample of third party logistics operators (TPLs) in the Spanish region of Navarre..

WED 23.10 AT 14:00 IN ROOM ZERO

T-TRANS: Enhancing the transfer of intelligent transport systems (ITS) innovations to the market

Presenter: Susanne Kellberger

Authors: Susanne Kellberger

This presentation is based on research results from the EU-funded FP7-project T-TRANS. It aims at enhancing the understanding of key drivers for transport innovation by analysis of the main drivers and barriers determining the success or failure of innovations. The selected past innovations are drafted from the Transport as well as Information and Communication Technology (ICT) sectors. In addition to that the development of an ITS ontology helps to understand the relationships among various ITS areas, applications and technologies. This ontology links ITS concepts based on the study of four case studies, and is general enough to be valid across different transport modes.

WED 23.10 AT 15:00 IN ROOM ZERO

FREVUE: Freight Electric Vehicles in Urban Europe

Presenter: Matthew Noon

Author: Matthew Noon

The use of Electric Freight Vehicles in urban logistics holds significant promise. Not only can it contribute to the decarbonisation of the transport sector, but also make substantial improvements to air quality and environmental amenity at a local level. At present however, there is still industry and regulatory resistance to the shift based on financial, infrastructural and political constraints. With support from the European Commission's Framework Programme 7, FREVUE is a demonstration project that will trial over 120 electric freight vehicles in eight cities across Europe. Operating in a variety of different sectors and geographical settings with diverse political and regulatory frameworks, the project will show how EFVs can make a real contribution to improving both the economic and environmental performance of the urban logistic industry. Launched in March 2013, this 4 ½ year project will independently assess the operation and effectiveness of EFVs and produce a white paper to move the industry forward.

WED 23.10 AT 15:30 IN ROOM ZERO

ICT for cooperative supply chain visibility within a port centric intermodal setting: The case of the Thessaloniki port-rail-dryport integration

Presenter: Eliza Gagatsi

Authors: Gagatsi Eliza, Athanasopoulos Nikos, Vaggelas George, Aifadopoulou Georgia, Morfoulaki Maria

Although ICT applications in transport and logistics have gone a long way especially in the past decade, supply chain visibility still remains a challenging issue to be tackled. This is especially important in the case of a Med port-rail-dryport setting, as the FutureMed project testifies. Cooperative action of the supply chain actors involved in such a setting is required to solve the informational and ICT integration problems that still exist. This is the case of FutureMed's Greek (actually involving Greece and Balkans) pilot, which is currently at its preparatory phase. The present article initiates by placing supply chain visibility within its wider context and proceeds to the description of the Greek pilot aiming at enhancing such visibility by the use of ICT..

WED 23.10 AT 16:00 IN ROOM ZERO

Spanish Port Hinterland Intermodal Information – FUTUREMED Pilot

Presenter: Susana Val

Authors: Susana Val, Fernando Roldán

This presentation shows the necessity of an information exchange system methodology for making more efficient port-hinterland intermodal corridors and how interoperability information systems contribute to this target. Thus, the paper reflects the pilot that is being designed and developed by the Spanish team, involved in the MED project FUTUREMED. The pilot aims the analysis of the current situation port-hinterland in terms of accessibility barriers, information systems used and logistics activities in the corridor. Furthermore, the

work needs the compilation of the documentation and operation requirements for every actor involved and also to create a methodology based on these requirements to define an information system model to be finally tested. The result will be an IT operative platform that will enable the information exchange among the corridor actors, which will make feasible the development of a sustainable transport chain and the possibility of being used by others or even being integrated in a transnational transport corridor among the actors involved.

WED 23.10 AT 16:30 IN ROOM ZERO

Intelligent Logistics Zones: An ultimate vision of efficient, safe, and transparent logistics infrastructure

Presenter: Saira Saleem Pathan

Authors: Saira Saleem Pathan, Olaf Poenicke, Hagen Borstell, Klaus Richter

In today's era, we are living in the world of "cloud of technology" which in consequence, transforms the operability of logistics significantly. However, it is crucial to aggregate the new technologies in a flexible, adaptive and proactive layered architecture that not only facilitates the on-going services but also preserve the provision of future logistics advancements. Intelligent logistics zones include the efficient, safe and transparent flow of product from source to sink through a multi-modal and multi-disciplinary architecture that aims to fulfill the objectives of logistics and transportation operations. This paper aims to outline the research focusing on information and communication technology (ICT) for logistics infrastructures particularly in the domain of radio and image based technologies as the main themes along with the key findings and future research directions. The emphasis is based on the contribution of radio and image based technology for the advancement in the logistics processes. The key factor, which distinguished this research paper, is the inclusion of safety and security as the main components in the traditional logistics frameworks. Indeed, the significance of safety and security measure cannot be overlooked due to the critical operational activities in the context of logistics infrastructures which is currently an active topic for the researchers.

BIG DATA AND SERIALIZATION FOR SUPPLY CHAIN VALUE CREATION

BY STEPHEN MILES

In a recent study for the Center for Biomedical Innovation BIOMAN program at MIT we have seen explosive growth in outsourced manufacturing in the pharmaceutical industry. Raw ingredients, excipients and Active Pharmaceutical Ingredients are now being produced at over (300,000) manufacturing locations in Asia. A risk based management approach to supply chain oversight is advocated by regulatory agencies. For this approach to work lots of data is required. A consistent programming interface (API), a breakdown of data into elements, and a standardization of terms and units are crucial for a risk based management system. Providing visibility (and an ordering capability) to patients, as well as tracking the resulting outcome could provide statistically relevant data samples for a large variety of new healthcare initiatives.



Stephen Miles

Stephen is a Research Scientist at the MIT Senseable City Laboratory. His research interest focus on the use of Automated Information Data Capture (AIDC) and advanced wireless identification and tracking technology to communicate about things in the physical world. His work with Auto-ID information exchange began in 2004, supervising MIT Auto-ID Labs/Center for Transportation Logistics MLOG theses that documented learnings from the GS-1/EPCglobal Data Exchange Work Group, and organized the first interoperability tests of the EPC Information Services (EPCIS) specifications. As a Research Engineer and RFID Evangelist for the group Steve organized the RFID Academic Convocations with a conference committee of RFID researchers from around the world, in collaboration with US federal and state agencies, the European Commission Directorate General for information society and media (DG Info) and the China Ministry of Science and Technology (MOST). The results of this collaboration are published in "RFID Technology and Applications" (Cambridge University Press, 2008), for which Steve served as Co-Editor. Prior to enrolling in the MIT Sloan Management of Technology Programm in 2003, Steve was a founder of several startups in computer sciences and network infrastructure. As a researcher, consultant and entrepreneur, Steve has supported major international and industry organizations, governments and network service providers in the design and roll-out of value added network services connected to things.

INDUSTRY DAY 1

TRANSPORT LOGISTICS CONTROL TOWERS

BY ALEXIS ROTENBERG

Abstract: Logistics collaboration is a complex undertaking involving a large number of actors and multiple processes. 3PL Logistics providers have tried for many years to offer 'Logistics in a box' concepts based on a logistics system platform and transactional integration with their clients.

Until recently, most attempts failed for a variety of reasons:

- Fragmented logistics capability ('Which 3PLs together can offer all required services at the best price?')
- Level of logistics maturity of parties involved ('Are we ready for collaborative relationships?')
- Unsatisfactory business case ('We got little payback from aggregating transport flows and reducing the number of logistics partners')
- Risk of losing flexibility ('We'd like to avoid being hooked in a relationship with a single logistics service provider')
- System and integration challenges ('Logistics visibility requires lots of data')

In this presentation, the Gartner speaker will define logistics collaboration and the prerequisites for collaborative partnerships, then describe the journey, companies are currently undertaking from collaborative processes to collaborative relationships.

Various Gartner models will be briefly introduced by the speaker:

- Gartner Demand-Driven Value Network
- Gartner Hierarchy of Metrics
- Gartner Logistics Maturity model

Then examples of logistic collaboration will be shared; emphasizing the various approaches and solutions that are becoming available to the industry. And share the concepts the most advanced companies are developing.

- What is the scope of such Logistics Control towers?
- What kind of visibility do they provide?
- What kind of systems can support Logistics Control Towers?

The speaker will conclude with the future direction Logistics Collaboration is taking.



Alexis Rotenberg

Alexis works for Gartner since 2011. As a Leadership Partner, he started the deployment of the personalised advisory services for supply chain executives in Europe. Under his leadership the Enterprise Supply Chain Leader (ESCL) services are now offered to more than 50 executives in a variety of industries like consumer goods, life sciences, high-tech, industrial and retail companies; creating a network of 200 supply chain executives world-wide that are leveraging personalised advisory services. Before joining Gartner, Alexis Rotenberg worked for over 15 years in a variety of logistics and supply chain functions ranging from end-to-end supply chain redesign, development of logistics control towers, business process optimisation and the deployment of supply chain optimisation and logistics visibility solutions.

Companies he worked for during his career include 3M, Syngenta Crop Protection, i2 Technologies, Oracle, Levi-Strauss, Lever Brothers and Logistics Consulting Partners, giving him exposure to literally 100s of other companies. Alexis holds a Masters degree in Applied Economics and another as Commercial Engineer – from the University of Brussels. He has also completed a Lean Six Sigma Blackbelt assignment during his time with 3M Europe.



INDUSTRY DAY 1

Horizontal collaboration: a new logistics strategy for the 21st CENTURY

BY SVEN VERTREPEN

Statistics show that 20-25% of all anthropogenic greenhouse gas emissions are the result of transport and logistics. Meanwhile, according to a study by the World Economic Forum, 1 out of every 4 trucks in the EU is driving empty and the average load factor of the other 3 is less than 60%. This means that the capacity utilization of the European logistics network reaches hardly 43%. The harmful impact of this on the economy, society and the environment can no longer be ignored.

In the past few years, horizontal collaboration has been gaining attention as a new logistics strategy that can make the transport sector more efficient, effective and sustainable. It requires that multiple shippers, even competitors, proactively work together to form communities with consolidated and synchronized freight flows. This leads to drastic improvements in the utilization rate of available transport capacity, total logistics cost and carbon footprint, while sometimes also improving the customer service level. In addition, flow bundling can facilitate intermodal transport solutions (rail, barge, short sea) which require large, stable and balanced volumes to make them economically viable. Horizontal collaboration is very different from the traditional way of working in transport and logistics. It requires new building blocks such as big data analysis, network synergy analysis, multilateral contracts (anti-trust compliant), quantitative methods for fair gain sharing and advanced ICT systems (collaborative control towers). Most importantly, it is only possible through intervention of a new logistics actor, the 'neutral trustee' or 'network orchestrator'. This independent party facilitates the creation of logistics communities and helps to maximize synergy effects. Horizontal collaboration is rapidly gaining traction in Europe and the USA and has the potential to become a leading new logistics strategy. If successful, this may even lead to the development of a new ("blue ocean") market for sustainable transport.



Sven Vertrepen

Sven Verstrepen holds MSc degrees in Applied Economics (University of Antwerp, 1996), Marketing Management (Vlerick Business School, 1997) and Logistics Management (Flemish Chamber of Engineers, 2004). He started his career as a researcher in Management Information Systems at Vlerick Business School in 1997. In 1999, Sven became supply chain analyst at the Agfa-Gevaert Group, where he was responsible for European supply chain and SAP/APO related projects. This position offered him the opportunity to gain hands-on international experience in logistics process improvement, working capital optimization, demand forecasting and reverse logistics. In June 2004, Sven joined the Flanders Institute for Logistics where he became responsible for research in collaborative logistics, closed loop supply chains and sustainable logistics. In November 2008, Sven co-founded TRI-VIZOR (www.trivizor.com / website currently under revision), a spin-off company of the University of Antwerp and the world's first cross supply chain orchestrator, where he holds the position of Business Development Director. In March 2011, TRI-VIZOR together with Baxter and UCB accomplished the world's first successful showcase of orchestrated horizontal collaboration in logistics. This project was successively awarded with the European Supply Chain Distinction Award for Innovation (Berlin, June 2011) and the VBO/Belgian Business & Society "Sustainable Company of the Year Award" (Brussels, October 2011). After a few similar successful projects, in 2012, TRI-VIZOR became "Belgian spin-off company of the year". TRI-VIZOR has also been implementing showcases and test projects of horizontal collaboration and logistics bundling on behalf of the EU "Collaborative Concepts for Co-modality (CO³)" project (www.co3-project.eu). Sven has published several books and academic papers on collaborative supply chains and reverse logistics. He is also a frequent guest speaker at universities and international conferences.

INDUSTRY DAY 1

ALICE – the ‘Alliance for Logistics Innovation through Collaboration’ in Europe

BY EDUARDO ZAPATA

The European Technology Platform on Logistics, ALICE, was officially launched in Brussels, in June 2013. The Platform is set-up to develop a comprehensive strategy for research, innovation and market deployment of logistics and supply chain management innovation in Europe. The platform will support the EU Program for research: Horizon 2020. This initiative will give external advice and societal engagement to implement logistics related issues in the Horizon 2020 European Commission Program showing complementarities and synergies with current European Technology Platforms in the fields of transport and industry sectors. Logistics is a key enabling sector for the European economy. Not only does it contribute close to 14% to the GDP of Europe (European Logistics Action Plan, 2007) but its impact on the quality of the EU manufacturing and service sectors is substantial. It is estimated that logistics account for 10 to 15% of the final cost of finished goods, thereby determining the competitiveness of Europe vis-à-vis other world regions. A 10% to 30% improvement in efficiency in the EU logistics sector would potentially equal a € 100 – 300 billion cost relief for the European industry. Six countries out of the global top-10 logistic performers are from the EU in 2012 which means a potential EU leadership in the field. ALICE ultimate challenge will be to contribute to a European industry resilient by a true “people, planet and profit” oriented logistics and supply chain sector, i.e. a sector that is economically, environmental and socially sustainable contributing to both industry competitiveness and the EU policy targets. ALICE is based on the recognition of the need for an overarching view on logistics and supply chain planning and control, in which shippers and logistics service providers closely collaborate to reach efficient logistics and supply chain operations. The ambition is to contribute to a 30% improvement of end to end logistics performance by 2030.

**Eduardo Zapata**

Eduardo has a degree in Computer Engineer by Universidad Politécnica de Madrid and a Master of Science in Robotics by the University of Southern California (Los Ángeles USA). His professional career started to develop in the Unilever factory of Aranjuez (near Madrid) where he participated in different areas of that manufacturing facility with increasing managing responsibilities: process control and automation, maintenance, project management and production management. Afterwards, Zapata moved to Tibbitt&Britten (the British Logistics Service Provider, now disappeared after being acquired by Exel Logistics and DHL Supply Chain) as Business Development Manager, initially, and Managing Director for Retail and New Business, later. After five years, he started a new career as business and production processes consultant in Bekaert Consulting, based in Bilbao, and then moved as Managing Director for the Logistics Division at Transportes Azkar, one of the largest LSPs in Spain. Since 2008, Zapata is Managing Director at CITET, an Innovation Center for Logistics and Transport dedicated to stimulate research, innovation and sustainability in the sector. This position is currently shared with that of Secretary General at UNO, the Spanish Logistics and Transport Business Association. Eduardo is member of ALICE Steering and Executive group and is the chair of the Urban Logistics ALICE Working Group.

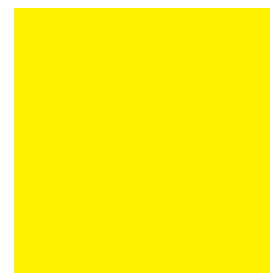
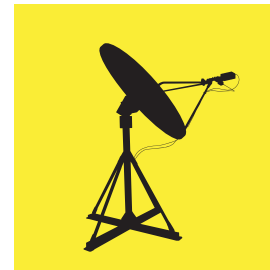
INDUSTRY DAY 1

65

Intelligent Cargo

MODERATOR: GERMÁN HERRERO CÁRCEL

The efficient movement of cargo is essential to the economy and to the quality of life. The transportation of goods in the global economy, driven largely by outsourcing of services, has never been more complex. As the degree of global collaboration grows, and multi-tiered nature of today's supply chain, the global supply chains become increasingly complex. Achieving competitive advantage in times of rapid changes requires supply-chain stakeholders to have a clear understanding of the direction of change and its implications for business or supply chain mechanisms. One of the enablers in the collaborative logistics is Intelligent Cargo, as part of a complex network of interoperable vehicles, infrastructures and logistics management systems. Successful deployments of Intelligent Cargo technologies can yield direct efficiency and productivity benefits to logistic stakeholders and the freight network. In this session, innovative approaches and lessons learned of Intelligent Cargo will be presented.

**Germán Herrero Cárcel**

Germán joined Atos in 2006 where he now serves as Head of the Supply Chain sector, responsible for all technology research and development activities for logistics and electric vehicles projects in Atos (ARI). He has experience in FP7 projects related to logistics and electric vehicle as Cassandra, iCargo and eDash projects. Germán earned a master degree in Computers Engineering from University of Valencia, with strong technical expertise in semantic technologies and he has authored a number of technical papers.

Intelligent Cargo: bringing the concept into practice

BY ANDRÉ NIJHUIS

Real time supply chain visibility and control is high on the list of requirements of many companies in order to manage their supply chains. Having access to all relevant data in real-time allows full control of the SC with options to maximize SC efficiency and customer service. Yet the execution of logistics services in the supply chain is often performed by several different operators, all using their specific control mechanisms. Not only are the tools they use different in most cases, they also use different concepts and formats to record and feedback data related to the execution. There are several initiatives that try to provide some kind of standard that would allow better control and less dependency on any specific logistics service provider (LSP). An organisation like GS1 for instance is aiming to achieve this by standardizing the data elements in the supply chain. Also technologies like 2D barcoding and RFID aim to improve the control.

But whatever standard is used, if the LSP's in the supply chain use disparate disjointed tools to manage these chains, relevant information is often not shared and there is no real-time, integrated view of this chain. Hence no option to optimize to the full extent or intervene when needed to provide maximum customer service. To get to the desired situation, we need a step change in the logistics control function; a paradigm shift. Rather than putting the focus on the logistics activity (warehousing, transport, cross-dock, etc.), we need an entity-centric approach. Focusing on the entity and following the digital shadow of the entity in the tools supporting the logistics flows can provide this real-time view and control of this entity. As part of the iCargo project a practical example has been developed and is being piloted to prove this concept. During the presentation this pilot will be explained and logistic and environmental advantages highlighted.



André Nijhuis

André graduated in Physiotherapy and subsequently in Business Logistics at College/University in Amsterdam. Initially worked as consultant and later on as EMEA Logistics Manager for NCR, optimizing and managing their EMEA spare parts inventory. In this period specific focus on logistics services needing innovative IT solutions created further awareness and interest in Information Technology within the Logistics area. Following that joined TNT Logistics as European IT Business Development and Deployment Manager for the Technology Sector, responsible for the development of several EMEA logistics operations for major Technology Companies. Then joined UPS SCS as their EMEA IT Strategy Manager with focus on streamlining several existing IT platforms, supporting similar services. Since the last seven years within DHL Supply Chain as EMEA Head of IT Business Development responsible for development of (innovative) IT solutions in the Technology and Consumer Sectors for multinational logistics service needs.



INDUSTRY DAY 1

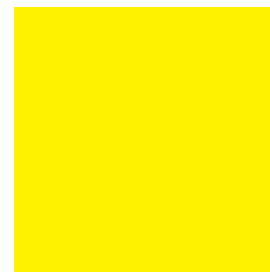
69

Innovation in Intelligent Cargo**BY SERVET BALCIOGLU**

The presentation discusses “what’s new” in iCargo concept, in other words it discusses the innovations in iCargo. iCargo brings market and stakeholder transformations based on new capabilities for sharing timely information under optimised processes. New ICT capabilities that are essential for stakeholders to face these transformations to optimise resources are also discussed.

Servet Balcioglu

Servet is iCargo Project Coordinator and Country Business Development Director within Atos Research and Innovation. Servet has previously held Business and Project Management roles. His background is in Telecom and Software within hi-tech business management. Servet got his diploma at the George Mason University in Virginia (USA).

**From Intelligent Cargo to Intelligent Logistic Services****BY PAOLO PAGANELLI**

The presentation discusses opportunities for innovative logistics services, based on new capabilities to process and share information and motivated by global market transformations. Logistics management objectives and approaches are analyzed from the perspective of the different involved stakeholders: shippers, logistic service providers and public administrations. Past attempts at innovation are discussed, highlighting the limitations of single-stakeholder approaches. A new perspective on the role and value-proposition of logistic services providers is presented, taking into account the profound changes affecting most B2C and B2B supply chains. Exploiting new ICT capabilities is essential for the logistic services providers to face these transformations, by performing new and more valuable activities. This means evolving from simple transport capacity supply, although based on “intelligent” cargo and vehicles, to more information-based services aimed at integrating and optimizing resources along the supply chain.

Paolo Paganelli

Paolo has a full degree in electronic engineering and a recognized expertise in ICT and SCM, gained through several innovation projects carried out in over 20 years for leading international enterprises. After working for 15 years as Product Manager and Business Unit Manager in large ICT and consulting companies, Paolo has founded Bluegreen Strategy to support customers in the implementation of supply-chain integration and improvement projects. He has been coordinator of the EU projects EURIDICE and Logistics for LIFE and he is technical coordinator of the iCargo integrated project..

INDUSTRY DAY 1

Session: Investors Session

MODERATOR: JAVIER VAL ALONSO

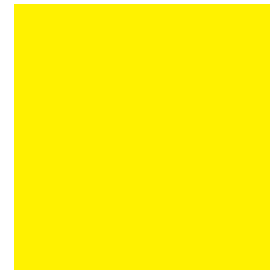
The European Commission is putting more emphasis every time in the importance to produce exploitable results by the EU-funded projects, and this interest is expected to be increased in the Horizon 2020. The economic background is pushing to produce innovation and technological development in the European industry and projects funded by the European Commission must move in that direction. The format of this track is that 4 running FP7 projects about ICT and Logistics will present a set of exploitable results that the corresponding projects will produce. These projects are Cassandra, Comics, iCargo and LogiCon. There will be a group of investors and trending technology experts that will provide feedback about how the market would accept these results. A round table about these issues will be generated to debate and to give recommendations from the market side to the research and innovation results presented by the project leaders. The objective of this session is to turn the project leaders the importance of producing exploitable results and help them understand what the needs and trends of the market at this moment from a technological point of view. And finally, to check how far or near these results are from those needs. At this place we would like to express our sincere thanks to all participating business angels and investors. Namely these are:

- **Mrs. Teresa Azcoza**, CEO from Going Investment Gestion
- **Mr. Asier Rufino**, Tecnalia Ventures Director
- **Mr. Javier Fano**, Mejora Competitiva Director
- **Mr. Alexis Rotenberg**, Gartner



Javier Val Alonso

Javier is a Telecommunication Engineer (University of Zaragoza, Spain), MSc Degree in EE and CS (University of Illinois, Chicago, USA) and Ex. MBA (IE Business School, Spain). Javier worked 4 years in Lucent Technologies Bell Labs (1999-2003) in Intelligent Networks department managing different products worldwide. After studying the MBA in 2003, I acquired a mix of business and technical knowledge and moved to work to ITA (2003-present) working in national and international R&D projects as well as applying the research results creating new product and services with regional SMEs in ICT applied to Logistics. At present, Javier is the Head of Marketing Unit in ITA.

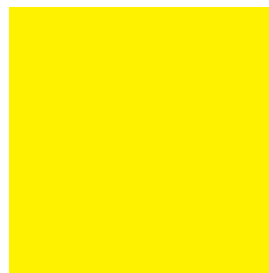
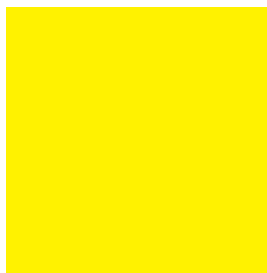
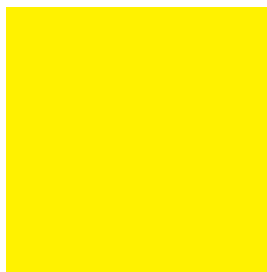


Investors Session

BUSINESS ANGEL:

Teresa Azcoza

In 1991 Teresa started her professional career in the Strategic Services division of Andersen Consulting. A year after Teresa joined the Instituto Aragones de Fomento (IAF), a Public Administration entity charged with economic development in the region of Aragon. She became the manager of the Finance unit in 1997. In the year 2000 Teresa decided to further develop her private equity skills by joining Going as an investment manager with broad experience in the public sector side. In the year 2004 Teresa participated in the creation of the fund management unit (SGEGR), which would constitute the official launch of Going Investment as both an investor and fund manager. Going took the step of creating a registered fund management unit, Going Investment Gestión, using its experience to manage third party funded vehicles (Savia Capital funds), on the back of their successful track record. Key shareholders in these new funds included the Public Administration as well as well known institutional investors such as Telefónica, a number of Savings Banks as well as family offices. She has participated in over 30 investments and exits with a particular focus in manufacturing and technology sectors. Since 1999 Teresa has been a member of over 20 Boards of Directors. Today she is present in 9 boards including 2 companies supervised by the CNMV. She is also teacher in San Jorge University MBA and IEF, and active member of the Spanish VC Association (ASCRI), APD and Directivas de Aragon. Teresa Azcona is graduate in Economics and Business Administration from the University of Zaragoza, she holds a Diploma in Financial Entities Management from the Training Department of the Bank of Spain and a Diploma in Advanced Venture Capital Management from EVCA (European Venture Capital Association).



BUSINESS ANGEL:

Asier Rufino

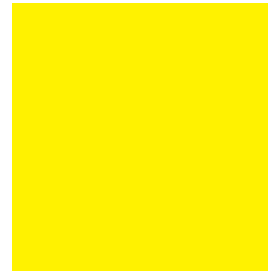
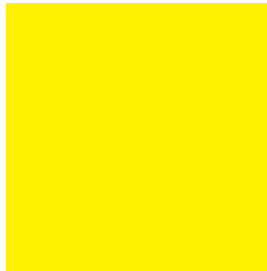
Asier is general director at Tecnalia Ventures, a 100% Tecnalia subsidiary company dedicated to the appreciation of Tecnalia R&D in asset development and management of investee companies by Tecnalia. Graduated from UPV and MBA from the London Business School - MIT Sloan. 12 years of international career (Ireland, France, UK, USA and Dubai) developed in the field of corporate strategy and innovation. Co-founder of Business Angels Grow + (Orchestra) and MicroWave Ventures (Investment Committee member). Asier is President of Digimet and teaches at the Deusto Business School.

Investors Session

BUSINESS ANGEL:

Francisco Javier Fano

Francisco Javier is the founder and manager of Mejora Competitiva, a consulting firm specialising in strategic marketing innovation. Francisco Javier Fano has strong capabilities in marketing strategies, experience design, trends research and analysis, and digital design. Francisco Javier Fano works also as a teacher and speaker in “social innovation”, “strategic marketing innovation” and “new trends and research techniques” in Universidad Complutense of Madrid and CESTE Business School. Besides, he collaborates with business accelerator organisations and entrepreneurs programs, as a keen marketing, innovation and digital world enthusiast. Formerly he worked as a manager for Accenture in Madrid office. Francisco Javier Fano has got a degree in Industrial Engineer from the University of Zaragoza; an executive MBA from European Business School; certification in Program in Marketing Management from ESADE; and both certifications CPIM y CIRM from APICS (The American Association for Operation Management) and CEL (Logistics Spanish Center).



BUSINESS ANGEL:

Alexis Rotenberg

Alexis works for Gartner since 2011. As a Leadership Partner, he started the deployment of the personalised advisory services for supply chain executives in Europe. Under his leadership the Enterprise Supply Chain Leader (ESCL) services are now offered to more than 50 executives in a variety of industries like consumer goods, life sciences, high-tech, industrial and retail companies; creating a network of 200 supply chain executives world-wide that are leveraging personalised advisory services. Before joining Gartner, Alexis Rotenberg worked for over 15 years in a variety of logistics and supply chain functions ranging from end-to-end supply chain redesign, development of logistics control towers, business process optimisation and the deployment of supply chain optimisation and logistics visibility solutions. Companies he worked for during his career include 3M, Syngenta Crop Protection, i2 Technologies, Oracle, Levi-Strauss, Lever Brothers and Logistics Consulting Partners, giving him exposure to literally 100s of other companies. Alexis holds a Masters degree in Applied Economics and another as Commercial Engineer – from the University of Brussels. He has also completed a Lean Six Sigma Blackbelt assignment during his time with 3M Europe.

iCargo – A Business Ecosystem for Logistic Services

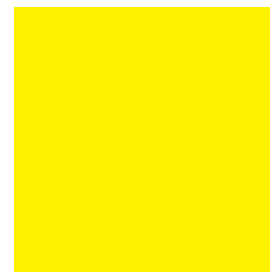
BY PAOLO PAGANELLI

The presentation briefly introduces the global freight business ecosystem implemented by the iCargo Integrated Project. The iCargo ICT infrastructure provides uniform and ubiquitous access to the logistic services and resources of ecosystem members. These are clients, like manufacturers and retailers, logistic services providers, including freight forwarders and carriers for the different transport modes, and providers of value-added services. The value resides in the ability to cooperatively plan and execute intermodal door-to-door shipments, based on real-time information access from all the involved players. This increases resources utilization, reduces carbon emissions and allows more flexible and dynamic plans.



Paolo Paganelli

Paolo has a full degree in electronic engineering and a recognized expertise in ICT and SCM, gained through several innovation projects carried out in over 20 years for leading international enterprises. After working for 15 years as Product Manager and Business Unit Manager in large ICT and consulting companies, Paolo has founded Bluegreen Strategy to support customers in the implementation of supply-chain integration and improvement projects. He has been coordinator of the EU projects EURIDICE and Logistics for LIFE and he is technical coordinator of the iCargo integrated project.



INDUSTRY DAY 1

LOGICON: Connecting Logistics SMEs

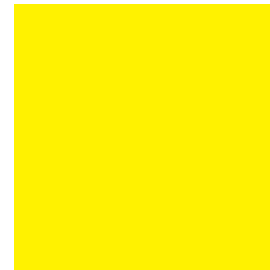
BY FRANCESC ROSINES

Logistics sector is dominated by SMEs: some 80% of the companies operating in EU logistics are SMEs. Due to their size and financial position, they are often unable to drive new technologies in areas that will benefit them: logistics processes, transports technology, and ICT support for both. Currently advanced solutions are mainly reserved to Large logistics companies. However, usually both typologies collaborate in freight transport. Specifically in trade and logistics this results in many SMEs lagging behind in the adoption of even many basic IT and data exchange solutions. As a consequence, data and documents are exchanged manually, which results in errors, delays and loss of efficiency. This affects both SMEs and Large logistics companies collaborating with them. Logicon aims to develop targeted solutions for data exchange in international trade and transport logistics for SMEs that supports the further digitisation of document exchange. The main purpose for Logicon is developing solutions that are easy to adopt, require little or no investment, and low running costs, and that are open in the sense that they allow easy access to and from networks or communities. Logicon will provide connectivity to Logistic platforms, from the sophisticated ones of the main logistic operators/port communities to simple ones. Typical examples where connectivity is needed are: data entry portals, secure document exchange facilities, or platforms for data exchange. Logicon is using a model based on “bazaar” model instead of “cathedral” model with the objective to keep the solutions simple, small and agile. Expected benefits for adapters are the Cost reduction, an increased productivity and an increased customer satisfaction. Logicon plans to use developed solutions and market introduction strategy to become a de facto standard solution, replacing and/completing current proprietary solutions; and involving SMEs, SMEs platforms, Communities and Large companies.



Francesc Rosines

Francesc graduated in Physics Science in 1987 by Universitat de Barcelona. He was research assistant at the University of Barcelona, and part of the research department of the US Technology company. Then he worked for 7 years in the ITeC Technological Institute, where he participated in several projects related to Transport infrastructure construction. From 1998 he was part of the Sema Group team providing solutions to the IOC, the Olympic Games and other Major Events, where he participated in high complexity and visibility projects around the world. After the fusion with Atos Origin, he moved to the Research and Innovation team in 2006 where he was leading several projects for the European Commission and national bodies in the ICT applied to Transport, Logistics and Food arenas. In 2011, he co-founded ENIDE, where he is currently participating in several FP7 projects and promoting several Transport, Logistics, Food and Green Cars public and private initiatives.



COMCIS: Bringing global freight data to the market

BY FRANK KNOORS

COMCIS has demonstrated that logistics information services - making smart combinations of logistics data, intelligent applications and business communities – can be implemented in both operationally and commercially viable ways. The project has demonstrated this through consolidated supply chain visibility services that go beyond the state of the art, improving in-transit control of sensitive shipments. Major market players in the global ocean freight and container shipping business, like DHL Global Forwarding, have demonstrated these solutions in real-life and shown the potential to improve operational control and enhance general service levels. The presentation addresses the following:

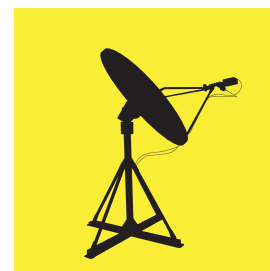
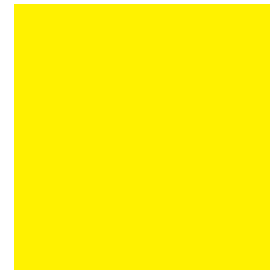
1. The Logit 4SEE® services platform and its unique selling points
2. How offerings of multiple providers can be packaged into one single service
3. The business model for exploiting Logit 4SEE®

Logit 4SEE® (“One snapshot for logistics”) takes the concept of supply chain visibility one step further and creates the backbone for establishing digital logistics communities. The objective of the presentation is to present the business idea to investors and highlight opportunities for exploitation.



Frank Knoors

Frank is managing director and co-owner of Logit Systems. He holds a master's degree in computing science (with great distinction) from Eindhoven University of Technology, and a master's degree in business economics from the University of Amsterdam. Frank has been and is involved in several European projects within FP6 and FP7: Marnis, Freightwise, Moses, Smart-CM, i-Cargo, DiSCwise and COMCIS (last two as coordinator). Before that, he has founded Sequoyah in 1993, a consultancy with focus on e-commerce and business process re-engineering, using technologies to enable new forms of collaboration. Assignments were carried out in various sector – industry, telecommunications, banking, education, public sector, but increasingly in transport & logistics. Frank's areas of interest include supply chain execution, advanced planning and simulation, co-modality, logistics information hubs, secure trade lanes, motorways of the sea, vessel traffic management information systems, and electronic port clearance. He adopts an integrative approach to these topics - covering issues of strategy, process optimization, and ICT technology.



INDUSTRY DAY 1

83

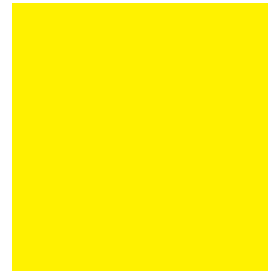
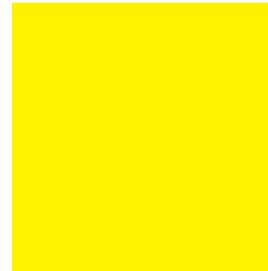
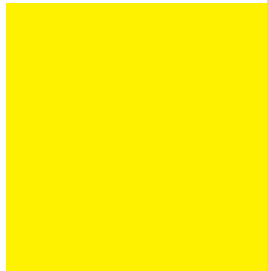
EURIDICE

BY MARGHERITA FORCOLIN

The session will shortly outline objectives and results of the Euridice project that successfully implemented the intelligent cargo concept. The presentation will stress the challenge to overcome the gap between research results and possible market solutions providing examples of solutions that have been derived by the EURIDICE Project experience and results

Margherita Forcolin

Margherita is a qualified IT manager with more than twenty years of experience in software development and a strong background in Object Oriented methodologies. She has participated and managed several IT research projects with Regional, European & international scope always playing relevant. As Head of European Research Projects office at Insiel she has been involved in numerous EU funded research projects, playing relevant roles, she has been technical coordinator in ToolEast Projects and coordinated the development of the Intelligent Cargo Concept within the EURIDICE project. Margherita is now coordinator of the LOGINN Coordination Action and MobiS FP7 project.



CO3 – Added value of technology in logistics horizontal collaboration: identifying the need for an integrated ICT approach

BY MICHAEL BOGEN

CO3 is an EU funded initiative to develop and test innovative business models for sustainable horizontal collaboration in transport and logistics, across different independent supply chains and networks. CO3 is testing a number of innovative concepts in real-life market environments. By bundling and synchronizing freight flows across multiple supply chains, the test cases are expected to demonstrate significant simultaneous improvements in logistics cost, customer service and sustainability. The experience of CO3 to date has shown that effective use of information and communications technology (ICT) is a major critical success factor in achieving repeatable and scalable results in horizontal collaboration. Our presentation will illustrate, based on factual CO3 project experience, how ICT can add value as catalyst and enabler of horizontal collaboration.

Michael Bogen

Mike is the Managing Director of Giventis International, a Netherlands based company focused on Web based technology that enables cross enterprise collaboration in transport and logistics. In 2003, Giventis received initial funding from the European Commission to study the economic benefits from collaboration. From that point, it has evolved into an Web based information services company, focused on innovative large scale transport network matchmaking and collaboration, making it a pivotal player in in the European Commission funded "Collaborative Concepts for Comodality" (CO³) project for horizontal collaboration. Mike is a graduate of the University of Wisconsin-Madison.

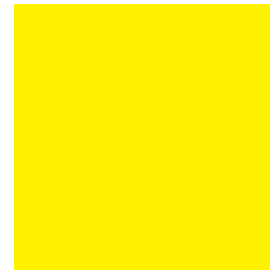
INDUSTRY DAY 1

SMARTFREIGHT: Individual traffic management of freight vehicles**BY HANS WESTERHEIM**

During the SMARTFREIGHT project possible utilization of ICT in individual traffic management was presented. The project worked with on goods unit, on board units, mobile communication technology, cooperative systems and ICT services and showed how these technologies could be used to enable a better traffic management function where individual freight vehicles were given individual rights and measures when driving in urban areas. The use of the technologies was discussed with four test sites, and both administrative, legislative, practical and economical issues related to implementation and deployment of such a traffic management regime was in focus. This presentation includes the practical results from the project in combination with a discussion of the challenges a city or regional administration will face in implementing a new traffic management regime.

**Hans Westerheim**

Hans holds a Master in Science in Computer Science from the Norwegian University of Technology and Science (NTNU). His bachelor includes both computer science and transport economy and planning studies. He works as a senior adviser at SINTEF ICT and is also a PhD candidate at NTNU within the field of information systems and interoperability, related to the challenges of the transport sector. Westerheim has been involved in several EU funded research and development projects, among them Freightwise (FP6 – intermodal freight); e-Freight (FP7 – intermodal freight); L4LIFE (FP7 – Coordination and supporting action) and SMARTFREIGHT (FP7 – urban freight transport). He was the coordinator of SMARTFREIGHT. He has worked with ITS deployment on the behalf of the Public Roads Administration in Norway in the EasyWay project, where he was the responsible for the interoperability task force. He has been one of the main responsible for the ARKTRANS framework for interoperability in the transport sector.



Logistics ICT Demonstrator Centre

BY MIGUEL ÁNGEL BARCELONA LIÉDANA

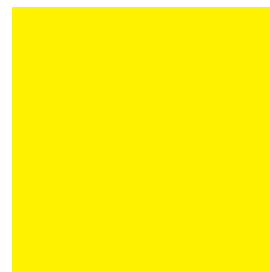
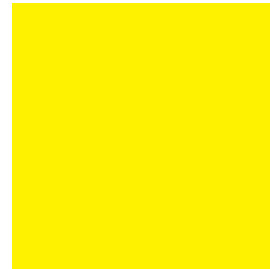
The ICT Demonstrator Centre for Logistics is a public space in which interested ICT companies may demonstrate how their technology-based products and services can help to create innovative solutions, and improve the productivity and competitiveness in the field of Transport & Logistics. Additionally, the Demonstrator Centre serves as a meeting point between innovation and business needs. It is managed by ITA (Aragón Institute of Technology) which was recognized from the Ministry of Industry as the National Centre of Knowledge in the Application of ICT to Logistics. The aim is to create a space that allows Logistic industry to be more competitive and ICT companies create better solutions through innovation and technological development. The Centre offers Logistics organizations to share their problems, deploy them in a mirror scenario and work with ICT providers to analyze what is the best solution. A space to improve ICT products, adapt to the environment of potential customers, demonstrate or integrate to address a major problem or know what needs are not covered, are some proposals the Centre has for ICT companies. ICT, innovation and logistics in the same place, which is divided into several areas classified in the following modules: ICT for the Supply Chain, Intelligent Warehousing, Intelligent Transport and Intelligent Point of Sale. This Session shows in practice how ICT solutions help decision-making process for Logistic companies, foster cooperation and visibility in the supply chain and allow enterprises to be more productive and competitive. The Aragon Institute of Technology together with some ICT and Logistic companies are showing solutions like:

- ICT for collaborative decision-making in the supply chain.
- SOA-based automatic replenishment Vendor managed inventory.
- Automatic identification systems for inbound and outbound orders.
- Distributed and cloud-based warehouse management systems.
- ICT solutions for urban mobility planning and optimization.



Miguel Ángel Barcelona Liédana

Miguel graduated in Computer Engineering at the University of Zaragoza in 2001. He has led the implementation of the National Centre of Knowledge in the application of ICT into Logistics and the National Demonstration Centre of ICT for Logistics. He's currently the Head of Logistics Division at Aragon Institute of Technology. Passionate about learning, his main research interests focus on software engineering and its application to logistics. He is working in his doctoral thesis at the University of Seville in the field of the application of Model-Driven Software Engineering into Collaborative Decision-Making in the Supply Chain..



INDUSTRY DAY 1

Session: E-Freight

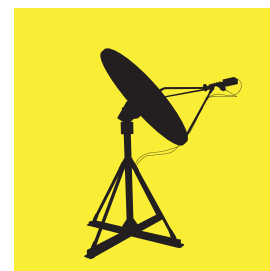
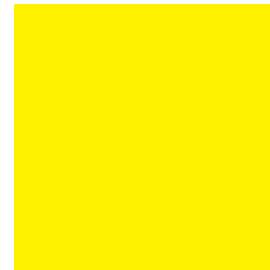
MODERATION: FLEUR BREUILLIN

The logistics sector, a key driver for the European economy, is facing new developments at a global level. Its future lies in more flexible, dynamic and collaborative supply chains, for which an efficient access to information is required. Information is generated in different contexts, for different purposes and by different entities: transport documents, transport management tools, reporting formalities. That means information in principle is “there”, but not necessarily available. This is why there is a need to improve access to information. On the one hand, that means making existing information exchanges more efficient, through reusing data and avoiding entering the same information into the system again and again. On the other hand, that also implies considering the development of new opportunities for the logistics sectors that could arise from the use of up-to-now unexploited information. In order to provide a frame to support industrial stakeholders in these developments, the European Commission is working on the e-Freight policy initiative, as announced in the 2011 White Paper “Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system” (WHITE PAPER: Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system). Concrete results of facilitated exchanges of information can be imagined in enhanced cooperation between logistics stakeholders, increased cargo visibility, as well as an optimized choice of transport services. That means reduced costs and administrative burden, optimised operational management, new business opportunities supporting European growth and competitiveness, and ultimately, benefits for all, from big companies to SMEs. This session will aim at discussing current challenges faced by logistics stakeholders when developing new logistics concepts (such as modular logistics or an increased use of hubs), and how more efficient flows of information could help bringing such concepts to reality.



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.



INDUSTRY DAY 1

91

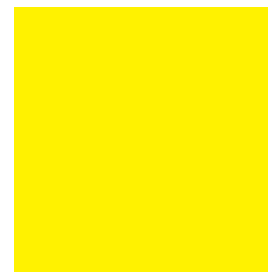
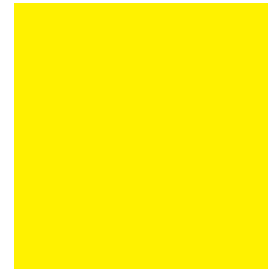
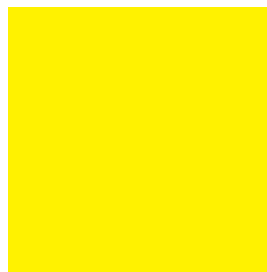
e-Freight, enabling connectivity and Interoperability in freight information exchange. A practitioner's point of view

BY MATS ROSEN

Currently, the transport chains that involve Stena Line, DSV and their customers are not optimized, since all parties have their own IT and booking systems, but they are not communicating with each other, and tracking cargo is not possible within the door-to-door chain. Mats Rosen will present the lessons learnt from a Business Case that was set up within the e-Freight project to explore the potential of the e-Freight Framework and the e-Freight connectivity infrastructure to support optimization of these transport chains, the expected impacts of adopting standards and technologies used on business level and future plans for doing so.

Mats Rosen

Mats is Project Manager at DSV Road AB in Sweden. Having completed degrees in transport management and transport economics, Mats has worked with Transport & Logistics for more than 25 years and has extensive experience on system integrations, change management and different development of Transport Management Systems. Mats has worked with EDI communication, edifact and xml based protocols. Mats represents DSV in GS1 and has been instrumental in producing the new xml messages for Transport & Logistics from the eCom Logistics Group of GS1. Mats is appointed member of the recently created Transport & Logistics leadership group within GS1.

**IT Approach for Physical Internet and Modular Logistics**

BY GIANCARLO TRETOLA

Physical Internet and Modular logistic may be built upon existing systems, integrating the current processes with the needed data and the related operation. The introduction of the modular containers and the related processes may be seen as an evolution rather than a revolution of the IT supporting Systems.

Giancarlo Tretola

Giancarlo has received his Master Degree in Computer Engineering December 17th 2003 and his Ph.D. in Information Engineering October 26th 2007 at the University of Sannio. His Ph.D. final thesis, titled: "Autonomic Workflow Management in eCollaboration Environment", has been related to the introduction, in an open environment, of Autonomic Computing approach in Business Process Management. From December 2003 up to July 2011, during his Ph.D. course and during his activities as assistant professor at University of Sannio he was active in the RCOST (RESEARCH CENTRE ON SOFTWARE TECHNOLOGY). His main research interests have been in Software Engineering applied to distributed systems, business processes management and service based architecture. Moreover, his research activities have been related to semantic supported service composition, automatic planning of processes and grid computing. He has been involved in several research projects related to the previous arguments, i.e. Locosp, about collaborative workflow in automotive design, with main partner FIAT, and ArtDeco, about adaptive infrastructure enabling interoperability between separated organizations. Also, he has been involved in CoreGrid, the European Research Network on Grid technologies. From August 2011 he has joined Meware s.r.l., a highly specialized IT consulting company, where he is leading projects in the fields of business process management and business analytics. He is also actively involved in the following research projects: Modulushca and LogiCon.

INDUSTRY DAY 1

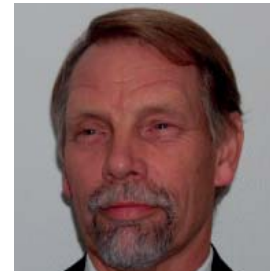
Hubs in Ecofriendly Transport Solutions

BY JAN TORE PEDERSEN - JANEZ MERLAK

In order to achieve the overall goal of reduced emissions, the EU Commission has set a target for a reduction of at least 60% of GHGs by 2050 with respect to 1990 levels from the transport sector. By 2030, the EU goal for transport will be to reduce GHG emissions to around 20% below their 2008 level. This strive for more environmentally friendly transport has led to the concepts of co-modality and transport corridors in EU transport policy. Common for both of these is that when more than one mode of transport is being used and transshipment is necessary. Hence, in future EU transport the role of hubs will increase and change. The EcoHubs project addresses the challenges faced by hubs in the context of the above. The presentation describes the drivers for changes that influence the development of European hubs, including, environmental performance requirements, increased economy of scale in intercontinental transport, cost of the use of fossil fuels, development of logistics clusters, increased use of eCommerce, and the trend towards more dynamic supply chains. In addition to making current operations more energy (and environmentally) more efficient, hubs should investigate the possibilities of providing new, value adding services, ensure that they can easily and effectively be integrated into new dynamic supply chains (related to the use of information and communication technology), and establish efficient regional cooperation. The presentation provides insight into.

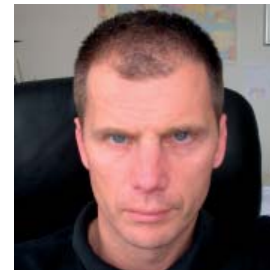
- A cooperative model for hubs (EcoHubs Model) to:
 - » Make hub services visible and facilitate integration of hubs in efficient logistics corridors and chains,
 - » Establish capabilities for cooperation between hubs to deal with hub capacity limitations;
- An improvement methodology and tool to assist intermodal terminal operators in carrying out a self-assessment against the EcoHubs Model to identify improvement actions (develop an Eco-improvement Action Plan);
- EcoHubs Solutions (Value Adding Services) that enable «greening of hubs»,

A measuring and benchmarking system for quantification of the «greening of the hub».



Jan Tore Pedersen

Jan Tore is owner and Managing Director of Marlo a.s. He holds an MSc in Control engineering and a PhD in manufacturing from the Norwegian University of Science and Technology (NTNU) and an MSc in Computer Science from University of California at Santa Barbara. His experience includes 30 years of business and technology development of advanced software systems (The Kongsberg Group), and business- and technology development in the maritime sector (The Kvaerner Group), including an integrated system for ships covering all onboard control and navigation capabilities. Since the mid 1990-ies, Jan Tore has been active in EU and national projects for development of innovative logistics solutions and related information technologies.



Janez Merlak

Janez has been employed by the regional Combined Transport Operator Adria Kombi since 1995, after leaving the college for Biotechnology in Ljubljana. During accumulation of practical knowledge of the transport industry, the company management decided to send him to University of Traffic and Maritime Studies to get theoretical background and he graduated in 2000. He applied for another Programme at the same College and got his B.Sc. degree in 2003. All the scientific work solving of problems came from the real sector. The solutions have been tested or implemented in his work surrounding at Adria kombi. Since 2006 he has been promoted to Chief Operation Officer at Adria kombi, where he is still active. Beside the work in operations, he has been appointed to diverse R&D Projects from IT Development at Adria kombi to Marco Polo and other EU Programmes. Since 2007 he is appointed as a Guest Expert in Logistics and holds Lectures about Intermodal Transport for students of University in Maribor, Faculty of Logistics. Janez represents Adria Kombi in the ECOHUBS project, providing the end user requirements and the strategic thinking around the vision for raising the efficiency, organization and environmental footprint of Intermodal Terminals to transform them to Green Hubs in the whole transport chain.



INDUSTRY DAY 2

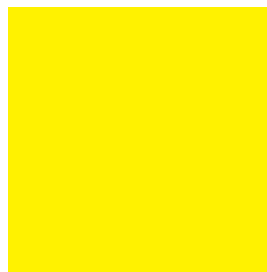
Logistics Clusters as Drivers of Economic Growth

BY YOSSI SHEFFI

Why is Memphis home to hundreds of motor carrier terminals and distribution centers? Why does the tiny island-nation of Singapore handle a fifth of the world's maritime containers and half the world's annual supply of crude oil? Which jobs can replace lost manufacturing jobs in advanced economies? Some of the answers to these questions are rooted in the phenomenon of logistics clusters - geographically concentrated sets of logistics related business activities. In this presentation, supply chain management expert Yossi Sheffi explains why Memphis, Singapore, Chicago, Rotterdam, Los Angeles, Zaragoza, and scores of other locations have been successful in developing such clusters while others have not.

Sheffi outlines the characteristic "positive feedback loop" of logistics clusters development and what differentiates them from other industrial clusters; how logistics clusters "add value" by generating other industrial activities; why firms should locate their distribution and value-added activities in logistics clusters; and the proper role of government support, in the form of investment, regulation, and trade policy.

Sheffi also argues for the most important advantage offered by logistics clusters in today's recession-plagued economy: jobs, many of them open to low-skilled workers that are concentrated locally and not "off-shorable." These logistics clusters offer what is rare in today's economy: authentic job-creation success stories. For this reason, numerous regional and central governments as well as scores of real estate developers are investing in the development of such clusters.



Yossi Sheffi

Yossi is the Elisha Gray II professor of Engineering Systems at the Massachusetts Institute of Technology, where he serves as Director of the MIT Center for Transportation and Logistics (CTL). He is an expert in systems optimization, risk analysis, and supply chain management, which are the subjects he teaches and researches at MIT. He is the author of many scientific publications and three books: *Urban Transportation Networks: Equilibrium Analysis with Mathematical Programming Methods* (Prentice Hall, 1985); *The Resilient Enterprise: Overcoming Vulnerability for Competitive Advantage* (MIT Press, 2005); and *Logistics Clusters: Delivering Value and Driving Growth* (MIT Press, 2012).

Under his leadership, CTL launched many new educational, research, and industry/government outreach programs, leading to substantial growth. He is the founder and the Director of MIT's Master of Supply Chain Management degree. He also led the international expansion of CTL by launching the Supply Chain and Logistics Excellence (SCALE) global network of academic centers of education and research. The network includes centers modeled after CTL in Zaragoza, Spain; Bogota, Colombia; and Kuala Lumpur, Malaysia.

Outside the university Professor Sheffi has consulted with governments and leading manufacturing, retail and transportation enterprises all over the world. He is also an active entrepreneur, having founded and co-founded five successful companies: Princeton Transportation Consulting Group Inc.; LogiCorp Inc.; e-Chemicals Inc.; Syncra Inc.; Logistics.com Inc.

Yossi Sheffi was recognized in numerous ways in academic and industry forums and was on the cover of *Purchasing Magazine* and *Transportation and Distribution Magazine*. In 1997 he won the most prestigious recognition given by the Council of Logistics Management - the Distinguished Service Award. In 2006 he won the Aragón International Prize. In 2010 he became an honorary Doctor (Doctor Honoris Causa) of the University of Zaragoza in Spain and in 2011 he was awarded the Salzberg Medal and Award for "outstanding leadership and innovations in Supply Chain management" by the University of Syracuse. He is also a life fellow of Cambridge University's Clare Hall College.

He obtained his B.Sc. from the Technion in Israel in 1975, his S.M. from MIT in 1977, and Ph.D. from MIT in 1978. He now resides in Boston, Massachusetts.

Presentation: Horizon 2020

BY WOLFGANG HÖFS

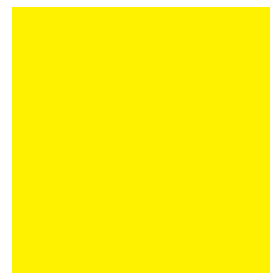
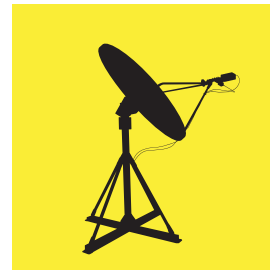
European Union's new framework programme for research and innovation H2020 will commence on January 01, 2014 and last for seven years until 2020. Its first work programme for the Transport societal challenge – covering 2014 and 2015 - has been drafted and will be published soon.

The presentation explains the main strands of Horizon 2020 and highlights particular opportunities for logistics research and innovation. Information and communication technologies, their integration and piloting will play an important role in the programme. A paradigm shift for ICT from supporting business processes to integrated information as an important element in the value chain is likely to happen and will innovate logistics industry. Building upon ongoing research projects and recent results achieved collaborative approaches to innovation in logistics are urgently needed, involving all actors, i.e. shippers, logistics and telecommunication service providers, retailers, consumers, but also vehicle manufacturers and their suppliers. Only such an approach will ensure continuity for European's leading role in global logistics.



WOLFGANG HÖFS

Wolfgang is team leader for „ICT for Transport and Mobility“ in EU Commission's Directorate General CONNECT (Communications networks, Content and Technology), is taking care of logistics related ICT research projects in the Smart Cities and Sustainability unit's portfolio. His team manages a portfolio of around 60 research and innovation projects focusing on the information and communication technologies' aspects of transport and mobility. He is in particular engaged in international research cooperation issues. Before joining the Commission's services in 2001, he worked for major players in logistics and software industry on the implementation and integration of mission-critical IT systems in different European countries. At Schenker AG, today Deutsche Bahn AG subsidiary, he managed the integration and web-launch of their CRM systems for tracking & tracing after the merger with Gothenburg-based BTL (Bilspedition/Scansped) in the late '90s. He studied in London and Dortmund and holds a Master's Degree in Computer Sciences (Informatik) and Business Administration from Technical University Dortmund. His personal research interests are focused on Cooperative Systems, vehicle / road automation and smart mobility.



Session: ICT for Collaborative Logistics

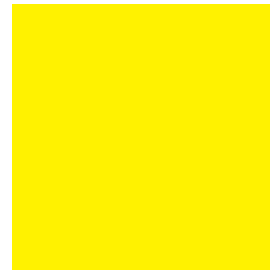
BY JENS SCHUMACHER

World spanning supply networks require the seamless exchange of information between different stakeholders involved in the logistics value chain. The problem nowadays is not to find international partners but rather the collaboration between them. Hereby ICT plays a major role by providing advanced collaboration tools for worldwide cooperation. The goal of these collaboration technologies is to provide a trustful environment, which enables distributed working on joint efforts between logistics partners. However, not only the vertical integration of the different logistics services is required, but also a horizontal collaboration between enterprises, even competitors, has to be investigated. The baseline in this direction is the management of accessing and exchanging of logistics' mission critical data in a structured and standardized way. This session will cover the various aspects of IT from the provisioning of data to new ways of collaboration in supply chains, including the advancements recently made in the field of Intelligent Cargo as a driver for Collaborative Logistics.



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...



Transport information management on supply chain

BY HÉCTOR BENITO SERÓN

Transport information management and interchange between related actors on supply chain is a crucial point for a successful information control. Based on this relevance, in Carreras Grupo Logístico we decided the use of automatized interfaces to interchange information between our two internal divisions, Transport Division and Supply Chain Division, using the GS1/EANCOM interfaces. These are the main GS1/EANCOM interfaces used:

- IFCSUM & IFTMIN: Instruction for booking a transport service for a collection of consignments, or instruction for cancel a previous booking request.
- IFTSTA: Report the transport status of a booked transport instruction. It can notify these different situations:
 - » Transport confirmation and data of the effective car and driver assigned (IFTMBC)
 - » Delivery/Rejections/Incidents status of all the consignments at the moment of the delivery (IFTSTA)
 - » Delivery Confirmation (IFTMAN)
- INVOIC: Notify the costs of the transport activity that will be invoiced to the solicitant of the transport

The goal for Carreras is to implement a similar flow for any other transport supplier that collaborates with us, using this kind of interfaces. We believe that GS1/EANCOM interfaces (EDIFACT o XML) are wide enough to contain all necessary information.

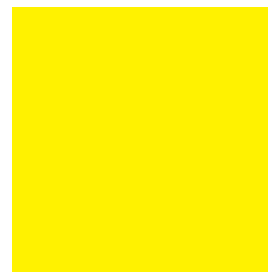
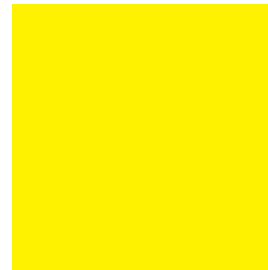
For a supply chain operator like Carreras is absolutely necessary to know and control all of the intermediate steps of a delivery, including all transport services, whether these services are made internally or by an external transport collaborator: we are the final responsible of the delivery, and the use of automatized interfaces is absolutely necessary to guarantee the accuracy of the information that we provide to our customers.



Héctor Benito Serón

Héctor holds a computer science engineering degree from the University of Zaragoza since 2001. He has been working with the Carreras Logistics Group since 2002 as IT Director of the Logistics Division of the Company for seven years.

Héctor is now the IT Director for the whole Carreras Logistic company. During this time he has been involved in the principal innovation projects, new activity areas and integration projects with customers. His current research interests include B2B and EDI Communications, Business Intelligence, and Information Security, Optimization process.



iCargo – the connecting concepts

BY ERIK CORNELISSE

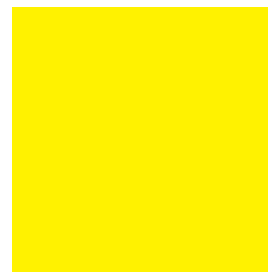
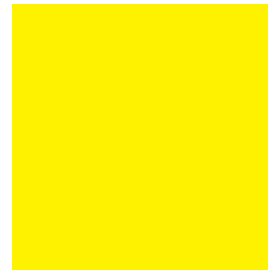
Electronic exchange of information via the internet is a commodity but still it requires the assistance of software engineers to set-up new connections and to process business messages. This presentation explains what can be added to existing software systems to reduce the effort for exchanging information between companies. An electronic Cooperation Agreement is one of the concepts that is currently missing and contains the rules for setting up an electronic connection and defines also which information will be exchanged. Since many standards exist for transport logistics, the problem of interpretation is a semantic barrier which has to be overcome first before Cooperation Agreements can be implemented. The presentation will also explain how semantic models are used to implement Cooperation Agreements. The ultimate goal is to provide a secure environment where everybody can join just as easy as using Skype and to exchange information automatically with those who are addressed explicitly within Cooperation Agreements.



Erik Cornelisse

Erik graduated as aerospace engineer at the Technical University of Delft. He has worked in production logistics of Fokker Aircraft for 5 years. During his next job as line manager System Integration, Erik's department was responsible for the development and implementation of an electronic post-office to switch EDIFACT messages for the Port of Rotterdam. Now, Erik is working for CGI for more than 15 years as technical and senior project manager in the area of intelligent traffic and transport systems. He has helped to design and implement traffic management systems that are currently still running in traffic control centers in the Netherlands.

In 2006, he has developed a special interest in the Internet of Things as project manager for the ARMAS III project commissioned by the European Space Agency (ESA). His involvement as one of the architects for an intelligent cargo architecture during the EURIDICE integrated project is therefore not a coincidence. Currently Erik is involved as project manager and architect in the iCargo on behalf of CGI.



INDUSTRY DAY 2

Interoperable Freight Information Service

BY FRANK KNOORS

COMCIS has demonstrated that logistics information services - making smart combinations of logistics data, applications and business communities - can be implemented in both operationally and commercially viable ways. The project has demonstrated this through consolidated supply chain visibility services that go beyond the state of the art, improving in-transit control of sensitive shipments. Major market players in the global ocean freight and container shipping business, like DHL Global Forwarding, have demonstrated these solutions in real-life and shown the potential to improve operational control and enhance general service levels. Interoperability between multiple systems and data sources were required in order to create sufficient added value at affordable costs. The Common Framework has been instrumental to make such interoperability work. The presentation addresses the following:

1. The Logit 4SEE® services platform and its integration capabilities
2. The operational model used for consolidating multiple data sources
3. The role of the Common Framework for interoperability

The objective of the presentation is to present how interoperability is realized by a layered service approach based on the Common Framework. It is aimed at IT professionals and those active in business process transformation in the logistics industry.



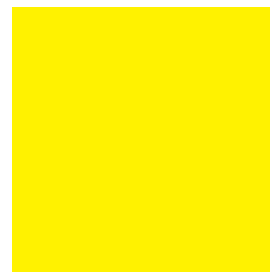
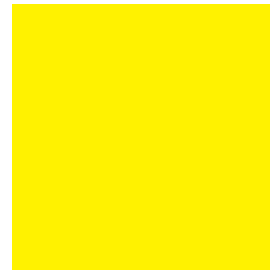
Frank Knoors

Frank is managing director and co-owner of Logit Systems. He holds a master's degree in computing science (with great distinction) from Eindhoven University of Technology, and a master's degree in business economics from the University of Amsterdam.

Frank has been and is involved in several European projects within FP6 and FP7: Marnis, Freightwise, Moses, Smart-CM, i-Cargo, DiSCwise and COMCIS (last two as coordinator).

Before that, he has founded Sequoyah in 1993, a consultancy with focus on e-commerce and business process re-engineering, using technologies to enable new forms of collaboration. Assignments were carried out in various sector - industry, telecommunications, banking, education, public sector, but increasingly in transport & logistics.

Frank's areas of interest include supply chain execution, advanced planning and simulation, co-modality, logistics information hubs, secure trade lanes, motorways of the sea, vessel traffic management information systems, and electronic port clearance. He adopts an integrative approach to these topics - covering issues of strategy, process optimization, and ICT technology.



INDUSTRY DAY 2

Security in Logistics

BY FRANK ARENDT AND NILS MEYER-LARSEN

The project CASSANDRA (www.cassandra-project.eu) focuses on improving efficiency, security and compliance in international trade and logistics by integrating information flows on goods, actors, (commercial) contracts and transportation. CASSANDRA addresses the visibility needs of both business and authorities by developing a data sharing concept that allows an extended assessment of risk by both business and authorities. Combining existing business information sources in supply chains results in the timely availability of an accurate and high quality data set. Better quality information in terms of accuracy, timeliness and completeness, combined with innovative information integration and visibility, tracking and scanning technology, provides both businesses in the supply chain and supervision authorities with enhanced visibility and enables a transparent and reliable assessment and treatment of risks. The strategic impact for businesses is an improved supply chain performance and cost efficiency by reducing administrative and planning errors along the chain. CASSANDRA implements and demonstrates the core concepts in three so-called Living Labs. These labs are set up around major European trade lanes, including Asia – Europe, Europe – US and North Africa – Europe. In detail, the living labs demonstrate in global trade lanes how electronic data sharing and improved risk analysis enables smoother logistics flows, while maintaining compliance with legal requirements. The workshop's focus is on reports by logistics practitioners on their motivation to be involved in the project, their expected benefits from implementing the CASSANDRA approach and their experience from the activities in the Living Labs.



Frank Arendt

Frank is an expert for IT systems in the transport industry. He has been working as scientist and project coordinator at the Institute of Shipping Economics and Logistics (ISL) in Bremen, Germany for about 25 years. In 2002, he took over the leadership of the department "Information Logistics" becoming a member of the Board of Directors of ISL. He has received a diploma in mathematics and a doctorate in Business Economics. In parallel, Frank was appointed as professor at the University of Applied Sciences in Bremerhaven with a chair in the master course on ISSM (Integrated Safety and Security Management) in September 2009.

Frank was the coordinator of the INTEGRITY project (Intermodal Global Door-to-door Container Supply Chain Visibility) and the RISING project (RIS Services for Improving the Integration of Inland Waterway Transports into Intermodal Chains) in the 7th R&D Framework Programme of the European Commission. Currently, he is coordinating the project ECSIT (Increase of container security by applying contactless inspections at port terminals) in the German Security Research Programme.

Nils Meyer-Larsen

Nils studied Physics at the University of Hamburg and obtained a PhD degree in Physics. He is Project Manager at the Institute of Shipping Economics and Logistics (ISL) and leader of the ISL competence area "Auto ID and security in container transport". He has managed several IT related national and international research and development projects. Nils Meyer-Larsen managed the European project CHINOS dealing with the optimisation of container handling in container terminals and the complete transport chain using RFID and automatic damage documentation and led the development of the Maritime Transport Sector Observatory, a platform for the Maritime Transport Coordination Platform of DG TREN. He was project manager of the INTEGRITY project, aiming at enhancing the visibility and security of global intermodal container transport chains, and currently participates in the project CASSANDRA, which has the goal to enhance supply chain visibility in order to simultaneously improve business operations and the efficiency and effectiveness of government security inspections. Furthermore, he works as a lecturer at the Bremerhaven University of Applied Sciences in the master degree course Integrated Safety and Security Management..

IT innovations for safer, more secure and efficient international supply chains

BY YAO-HUA TAN

CASSANDRA addresses the supply chain visibility needs of both business and government in the international flow of containerized cargo. The main strategic goal is to enhance supply chain visibility to improve business operations as well as government's cross-border security inspections.

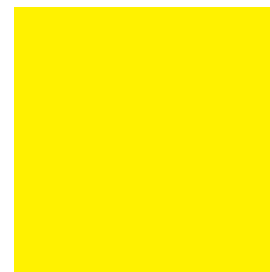
The strategic impact for businesses is an improved supply chain performance and cost efficiency by reducing administrative and planning errors along the chain. For this, supply chain management should be based on a transparent and reliable assessment and treatment of risks. For government agencies CASSANDRA improves efficiency and effectiveness. CASSANDRA helps customs to assess business processes and procedures and identify secure supply chains. In this system-based approach, government agencies use a audit methodologies to assess compliance to rules and regulations based on the evaluation of the integrity, reliability and internal consistency of the business and IT systems. By minimizing the attention given to these secure flows and businesses, government agencies can focus on high-risk flows resulting in a higher hit rate and greater effectiveness of security related government inspections.

To provide supply chain actors and government authorities with these accurate data, the project develops a data-sharing concept: the Data Pipeline. CASSANDRA achieves interoperability of heterogeneous systems by combining state of the art IT innovations. Access rights and security mechanisms are implemented in the data pipeline concept to enable secure data sharing. Furthermore, dashboards for supporting businesses and customs for risk management and supply chain visibility are implemented on top of data pipelines for international trade lanes.



Yao-Hua Tan

YAO-HUA is professor of Information and Communication Technology and head of the department Engineering Systems and Services of the Faculty 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 IT innovation to make international trade more secure and safe; compliance management for international supply chains; multi-agent modelling to develop automation of business procedures in international trade, ICT-enabled electronic negotiation and contracting. He published five books and over 220 conference papers and journal articles. He was coordinator and scientific director of various research projects on IT innovation to facilitate international trade; including the EU funded projects ITAIDE, CASSANDRA. He is vice-chair of the Committee on Trade of the Trade Division of the United Nations Economic Commission for Europe.



INDUSTRY DAY 2

111

Improving the reliability of global supply chains

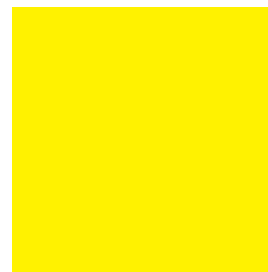
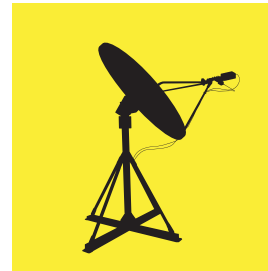
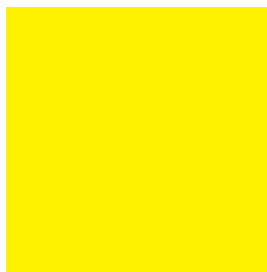
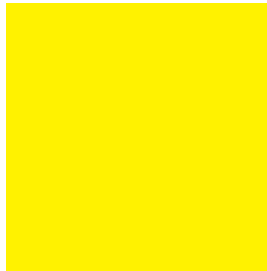
BY SEBASTIAN SEIDEL

DHL OCEAN FREIGHT is currently moving over 2.7 Mio TEU per year on its intercontinental tradelanes. In order to guarantee a seamless transportation of this tremendous amount of cargo, sophisticated efforts are taken to support improved processes through insights into door-to-door container conditions. An important prerequisite is in-transit visibility, thus monitoring of mission critical parameters and notification of remote users in case exceptions occur, which is substantial to enable the execution of corrective or remedial action protocols prompted by in-transit alarms.

Furthermore, a conclusive and controlled flow of original data accompanying the physical transport is leading to a faster and more reliable clearance of containerized ocean freight. Due to these reasons, DHL OCEAN FREIGHT is participating in the CASSANDRA project, which is investigating how a good functional information flow between business and authorities can further improve the efficiency of the processes on either side. One of the most important project results is that an optimized digital data flow will reduce transaction costs and increase the quality for shippers, freight forwarders, and authorities, resulting in a considerably improved reliability of supply chain, which substantially drives the customer satisfaction.

Sebastian Seidel

Sebastian Seidel took over the responsibility for Global Ocean Freight Secure Supply Chain effective from January 2013. After he finished his education in 2006, he worked in various logistics areas, e.g. overland transportation, oversized project logistics and business development to gain some operational background. In 2010 Sebastian moved to the DGF headquarters in Bonn, where he took over the role as Global Strategic Project Manager to get experiences behind the stage in different ocean freight areas, before he took over his new responsibility..



BAP CASSANDRA Living Lab

BY JOHN PROB

BAP Supply Chain is predominantly in the Asia to UK tradelane. By bringing data together from multiple sources upstream in the tradelane, quality of data can improve efficiency for businesses. Using better quality and more accurate data about the container consignments, customs are also able to piggy back on business data to perform risk analysis that allows for more effective container targeting, reducing time consuming checks and clearance procedures and giving more time to look at dubious consignments.

Benefits for business include better planning of container consignments due to arrive at port, particularly for those that are subject to transshipment or adverse weather conditions. These conditions can have a huge impact on the Customers onward supply and time to market, critical during product promotions and seasonal sales.

Container manifest data is checked and captured in the BAP Living Lab at the consignment completion point in China and allows for a reliable assessment of what is in the container, beneficial to business quality processes and customs security..

John Prob

John Prob works for BAP as a System Project Analyst. BAP is a port-centric warehousing and logistics provider on the Port of Felixstowe, Britain. Working on BAP systems and databases handling Import and Export consignments through the Port of Felixstowe, John is also involved in the CASSANDRA project, working on the Asia/UK Living Lab, where BAP are a Tradelane partner.

Prior to joining BAP, John worked as a System Test Analyst for 10 years, with 3 years working for a test consultancy.

INDUSTRY DAY 2

Session: ICT for Sustainable Logistics

BY BERNHARD HOLTkamp

Logistics highly depends on efficient and reliable processes. Without, single companies till to whole supply chains can fail. Past approaches have seen a strong contrast between efficiency, reliability and sustainable. New approaches confirm: Sustainability drives efficiency – and this is particularly true in supply chain logistics .

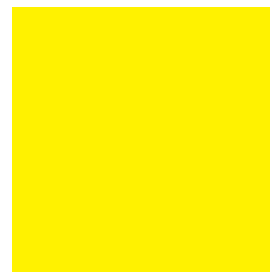
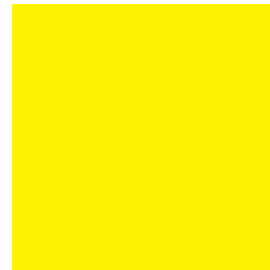
In this session we indicate that quantum leaps for sustainability in logistics relates to ICT applications. ICT for sustainable logistics enables services and processes, such as communication and collaboration, transparency and teleworking which ensures direct and indirect impacts to environmental, economic and societal factors. For example, the application of ICT in logistics helps to improve communication and collaboration of supply chain partners and competitors and enhances (process-) transparency. However, transparency leads to an increased performance of vehicles and infrastructure which increases the efficiency and utilization of trucks and trips and reduces the environmental pollution.

Continuous improvements on material science (e. g. improvements of the fuel usage of trucks, lower CO2 emissions, etc.) helps the logistics industry to become more sustainable. But nevertheless, their contributions in considering of the fact of the increasing traffic volume are to less to fulfil the European Unions sustainability targets (improvement of energy efficiency by 20% until 2020; reduction of the greenhouse gas emissions by 80-95% until 2050). In this session we want to point out and discuss with you, how and why ICT, and thus increased communication, collaboration, transparency and teleworking will be the most significant enabler for sustainability. The session will focus on current initiatives (e. g. the Swedish initiatives, initiatives in rural areas, Freight Village Bremen), new business models, ICT-tools and –standards to enhance sustainability in logistics.



Bernhard Holtkamp

Bernhard born in 1955, got his diploma and Ph.D. in computer science from the University Dortmund. For more than 30 years he is working on applied research. He was a research assistant at the University of Dortmund, held a position as Adjunct Research Professor at the Naval Postgraduate School in Monterey, California, and was head of department in Fraunhofer ISST for more than 10 years. For several years now he is manager strategic project development for Fraunhofer ISST. A core theme of his work is cloud computing that provides the basis for the Fraunhofer Innovation Cluster „Cloud Computing for Logistics“. In this context he is involved in the implementation of the Logistics Mall.



Swedish initiatives on sustainable logistics

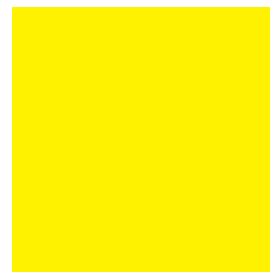
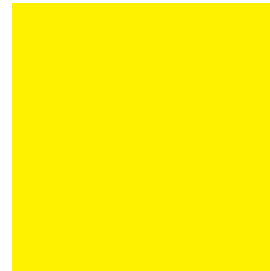
BY RAIN JÜRIADO

The presentation will focus on current initiatives in the field of sustainable logistics in Sweden. Due to the size of the country, export-dependency, and relatively long distance to mainland Europe, Sweden is highly dependent on the efficiency of the transport system. A number of privately and publicly funded programmes have been launched in recent years to reduce the environmental impact of freight transport. The transport system is characterised by high sunk costs, reducing the pace at which transformations can take place. A central issue has been to strike a balance between short term funding of individual projects and long term investments in cluster development.



Rain Jüriado

Rein (born 1977) works for Vinnova – the Swedish government agency for innovation systems since August 2012. Prior to that, he worked at the European Commission (DG MOVE) mainly with transport and logistics research. Mr Jüriado holds a M.Sc. in Logistics and Supply Chain Management from Cranfield University (UK) and a Ph.D. in Business Studies from Stockholm University (Sweden).



INDUSTRY DAY 2

Generation of Logistic Services for rural environments

BY ESTELA BLASCO AVILA

Whereas urban freight distribution is a recurrent problem that is taken in consideration in several ICT solutions, scant projects are being carried out in rural zones. Rural zones are areas with low density of population generating too many daily movements between warehouses (placed mainly in large cities or huge logistics platforms) and final destinations such as small shops, family-run businesses, hotels, restaurants, chemists, newspaper kiosk and city councils or homes. The goal of logistic services for rural environments is to integrate all stakeholders related to Freight Rural Transport with the target of making more efficient and sustainable the long-term transport and so the supply chain.

The freight distribution last mile concept is a common distribution problem. As we get closer to the final customer located on rural areas, economies of scale are increasingly difficult to apply as the size of batches tends to decrease. It would be rare, for instance, for a single business to be the consignee of the cargo of a whole truckload. It is the same for the other way round, from the view of a smallholder farmer, rural freight transport takes place on the first mile. Products are collected at rural areas, transported to the homestead or storage facility and from there directly to the road side, to buying points or to local and regional markets. Therefore the transport of freight distribution in rural areas is especially important to transport and logistics companies as it offers potential for significant improvements, not only for the optimization of processes but also for optimal routes and services seen in context with truck load weight and fuel consumption.

Projects like GoRural aims to create a platform that supports current and future transportation and distribution services occurred in rural areas, to or from the big cities or other rural areas. The project will focus on end users, looking for new business models including, for example, farmers, artisans, family businesses, or the end users in rural settings. The project will also consider how to deal with the increasing internet sales and its consequences.

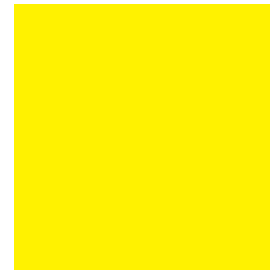
GoRural will analyze new business models involving multiple agents in the distribution chain and will also take into account the legal and contractual aspects of these services. Its main objective will be to implement "ICT solutions that facilitate the transport, collection and distribution in rural areas optimizing routes and travels and generating new business models among rural enterprises".



Estela Blasco Avila

Graduated in Computer Engineering at the Zaragoza University, currently is leading several R&D project in Hiberus Tecnologías, the leading technological company in Aragon specialized in business consulting and technology services and outsourcing company.

She has been involved for 7 years in several positions of responsibility and leadership in Information Technology. Most career leading teams and projects, tackling national and international projects related to mobility, semantic web, and content management. She has been involved in collaborative teams for innovation projects at both national and EU levels and under different programs, within the Digital Home, Mobility solutions or Improving the quality of user experience based on profiles and user models. Estela is now Innovation Project Manager, leading projects and teams dedicated to software factory. Currently she is the project leader of the GoRural project searching logistic solutions for rural environments.



Sustainable best practice in modern logistics supply chains by using the example of the leading Freight Village Bremen

BY THOMAS NOBEL

Carbon dioxide reduction is one of the main goals nowadays. The EU itself aims to improve energy efficiency by 20% until 2020. The ambitious goal is to reduce greenhouse gas emissions by 80-95% until 2050. Concerning the modelling and evaluation of energy and environmental impacts the following best practice was considered in an innovative way. The Freight Village Bremen in the Northwest of Germany disposes of different connections to road and rail (also waterway and air) infrastructure. At the moment, a high share of container truck runs coming from the seaports and using the existing motorway has to be carried out through the city centre of Bremen. In the future, there will be a direct connection to the motorway to the Freight Village which will be used by the majority of truck drivers. The focus lies on the consideration of three dimensions of sustainability. Those dimensions are economical, ecological and social effects. In economical view lower costs due to less distances and fuel consumption are analysed predominantly. In ecological view the impact of the new motorway connection are considered regarding the amount of exhaust emissions especially. The approach regarding the first two dimensions is to measure the effects of avoiding transportation through the city centre which means reducing congestion, distance of transport and fuel consumption and emissions. Existing tools as "ECOTRANSIT World" and manuals for calculating different routes/alternatives have been applied. In this context, the new European standard (CEN/TC 320-16258) for measuring greenhouse gas emissions has to be mentioned. Social effects exist because of saved time due to less driving times for employees e.g. which leads to more spare time. External costs were analysed therefore, "External costs in the transport sector: a critical review of the EC internalisation policy". By considering all three components it is possible to balance the effects of all three dimensions in a unique approach. This concludes also the attempt, to balance the costs due to saved spare times etc.



Thomas Nobel

Thomas has been managing the DGG (German freight village umbrella organization) for more than ten years. He has lead-managed studies and projects for the European Commission, the German Ministry of Transport, various regional authorities and private companies from manufacturing and logistic sector, covering research and consulting activities in intermodal freight networks and freight villages on international level (e.g. China, Belarus, Brazil, Greece, Italy, Lithuania, Austria and Macedonia).



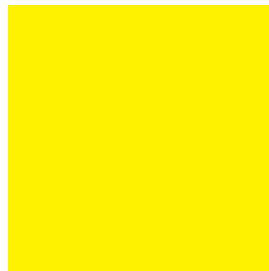
INDUSTRY DAY 2

ICT contributions and challenges for logistics innovation

BY GEORGIA AIFADOPOULOU AND FERNANDO LIESA

Modern supply chains are complex networks of independent organizations working together to move and transport goods from conditions of lower value to ones of higher value. The complex nature of these networks requires that the various actors operating in them coordinate their actions in a highly integrated manner if desired outcomes are to occur. ICT is considered major enabling factor for achieving supply chain integration and efficiency and for boosting innovation in logistics practice. However, the current state of ICT systems are such that only the most technology savvy and capital rich organizations can successfully participate in, or manage, these complex networks. High investment cost required for current ICT solutions adoption, high level of technical sophistication necessary to integrate and operate these solutions, and lack of standards for securing interoperability of new systems that emerge with existing ICT infrastructure, are some of the barriers that makes ICT adoption possible only by the largest logistics players. In the forthcoming years low cost to operate and easy to adopt ICT solutions are needed in order to support innovative business models and practices in logistics industry that will improve the competitiveness of this sector and enhance added value provision to the users. New tools and standards that allow all participants, whether large or small, to rapidly setup and tear down supply networks are required. This interactive session will discuss main research and innovation challenges that need to be addressed in order to:

- Facilitate the closure major gaps in current ICT systems so that the very best performance in the execution of supply chain activities can occur.
- Accelerate innovative logistics community creation.



Georgia Aifadopoulou

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.

Fernando Liesa

Fernando holds a PhD since 2004 by University of Zaragoza (Spain). Since then he has worked in the field of research and innovation management, knowledge transfer and dissemination, and management of triple helix networks. Fernando is the knowledge transfer office director at Zaragoza Logistics Center since 2006 and since 2007 he is also the general manager of the national (Spanish) center of competence in logistics, CNC-LOGISTICA. One of his main duties within CNC-LOGISTICA is the coordination of the Spanish Technology Platform in Logistics, Intermodality and Mobility, Logistop which involves 300+ Spanish companies, research and technological centers. Dr. Liesa has participated in several national and international projects in the field of logistics and supply chain management such as the following FP7 projects: SECURESCM, SoCool@EU, CASSANDRA, CO3, FLOUE, GREENSUPPLYCHAIN2009 and SAFEPOST developing research, technology transfer and dissemination and management activities. Fernando Liesa is now the coordinator of the FP7 project entitled: European Platform Driving KnoWledge to INNovations in Freight Logistics, WINN which has promoted the European Technology Platform on Logistics, ALICE.

Session participants

Margherita Forcolin

Margherita is a qualified IT manager with more than twenty years of experience in software development and a strong background in Object Oriented methodologies. She has participated and managed several IT research projects with Regional, European & international scope always playing relevant. As Head of European Research Projects office at Insiel she has been involved in numerous EU funded research projects, playing relevant roles, she has been technical coordinator in ToolEast Projects and coordinated the development of the Intelligent Cargo Concept within the EURIDICE project. Margherita is now coordinator of the LOGINN Coordination Action and MobiS FP7 project.

Andreas Kirchhainer

Andreas is a M.Sc. in Computer Science from the Technical University of Denmark, a B.Sc. in International Marketing from the Copenhagen Business School and MBA from ISEAD, Fontainebleau. He joined McKinsey & Co., Inc. in 1990 after several years as software engineer. In the Daimler AG Group, he held various positions, he was head of Business Development and Passenger Information in the Signal Group where he expanded the telematics activities. From 1995 until now, Andreas entered the AIS Advanced InfoData Systems GmbH, a track'n'trace telematics company, as owner and managing director. His emphasis in the international expansion has been improvising logistics for SME's using telematics data and advanced optimization algorithms.

Eduardo Zapata

Eduardo has a degree in Computer Engineer by Universidad Politécnica de Madrid and a Master of Science in Robotics by the University of Southern California (Los Angeles USA). Since 2008, Eduardo is Managing Director at CITET, an Innovation Center for Logistics and Transport dedicated to stimulate research, innovation and sustainability in the sector. This position is currently shared with that of Secretary General at UNO, the Spanish Logistics and Transport Business Association. Eduardo is member of ALICE Steering and Executive group and is the chair of the Urban Logistics ALICE Working Group.

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...

Stefano Persi

Founder of ENIDE. Stefano has over 18 years of professional experience in the technological industry, including large ICT companies, automotive industry and electronics industry. He has worked in international complex and high performance projects in Europe and around the world.

Alexander Stathacopoulos

Alexander graduated in November 2003 from the department of Civil and Offshore Engineering of Heriot-Watt University in Edinburgh, with a MEng in Civil Engineering. In 2005, he obtained his MSc in Construction – Project Management. In September 2010 he started working at the Hellenic Institute of Transport as a research associate and in January 2012 he completed his PhD. He is a native English speaker and has a good knowledge of French. Since joining HIT, he has been involved in a number of projects including the study and optimization of the pupil transport system in Greece, the administrative management of the SMART-CM project on Container Security, the ENVIROPORT project and several others.

Paolo Paganelli

Paolo has a full degree in electronic engineering and a recognized expertise in ICT and SCM, gained through several innovation projects carried out in over 20 years for leading international enterprises. After working for 15 years as Product Manager and Business Unit Manager in large ICT and consulting companies, Paolo has founded Bluegreen Strategy to support customers in the implementation of supply-chain integration and improvement projects. He has been coordinator of the EU projects EURIDICE and Logistics for LIFE and he is technical coordinator of the iCargo integrated project.

“In Auditorium”

TOPIC	SPEAKER
12:00 Registration	
12:20 Introduction / Session Settings	Emilio Larrode
12:30 Public-Private Partnership for Coordinated Supply Chain Risk Management	Marcel van Oosterhout
13:00 Business Intelligence for Improving Supply Chain Risk Management	Lingzhe Liu
13:30 A synergy based method for designing ITS services	Shoaib Bakhtyar
14:00 A Framework for Green Transport Logistics Process Design using best practice repositories and case based reasoning	Bill Karakostas
14:30 Coffe break	
15:00 Logistics optimization by the use of truck FCD – enhanced routing for heavy goods vehicles	Michael Schygulla
15:30 Architecture vision for an Open Service Cloud for the smart car in logistics	Martin Birkmeier
16:00 Towards an IT infrastructure for compliance management by data interoperability – the changing role of authorities	Wout Hofman
16:30 L/SH drivers' work outside the cab: From ergonomics and accident statistics analyses to participatory development and future scenarios	Arto Reiman
17:00 Cultural Visit - Aljaferia Zaragoza	
19:30 Come Together Event - NH Grand Hotel Zaragoza	

“In room zero”

TOPIC	SPEAKER
12:00 Registration	
12:20 Introduction / Session Settings	Bernhard Holtkamp
12:30 A service-oriented platform to achieve collaboration in the supply chain	David Ciprés
13:00 Design of SmartGate Technologies for Enhanced Material Handling	Michael Lütjen
13:30 RFID Technology Adoption In Third Logistic Operators: A Multiple Case Study	José Antonio Alfaro
14:00 T-TRANS - Enhancing the transfer of intelligent transport systems (ITS) innovations to the market	Susanne Kellberg
14:30 Coffe break	
15:00 FREVUE: Freight Electric Vehicles in Urban Europe	Matthew Noon
15:30 ICT for cooperative supply chain visibility within a port centric intermodal setting: The case of the Thessaloniki port-rail-dryport integration	Eliza Gagatsi
16:00 Spanish Port Hinterland Intermodal Information – FUTUREMED Pilot	Susana Val
16:30 Intelligent Logistics Zones: An ultimate vision of efficient, safe, and transparent logistics infrastructure	Saira Saleem Pathan
17:00 Cultural Visit - Aljaferia Zaragoza	
19:30 Come Together Event - NH Grand Hotel Zaragoza	

"In Auditorium"

TOPIC	SPEAKER	
08:30 Registration		
09:00 Introduction / Session Settings	Jens Schumacher	
09:05 Welcome & Introduction	Arturo Aliaga	
09:20 Big Data and Serialization for Supply Chain Value Creation - examples from the healthcare industry	Stephen Miles	
09:50 Transport Logistics Control Towers – From Collaborative processes to collaborative relationships	Alexis Rotenberg	
10:20 Horizontal collaboration: a new logistics strategy for the 21st century	Sven Verstrepen	
10:50 ALICE – the 'Alliance for Logistics Innovation through Collaboration'	Eduardo Zapata	
11:20 Introduction to the parallel sessions	Jens Schumacher	
11:30 Coffe break		

DAY 2 **PARALLEL A:**
INTELLIGENT CARGO
 MODERATION: GERMÁN HERRERO CÁRCEL

THU 24.10

"In Auditorium"

11:45 Introduction	Germán Herrero Cárcel	
11:50 Intelligent Cargo; bringing the concept into practice	Andre Nijhuis	
12:15 Innovation in Intelligent Cargo	Servet Balcioglu	
12:40 From Intelligent Cargo to Intelligent Logistic Services	Paolo Paganelli	
13:05 Round Table / Interactive Discussion		
13:30 Lunch & booth presentation		

TOPIC

SPEAKER

DAY 2 **PARALLEL B:**
INVESTORS SESSION
 MODERATION: JAVIER VAL ALONSO

THU 24.10

"In room zero"

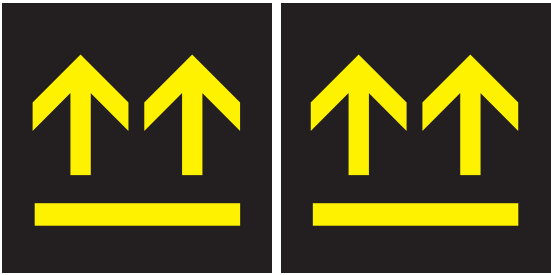
11:45 Introduction	Javier Val Alonso	
11:50 A Business Ecosystem for Logistic Services	Paolo Paganelli	
12:05 LOGICON – Connecting Logistics SMEs	Francesc Rosines	
12:20 Mobilising Global Freight Data	Frank Knoors	
12:35 EURIDICE: An intelligent cargo concept - how research can be successful	Margeritha Forcolin	
12:50 Added value of technology in logistics horizontal collaboration: identifying the need for an integrated ICT approach	Michael Bogen	
13:05 Individual traffic management of freight vehicles	Hans Westerheim	
13:20 Round Table / Interactive Discussion		
13:30 Lunch & booth presentation		

“In Auditorium”

TOPIC	SPEAKER
14:30	Introduction
14:35	e-Freight, enabling connectivity and Interoperability in freight information exchange. A practitioner's point of view
15:00	Hubs in Ecofriendly Transport Solutions
15:25	IT Approach for Physical Internet and Modular Logistics
15:50	Round Table / Interactive Discussion
16:15	Coffee break & booth presentation / departure for industrial visits
17:00	Industrial Visits
20:00	Conference Dinner

“in ICT Demonstrator Center”

TOPIC	SPEAKER
14:30	Introduction
14:35	Collaborative Supply Chain
15:00	Cloud-based WMS
15:25	Urban mobility
15:50	SOA-based VMI
16:15	Coffee break & booth presentation / departure for industrial visits
17:00	Industrial Visits
20:00	Conference Dinner



"In Auditorium"

	TOPIC	SPEAKER
08:30	Registration	
09:00	Introduction	Jens Schumacher
09:05	Announcement ECITL 2014	
09:20	Logistics Clusters as Drivers of Economic Growth	Yossi Sheffis
10:00	Horizon 2020	Wolfgang Höfs
10:15	Coffe break	

DAY 3 **PARALLEL A:**
ICT FOR COLLABORATIVE LOGISTICS
 MODERATION: JENS SCHUMACHER

FRI 25.10

"In Auditorium"

10:30	Introduction	Jens Schumacher
10:35	Transport information management on supply chain	Héctor Benito
11:00	iCargo – the connecting concepts	Erik Cornelisse
11:25	Interoperable Freight Information Service	Frank Knoors
11:50	Round Table / Interactive Discussion	
12:15	5 min coffee break'	

DAY 3 **PARALLEL B:**
SECURITY IN LOGISTICS
 MODERATION: NILS MEYER-LARSEN / FRANK ARENDT

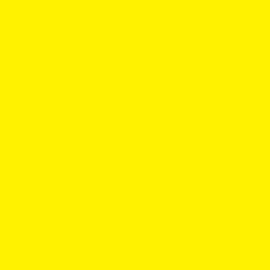
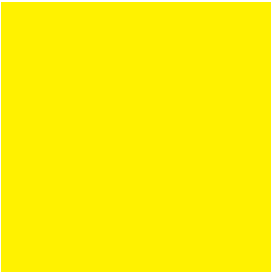
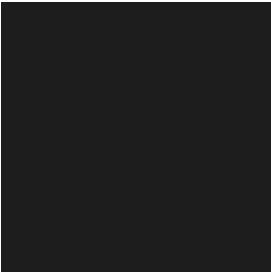
FRI 25.10

"In room zero"

10:30	Introduction	Frank Arendt
10:35	A Business Ecosystem for Logistic Services	Yaohua Tan
11:00	LOGICON – Connecting Logistics SMEs	Sebastian Seidel
11:25	Mobilising Global Freight Data	John Prop
11:50	Round Table / Interactive Discussion	
12:15	5 min coffee break'	

	TOPIC	SPEAKER
12:20	Introduction	Bernhard Holtkamp
12:25	Swedish initiatives on sustainable logistics	Rain Juriado
12:50	Generation of Logistic Services for rural environments	Estela Blasco
13:15	Sustainable best practice in modern logistics supply chains by using the example of the leading Freight Village Bremen	Thomas Nobel
13:40	Round Table / Interactive Discussion	
14:10	Wrap up	
14:30	Lunch Break	

	TOPIC	SPEAKER
12:20	ICT Contributions and Challanges for Logistics Innovations (Interactive Session)	Margherita Forcolin Eduardo Zapata Andreas Kirchhainer Stefano Persi Jens Schumacher Paolo Paganelli Alexander Stathacopoulos
14:10	Wrap up	
14:30	Lunch Break	



NITAX

NITAX has been incorporating technological innovations for more than 30 years in the public transport sector, more specifically to the taxi market. Our product range includes electronic equipment like top signs/roof lights, taximeters and its peripherals. In the fleet management area, SIDUS is the latest product for automatic taxi service dispatch. Its cutting edge technology, now cloud based, uses the most advanced software technology to assign the nearest taxi within the fleet to the user. The integrated Geographic Information System allows a shortest and fastest route calculation for each fleet vehicle. The whole cycle, since the incoming call -VoIP enabled- reaches the service centre until the vehicle picks the customer up, is integrated in the SIDUS system. Web and mobile APP requests are integrated in the system as well. And thanks to the combination of dispatch services and taximeter economic activity, a complete resource management is made available to drivers and owners.



HIBERUS TECHNOLOGY

Hiberus Technology is a company specialized in business consulting and technology services and outsourcing. It is the leading technology company in the Ebro Valley, a reference in the Spanish market, and it is currently in the process of expanding into the Latin American market. Hiberus is part of one of the leading business groups in the field of ICT (Information and Communication Technologies) in Spain, with a workforce of over 1000 professionals and a turnover of over 100 million. Our goal is to help companies and organizations by ensuring that their information systems help them improving their business operations and increasing cost-effectiveness. Our slogan "Your Growth, Our Growth" reflects our efforts to commit to our customer's business objectives in a new relationship model based on the involvement with their results, pay-per-use schemes, and cooperation.



CARRERAS GRUPO LOGISTICO

Carreras Grupo Logístico, founded in 1933, is a Spanish company leader in integral logistics - transport, warehousing and distribution, pallets, co-packing, logistics consulting. The group is present all around Spain, including the Iberian Peninsula and island, considering both its transport division as in logistics and pallets. It also has a strong international presence. Carreras received in 2009, the European Transport Award in Logistics category, awarded by the Spanish Federation of Freight-and-CETM Transportation Professional magazine, for its growth and excellent management in the areas of transportation and logistics. In 2012, he received the ICIL Award for Excellence in logistics. Carreras turnover in 2012 was 178M€ and employs 1.300 people.



DISTRIBUIDORA DE ARAGÓN (DASA)

Distribuidora de Aragón (DASA), Grupo Heraldo distribution company, acts throughout the Aragonese territory in Spain with nearly 1,000 points of sale and delivery of more than 70 million items annually, mainly newspapers and magazines but also other products and services such as school supplies, stationery, toys, confectionery, prepaid card recharge (cell phones, public transportation, all-purpose payment...), computer accessories and others. In addition, is responsible for carrying newspapers and magazines to 20,000 subscribers' addresses throughout Aragón. With all that, DASA vehicles travel about 3.8 million kilometers a year, the equivalent of traveling nearly 10 times from the Earth to the Moon.



MANN + HUMMEL

The MANN+HUMMEL Group is a leading global expert for filtration solutions and development partner and original equipment supplier to the international automotive and mechanical engineering industries. Employing 14,575 people at more than 50 locations worldwide, the company achieved turnover of about 2.6 billion euros in 2012. The group's product portfolio includes air filter systems, intake manifold systems, liquid filter systems, cabin filters and plastic sound components (known as 'symposers'), as well as filter elements for vehicle servicing and repair. For general engineering, process engineering and industrial manufacturing sectors the company's product range includes industrial filters, a series of products to reduce carbon emission levels in diesel engines, membrane filters for water filtration and filter systems. Further information about MANN+HUMMEL can be found under www.mann-hummel.com



ESTESA

ESTESA is a logistic company dedicated to the global warehouse management. It's main activity is the household appliances handling and currently (2013) is operating for the B/S/H/ group whether at its main finished product warehouse for the Iberian Peninsula located in the logistic platform PLAZA, in Zaragoza, In 2011, Estesa handled 10.200.000 units of white line appliances and 5.500.000 units of small appliances at those BSH Zaragoza PLAZA installations, which meant a total of more than 35.000 loaded or unloaded trucks.



AREX

Aragón Exterior is the economic development agency of the regional government of Aragón. Its „Invest in Aragón“ department is the one-stop contact for foreign companies seeking advice about investments in the region of Aragón, guiding them through all the compulsory procedures required to set up a project and providing information about financial incentives and backings for specific sectors of activity. Furthermore, Aragón Exterior fosters the international growth of local companies by supporting export, sourcing and investment projects in new markets.



MARTIN MARTIN

“Martin Martin, Aragonese supply chain, leader in the sector of leisure snack. We have 78 convenience stores, in 12 Spanish provinces, serving more than 7 million customers, with our 400 employees, of whom 96% are women”.



TECNYCONTA

Tecnyconta with a continuous process of innovation and the application of the latest technologies has become the Spanish leader in prefab solutions for industrial and logistics construction. From our factory, located in the municipality of Tauste, Zaragoza, that covers an area of 270,000 square meters, we supply precast concrete structure to Portugal, Spain and southern France.



GRUPO JORGE

We look after every step in the chain of pork production with adaptability and workable solutions. Grupo Jorge is one of the largest meat groups in Spain, with a presence in the pork sector going back 75 years. Our long history has meant that today we enjoy acknowledged international prestige, and we are continuing to follow an ambitious program of investment. Our philosophy is to combine efforts and benefit from synergies with a multifaceted vertical business, based on sustainable development that guarantees total control of processes and of the chain and ensures the quality of our product.



IAT

IAT is a Technological Centre specialised in Engineering and Knowledge Management constituted as a private foundation, of non profit character. Recognised as being of public interest, it acts under strictly professional criteria, providing Knowledge Intensive Services and developing its own technology. Its goal is to assist companies and institutions to improve their results while making them sustainable, by providing them value using innovative solutions. IAT develops its expertise in Logistics Management and Supply Chain, through its operational center specialized in this area, called Center for the Promotion of Logistics in Andalusia (CPLA).



ENIDE

ICT company specialized in Innovation for Logistics & Personal Mobility. ENIDE has expertise in the creation of innovation for the industry, particularly transport, supply chain, manufacturing and agrifood. Our team brings expertise in edge ICT technologies related to Internet of Things & Services, Business Intelligence and their integration. We offer to our clients and partners our expertise in R&D project management and organizational support, as well as consulting for innovation routes.



VIA AUGUSTA

Via Augusta is a Spanish company focused in handling all kinds of goods (general cargo, gasses and ADR). The company was established in 1960 and today has a great experience in road and intermodal transport. Our service is characterized by: agility, efficiency, flexibility and commitment. We are pioneers in our region using natural gas vehicles and advanced fleet management solutions which improve safety and sustainability of our activity.



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