

# European Review of Regional Logistics

*Quarterly Newsletter of Open ENLoCC*



## *In this issue:*

- ***Reports on Projects, Policies and Regions. Network Member CMS.***
- ***News. Dates. Open ENLoCC General Assembly.***
- ***Adam Smith on Financing of Road Construction and Maintenance.***

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Cover photo: "Logistics get transparent", Martin Brandt



## Editorial

Open ENLoCC, the European Network of Regional Logistics Competence Centers, presents the first issue of its “European Review of Regional Logistics”. It will replace the regular “Open ENLoCC Newsletter”, and will supply more information about the logistics trends and initiatives around Europe, with an eye to their consequences for the regions of Europe. The “Review” will be a keen follower of European projects and policies in the sector, and debate their results from a regional standpoint.

Logistics competence centers exist in many regions of Europe. In this issue we present the “Centre for Maritime Studies” at Turku University in Finland. With Swedish Scania, we also present a region and its logistics functions. Furthermore, we present work results of projects, which may be important for policies of other regions. In this issue, the main focus is on intermodal transport.

A special role plays the dissertation of Sara Verlinde, dealing with city logistics. Apparently, the idea of an urban consolidation center has come to its limits, in today’s world of competition and many complex logistic chains. Her main focus thus is no longer on a unified approach to organize transport in and out of an urban area, but to implement flexible and helpful measures for selected logistics chains.

Logistics is a rather young and very practical science. However, the topics of logistics have always existed. We believe that, perhaps also because the logistics science is so new, some historical approaches are worth reading today. Therefore, we will present some selected excerpts.

This edition starts with a text of Adam Smith, who elaborates about different methods and results of a road toll. The science of today may have further elaborated the topics in detail, often leading to different results. Nevertheless, his original text shows what can be done by systematic reasoning. Since there is quite a lively debate around the topic of road toll, with different systems implemented across Europe, his text may be a good starting point for evaluation.

Furthermore, we offer the reader a debate forum, a news section and a list of next dates. Even more than the other topics, these sections will depend on the future input of readers. The next issue of the quarterly “Review” is scheduled for September.

**Alberto Preti**

President “Open ENLoCC”

June 2015



## Debate

Past issues of this newsletter got several responses, which may interest the readers.

### Craning trailers



There are different opinions about the efficiency regarding craning of trailers which are not built for rail transport. Would it not be better just to use longer (45') containers instead? Or an improved trailer technology? Phil Mortimer of TopHat writes:

"The TopHat project is still a developing research project so we don't have any photographs or drawings which could be released as yet. The essentials of the technology are feasible and the economics look robust. We believe this could have serious potential in Europe for domestic and cross border/international flows which are mandated to move in trailers. It should allow rail to participate in traffic it would otherwise not carry.

There are similar projects in the US which have now actually deployed top lifting trailers. These are reefers and the primary advantage is the longer trailer life and reduced damage incurred during the lifting process compared to the grapple arm technology previously used. We also avoid the need for any additional lifting cradles.

Other big potential beneficiaries from the top lifting technology are the truckers/forwarders/shippers who could move traffic in trailers through ISO equipped terminals and yards and add to their portfolios of services and capabilities. The train operators and wagon leasing companies could also stand to gain as new services involving more mixed trains of trailers and containers are brought into service."

For the time being, already quite a number of different alternative technologies each show their respective strengths in service. Some examples: With the help of "CargoBeamer" it is possible to run 4m-trucks across the Gotthard, "Modalohr" runs high-volume services between Bettembourg and Perpignan, and "NiKraSa" units supplement existing trains e.g. between Bettembourg and Trieste.

### Where the sulphur goes

The question was raised whether the sulphur ban in the Baltic Sea would just increase sulphur levels elsewhere, reducing the net environmental impact. This provoked a response by Reima Helminen from the Centre for Maritime Studies at the University of Turku:

"SECA areas like Baltic sea + North Sea have 0,1% SOx limit as from 2015 Other sea areas will have 0,5% SOx from 2020 (or 2025 if deferred). These are IMO decisions.

The sulphur can be removed from oil in refinery and it can be used later e.g. in fertilisers in a safe way. If scrubbers are used the sludge is taken from vessels in ports and sent to plants that can treat it.

Environmental impact is positive on the whole."

## News

### Open ENLoCC recommended by Finnish "Logistics Center Developer's Handbook".



This report is based on numerous different research projects and studies. As one practical initiative to develop and sustain our competitiveness, the authors suggest to establish “a Finnish Logistics Competence Cluster”, and link it internationally. “One step could be OpenENLoCC (Open European Network of Logistics Competence Centers). This approach will help the organizations operating in our market to solve the problem of availability of skilled workforce, and to link our companies and development organizations more tightly to European peers. “

Monipuoliseen yhteistyöhön rakentuva ajattelumalli – kansainvälisten OpenENLoCC ja erilaisten alueellisten logistiikkaklustereiden esimerkkien mukaisesti – antaa systemaattisen viitekehyksen logistiikan kehittämiseksi sen eri tahoilla, ja liittyy sen osuvasti osaksi laajempaa tarkastelua eri tasoilla yksilöistä yrityksiin ja kehittämisorganisaatioihin sekä julkisiin toimijoihin saakka. Toimintamallin käytännön toteutus tulee suunnitella huolellisesti yhteistyössä, jotta se palvelee oikealla tavalla tarpeellisia organisaatioita, ja jotta tarpeellinen tieto ja kokemus saadaan jouhevasti ja kustannustehokkaasti jaettua yhteistyöverkostossa olevien toimijoiden kesken.

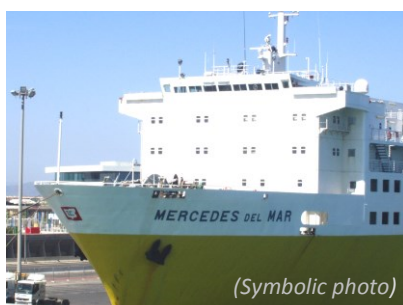
### Daimler to shake up European port system for auto export?

In March 2015, some media reported that Daimler „sees good chances for a partial transfer of auto loading towards mediterranean ports“ (DVZ of March 11). The main reason given is shorter transit time. It was further speculated that the ports in question may be Livorno or Koper.

Auto export is a volume business, on the main routes done with auto carriers holding several thousand cars at a time. Assumed that a main route would be run at least on a bi-weekly schedule, that would result in a minimum of 50,000 cars outbound and – which is the challenge – at best also a further 50,000 cars inbound, usually of a different brand. Since a trainload is about 200 autos, such a magnitude would equal about a daily pair of trains to and from the port.

This is just the minimum scale for such a service. With larger ferries and higher frequencies, there is practically no upper limit. Market leader Bremerhaven alone has a yearly throughput of a good 2 million autos. This allows frequent routes to different parts of the world. The high threshold for operation, together with the oligopolistic world auto market, results in a highly oligopolistic auto port structure in Europe.

Shorter transit times may mean one ship less in the rotation, a shorter time to market and, certainly in the case of Mercedes, lower capital costs. At a certain point, which apparently the management finds about to be reached, this may offset the frictions that go with the setting up of a new transport chain. Daimler expects to sell about 300,000 cars in China in 2015. Although they are partly made in China, a Daimler decision for a Southern port might shake up the European port system considerably, whichever may be the port under consideration.



(Symbolic photo)

/ed.

**“ITS” in Bordeaux, October 5 to 9.**

This year's ITS World Congress will be held in Europe, more precisely in Bordeaux, early October (see “Next Dates” section below). From a rather specialized and small event, this congress has become the most important ITS event in the world, where technical and strategic exchanges bring together the diverse actors of this integrated sector. Some numbers for Bordeaux: 20,000m<sup>2</sup>, 3,500 exponents and an expected 10,000 visitors from 60 countries, 300 conferences, 15 demonstrations and 10 technical visits.

ITS can be seen as the triangle cooperation between transport & logistics, ICT and procedures. Each of the components is equally important, their interrelationships work together to bring forward smart solutions for freight and passenger mobility. The approach is really systematic. Jeremy Rifkin's concept of the ‘third industrial revolution’ can be used to better understand ITS: when new communication technologies and new energy technologies join, the systemic exploitation of those two can bring quite profound changes to the economy; he says that today we are at the edge of the third industrial revolution.

Similar, indeed connected to the physical internet concept, the structuring of connected activities and actors under the header of ITS is expected to have important impact on the transport, logistics, supply chain, mobility, etc. sector. Dr. Meng Lu, Program Manager International at the Dutch Institute for Advanced Logistics and member of the ITS program committee states: “ICT based ITS or C-ITS (Cooperative Intelligent Transport Systems) will enable regions to improve inter- and intra-region freight management (e.g. forecasting, re-planning and control). Collaboration between authorities, shippers and logistics service providers is a must.”

Open ENLoCC member i-Fret / i-Trans from Northern France will be present in Bordeaux on the ATEC ITS France booth.

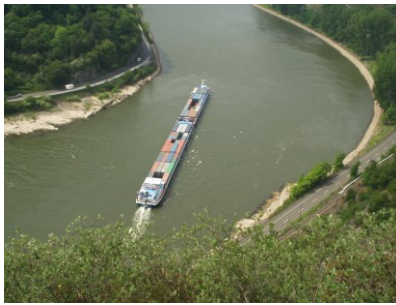
**Anna Melsen**

i-Fret coordinator

**Guidance on urban logistics**

A consortium formed by Ecorys, University of Antwerp, University of Lisbon and Prof. Dablanc of IFFSTAR is responsible for a European Commission (Directorate General for Mobility and Transport) mandated study on facilitating the preparation of European non-binding guidance documents (NBGD) on urban logistics. The study includes a stakeholder consultation via online questionnaire and via meetings in Brussels at a later stage.

The first two topics to be covered in 2015 are: Information provision of route guidance for urban logistics vehicles, and treatment of logistic activities in urban vehicle access regulation schemes. The questionnaire can be found at <https://s.chkmkt.com/?e=41358&h=D70669588A43756>. Since many actual and future activities focus around urban logistics, it may be a good idea both to contribute and to learn from this activity.



*Container barge negotiating the Loreley gorge at the Rhine. At each bank, a heavily utilized double track railway mainline follows the course of the river.*

### **“Interregional Alliance for the Rhine-Alpine-Corridor EGTC” founded**

On 24 April 2015 the “Interregional Alliance for the Rhine-Alpine-Corridor EGTC” has been founded in Mannheim. The new cooperation should have a solid legal fundament; that is why the partners had agreed to form a “European Grouping for Territorial Cooperation (EGTC)”. 14 organisations had signed the declaration to found the EGTC. With the choice of this rather new legal form the European character of the cooperation was underlined.

This new cooperation form is based on the EU-funded project „Corridor 24 Development Rotterdam-Genoa (CODE24)“. This strategic project has started five years ago and became a very successful and constructive cooperation which was initiated by partners from regional and local level. The Regional Planning Association Rhein-Neckar was in charge of the project lead and now is the secretariat of the EGTC.

### **ITL with new projects**

The Open ENLoCC member ITL is pleased to announce the start of two new projects in which it is partner, funded within the first Horizon call, topic MG.5.2-2014 “Reducing impacts and costs of freight and service trips in urban areas”:

SUCCESS, led by the Luxembourg Institute of Science and Technology (LIST), deals with the topic of construction logistics in urban areas and it involves major construction companies in Europe.

NOVELOG is led by the Centre for Research and Technology Hellas (CERTH). It involves as partner the Open ENLoCC member NewRail - Centre for Railway Research at Newcastle University and it had letters of support of the members KLOK and CRITT. NOVELOG deals with the city logistics topic from a strategic policy making perspective, with applications in 12 city cases.

### **People**

Nadia Di Paola in the past worked for Open ENLoCC member LOGICA scarl. She is now working as expert at innovation policy for The European Commission (H2020 calls), The World Bank, and the Italian Ministry of Economic Development.

After almost 10 years at Emilia-Romagna Region and ITL, Marco Mobrici is now facing new professional challenges. Marco has been involved in Open ENLoCC since its birth and has seen its development and consolidation since the ENLoCC project of which he was project manager for Emilia-Romagna Region. Marco moved since April 2015 to Arietti & Partners - M&A International Inc. based in Bologna, where he manages innovation projects and funding for business competitiveness (also participating in some specific H2020 calls). The whole Network thanks him for his work and looks forward to meeting him again in a professional or personal environment.



## Open ENLoCC member “CMS” of Turku University



The Centre for Maritime Studies (CMS) with its 30 employees is one of the leading providers of research, consulting and education services in the field of maritime and logistics sectors in the Baltic Sea Region. Annually we carry out several research and consulting projects both nationally and internationally. CMS serves the whole maritime cluster, both the public and private sector. The main fields of expertise include shipping and ports, logistics and transport infrastructure, marine industry, environmental impacts of transport, and the role of logistics in regional development.

**CENTRE FOR MARITIME STUDIES** CMS is a part of Brahea Centre, an independent institution of the University of Turku, Finland. Among our core competences are:

### Maritime and intermodal logistics

This includes research projects, for example, related to:

- Logistic chains and transport corridors.
- Infrastructure issues.
- Port – hinterland connection studies.

### Maritime industries, ports and environmental impacts

This includes:

- Maritime cluster reviews of several European countries.
- Market reviews and estimations of cargo throughput and maritime traffic of the ports in the countries located in the Baltic Sea Region.
- Regional economic impacts of port activities .
- ICT and work processes in ports, e.g. Port Community Systems.
- Transit traffic and Russian ports.
- Cost-effectiveness of environmental regulation.

### Continuing education and conferences

We offer high-quality university level further education and conferences, which are mainly aimed at people already working in the maritime field.

We arrange a number of international conferences each year. These events are directed for national and international experts and they provide up-to-date information on topical issues. Some of our conference brands:

- Ice Day (Winter navigation in harsh northern conditions, every second year)
- Mayday, Mayday, Mayday (Maritime search and rescue)
- Satama Port (Port Conference every second year)
- Maritime Safety Conference (yearly)
- Shipbuilding and Technology in Ships (different themes)

You can find information about our conferences at [www.conferences.fi](http://www.conferences.fi).

Continuing education gives the possibility to update and develop one's professional skills and learn new skills needed in working in the maritime, port and logistics industries. We lead and are involved in a large number of national and international EU-funded training and education projects in the fields of seafaring and transport logistics.





Our conferences and education courses act as special forums for professionals to meet. There you will also meet the top specialists of the maritime field as speakers.

Our personnel takes part in the work of different working groups, committees and boards focusing on the acts that promote the visibility and competitiveness of the maritime business. Improvement of the safety culture and sustainable use of the environment are also our focal areas. The advisory board of CMS consists of decision makers and maritime specialists from various organizations.

We work in close co-operation with the maritime authorities, other universities and maritime academies, companies, industry and other organizations.

Shortsea Promotion Centre (SPC) Finland is part of the Centre for Maritime Studies. The aim of SPC Finland is to promote shortsea shipping and intermodal transport. SPC Finland is a member of the European Shortsea Network (ESN).

### **What kind of projects do we do?**

CMS has been a coordinator/partner in several research projects funded by EU programmes and the Commission, the Finnish Funding Agency for Technology and Innovation, the Academy of Finland and by the corporate world. Some examples of our ongoing projects:

MariePRO – Promoting Maritime ECVET Actions aims to smoothen the way for the Maritime Education and Training (MET) institutions towards implementing ECVET, the European Credit System for Vocational Education and Training. The ECVET system allows mutual recognition for credits gained in different European countries, opening doors for increased student mobility.

Baltic Sea port market review package consists of two publications: Baltic Port List and Baltic Port Barometer. The reports contain detailed statistics on ports' annual cargo development and ports' outlook on future development.

Clean shipping economics – shipping under new paradigm (CHIP): The aim of the research is to apply corporate social responsibility (CSR) on shipping operations.

PORTOPIA aims at creating an integrated knowledge base and management system of port performance to serve the industry's stakeholders in improving the sustainability and competitiveness of the European Port System.

### **What do we expect from our Open ENLoCC membership?**

Since 75% of the EU trade is transported by seagoing vessels it provides opportunities for a variety of supply chains and R & D projects. CMS is willing to provide its expertise on the fields of port operations and maritime transports. Open ENLoCC is a good international platform for searching for project partners in the fields of intermodal transport and maritime related logistics. We are also looking information on current trends in logistics as well as information on funding opportunities regarding research and education projects.

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## The Region of Skåne (“Scania”) – transit in transition

*The Swedish Region of Skåne and the Danish island of Zealand at the entrance of the Baltic Sea.  
Source: Oresundsbro Konsortiet.*



*Öresund bridge, connecting  
Copenhagen and Malmö  
Photo: Søren Madsen, Øre-  
sundsbron*

The Region of Scania in southern Sweden has since the beginning of time been a transit region into and from Sweden. Originally a part of the Danish Kingdom, the Danish and Swedish monarchies almost constantly have made war, as Sweden strived to conquer the region. In 1658 Sweden succeeded. The fight was in essence about the transport and logistics supremacy of the narrow straight of Öresund and the tolls that every ship entering through the straight into the Baltic area had to pay. Scania becoming Swedish meant that the Öresund became a border instead of a uniting straight, but since the year 2000 Scania and Denmark are once again connected, now by a multi-modal bridge, and the ports of Malmö and Copenhagen have merged into one company, Copenhagen Malmö Port, CMP. Copenhagen has specialized in cruising and Malmö in logistics, primarily as a car import hub for northern Europe including Russia.

Just as in historic times, still today the Öresund is a central link - or bottleneck - throughout the global trading system and the Region is still as important for world trade, not least because of the globalization of trade spread far beyond the Baltic Sea States. Furthermore, several projects and actors are investigating the possibility of speeding up transit from China to Europe by using railway from Shanghai to the Baltic area, via Scania and the bridge to Denmark and finally through the planned tunnel to northern Germany (Fehmarn Belt). If such plans would come in operation, transit through Scania would definitely explode. So, ironically, the issue of northern Europe's transport and logistics supremacy, with Scania in the center of development as a region of transit, is still as topical as it was in 1658!



*Auto carrier, Malmö CMP*

So what are the logistics features and advantages of Scania? When it comes to infrastructure, besides the Öresund Bridge, the Region is well endowed with harbours, many of them multi or tri-modal connecting with both the motorway system and the railways. Except for CMP which is semi-private, the harbours are run by the municipalities. Containers, for which Helsingborg is Sweden's second largest port, cars in Malmö, RORO and bulk are the main areas of business. The Scanian ports are the gateways to the rest of the Swedish market as well as for Swedish exports and the Region itself an area of transit. Good port facilities combined with a well-functioning infrastructure of major roads and railways including the accessibility to Copenhagen Airport has attracted the establishment of many major warehousing and postponement/pre delivery inspection (PDI) activities to the west coast of the Region. Examples are the different PDIs in CMP, the Central Warehouse of ICA, one of the largest food and department store chains in Sweden (100,000 m<sup>2</sup>), the DSV central terminal, a major forwarder in Denmark (100,000 m<sup>2</sup>) and similarly the PostNord Terminal (Swedish and Danish Postal Logistics of 75,000 m<sup>2</sup>).



*Regional train,  
Malmö central station*

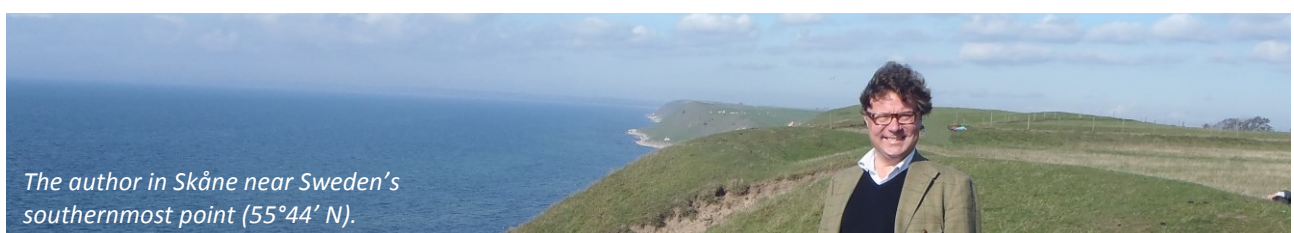
But Scania is not only transit – it is a region in transition. With a favourable population structure, a good labour market and being a major centre of consumption in Sweden, Scania is one of the fastest growing regions in Northern Europe. The infrastructure is good both for public and private transport, and also the last year's investments in new residential areas, event arenas and cultural activities, most notably in Malmö, have made Scania a Region to stay in, to live in and to visit!

A good mix of infrastructure, labour supply, transport companies and logistics facilities combined with regional purchasing power and the business environment could be identified as main factors directing establishment of new logistics activities such as terminals, gateways and dry ports. Supporting measures from the municipalities, the political climate, the supply of consultants and experts, proximity to competitors and IT accessibility are just as important factors. In Scania there are several Research Centres for Transport and Logistics, as well as academic educations for logisticians, one of which is Transport Management at Malmö University.

So, once the logistics business and competence clustering has started, it is quite obvious that it will go on: Scania is not only a region of transit anymore, it's a region in transition - but the struggle for northern Europe's transport and logistics supremacy continues!

#### **Carl-Magnus Carlsson**

Director of Transport Management Studies  
Malmö University





## Recommendations for trans-alpine combined transport



Many projects have in the past dealt with freight transport across the Alps. A main purpose of these projects was to move freight from road to rail, by initiating and promoting offers for combined transport. Within the past years, a number of new relations indeed were established, and the projects can claim to have an active role within that process. At the end of the recent finding period, the EU commission asked for an overview on the achieved results and for recommendations for future policies.



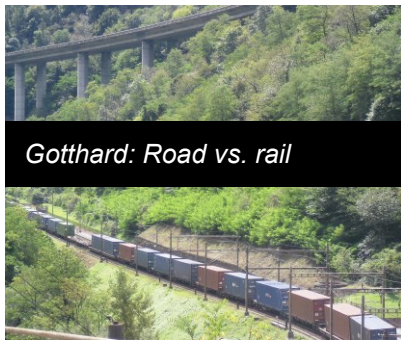
This was done within the SusFreight project. SusFreight, Sustainable Freight Transport – Now and Tomorrow, is a project co-financed by the Alpine Space Program under the 5th Call for Proposals. SusFreight aims at addressing the environmental problems related to transports through the natural bottleneck represented by the economically dynamic regions composing the Alpine Space. The project was relatively small, and work was done within about a year. Lead partner of SusFreight was the German Association for Housing, urban and Spatial Development, with the LKZ Prien GmbH doing the project management.

SusFreight came up with a number of recommendations, which are listed below verbatim:

1. Development of an optimal Supply Chain model for illustrating the processes of combined transport to have a common basis of understanding and decision making.
2. Openness for technologies for combined transport, leading to a balance of environmental protection and sustainable economic growth.
3. Development of new business models tailored to the needs of SMWs for the participation in combined transport.
4. Development of best practice concepts for an optimal freight village and terminal design and layout.
5. Redesign of funding guidelines and implementation of task oriented subsidies for combined transport.
6. Involvement of public and private implementing partner in projects developing specific market oriented products to support sustainable freight transport.
7. Stronger connection of logistics aspects and spatial planning policies to optimize transport flows and land use in Alpine Space regions.

*Below: Semitrailer and different types of containers, crossing the Gotthard by rail.*





8. Development and promotion of educational programmes to increase sustainability and competitiveness of (Alpine Space) combined transport.
9. Collection of all existing standards in European rail transport in a knowledge pool as basis for harmonizing standards.
10. Identification of and undertaking low, focused investments in infrastructure bottlenecks with leverage effects for railway transport. Optimization of IT flows along the supply chains by electronic and standardized data exchange among terminals.
12. Optimize empty container management.
13. Improvement of interfaces between national networks and transnational corridors.
14. Support approaches to corridor planning and coordination (in the frame of the new TEN-T) and thus increase potential for combined transport.
15. Establish long-term governance structures for transnational transport corridors.
16. Follow-up the potential of dry ports in the systems of the TEN-T corridors.
17. Definition of a specific standard for the measurement of CO<sub>2</sub>-emission as basis for the evaluation of projects and economic activities in Alpine Space.
18. Development of both necessary and appropriate data collection (in cooperation with economy and politics) in the combined transport sector.



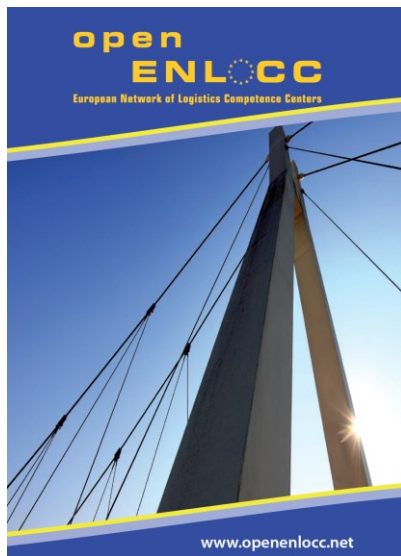
Alp transit obviously is not so specific a transport issue as to have only singular issues. Furthermore, what appears obvious and perhaps self-explaining from one point of view may be completely invisible from some other viewpoint. The topics are specified in the report in more detail. Each recommendation is further evaluated in the categories “time”, “cost”, “efficiency” and – as a conclusion – “priority”.

A further result is an overview of the actors in trans-alpine intermodal transport and their respective role, reflecting the complexity of the transport chain and the multitude of involved institutions.

**Martin Brandt**  
Project Manager  
KLOK e.V.

## Project Info

SusFreight, “Sustainable Freight Transport – Now and Tomorrow”, is a project co-financed by the Alpine Space Programme under the 5th Call for Proposals. Duration was from September 2013 to December 2014. The detailed recommendations of the final report can be downloaded from [www.susfreight.eu](http://www.susfreight.eu) under the title “New challenges and approaches for sustainable freight transport in the Alpine Space”.



## Open ENLoCC General Assembly

This year's General Assembly of Open ENLoCC was held in Portorož / Slovenia on May 22. Traditionally, a public event was held the day before, this time in cooperation with the CO-EFFICIENT project.

**Tom Zunder** from NewRail of Newcastle University **was welcomed**; the new **membership of NewRail at Open ENLoCC was confirmed**.

The work report for 2014 and up to the General Assembly 2015 was presented, including the following cornerstones:

- General Assembly on 3 April 2014, including a joint seminar on City Logistics with VUB on 2 April 2014.
- Increased member cooperation.
- Institutional role in the ALICE General Assembly and Mirror Group.
- The Newsletter was issued regularly. A poster of Open ENLoCC is available for events and members, and the website is kept updated.
- A partner brochure was issued, with public infos about our members.
- A strategy process was set up and carried out.

Alberto Preti presented the five-year vision of the Steering Committee for Open ENLoCC. On the base of a comparison with other networks, he outlined similarities and specifics of Open ENLoCC and defined the desired driving elements and actions five years from now.

Future activities are seen in these three fields:

- Consolidation & activation of knowledge
- Giving visibility to this knowledge
- Network and growth

This includes a detailed list of future activities, which will be revised yearly. A first result is the redesign and upgrade of the Open ENLoCC newsletter as the "European Review of Regional Logistics". It will also be available in print.

The General Assembly decided to keep a "regional public role regarding logistics" as a condition of membership, may that focus on science or on knowledge transfer. Institutions not fulfilling this precondition will be given other opportunities to take part in the knowledge exchange.

The three-year terms of President Alberto Preti from ITL and Secretary Martin Brandt from KLOK were up. Their institutions each were unanimously reelected as the holders of the position for another three-year term. Alberto Preti (president) and Martin Brandt (secretary) will continue their work.

It was further decided to hold next year's General Assembly in Bologna at member ITL, preferably in April. The 2017 General Assembly is envisaged to be held in Kassel at member MoWiN.

/ed.





Stane Božičnik (above) and  
Tom Zunder (below)  
presenting their work.

Photos: Roman Klančar

## Co-Efficient conference with Open ENLoCC General Assembly

The University of Maribor has, within the project CO-EFFICIENT and in cooperation with the “International Conference on Transport Science – ICTS 2015” and Open ENLoCC – European Network of Logistics Competence Centres, organized the successful final conference entitled “Improving Energy Efficiency – Improving Competitiveness” on May 21. CO-EFFICIENT (Collaborative framework for energy efficient SME systems) is co-financed under the “Interreg MED” programme of the European Union.

The event, organized by Professor Stane Božičnik and his team, brought together many experts, stakeholders, academia, representatives of transport and logistics sector alongside experts from the field of energy efficiency and representatives from small and medium enterprises from Europe and Slovenia. Topics that were discussed include efficient urban freight, energy efficiency of SMEs, energy management in practice alongside accomplishments and solutions offered by the project CO-EFFICIENT. Quite a number of presentations were of immediate interest to the logistics sector:

Flavio Bonfatti of SATA, Italy, presented Networking eService: It improves supply chain organisation and operation (selects more efficient partners, minimises the generated freight traffic), and introduces electronic document generation and exchange.

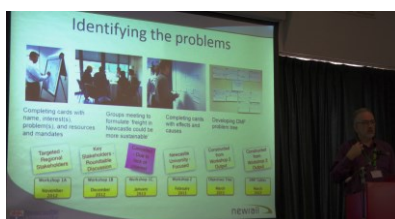
Alberto Preti of ITL Bologna and President of the Open ENLoCC network presented the Open ENLoCC example for networking and knowledge exchange as enabler of more efficient logistics in Europe.

Carl-Magnus Carlsson of Malmö University elaborated upon Logistics and Energy Consumption – the Role of Logistics Competence Centres in Decoupling.

Igor Žula of the Slovenian Logistics Association presented his “Methodology 5Δ<sup>®</sup>” – efficiency and productivity improvement in production and logistic. The five steps are:

1. Current situation analysis;
2. Preliminary workshops and trainings;
3. Preliminary changes and pilot implementations;
4. Knowledge transfer into day to day work (systematisation);
5. Project closing.

Mr. Žula then explained the application of these principles under the conditions of a “living lab”.



Tom Zunder of NewRail introduced the “Coherent Campus Delivery - Pilot Scheme”, which includes application of Delivery Servicing Plans with 100% Electric Delivery vehicles. The University campus proved to be a rather good breeding ground for the experiment, with trial deliveries operations from an urban consolidation centre resulting in 25% fewer freight vehicles on Campus.

/ed.

## Freight flow consolidation and off-hour deliveries

*This is the abstract of Sara Verlinde's doctoral thesis "Promising but Challenging Urban Freight Transport Solutions: Freight Flow Consolidation and Off-Hour Deliveries", defended on 22 May. Promotors were Prof. dr. Cathy Macharis of Vrije Universiteit Brussel, research centre MOBI, and Prof. dr. Frank Witlox of Universiteit Gent, research group SEG.*

Although inevitable, urban traffic causes air pollution, noise pollution and congestion. Up to 20% of urban traffic is related to freight transport and service trips and, proportionally, it contributes more to the negative side-effects of urban traffic than passenger related traffic. Throughout the past few decades, a range of solutions to reduce the negative impact of urban freight transport have been researched, tested and implemented.

Two possible solutions are: freight flow consolidation and off-hour deliveries. They have two things in common. First, despite the fact that it is generally accepted that there are considerable benefits to both solutions they seem to remain permanently promising and have not been widely adopted yet. Second, they require support of both public and commercial stakeholders to be successful in the long term. The purpose of this thesis is to identify feasible, consensual and successful applications of urban freight flow consolidation and off-hour deliveries. To reach that goal a twofold approach is adopted: (i) reassessing the generally accepted logic behind freight flow consolidation and off-hour deliveries as well as their impact and (ii) evaluating both concepts and/or their applications from the perspective of all stakeholders.

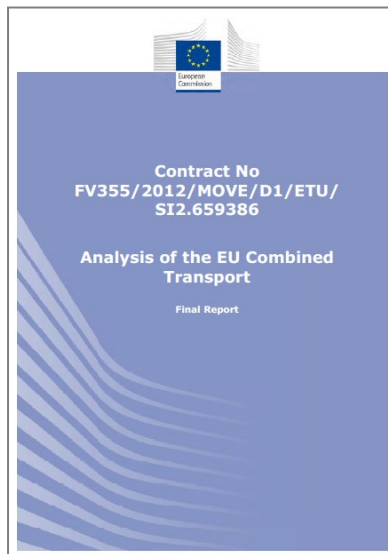
One possible freight flow consolidation solution is to implement an Urban Consolidation Centre (UCC). A review of the available UCC impact assessment made me conclude that 87% of UCCs have a positive impact on the number of urban freight vehicle kilometres. However, this positive impact might have to partially be put down to the lack of high-quality urban freight data and the consequent too positive estimations. Despite the dominant attention for UCCs in the literature on urban freight flow consolidation, there are alternative approaches. This thesis identifies and categorizes them and cites existing, often small-scale examples.

One possible alternative approach is to use a Mobile Depot for express deliveries and pick-ups. Evaluating this concept revealed that it decreases the amount of emitted pollutants and the number of diesel vehicle kilometres but doubles the operational costs for the express service provider. The thesis also demonstrates that there is no overall stakeholder support for a general shift of urban freight flows to off-hours in Belgium. There are, however, freight flows that are more suited than others to be shifted to off-hours. My research identifies these freight flows and characterizes them.

Based on this research, one particularly suited freight flow would be supermarket deliveries. Evaluating a trial that took place in Brussels revealed that there are considerable time and fuel savings when deliveries to two supermarkets in Brussels are shifted to off-hours and that this solution would be able to receive overall stakeholder support when sufficient measures are taken to keep the noise nuisance for local residents to a minimum. Finally, the thesis contributes to the research field of urban freight transport by introducing the concept of stakeholder involvement in the evaluation of urban freight transport solutions by using Multi Actor Multi Criteria Analysis which is an evaluation tool that explicitly includes the goals and objectives of all stakeholders.

*Sara Verlinde debating her work during the joint seminar of VUB-MOBI and Open ENLoCC, Brussels, April 2014.*





## “Analysis of the EU Combined Transport”

The renowned consultants KombiKonsult GmbH, Frankfurt am Main (Lead Partner), Intermodality Ltd, Lewes, PLANCO Consulting GmbH, Essen, and Gruppo CLAS S.p.A., Milano, have studied in detail the current state of the combined transport market as well as its development. The study of 639 pages is published by the EU Commission and can be downloaded from the official pages of the commission under <http://ec.europa.eu/transport/themes/strategies/studies/doc/2015-01-freight-logistics-lot2-combined-transport.pdf>. It includes intermodal transport on rail, inland waterways and short sea shipping as well as their interfaces.

While a key question for the Commission was to learn about national legislation and their relation to EU legislation, the reader will find a much wider range of relevant information. The study is so comprehensive that listing the results on one or two pages would mean to reduce it to banalities and thus would not do it any justice. Instead, it may be more interesting for the reader to learn what the study is about, so he can look for his own topics of interest.

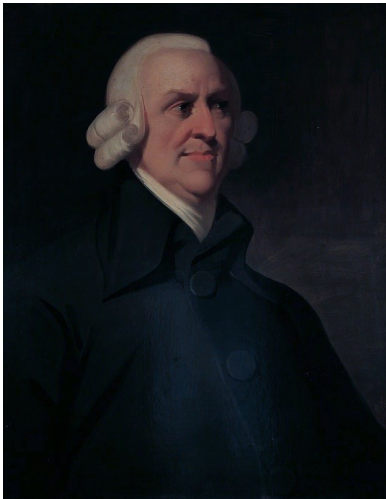
### The study

- explains the various types of combined transport as well as their market segments (which vary greatly among the different regions across Europe),
- makes assumptions about the segments of combined traffic for which data is limited (and lays open the assumptions),
- takes a quantitative look into the state of combined transport in all EU member states,
- explains technical, commercial and administrative developments within these segments,
- gives data for the most important international intermodal corridors,
- explains different business models of combined transport, including the types of actors involved,
- forecasts combined transport under certain assumptions (scenarios),
- and shows the various national measures of support for combined transport in detail.

Actually, this study appears more useful for long term reference than for deriving any quick fix policies. From a regional point of view, the logistics competence centers usually know for their “own” region its location relative to a corridor as well as the available connections. But often they do not have enough information to put their locational analysis into a quantitative context across Europe. The study may be an important tool here. Which is why it is recommended to our readers from throughout the regions of Europe.

/ed.





Adam Smith, 1723-1790 ("The Muir Portrait", National Galleries of Scotland).

*Smith became famous as a fierce advocate of a market economy. As his text about road toll shows, he nevertheless weighted his arguments with respect to circumstances and detail.*

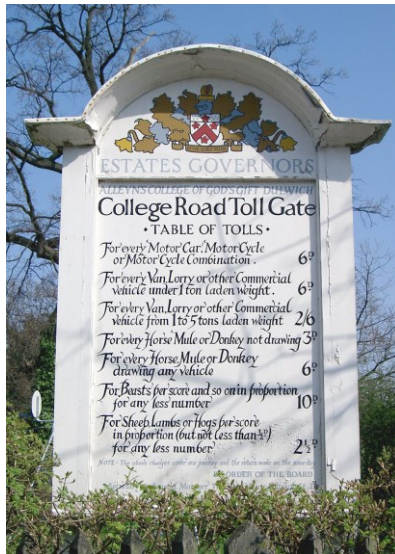
### Adam Smith: Road Toll for Construction and Maintenance

**"A highway, a bridge, a navigable canal, for example, may, in most cases, be both made and maintained by a small toll upon the carriages which make use of them; a harbour, by a moderate port-duty upon the tonnage of the shipping which load or unload in it.**

When the carriages which pass over a highway or a bridge, and the lighters which sail upon a navigable canal, pay toll in proportion to their weight or their tonnage, they pay for the maintenance of those public works exactly in proportion to the wear and tear which they occasion of them. It seems scarce possible to invent a more equitable way of maintaining such works. This tax or toll, too, though it is advanced by the carrier, is finally paid by the consumer, to whom it must always be charged in the price of the goods. As the expense of carriage, however, is very much reduced by means of such public works, the goods, notwithstanding the toll, come cheaper to the consumer than they could otherwise have done, their price not being so much raised by the toll, as it is lowered by the cheapness of the carriage. The person who finally pays this tax, therefore, gains by the application more than he loses by the payment of it. His payment is exactly in proportion to his gain. It is, in reality, no more than a part of that gain which he is obliged to give up, in order to get the rest. It seems impossible to imagine a more equitable method of raising a tax. When the toll upon carriages of luxury, upon coaches, post-chaises, etc. is made somewhat higher in proportion to their weight, than upon carriages of necessary use, such as carts, waggons, etc. the indolence and vanity of the rich is made to contribute, in a very easy manner, to the relief of the poor, by rendering cheaper the transportation of heavy goods to all the different parts of the country.

When high-roads, bridges, canals, etc. are in this manner made and supported by the commerce which is carried on by means of them, they can be made only where that commerce requires them, and, consequently, where it is proper to make them. Their expense, too, their grandeur and magnificence, must be suited to what that commerce can afford to pay. They must be made, consequently, as it is proper to make them. A magnificent high-road cannot be made through a desert country, where there is little or no commerce, or merely because it happens to lead to the country villa of the intendant of the province, or to that of some great lord, to whom the intendant finds it convenient to make his court. A great bridge cannot be thrown over a river at a place where nobody passes, or merely to embellish the view from the windows of a neighbouring palace; things which sometimes happen in countries, where works of this kind are carried on by any other revenue than that which they themselves are capable of affording.

In several different parts of Europe, the toll or lock-duty upon a canal is the property of private persons, whose private interest obliges them to keep up the canal. If it is not kept in tolerable order, the navigation necessarily ceases altogether, and, along with it, the whole profit which they can make by the tolls. If those tolls were put under the management of commissioners, who had themselves no interest in them, they might be less attentive to the maintenance of the works which produced them.



*Pre-decimal table of road toll.*  
Source: Wikimedia commons

*“exigencies”: Necessities in a particular situation*

*“augmented”: extended, increased*

*“incumbrance”: value-reducing burden on property*

The canal of Languedoc cost the king of France and the province upwards of thirteen millions of livres, which amounted to upwards of nine hundred thousand pounds sterling. When that great work was finished, the most likely method, it was found, of keeping it in constant repair, was to make a present of the tolls to Riquet, the engineer who planned and conducted the work. Those tolls constitute, at present, a very large estate to the different branches of the family of that gentleman, who have, therefore, a great interest to keep the work in constant repair. But had those tolls been put under the management of commissioners, who had no such interest, they might perhaps, have been dissipated in ornamental and unnecessary expenses, while the most essential parts of the works were allowed to go to ruin.

The tolls for the maintenance of a high-road cannot, with any safety, be made the property of private persons. A high-road, though entirely neglected, does not become altogether impassable, though a canal does. The proprietors of the tolls upon a high-road, therefore, might neglect altogether the repair of the road, and yet continue to levy very nearly the same tolls. It is proper, therefore, that the tolls for the maintenance of such a work should be put under the management of commissioners or trustees.

If the tolls which are levied at the turnpikes should ever be considered as one of the resources for supplying the exigencies of the state, they would certainly be augmented as those exigencies were supposed to require. According to the policy of Great Britain, therefore, they would probably be augmented very fast. But the turnpike tolls, being continually augmented in this manner, instead of facilitating the inland commerce of the country, as at present, would soon become a very great incumbrance upon it. The expense of transporting all heavy goods from one part of the country to another, would soon be so much increased, the market for all such goods, consequently, would soon be so much narrowed, that their production would be in a great measure discouraged, and the most important branches of the domestic industry of the country annihilated altogether.

Secondly, a tax upon carriages, in proportion to their weight, though a very equal tax when applied to the sole purpose of repairing the roads, is a very unequal one when applied to any other purpose, or to supply the common exigencies of the state. As the turnpike toll raises the price of goods in proportion to their weight and not to their value, it is chiefly paid by the consumers of coarse and bulky, not by those of precious and light commodities. Whatever exigency of the state, therefore, this tax might be intended to supply, that exigency would be chiefly supplied at the expense of the poor, not of the rich; at the expense of those who are least able to supply it, not of those who are most able.”

## Adam Smith „Wealth of Nations“

With his most famous work “An Inquiry into the Nature and Causes of the Wealth of Nations”, the moral philosopher Smith became the first popular modern economist. The text above is a slightly abbreviated excerpt of Book V, Chapter I, Part III (Of the Expense of public Works and public Institutions), Article I (Of the public Works and Institutions for facilitating the Commerce of the Society), first published in 1776.

## Next Dates

June 2015

### **The future of last mile logistics - LaMiLo project final conference**

The LaMiLo (Last Mile Logistics) project has explored ways of making the last mile of a supply chain more efficient by making better use of existing transport infrastructure and networks. This closing conference will focus on the project's lessons learned. Speakers include Daniela Rosca, Head of Unit, Clean Transport & Sustainable Urban Mobility, DG-MOVE, and Pascal Smet, Minister of the Government of the Brussels-Capital Region.

Brussels, Thon-EU Hotel, June 24.

### **Austrian Day of Logistics ("Österreichischer Logistik-Tag")**

This nationwide conference (in German), organized by "Verein Netzwerk Logistik", deals with all aspects of logistics, focusing on "Industry 4.0".

Linz, Design-Center, June 25.

### **EXCHaINGE – The Supply Chainers' Conference**

3rd annual international business conference for supply chain and operations professionals. This year's theme: Change Management. Between digitization and gamification, there's a lot more on the agenda at EXCHaINGE. And above all, lots of time for networking and the presentations of the Supply Chain Management Award finalists.

Frankfurt, HOLM House of Logistics and Mobility, June 25/26.

### **EPoSS Brokerage Workshop on IoT Large Scale Pilots.**

ALICE Vice-Chairman, Rod Franklin of Kühne Logistics University KLU, will share ALICE vision on logistics challenges and how IoT innovation could benefit logistics industry. ALICE is the European Technology Platform for logistics. Opportunities for Logistics Innovation.

London, The Westminster Conference Centre, June 26.

### **RailNewcastle summer school**

An intensive programme in Rail & Logistics taking place at Newcastle University. The programme puts an emphasis on the growing interest in rail freight and passenger services and international aspect of logistics, which promotes safer and more secure rail transport systems, more mature and environmentally friendly distribution of freight, more efficient railway operations. Week 1: Lectures. Week 2: Student-led group research projects. Week 3: Technical visits, workshops, thematic seminars, networking, RailNewcastle conference.

Newcastle University, June 29 to July 17.



July/August 2015

### **Transportation research on Climate change**

The European Transport Research Alliance – ETRA, as an Organisation encompassing as partners five European Associations with members involved in different aspects and areas of Transport research. The ETRA, recognizing the horizontal nature of the impacts of climate change on the Transport system, is organising this one day Workshop in cooperation with the French Transport research Organisation IFSTTAR, and in parallel to the "Our Common Future under Climate Change - CFCC-2015" Conference<sup>1</sup>, also held in Paris from July 7th – 10th 2015. Paris, IFSTTAR offices, July 6.

### **2nd International Physical Internet Conference**

The sessions are structured according to ALICE Working Groups (ALICE: The European Technology Platform for logistics), therefore scoping: sustainable logistics, supply chain security and risk management, corridors, hubs and synchro-modal transport, technologies for logistics, Supply network collaboration and



urban logistics. A number of European Research and Innovation projects are supporting the conference for close discussion between these projects, industry and research.

Paris, Mines Paris Tech, July 6 – 8.

#### **RailNewcastle Conference**

This rail-focused international conference offers opportunities for Scholars, Bachelor, Master, PhD Students, Early Career Researchers and Professionals involved in rail-related research projects and courses.

Newcastle University, July 15 – 17.

#### **Course on Shipping, Transportation and Trade**

The University of the Aegean, Department of Shipping, Transport and Trade, runs a Course on Shipping, Transportation and Trade under the title of 'Current Advances and Market Perspectives for World Shipping Leaders', co-hosted by TransportNET. The lectures of this three weeks course cover two Thematic Units: "Shipping Market Cycles in the 21st century: Still in Crisis", and "Planning and Decision Tools in Shipping, Transportation and Ports."

Chios (Greece), July 19 – August 8.

#### **2nd Interdisciplinary Conference on Production, Logistics and Traffic**

The Interdisciplinary Conference on Production, Logistics and Traffic (ICPLT) addresses the interfaces between these three disciplines. The conference addresses all representatives of the disciplines production, logistics, spatial and transport planning, who are interested in discussing scientific and practice-oriented approaches. Practitioners, politicians, public authorities and researchers from production, logistics and transport are invited to use the conference as a platform for knowledge-exchange and transfer.

Dortmund, IBZ at TU Dortmund, July 21/22.

## September 2015

#### **National City Logistics Conference**

The national initiative for city logistics in Sweden, composed of organizations on national level as well as from the three largest urban regions, invite for debate (Swedish language).

Malmö, Clarion Hotel & Congress, September 15.

#### **TIDE final conference**

TIDE is a European project that kicked off in October 2012 and brings together cities in the field of urban transport innovation. The mission of TIDE is to enhance the broad transfer and take-up of fifteen innovative urban transport and mobility measures throughout Europe and to make a visible contribution to establishing them as mainstream measures. The TIDE final conference will feature results from the five clusters and practical site visits, including a visit to the construction of Metro Line 9 in Barcelona.

Barcelona, September 15/16.

#### **International Railway Seminar**

RAILFORUM 2015 brings together top specialists in railway logistics from all over the world. The seminar offers high-class speeches, fresh viewpoints and useful contacts. The seminar focuses on two themes: RAILWAY HUBS and RAILWAY CORRIDORS.

Kouvola (Finland), September 24.

#### **Assises du port du futur**

This national ports conference is meant for French and European policy-makers, executives from major international ports, industry leaders, hauliers and academics to work together and discuss today and tomorrow's port-related issues.

Topics: ports as driving forces for sustainability, ports as architects of their hinterlands, the connected port, and for environmentally friendly and energy efficient ports. [www.eau-mer-fleuves.cerema.fr/les-themes-des-assises-the-topics-of-our-a1237.html](http://www.eau-mer-fleuves.cerema.fr/les-themes-des-assises-the-topics-of-our-a1237.html).

Paris, September 30 to October 1.

## October 2015

### **URBE - URban freight and BEhavior change**

URBE aims at identifying the behavioral game changers capable of modifying the present trends and pro-actively responding to the sustainability challenges urban freight distribution possess to modern cities given the role it plays in linking production, logistics and society. Conference organized by Department of Political Sciences and Centre for Research on the Economics of Institutions, University of Roma Tre.

Researchers, practitioners, politicians and public authorities are invited to use the conference as a platform for knowledge-exchange and transfer. The conference is endorsed by: 1) Center of Excellence for Sustainable Urban Freight Systems, 2) WCTRS' Freight Modelling (SIGB5), 3) Italian Society of Transport Economics and Logistics.

Rome, October 1/2.

### **ITS World Congress**

The ITS World Congress has grown into a leading event in its field (see above, page 6). With its plenary, executive, special interest and technical/scientific sessions it covers the field widely. 10,000 participants are expected.

Bordeaux, October 5-9.

### **Baltic Logistics Conference**

Rostock-Warnemünde, October 6.

### **CIVITAS Forum 2015**

The theme of the Conference will be "Sharing the city" with a focus on sustainable urban mobility as an important driver to build an accessible and liveable city for all, as well as to constantly improve the quality of urban life. Details at: <http://www.civitas.eu/content/civitas-forum-conference-2015>. The Open ENLoCC member ITL is presenting a work on "The relevance of extra-urban short-range freight for urban mobility interventions" in the conference Session 6 – New schemes for urban freight delivery.

Ljubljana, October 7 – 9.

### **10th China (Shenzhen) International Logistics and Transportation Fair (CILF)**

A leading logistics and transport expo in Asia for logistics service, SCM, port and shipping, transport, IT solutions, mobility, air cargo, material handling and beyond, expecting about 1,200 exhibitors from more than 30 countries, and 80,000 visits.

Shenzhen Convention and Exhibition Center, October 14 – 16.

### **32. Deutscher Logistik-Kongress ("BVL-Kongress")**

This yearly International Supply Chain Conference, organised by the German logistics association "BVL" is the main event for German decision makers in logistics.

Berlin, October 28 – 30.



## Open ENLoCC – the network

Open ENLoCC (European Network of Logistics Competence Centers) is an open network of regional competence centers in the field of logistics, run by public authorities or similar bodies. It was established as a follow up of the “ENLoCC”-project (from 2004 to 2007), then co-financed by the EU under the Interreg IIIC programme. It is self-supporting since.

The main task of the network is the international exchange of experience and knowledge between its participants and the promotion of a higher level of cooperation among European institutions.

Its members work together on common projects with the aim to develop the regional economy by solving infrastructural, organisational and technological problems of logistics and transport. The dissemination of the results of the network activities and the best practices take place on a wide scale.

As per June 2015, the European network of regional logistics competence centers Open ENLoCC has the following members:

- CMS, Brahea Centre at the University of Turku, Centre for Maritime Studies, Turku, Finland.
- CRITT Transport et Logistique, Le Havre, France.
- EAK, Entwicklungsagentur Kärnten GmbH, Klagenfurt, Austria.
- i-Fret, Innovation platform i-Fret for freight logistics, Dunkerque, France.
- ILiM, Institute of Logistics and Warehousing, Poznan, Poland.
- ITL, Institute for Transport and Logistics Foundation, Bologna, Italy.
- KLOK Kooperationszentrum Logistik e.V., Kornwestheim / Stuttgart, Germany.
- LCS, Logistik-Cluster Schwaben (LCS) e.V., Augsburg, Germany.
- Logistics in Wallonia, Liege, Belgium.
- Mah, Malmö University, Department of Urban Studies/Transport Management, Malmö, Sweden.
- MOBI, Vrije Universiteit Brussel – MOBI (Mobility, Logistics and Automotive Technology Research Group) Brussels, Belgium.
- MoWiN.net e.V., Kassel, Germany.
- NewRail, Newcastle University, Great Britain.
- PBN, Pannon Business Network Association, Szombathely, Hungary.
- UM, University of Maribor, Faculty of Civil Engineering – Transport Economics Centre, Maribor, Slovenia.
- WRS, Wirtschaftsförderung Region Stuttgart GmbH, Stuttgart, Germany.

Contact persons:

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Martin Brandt, Secretary of Open ENLoCC and Project Manager at the logistics cooperation center KLOK in Stuttgart Region.



