

European Review of Regional Logistics

Quarterly Journal of Open ENLoCC

Main topic: Handling of local and regional goods transport



- *Belgium becomes main gateway for Chinese logistics and crossborder e-commerce companies*
- *Urban freight transport policies and measures implemented in strategic documents of European cities – a review*
- *North Sea: Fallout of container spilling, January 2019*
- *Classic logistics text – Lewis Carroll: The Hunting of the Snark*
- *News, Next dates*

Issued by


Wirtschaftsförderung
Region Stuttgart

In this issue

Editorial	3
<i>by Carl-Magnus Carlsson, Co-editor of the "Review".</i>	
News from partners and logistics	4
<i>Conro ship "Grande America" lost. TER4RAIL survey. Summer Logistics School to be launched in Slovenia. Freight potential study on eastern Finland – Estonia transport corridor published.</i>	
Open ENLoCC – the network and its members	6
Reading	7
<i>Topical Collection on accommodating urban freight in city planning published in open access magazine "European Transport Research Review". Critical issues in transportation 2019.</i>	
Belgium becomes main gateway for Chinese logistics and crossborder e-commerce companies	10
Urban freight transport policies and measures implemented in strategic documents of European cities – a review	12
North Sea: Fallout of container spilling, January 2019	16
Classic text – Lewis Carroll: The Hunting of the Snark	18
Next dates	20

Cover photo: Vans and trucks in town, Martin Brandt

The "European Review of Regional Logistics", quarterly journal of Open ENLoCC, is issued by Wirtschaftsförderung Region Stuttgart GmbH (WRS) on behalf of Open ENLoCC, the European network of regional logistics competence centers. Editor: Martin Brandt. Open ENLoCC co-editors: Carl-Magnus Carlsson, Giuseppe Luppino. **ISSN 2509-226X**

Wirtschaftsförderung Region Stuttgart GmbH
Friedrichstraße 10
D-70174 Stuttgart
+49 711 282954, info@openenlocc.net.

Electronic subscriptions of the "Review" are free. Individual paper copies are distributed via Open ENLoCC members. The language of this publication is "EU English." Contact WRS for paper issue subscriptions and for the advertising guide.

The work of Open ENLoCC is financed by member fees and by a grant of Wirtschaftsförderung Region Stuttgart GmbH (WRS). WRS serves as the Secretariat of the network. Open ENLoCC is listed in the EU Transparency Register under ID 138828413651-57.

Dear members and friends of the Open ENLoCC network



In this spring edition of the Review, the handling of goods in urban areas is once again a major topic. Not only “Inner City Logistics”, but also freight transport in greater urban regions, will be addressed. We will also guide you into the state of the art in local and regional planning dealing with these logistics issues!

On urban freight transport we present a major overview on soft sustainable transport policies and measures implemented in European cities in a study made by Open ENLoCC members Tomislav Letnik, Maršenka Marksel, and Stane Božičnik at the University of Maribor FGPA, Slovenia and Giuseppe Luppino and Andrea Bardi from the Institute for Transport and Logistics in Italy. The conclusion is that “Presented case studies of different European cities ... have shown that well selected measures and/or their optimal combination can substantially decrease the energy consumption and CO₂ footprint.”

There is also a comprehensive compilation of recent articles about city logistics and regional logistics collected from the European Transport Research Review, which we outline for reference and recommend to our readers.

In the News Section among other things, we report on the loss of the Conro ship “Grande America” ship sinking with a cargo of cars and containers, which may cause long-term environmental problems. Furthermore, world-wide shipping has really had unwanted regional impact: On January 3, almost 300 containers went overboard a ship in the North Sea. The Review reports the consequences, from the German island of Borkum, which was hit hard, together with the islands of Ameland, Schiermonnikoog and Rottumeroog in the Netherlands.

In this issue you will also find a presentation of logistics developments around Open ENLoCC member Logistics in Wallonia, caused by cooperation with Chinese institutions and online trade platform Alibaba.

The classic text in this issue was written by a famous British author, Lewis Carroll. It deals with a journey into unknown territory and with unknown goals. Since the means openly include logistics, and since it also describes human behaviour in general, we thought it fit for presentation to our readers.

The spring issue also reports an unusual number of relevant next dates. Electro mobility, urban delivery and urban planning for logistics are, not surprisingly, becoming increasingly focused topics.

We wish you all good “spring logistics” reading!

Carl-Magnus Carlsson
Malmö University
Co-Editor

News

Conro ship “Grande America” lost



Identical sister ship „Grande Africa“
in Hamburg. Photo: Martin Brandt

The “Grande America” of Grimaldi was built in 1997 and operated between Europe and Western Africa in a rotation together with several similar vessels. This type of ships allows for transportation of cars, trucks, trailers and containers. It combines the features of a container ship with those of a “roll on, roll off” ferry and is therefore known as “conro” ship.

The “Grande America” was lost in the Bay of Biscay on March 12/13 after catching fire. While the crew was rescued, the ship sank with a cargo of cars and containers. It lost a larger amount of bunker oil, which is an immediate threat to the sea and the beaches, while the content of the containers may cause long term environmental problems.

Available photos suggest that the fire broke out among the containers.

TER4RAIL survey

TER4RAIL is testing, with your help, the extent to which experts across all transport modes and technology research believe the vision for the rail sector will be achieved by 2050, and if not, why and how. Please lend them 15-20 minutes of your expert time and complete the first round of their Delphi Study, and they shall share with you their results and insights after the second round.

The European Rail Research Advisory Council (ERRAC) published the RAIL 2050 VISION document in 2017. It represents the vision of the rail sector for the needs of the future railway system at the heart of mobility provision for Europe. For this to happen RAIL 2050 VISION sets out that research and innovation (and other supporting elements, including appropriate regulatory structures) are vital and that end-user and public support for research, development and innovation in the railway of the future is necessary.

<https://mailchi.mp/02a417023035/expert-survey-on-vision-for-2050>

Summer Logistics School to be launched in Slovenia

Logistics is a multidisciplinary and multi-stakeholder sector, where many skills and competences are needed. It comes as a surprise that few trainings are offered, as one would expect, especially for younger adults. In a labour market that is dynamic and quickly changing, the development of professional competences is now more than ever relevant and important. Summer Logistics School is an Erasmus+ project funded by the European Union to develop a summer school in Slovenia, targeting high school students on the logistics sector.

The school will run from 9th to 14th September 2019 and will be held in Portorož (Slovenia). It will comprise site visits, case studies, board games, interactive learning and lectures. Trainers have long experience in different aspects of logistics and come from all over Europe. The purpose of the school is to offer high-level training on core topics of logistics, and

foster the quality of human resources in logistics. Moreover, the school will build up the capacity of vocational education institutions and will enhance the quality and relevance of vocational learning. There will be mandatory and elective subjects, ranging from maritime and intermodal transport to supply chain management, cold chain management, warehouse analysis and order processing and transport organisation. The school is entirely taught in English and indeed, it is the very first initiative of its kind in Europe, targeting students aged 17 to 18.

The consortium behind the organisation of the Summer Logistics School is made by the University of Ljubljana (lead partner), Institute for Transport and Logistics (Italy), Association for the development of professional training in transport (France), School Centre Nova Gorica (Slovenia), I.I.S.S. Berenini (Italy), Faculty of Transport and Traffic Sciences of the University of Zagreb (Croatia), School Centre Celje (Slovenia), SPSŠB Ljubljana (Slovenia), Higher Institute "Carlo d'Arco" and "Isabella d'Este" (Italy), The School for Road Traffic and Transportation (Croatia).

Application for the school are still open, and are free of charge. For more information on the initiative and details on the school, please visit the official website: <http://www.slschool.eu/> or get in touch with bologna@fondazioneitl.org

Freight potential study on eastern Finland – Estonia transport corridor published

The study by Open ENLoCC member CMS in Turku analysed the freight potential between Eastern Finland and Eastern Estonia. The specific focus was on trucks and semi-trailers, which could be transported with the anticipated ferry line between the port of Loviisa in Finland and the port of Kunda in Estonia. The potential of Estonian commuter traffic for the ferry connection was analysed as additional element to support the viability of the foreseen ferry line. The major potential of the connection lies in the Finnish foreign trade which transits the Baltic States. The major component is the export whose value in Eastern Finland is ¼ of all Finnish export.

Growth in numbers of ro-ro units has been on average 7% over the last ten years. Several factors point to still growing trucking volumes on Via Baltica which means also more ro-ro cargo on the Gulf of Finland. The industry is fairly content with the current ro-ro services but congestion is seen as a significant challenge in the two capital cities. The possible policy decisions for steering heavy traffic from the city centres can provide opportunities for alternative ro-ro routes like Loviisa - Kunda. Specializing into niche cargoes (hazardous goods, oversize cargo etc.) in the market where the overall volumes are growing is also seen as a possibility for a new ferry service.

Based on the estimations of the current cargo potential and the positive expectations for the ro-ro market across the Gulf of Finland, and including the possible policy changes affecting the cargo routing, a Loviisa - Kunda ferry connection can be considered as a future alternative for Finland-Estonia ro-ro transports.

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 IIC programme. It is self-supporting since.

The main task of the network is international exchange of experience and knowledge between its participants, and 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. Dissemination of results from network activities and of the best practices takes place on a wide scale.

Members

- | | |
|---|---|
| <ul style="list-style-type: none"> • CMS, Centre for Maritime Studies of Brahea Centre at the University of Turku (FI). • CRITT Transport et Logistique, Le Havre (F). • CTL, Centre for Transport and Logistics of the University of Rome La Sapienza, Roma (I). • LCA LOGISTIK CENTER Austria Süd GmbH, Fürtitz / Kärnten (A). NEW • HIT Hellenic Institute of Transport, Thessaloniki (GR). • ILiM, Institute of Logistics and Warehousing, Poznan (PL). • ITL, Institute for Transport and Logistics Foundation, Bologna (I). • KINNO, Kouvola Innovation Oy, Kouvola (FI). • LCS, Logistik-Cluster Schwaben (LCS) e.V., Augsburg (D). • Logistics in Wallonia, Liege (B). | <ul style="list-style-type: none"> • Mah, Malmö University, Department of Urban Studies/Transport Management, Malmö (S). • MOBI, Vrije Universiteit Brussel – MOBI (Mobility, Logistics and Automotive Technology Research Group) Brussels (B). • MoWiN.net e.V., Kassel (D). • NewRail, Newcastle University (GB). • TØI, Institute of Transport Economics, Oslo (N). NEW • UM, University of Maribor, Faculty of Civil Engineering – Transport Economics Centre, Maribor (SLO). • Fundación Valenciaport, Valencia (E). • WRS, Wirtschaftsförderung Region Stuttgart GmbH, Stuttgart (D). • Consorzio ZAILOG, Verona (I). |
|---|---|

Reading

Topical Collection on accommodating urban freight in city planning

The open access magazine “European Transport Research Review” has recently published a collection of articles about accommodating urban freight in city planning. The compilation was made by Ivan Sanchez-Diaz and Michael Browne.

Below you can find names and short summaries of the articles from the compilation. All are original articles and can be accessed and downloaded for free via (<https://www.springeropen.com/collections/UFCP>), that magazine’s web page. Our readers are encouraged to do so.

- Ivan Sanchez-Diaz, Michael Browne: **Accommodating urban freight in city planning**. *European Transport Research Review* 2018 10:55.

This article is the editorial of the compilation, in the “European Transport Research Review” mentioned above.

- Shama Campbell, José Holguín-Veras, Diana G. Ramirez-Rios, Carlos González-Calderón, Lokesh Kalahasthi and Jeffrey Wojtowicz: **Freight and service parking needs and the role of demand management**. *European Transport Research Review* 2018 10:47.

This paper assesses the parking needs of freight and service related commercial activities and identifies the role of demand management in mitigating these needs.

- Laura Palacios-Argüello, Jesus Gonzalez-Feliu, Natacha Gondran and Fabien Badeig: **Assessing the economic and environmental impacts of urban food systems for public school canteens: case study of Great Lyon region**. *European Transport Research Review* 2018 10:37.

Urban logistics is a subject that interests both city planners and researchers. Although many works are found in non-food distribution, food-based logistics is less studied in an urban context, sustainability issues of urban food systems remain little analysed, but it is a crucial element for local public authorities.

- Carlos A. Gonzalez-Calderon, Iván Sánchez-Díaz, Iván Sarmiento-Ordosgoitia, José Holguín-Veras: **Characterization and analysis of metropolitan freight patterns in Medellin, Colombia**. *European Transport Research Review* 2018 10:23.

This paper seeks to pilot test a novel way to collect freight and service activity data and analyze the collected data in the metropolitan area of Medellin, Colombia.

- F. Arnold, I. Cardenas, K. Sörensen, W. Dewulf: **Simulation of B2C e-commerce distribution in Antwerp using cargo bikes and delivery points**. *European Transport Research Review* 2017 10:2.

The growth of e-commerce is accompanied by an increasing distribution of parcels in cities resulting in externalities like traffic congestion or emissions. Operational costs of companies can be reduced by stimulating customer self-pick-up, while externalities decrease with the implementation of a cargo bike distribution system.

- *Paulus T. Aditjandra, Thomas H. Zunder: **Exploring the relationship between urban freight demand and the purchasing behaviour of a University.** European Transport Research Review 2017 10:1.*

This research was focused on the 'receiver' end of the supply chain that has, in recent years, emerged as a novel area of investigation by European urban freight researchers. The paper explores the importance of procurement policy and mechanisms in a higher education establishment in order to drive a sustainable approach to inbound logistics. The key contribution of this paper is demonstration of the important role of logistics receiver can make in delivering sustainable city logistics.

- *Michela Le Pira, Edoardo Marcucci, Valerio Gatta, Matteo Ignaccolo, Giuseppe Inturri and Alessandro Pluchino: **Towards a decision-support procedure to foster stakeholder involvement and acceptability of urban freight transport policies.** European Transport Research Review 2017 9:54.*

This paper addresses the complex problem of multi-stakeholder decisions in urban freight transport policy-making from a public authority perspective, by proposing a procedure based on a modelling approach to support stakeholder involvement in the decision-making process. The paper analyses the existing methods that can be used for participatory decision-support, with the intent of contextualizing and introducing the innovative modelling approach.

- *Karin Fossheim, Jardar Andersen: **Plan for sustainable urban logistics – comparing between Scandinavian and UK practices.** European Transport Research Review 2017 9:52.*

Common practices in current urban logistics planning in Scandinavia and the UK, and the degree to which SUTP (Sustainable Urban Transport Plan), SUMP (Sustainable Urban Mobility Plans) and SULP (Sustainable Urban Logistics Plans) are used, are examined. Urban freight plans are designed with a sustainability perspective to define visions and policy measures for urban freight. SUTP, SUMP and SULP methodologies are used in existing Scandinavian and UK urban freight plans, especially when a collaborative planning approach is being practiced. The emphasis on urban freight is challenged by the regional perspective.

- *Giacomo Dalla Chiara and Lynette Cheah: **Data stories from urban loading bays.** European Transport Research Review 2017 9:50.*

Freight vehicle parking facilities at large urban freight traffic generators, such as urban retail malls, are often characterized by a high volume of vehicle arrivals and a poor parking supply infrastructure. Recurrent congestion of freight parking facilities generates environmental (e.g. pollution), economic (e.g. delays in deliveries) and social (e.g. traffic) negative externalities. The current work provides a quantitative study of the parking supply and freight vehicle drivers' parking behaviour at urban retail malls.

- Kelly Pitera, Petr Pokorny, Terje Kristensen, Astrid Bjørgen: **The complexity of planning for goods delivery in a shared urban space: a case study involving cyclists and trucks.** *European Transport Research Review* 2017 9:46.

Growth in urban areas has resulted in conflicts between road users as they share the roadway. Such conflicts are only exacerbated by failings in the planning process. The purpose of this study is to examine, through a case study in Trondheim, Norway, issues related to freight delivery on a street section with a high volume of cyclists in order to identify how and where urban freight should be addressed within the urban planning process.

- Heleen Buldeo Rai, Sara Verlinde, Jan Merckx, Cathy Macharis: **Crowd logistics: an opportunity for more sustainable urban freight transport?** *European Transport Research Review* 2017 9:39.

Passenger car occupancy has been falling for years. Partly empty vehicles on our road networks decrease passenger transport sustainability but also contain an opportunity for freight transport. Within Crowd logistics (CL), delivery operations are carried out by using passengers' excess capacity on journeys that are already taking place, resulting in economic, social and environmental benefits. Existing CL initiatives show, however, that there are important differences between concepts in terms of sustainability.

Critical issues in transportation 2019

- National Academies of Sciences, Engineering, and Medicine. **Critical Issues in Transportation 2019.** Washington, DC, 2018: The National Academies Press. <https://doi.org/10.17226/25314>.

The US Transportation Research Board has issued a paper on critical issues in transportation. Its focus is on topics that will be important in the coming five to 10 years. The categories are:

1. Transformational Technologies and Services
2. Serving a Growing and Shifting Population
3. Energy and Sustainability
4. Resilience and Security
5. Safety and Public Health
6. Equity
7. Governance
8. System Performance and Asset Management
9. Funding and Finance
10. Goods Movement
11. Institutional and Workforce Capacity
12. Research and Innovation

On 49 pages, this paper of course cannot give an in-depth analysis. Its value for the specialist is in reminding about the many categories of transport related issues, helping to find the position of any approach within the wide range of topics.

Belgium becomes main gateway for Chinese logistics and crossborder e-commerce companies



Left to right: Delegation member, Delegation member, Kris Peeters (Deputy Prime Minister), Charles Michel (Prime Minister of Belgium), Pierre-Yves Jeholet (Walloon Minister of Economy), José Happart (Chairman of Liege Airport), Luc Partoune (CEO of Liege Airport), Michel Kempeneers (COO of AWEX, the Walloon Export Agency).

On the 31st of May 2018, Cainiao, the logistic arm of Alibaba announced the creation of a global logistic network to fulfil their ambition: serving domestic China in 24 hours and the whole world in 72 hours. Five cities have been selected to be the backbone of this network: Hangzhou, Kuala-Lumpur, Dubai, Moscow and Liège. On the 24th of October, the first blocktrain with containers left Liège in the direction of Zhengzhou in the Henan province placing Liège, Wallonia and Belgium in the “Belt and Road Strategy”. These major achievements have nothing to do with chance but are the results of a long-term strategy.

Logistics in Wallonia has been present and active on the Chinese market for many years together with the Walloon Export Agency (AWEX) and Liege Airport. Several closed relationships have been established especially in the region of Shenzhen and Guangzhou through a regular presence at “China International Logistics Fair (CILF)” in Shenzhen, one of the most important fairs for the logistic sector in Asia. With the rapid growth of the cross border e-commerce, it appeared that this market segment would generate the next boom in Chinese foreign direct investment with many Chinese companies wanting to serve the European market. The consistent activity of the Walloon actors allowed them to identify major Chinese players on the verge to tackle the European market and considering the setting up of a physical presence in Europe.

In June 2015, the King and Queen of Belgium travelled to China for a state visit. On that occasion, Jack Ma, the founder of Alibaba invited the King of Belgium for a one to one meeting. This meeting went so well that Jack Ma promised to do something in Belgium if an opportunity is detected. Thanks to the work provided by the “EU-China Logistics Incubator” jointly created by the AWEX, Liege Airport and Logistics in Wallonia (see “Review” 1-2018), many companies were approached. Amongst them, the company “4PX” located in Shenzhen expressed its interest to settle in Liège. Alibaba being one of the shareholder of 4PX, the information circulated inside the company and inside Cainiao, the logistic arm of Alibaba. This led to the announcement of the new logistic network of the company on the 31st of May with five cities composing the future core network of Alibaba: Hangzhou, Kuala Lumpur, Dubai, Moscow and Liege.

This agreement was officially signed on the 5th of December in Liège together with a Memorandum of Understanding for the implementation of the Electronic World Trade Platform (eWTP). The Belgian Prime Minister Charles Michel said, “I am excited to welcome eWTP to Belgium and the commitment of Alibaba to improve the competitiveness of Belgian and European firms on the global stage in this partnership. This will be a huge opportunity to boost exports and bring wide reaching economic benefits to society, including employment opportunities to Liege. Participation in eWTP underlines our country’s vision to help local small and medium-sized companies to be more competitive in the global marketplace in the digital age. This is an opportunity for not just the small businesses and young people in Belgium but across Europe”.

The new smart logistics hub will be the cornerstone of the eWTP infrastructure collaboration, with Alibaba playing a key role in facilitating trade, particularly for accessing the China market, as part of the Group's commitment to serve as the "Gateway to China" and help import US\$200 billion worth of quality goods from the world to China over the next five years.

The Electronic World Trade Platform (eWTP) is a private sector-led, multi-stakeholder initiative that facilitates public-private dialogue to share best practices, incubate new trade rules, and foster a more integrated and inclusive policy and business environment to promote the development of e-commerce, trade and the digital economy in the internet age.

The eWTP was first initiated by Alibaba Group Founder and Executive Chairman Jack Ma in 2016 and was accepted as a major policy recommendation of the Business 20 (B20) and officially included in the 2016 G20 Leaders' Communique. The initiative aims to help smaller companies and participating countries realize their full economic potential by reducing trade barriers and making it easier for small to medium-sized Enterprises (SMEs) to expand their trading capabilities worldwide.

The development will be driven by businesses, with support from governments. Businesses can create hubs for e-commerce and governments can create virtual free trade zones for small business, develop new e-Trade rules, share best practices, facilitate development of e-commerce infrastructure and services. Alibaba Group has established three eWTP hubs outside of China in Malaysia, Rwanda and Belgium respectively. These milestones follow Alibaba's partnership with the three countries to work jointly to enable SMEs to benefit from global trade.

Train connection



On the occasion of the 30th anniversary of the twinning between the Walloon Region and Henan Province, an official delegation led by Vice-Governor He of Henan Province was present in Liège for the launch of the first block train between Liège and Zhengzhou on the 24th of October 2018. Henan Province, located in the heart of Central China, is one of the most populated areas of the country with 100 million inhabitants. It has been the bread basket for China for a long time and has provided the more advanced coastal regions of the country with a large workforce.

The Province is now particularly specialised in electrical manufacturing, logistics hubs creation at the instigation of Beijing and accentuates the modernisation of its agricultural base. Today, Henan is producing a GDP among the top 5 of the country's provinces. Zhengzhou, capital of Henan, is at the heart of this new dynamic and has benefited from the recent Chinese railway development and the improvement of a large amount of logistics infrastructures for air transportation. The city is to become the future airline and logistics hub from the new Central China.

This new connection came to life with the will of the company ZIH, the freight rail operator of the Henan province to add a new destination in Europe besides Hamburg and Munich. Today, two trains per week are connecting Liège and Zhengzhou and a third one will be added by the end of 2019.

Urban freight transport policies and measures implemented in strategic documents of European cities – a review

Tomislav Letnik,
Maršenka Marksel,
Stane Božičnik Ph.D.
University of Maribor
FGPA, Smetanova 17
2000 Maribor, Slovenia

Giuseppe Luppino,
Andrea Bardi
Institute for Transport
and Logistics – ITL
Viale Aldo Moro 38
40127 Bologna, Italy

tomislav.letnik@um.si
marsenka.marksel@um.si
giuseppe.luppino@regione.emilia-
romagna.it
andrea.bardi@fondazioneitl.org
stane.bozicnik@um.si

This article examines the existence of policies and measures for sustainable urban freight transport in European cities. The desktop analysis shows an extremely heterogeneous situation of logistics and mobility planning policies and planning documents adopted in Europe. Cities are mainly opting for soft measures with high impact on savings. Only few measures directly promoting energy savings were identified, while on the other hand various measures with indirect impact on energy consumption were recognized.

The research for this article was done within the project SULPiTER, co-financed by the Interreg Central Europe program of the EU.

European transport policy aims to foster decarbonisation of transport through gradual implementation of various measures to be achieved by 2050: no more conventionally-fuelled cars in cities, 40% share of sustainable low carbon fuels in aviation; at least 40% emissions decrease in shipping, 50% shift of intercity passenger and freight journeys from road to rail and waterborne transport on medium distances. Given that 25% of emissions of transport in the EU originates in urban areas, towns and cities play the key role in mitigating the negative effects of transport. Many cities are currently implementing “Sustainable Urban Mobility Plans” (SUMPs), which are mainly dedicated to mobility of passengers. In most cases freight transport has not been considered or has been addressed only partially.

In the absence of clear guidelines for addressing urban freight issues, cities have adopted diverse strategic documents and measures. Consequently, we today lack understanding about the structure of the implemented urban freight policy measures in the European cities and their efficiency. In particular this holds good also for the field of sustainable energy use and mitigation of CO₂ emissions caused by the city logistic operations. To overcome this problem EC has set a very ambitious goal of CO₂-free city logistics by 2030 and initiated the concept of “Sustainable Urban Logistics Plans” (SULPs) aiming to comprehensively address also urban freight issues.

Urban freight delivery is a very complex process faced with numerous issues that need to be solved in order to perform efficient services for customers. Deliveries are on one hand subject to various characteristics of urban areas, and on the other hand to dynamically changing expectations of customers. To cope with this complexity and with problems of increasing traffic volume, energy consumption, emissions and congestion, various transport policy measures are adopted in cities around the world. According to our knowledge, no methodology for identification of logistics planning documents and classification of them according to their maturity level exists in literature.

European cities included in the analysis have been selected according to their size and other relevant characteristics. The main idea was to examine a diverse sample. In addition the focus was not only on city centres but on the wider territory aspect of Functional Urban Areas (FUAs), consisting of

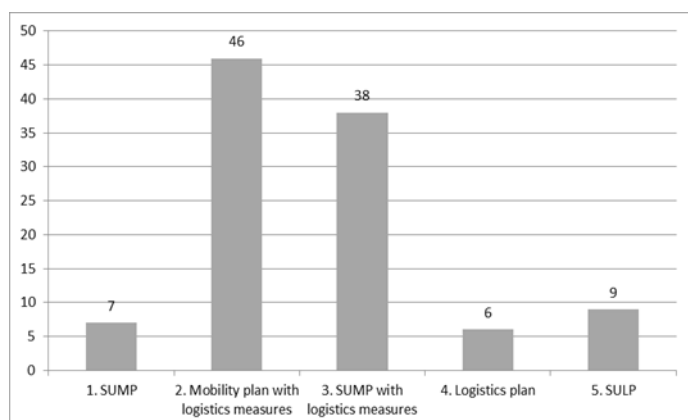


Figure 1: Frequency of planning documents by category in the chosen panel of cities

the city core and its commuting zone. In view of all these aspects, 129 cities have been selected for the analysis.

The identified strategic documents of European cities were classified into five main categories:

- SUMP without city logistics measures;
- Mobility plan documents with city logistics measures;
- SUMP with city logistics measures;
- Logistics plans;
- SULPs.

SULP is the most comprehensive document specifically devoted to logistics issues in urban areas. Logistics plans are similar to SULP, for they are in the whole extend devoted to logistics issues and the only difference to SULP is that they have been implemented before SULP methodology was available. The logistics plans structure is therefore not standardised, and they are therefore considered as slightly less relevant. SUMP are in general tackling all mobility issues, and freight transport is often omitted or is only partially mentioned. SUMP with city logistics measures are therefore next on the scale of relevant documents. Mobility plan documents introduced before SUMP methodology exist and are therefore a bit less relevant than SUMP. Finally, we tried to identify SUMP implemented but not containing any logistics issues. This option is on the bottom of our evaluation scale. If the SUMP are not dealing with logistics that means logistics issues are not recognised as relevant, revealing that the cities stick to old, uncomplete, planning patterns.

The results of the analysis of documents, identified in the panel of cities, are presented in Figure 1.

In the next phase, the panel of cities was reduced to 30 cities with well-developed and adopted logistics planning documents and measures. In these cities in total 158 measures were identified. These measures were reviewed in detail. Out of 158 measures 58 measures of the best practice character and with enough available data were selected. The selected measures were grouped into 10 types that have been used for detailed analysis. The main criteria for final selection of measures was application suitability of the measure not only to the city centre but also to the City FUA level. The following measures have been identified:

- Off street loading bays
- Cargo bikes
- Clean fuels and vehicles
- Spatial planning for logistics
- Freight routes
- Delivery and servicing plans
- Mobile depots
- Of peak deliveries
- By boat logistics
- Urban distribution centres

As can be seen from Table 1, Brussels and Paris are the most advanced among all of the analysed cities with 5 different measures adopted in the strategic transport policy documents. The majority of cities, 14 out of 30,

Country / City	Off-street loading bays	Cargo bikes	Clean fuels and vehicles	Spatial planning for logistics	Freight routes	Delivery and servicing plans	Mobile depots	Off peak deliveries	By boat logistics	Urban Distribution Centres	Coordination of freight rules	Frequency
A Vienna	•	•	•									3
B Ghent		•										1
B Brussels				•	•	•	•	•				5
BL Burgas			•						•			2
BL Balchik									•			1
HR Zagreb						•						1
CZ Brno										•		1
DK Aalborg	•		•			•						2
FI Helsinki					•							1
F Paris	•	•		•					•	•		5
F Lyon		•	•									2
F Toulouse					•					•	•	3
D Berlin			•									1
D Bremen			•									1
GR Serres					•	•		•		•		4
H Pécs											•	1
I Turin		•	•				•					3
I Lucca		•								•		2
NL Amsterdam					•				•			2
NL Utrecht			•						•			2
NL s'Hertogenbosch										•		1
N Trondheim			•			•						2
PO Kraków	•									•		2
PT Almada										•		1
RO Alba Giulia								•		•		2
ES Barcelona	•							•		•		3
ES Burgos									•	•	•	3
S Malmö					•							1
GB London						•				•		2
GB Dundee										•		1
GB Norwich										•		1
WEIGHT	5	7	9	2	6	6	2	4	6	14	3	

Table 1: Adopted low carbon urban logistics measures by European cities

have planned to implement Urban Consolidation Centres. Among the most popular measures are also clean fuels and vehicles (planned in 9 cities) and cargo bikes (planned in 7 cities).

The main characteristic of a measure also defines its applicability. For better understanding the measures in the Table 2 below, measures are qualitatively benchmarked in the sequel (counting the number of measures belonging to a specific category) with reference to:

- category of measure,
- territorial level of applicability,
- investment and operational costs,
- savings.

Based on their main purpose, measures can be categorised into the following groups: regulation, technology, infrastructure, service, industrial / economic, urban planning and energy. Regulation measures are mainly imposed by the city authorities to regulate or modify users' behaviour. Technology measures are strictly related to technological development, which is implemented to improve efficiency of the urban freight delivery processes. Service oriented measures are focused to improvement of logistics-oriented services in urban areas and are mainly dedicated to logistics operators. Industrial or economic measures are to be understood as incentives for business entities, which are indirectly providing solutions or tools for efficient urban

deliveries. Urban planning measures are oriented towards positioning of logistics infrastructure and facilities in urban areas. Energy measures are primarily dedicated to energy savings and achievement of energy efficiency.

From the spatial point of view, measures can be focused to the strict city centre (e.g. pedestrian – low emission zones), to the specific part of the city (e.g. industrial or residential area) or to the entire Functional urban area (e.g. eco norms for freight delivery vehicles in urban areas).

Successful implementation of measures is in many cases related to the volume of investment needed for their implementation. The lower the need for investment, the bigger is the possibility for implementation of the measure. The so-called soft measures (e.g. communication measures, organizational measures ...) are often preferred by the policy makers over hard or investment-oriented measures (e.g. building new street, new logistics terminal).

Crucial criteria for the measure implementation are savings. The bigger the savings, the bigger is the possibility and the need for measure implementation. Savings can be measured in time (e.g. shorter delivery time), costs (e.g. savings in delivery costs for transport operator), CO₂ emissions (e.g. savings of emissions imposed from delivery vehicles) and energy (e.g. savings of energy needed for delivery).

Assessment Parameters	Off-street loading bays	Cargo bikes	Clean fuels and vehicles	Spatial planning for logistics	Freight routes	Delivery and servicing plans	Mobile depots	Off peak deliveries	By boat logistics	Urban Distribution Centres	Frequency
Category											
Regulation	•	•	•		•					•	5
Technology					•						1
Infrastructures	•		•	•						•	4
Services		•				•	•	•	•	•	6
Industrial/econ			•			•					2
Urban planning	•			•							2
Energy			•								1
Scale of application											
Specific area	•	•				•	•	•	•	•	7
City centre	•	•	•			•	•	•	•	•	8
City/FUA	•		•	•	•	•					5
Investment											
Low		•		•	•	•	•	•			6
Medium	•								•	•	3
High			•								1
Savings											
Low											0
Medium	•	•	•	•			•	•	•		7
High					•	•				•	3

Table 2 Overview and benchmark of selected logistics measures

The majority of measures under consideration in Table 2 is categorised as regulatory or service measures. The reason is that the city authorities, with the aim to regulate and optimise the urban freight, predominantly impose these measures. It should be noted that only one of all selected measures is predominantly focused on energy issues. Clean vehicles and fuels are the only measures dealing directly with energy policy issues in urban areas. At the same time, several other measures have indirect impact on energy use. Benefits are due to optimisation of transport flows (e.g. fuel savings), introduction of clean vehicles for logistics operations (e.g. electric mobility) or modal shift (e.g. use of transport means with lower energy impact).

The analysed measures are less frequently applied outside of city centres and more frequently in city centres and/or in specific areas within the city. It may be concluded that problems are much more severe in the city centres, which in Europe are very often old, historical centres. The volume of needed investments reveals that 6 out of 10 analysed measures demonstrate low investment needs.

Very interesting results are shown in the lower part of the Table 2, where savings of the implemented measures are assessed. The majority of the measures under consideration (6 out of 10) belongs to the category of low investment needs. But, on the other side, the expected savings are on the medium to high level. It may be concluded that cities are focusing on soft measures (low costs, low investments), which are expected to bring optimal (medium/high) results.

Presented case studies of different European cities in the last part of the article have shown that well selected measures and/or their optimal combination can substantially decrease the energy consumption and CO₂ footprint. Single measures can bring on average about 20-30% savings while their optimal combination could result even in about 60-70% saving. We can conclude that with optimal combination of measures, cities can contribute to gradual realisation of the EU Commission's aim of CO₂ free city. Standardisation of approaches in the cities, as well as on the functional urban areas level, is needed and recommended.

Energy aspects are currently only partially addressed under the framework of urban freight models. Linking of energy and transport models is already possible, provided statistics and data are available. In general, transport models are to be considered as basis for generating inputs to energy models and not vice versa.

North Sea:

Fallout of container spilling, January 2019



*Photos (Borkum, January 2019):
Martin Brandt*

On January 2, the container vessel MSC Zoe lost 291 containers in the North Sea, mostly of the 40ft. type. Compared to the reported total yearly loss of typically around 700 containers worldwide, this was a very significant event. It happened in two positions: 22 miles north of the island of Ameland (Netherlands), and then again 22 miles northwest of Borkum island (Germany).

While most containers did not open, perhaps 30 spilled their contents into the sea. This was washed ashore mostly at the Dutch islands of Ameland, Schiermonnikoog and Rottumeroog, while in Germany mainly hitting its westernmost island of Borkum. Our editor Martin Brandt as a regular winter visitor of Borkum became an eyewitness of the aftermath and is reporting here.

MSC Zoe is one of the largest container ships in service, able to carry more than 19,000 “TEU”, i.e. “twenty-foot-equivalent containers”, and roughly 14,000 TEU at a more typical average container weight. At the time of the accident, it carried about 8,000 containers, most of them of the 40 ft. type which count for 2 TEU, so it likely was operating close to full capacity and not too far from its full draught of 16 meters.

MSC Zoe was serving on the “Silk” service route, a weekly container service between East Asia and Northern Europe, operated jointly by very large ships of Maersk and MSC shipping companies. In Europe, the service calls at Sines (south of Lisbon), Bremerhaven, Gdansk, again at Bremerhaven and then at Rotterdam before returning to Asia through the Suez Canal.

The incident happened in the North Sea east of the English Channel. After the accident, the ship unloaded most containers at Bremerhaven, which wasn’t easy due to deformations on deck, and with some days delay continued to Gdansk for unloading the remaining cargo. According to publicly available MSC schedules, it was soon replaced on the Silk service by another ship and will later in spring enter the Albatros service, which is a different weekly tour between East Asia and Northern Europe, partly calling at other ports. MSC Zoe reported no structural damage, but its container racks will need repair.

The incident raises questions

How could it happen that so many containers could get overboard? The spill was at midship. This is not typical, since at bow and stern the forces of ship movement are greater. This may indicate that containers were not properly latched. Going without latches would have speeded the unloading operation in Bremerhaven. Furthermore, local sources report that the ship may have used a shortcut which is just about 20 meters deep. Given the leverage of the large ship in stormy waves, it may have hit the ground, which would have sent a shock wave through the vessel.

The day of the spill, Wednesday, was the regular departure day for the “Silk” service from Bremerhaven, with quite some miles to even get there. Container services regularly run under heavy time pressure and often fight against delays.





The North Sea is very shallow along the German coast. Ship traffic follows specific routes, mainly the old deep former river beds of the ice age that now are inundated. The “Review” has asked a former captain of very large ships about the additional clearance a ship needs under its keel to navigate shallow waters in a storm, without accidentally hitting the ground. Here is the answer (translated into English):

“A ship of 400m length in the North Sea will not pitch (nose-dive) at all, because the length of the waves is shorter than the length of the ship. However, it may roll sideways rather hard. This depends not only on the height of the waves, but upon their length relative to the width of the ship, which may reach an angle of 30°. In the open sea, one could zigzag to avoid getting the waves directly from the side, but in the traffic lanes of the North Sea that may not be an option.”

Given the width of MSC Zoe (59m), the mathematics is: Half the width dives down. With $\cos 30^\circ = 0.5$, one must expect the ship in extreme situations to need almost 15 meters extra clearance below its draught! Therefore, occasionally hitting the ground may in practice be a rather likely event for very big vessels in the North Sea.

And what did the result look like?

There were photos of beaches full of cargo in the news. However, this was cleaned up rather quickly, although lots of new items appeared after each storm. Most of the time, the beach looked rather clean. “At first sight, I did not notice any difference”, says Martin Brandt. “However, once I had a closer look, the remains of the spill were everywhere.”

It is not the big items like furniture, toys and others. “The main visible issue is with plastic packaging”, Martin Brandt says. “The plastic was everywhere, and the sand was ripping it to pieces rather quickly. It would disintegrate under your hands when you picked it up. It will soon turn into microplastics, so it was extremely important to collect as much as possible. Nevertheless, Styrofoam and other packaging foam disintegrated within days.”

On the island of Borkum, the people had been called to the beach for helping with garbage collection during the first days, as on the neighbouring Dutch islands. Afterwards, teams of voluntary helpers took over, supported by locals and guests. They did not collect huge volumes, but tens of thousands of pieces. “It doesn’t look as if summer tourists will be affected”, says Martin Brandt. “The main problem apparently will be with marine sea life. And most of the problem is neither with the ship nor with its cargo, but with packaging.”



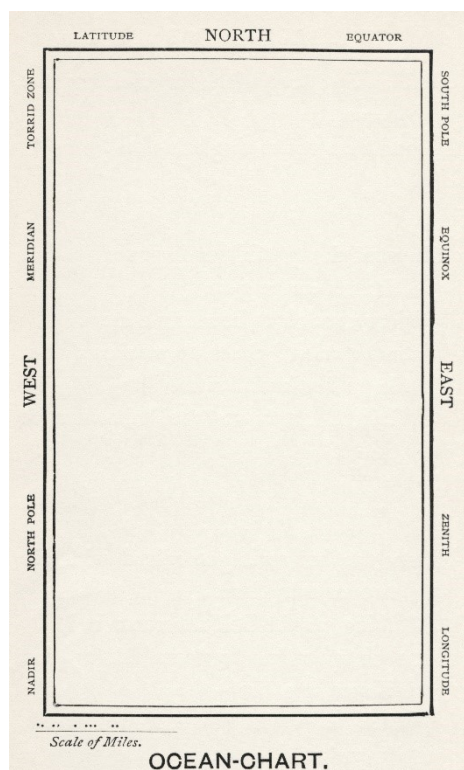
Classic text – Lewis Carroll: The Hunting of the Snark

This issue of the “Review” features a novelty for a “classic text” about logistics: An excerpt from a poem. It is from “The Hunting of the Snark” (1876) a classic in the field of “literary nonsense”. The author is Charles Lutwidge Dodgson (1832 –1898), better known by his pen name Lewis Carroll, and famous as the author of “Alice in Wonderland”.

The plot follows a crew of ten trying to hunt the “Snark”, apparently an animal. The hunt includes a sea voyage, with the “Bellman” serving as captain. While the crew is eagerly looking forward to encounter the Snark, the narrator knows that it may turn out to be a highly dangerous “Boojum”. Neither the Snark nor the Boojum are further explained to the reader. The crew, on the other hand, apparently does not feel the need for further explanation – maybe each crew member has his own understanding of what he expects to meet. But even that is not explained. Here is the text:

Fit the Second The Bellman’s Speech

The Bellman himself they all praised to the skies –
Such a carriage, such ease and such grace!
Such solemnity, too! One could see he was wise,
The moment one looked in his face!



He had bought a large map representing the sea,
Without the last vestige of land:
And the crew were much pleased when they found it to be
A map they could all understand.

“What’s the good of Mercator’s North Poles and Equators,
Tropics, Zones, and Meridian Lines?”
So the Bellman would cry: and the crew would reply
“They are merely conventional signs!”

“Other maps are such shapes, with their islands and capes!
But we’ve got our brave Captain to thank”
(So the crew would protest) “that he’s bought us the best -
A perfect and absolute blank!”

This was charming, no doubt: but they shortly found out
that the captain they trusted so well
Had only one notion for crossing the ocean,
And that was to tingle his bell.

He was thoughtful and grave – but the orders he gave
Were enough to bewilder a crew.
When he cried “Steer to starboard, but keep her head larboard!”
What on earth was the helmsman to do?

Then the bowsprit got mixed with the rudder sometimes:
A thing, as the Bellman remarked,

That frequently happens in tropical climes,
When a vessel is, so to speak, “snarked”.

But the principal failing occurred in the sailing,
And the Bellman, perplexed and distressed,
Said he had hoped, at least, when the wind blew due East
That the ship would not travel due West!

Lewis Carroll has always refused to give any explanation about his motives and the meaning of the story. Instead, he explained small and apparently irrelevant technical or linguistic details, most famously elaborating about “how the bowsprit got mixed with the rudder”, which obscured more than it would reveal.

Scholars have interpreted the poem as the human voyage of “hunting for happiness”. However, beyond any symbolic meaning it may simply and almost verbatim stand for basic human desire, in this case e.g. for “a map they could all understand.” Dodgson, who taught Mathematics at Oxford, apparently thought this was to be “a perfect and absolute blank” – all else would not be understood by everybody.

The illustration from the original publication has all the ingredients of a traditional map – except for content. The same thing could be said about the whole voyage. The reader is free to check current affairs for analogies.
/ MB

Get your copy of past issues!

Free electronic subscription via info@openenlocc.net, download of previous issues: www.openenlocc.net.



Next Dates

March 2019

Dortmund (D), March 27-28

4th Interdisciplinary Conference on Production, Logistics and Traffic (ICPLT)

FOCUS TOPIC: Commercial Transport – Essential Link for Production, Logistics and Society.

Parma (I), March 28-30

Logistica Parma

Logistica is an international exhibition of machinery, equipment and systems for industrial logistics. It is an excellent place where it's possible to find the whole view that the Italian market offers for logistics, transport, handling, supply chain management, lean manufacturing, automatic identification etc. Logistica takes place in conjunction with MECSPE an international exhibition dedicated to production technologies.

April 2019

Hanover (D), April 1-5

IAMD - Integrated Automation, Motion & Drive

Leading Trade Fair for Integrated Automation, Industrial IT, Power Transmission and Control, taking place within the Hannover Messe.

Gothenburg (S), April 2

Vehicle Electronics Connected Services

How can automotive cope with the challenges ahead? New business models & processes, skills and organizations are needed to stay competitive when new players such as Google, Amazon and Apple are entering the industry. Strategies are challenged by shorter development time for automation, electrification and connectivity projects. Over 70 of the most accomplished and innovative experts. Network and share ideas with +900 attendees.

London (GB), April 2-3

Everything EV

Strategies & Solutions for the Entire Electric Vehicle Eco-System. Targeting local authorities & government, fleet owners & transport authorities, commercial real estate owners and utilities DNO's & networks.

Athens (GR), April 3-4

EUROLOG 2019

Annual international congress of the European Logistics Association to promote dialogue between ELA members, in particular the national organizations, on a neutral platform, to provide a forum where highly reputed speakers from important European industrial, trading and service companies can portray trends and strategies in the European logistics sector as well as best practice, and to use the resulting insights as a basis for formulating specific recommendations for the day-to-day work of the congress attendants.

Marne-la-Vallée (F), April 4

"Socialisation aux pratiques de mobilité / socialisation par les pratiques de mobilité"

As part of the ANR Mode project (reasons for demotorization in French urban areas), a study day on the theme "Socialization in mobility practices / Socialization through mobility practices", Université Paris-Est Marne-la-Vallée.

Renens, Lausanne (CH), April 5-7

Salon du vélo et de la mobilité durable

Bicycle fair.

Singapore (SGP), April 9-10

TOC Asia

One of the world's leading shipping, ports and terminal events. It attracts manufacturers and suppliers of goods and services to the shipping, ports and terminals industry and presents the latest developments and technologies. TOC Asia incorporates an international technical conference to discuss key industry issues.

Gothenburg, April 10

Welcome to Northern LEAD Day 2019

Get inspired, listen to the latest research findings within Logistics and Supply Chain, and enjoy the discussions. Welcome to the annual Northern LEAD Day 2019.

Zurich (CH), April 10-11

Logistics & Distribution 2019

Logistics & Distribution is the main Swiss national fair for intralogistics, distribution and e-logistics.

Berlin (D), April 10-11

Electric Vehicles: Everything is Changing

Conference & Exhibition, "E-mobility Reinvented"

Izmir (TR), April 10-12

Eurasia Rail

8th International Rolling Stock, Infrastructure & Logistics Exhibition, expecting 300 exhibitors and 10,000 visitors.

Brussels (B), April 11

Open Mobility Conference 2019

The MaaS Alliance and TravelSpirit Foundation are delighted to announce the Open Mobility Conference. It will examine how to build an open ecosystem of mobility and lay the foundations for seamless Mobility as a Service (MaaS).

Moscow (RUS), April 15-17

TransRussia/TransLogistica

24th International Exhibition for Transport and Logistics Services and Intralogistics Technologies. TransRussia exhibition is held annually since 1995 and remains the largest industry platform for a wide range of representatives of the transport and logistics market. 395 companies from 27 countries took part in the exhibition in 2018. In 2019 there will be a new section Intralogistics, which participants will present the warehouse and racking system, lifting and transport equipment and means of automation of warehouse equipment for packaging and picking orders and operating equipment.

Shanghai (PRC), April 15-17

LogiMAT China

Is the international trade fair for distribution, materials handling and information flow, previously held in Nanjing. As an offshoot of LogiMAT in Stuttgart, Germany, it has established itself as the largest intra-logistics exhibition in Asia. In the accompanying technical forums the practical knowledge on current topics such as warehouse layout, inventory optimization, logistics strategies and intelligent logistics is in the foreground.

Baltimore, MD (USA), April 15-17

International Conference on Demand Responsive and Innovative Transportation Services

The conference will provide a chance to exchange knowledge with international operators; learn from suppliers and academics about advances in information technology, vehicles, and equipment; exchange insights with health care providers

regarding health-related transportation, and explore the impacts of transportation network companies on demand-responsive transit. Sponsored by TRB.

Sosnowiec (PL), April 16-17

Transportex

A 2 days event presenting products (like utility vehicles), services and institutions for transport companies, carriers, freight forwarders and road transport, logistics companies, management of ports and terminals, logistics service providers, investors.

Goyang-si (ROK), April 16-19

KOREA MAT 2019

Korea's biggest logistics exhibition covering material handling & logistics services.

Europe / Germany (D), April 19

Supply Chain Day / Tag der Logistik

Companies from the industrial, trading and logistics services sectors take visitors behind the scenes of logistics and supply chain management giving an insight into the wide variety of activities performed every day. Institutes, educational and training centres open their doors and present their projects. The event is organized by the German Logistics Association (BVL) and partners across Europe.

Cambridge (MA/USA), April 23

Crossroads 2019

Crossroads is a one-day event that brings together experts from MIT and the MIT Center for Transportation & Logistics (MIT CTL), to offer a truly unique learning opportunity. Crossroads is where you will discover how emerging innovations intersect with supply chain management (SCM).

Baku (AZ), April 23-25

Caspian Ports and Shipping 2019

International Ports and Shipping Exhibition. The show will be held for three days with commercial opportunity for exhibitors and sponsors to network directly with the delegates at this major annual international maritime transport Exhibition and trade event.

London (GB), April 24-25

2nd Connected Cars Summit 2019

The event will bring together key industry stakeholders from the automotive industry, connected, IoT, telematics data associations, safety personnel consultants, solution and technology providers.

Dornbirn (A), April 25-26

1. DACH-Kongress (Internationaler Verkehrskongress Österreich-Schweiz-Deutschland)

"Wachsende Verkehrsströme - Ausweg durch neue Technologien - Lösungen (nicht nur) für den Alpenraum" / Growing traffic flows – solutions through new technologies (not only) for Alpine space.

Birmingham (GB), April 30 – May 2

The Commercial Vehicle Show 2019

Exhibition and conference.

May 2019

Verona (IT), May 7-8

Intermodal Freight Transport (workshop by Ursa Major Neo project)

With a view to achieving the general objective of streamlining freight transportation along the TEN-T network, the project activities include the deployment of ITS solutions to improve

freight transport on the long distance and to foster the integration of ports and inland terminals in the TEN-T core network corridors. Topics will be: ITS tools for intermodal transport; ITS tools for improving ports' Traffic Management Plans, Gate automation, Buffer areas management.

Stuttgart (D), May 7-9

Electric & Hybrid Vehicle Technology Expo Europe.

Electric & Hybrid Vehicle Technology Expo Europe provides an opportunity to source the latest manufacturing solutions along the H/EV supply chain including electrical powertrains and components, battery management systems, materials and equipment. Expert-led conference with 120+ speakers including Audi, Daimler & VW. Free-to-attend trade fair to meet 450+ suppliers.

Hamburg (D), May 9-10

F&L conference "Managing uncertainty in the global supply chain – why it matters and how can we succeed?"

International supply chains operate in a volatile and uncertain environment, so shippers and service providers must choose how to respond to international trading conditions. Conference speakers and attendees represent a wide cross-section of the supply chain.

Naples (I), May 15-16

The Small Scale LNG Use

Euro-Mediterranean Conference & Expo.

Lisbon (P), May 16-17

European Maritime Day

The European Maritime Day (EMD) is the annual two-day event during which Europe's maritime community meet to network, discuss and forge joint action. It targets maritime professionals, entrepreneurs and ocean leaders. The focus in 2019 will be on blue entrepreneurship, innovation and investment to transform traditional maritime sectors and boost emerging technologies and value chains. A specific focus will be put on research and innovation for a plastic-free ocean.

Lyon (F), May 19-22

EVS 32, the 32nd International Electric Vehicle Symposium.

EVS (Electric Vehicles Symposium) is the leading international event to fully understand how new technology will be used in future mobility, together with the related business models and issues surrounding social acceptability. The various components of electric mobility will be on display; from markets to vehicle battery technology (hybrid and hydrogen fuel cell); from motorcycles to trucks, and from charging facilities to related services and public policy.

Berlin (D), May 21-22

ICTTP 2019

International Conference on Traffic and Transport Psychology.

Oslo (N), May 22-24

Urban Future Conference

Europe's largest event for sustainable cities. Topics are: Urban mobility, Green business & innovation, leadership, built environment & architecture.

Leipzig (D), May 22-24

Annual Summit of the International Transport Forum "Transport Connectivity for Regional Integration".

Mumbai (IND), May 26-31

15th World Conference on Transport Research

For the last 40 years, WCTR has been organised every three years by the WCTR Society. The conference aims to bring together academics, practitioners, managers, and policymakers

from all parts of the world, to share cutting-edge research and advanced state-of-practice. The conference also includes special sessions, technical tours, an exhibition and social events. This knowledge event provides a unique opportunity for experts to exchange ideas in all areas of transport research. To facilitate the interchange of ideas between researchers working in the same area, WCTR has structured the topics into nine categories with a total of 35 session tracks.

Athens (GR), May 29-30

International Green Shipping and Technology Summit

Keynote Speakers from top brands from around the world will share their strategies and their success stories regarding Project Management, Finance, Operation and Technology Impact.

June 2019

Portland, OR (USA), June 2-5

17th TRB Transportation Planning Applications Conference

The conference focuses on providing opportunities to showcase new transportation planning techniques and methods emphasizing practical, innovative, and timely technical and policy approaches to transportation planning.

Eindhoven (NL), June 3-6

13th ITS European Congress 2019

Organised by ERTICO - ITS Europe, topics are: Deploying new mobility services – from experiments to experience. A breath of fresh air. Connected, cooperative and automated mobility. Enhancing the efficiency of freight transport. Enablers of digital infrastructure. Transport network operations. Disruption, start-ups & future workforce.

Munich (D), June 4-7

Transport logistic

The world's leading trade fair for logistics, mobility, IT, and supply chain management has been taking place in Munich since 1978. Also part of transport logistic is air cargo Europe the industry gathering for the international air freight industry. transport logistic is the hub of the global logistics industry. The trade fair, which is accompanied by a conference program, presents the optimal solutions for every requirement. transport logistic combines innovative products, technologies, and systems with pooled expertise and a strong sales focus. **See advertising on these pages.**

Helsinki (FI), June 5-7

15th Biannual NECTAR Conference

The theme of this NECTAR conference is "Towards human scale cities – Open and happy". The conference will be held at the University main building, June 5-7, 2019. This year's keynote speakers are Prof. Jan Gehl and dr. Tim Schwanen.

Munich (D), June 6

How To Improve Multimodal Environmentally-Friendly Freight Solutions in Central Europe?

Key areas of discussion will deal with sustainable ways of shifting freight transport from road to rail or waterborne transport, promoting eco-innovation in freight logistics, developing multimodal freight corridors, optimizing the performance of multimodal logistics networks and creating frameworks for seamless information flow in the logistics chain. The event is supposed to involve both carriers and forwarders, terminal operators, experts in management and logistics and representatives of the EU Commission DG MOVE, active stakeholders and policymakers all coming from Central European countries. Presented by TalkNET project, at transport logistic fair.

Eindhoven (NL), June 7

2nd International Symposium on Driving Science

"Drivers in the Loop" – the central question during the 2nd Driving Science symposium is how the driver interacts with driver-vehicle systems in advanced environments. The Driving Science Symposium provides a forum for researchers and engineers from academia, industry and government involved in Driving Sciences throughout the world, to present their latest findings and ideas.

Stockholm (S), June 9-12

UITP Global Public Transport Summit

Covering all urban and regional transport modes across the globe, the Summit combines a diverse programme of leading Congress sessions and an outstanding Exhibition full of the latest innovations, solutions and products. While this is a passenger transport event, many of the public stakeholders for urban and regional logistics will be involved.

Paris (F), June 10-14

ITEA 2019

2019 Annual School and Conference of the International Transportation Economics Association.

Dubrovnik (HR), June 12-14

11th International Conference on City Logistics

Since city logistics schemes have already been implemented in several cities, a review of the performance of these schemes will also be presented. Also, an overview of the development and application of several mathematical models and the effects of e-commerce on urban freight transport will be given. The conference also provides an opportunity to discuss future initiatives of the Institute for City Logistics that are aimed at promoting international research collaboration and information exchange.

Stockholm (S), June 13

CIT19: International Conference on Integrated Transport 2019

A platform to discuss how disruptive technologies influence the mobility ecosystem and how they could affect different stakeholders. CIT19 aims to assess the potentials of emerging disruptive technologies for mobility solutions and consider their impacts on travel and transport as well as on different stakeholders.

Groningen (NL), June 14-16

International Cargo Bike Festival

The ICBF is the exhibition where visitors, users, designers, manufacturers, DIY-builders, and retailers of cargo bikes meet and inspire each other. It is a unique chance to test and ride a great number of cargo bikes of branches from all over Europe and several countries of the rest of the world.

Groningen (NL), June 17-18

6th European Conference on Sustainable Urban Mobility Plans "Planning for sustainable and active cities"

The European Conference on Sustainable Urban Mobility Plans is Europe's leading annual event for all those involved in putting the SUMP concept into practice. It serves as a forum for policy makers, local authorities, urban transport planners, academics, NGOs and other mobility professionals. The event offers opportunities to network, debate key issues and to exchange ideas on sustainable urban mobility planning. Attendance is free of charge. The 2018 edition in Nicosia attracted over 500 participants.

The conference series has always given room to urban logistics topics. The conference is co-funded by the European Commission in cooperation with the Municipality of Groningen.

Hamilton Island (AUS), June 17-21

TRISTAN X, the Tenth Triennial Symposium on Transportation Analysis

Expecting over 100 academics, researchers and practitioners from around the world to convene to discuss mathematical models, methodologies and computational results, and to exchange ideas on advanced applications and technologies in transportation.

Liège (B), June 18-19

Open ENLoCC General Assembly

Firenze (I), June 20-21

8th Florence Conference on the Regulation of Infra-structures

"Digital Platforms - The New Network Industries? How to regulate them?"

Aveiro (P), June 25-27

Urban Transport 2019

24th International Conference on Urban Transport and the Environment.

Dublin (IRL), June 25-28

Velo-City 2019

International cycling conference. The theme is "Cycling for the Ages".

Aveiro (P), June 26-28

Air Pollution 2019

27th International Conference on Modelling, Monitoring and Management of Air Pollution.

Preview

Kouvola (FI), September 26

RailForum

International seminar focusing on container transport between north Europe and Asia. **See advertising on back cover.**

Suggestions for publication of "next dates" are always welcome via info@openenlocc.net. For promotion beyond this column, ask for the advertising guide.

Connecting Global Competence



At the world's leading trade fair for logistics, mobility, IT and supply chain management, you can expect:

- More than 2,000 exhibitors from over 60 countries
- An extensive, first-rate conference program with more than 200 experts

Be part of this strong community.

Get your ticket now!

» www.transportlogistic.de/tickets/en



June 4–7, 2019
Messe München

» www.transportlogistic.de

LOGISTICS
makes it
happen



transport
logistic

the leading exhibition

RAILFORUM

KOUVOLA - FINLAND

26 September 2019

International Seminar focusing on
container transports between North Europe and Asia.
We bring together experts, clients and decision makers
in the field of logistics. Save the date!



Top themes
in Railway Logistics



Future Outlooks
for Markets & Investment
Opportunities



Over 200 participants,
100 companies and
organizations

railforum.fi



Leverage from
the EU
2014–2020

Kouvola.innovation