



# IPIC 2019

6th International Physical Internet Conference | London

## CONFERENCE PROGRAMME



9th July to 11th July 2019

Church House Westminster, Deans Yard, Westminster, London SW1P 3NZ



# ABOUT US

The Physical Internet Initiative aims at transforming the way physical objects are moved, stored, realised, supplied and used, pursuing global logistics efficiency and sustainability. Originating from Professor Benoit Montreuil in 2006, this ground breaking vision, revolutionising current paradigms, has stirred great interest from scientific, industrial as well as governmental communities.

The International Physical Internet Conference 2019 aims to provide an open forum for researchers, industry representatives, government officials and citizens to together explore, discuss, introduce leading edge concepts, methodologies, recent projects, technological advancements, start-up initiatives, for current and future Physical Internet implementation.

Hear from industry experts on topics including inter-connected logistics, PI fundamentals, business models, governance and implementation, cross-chain control, synchromodal transportation, IT systems, stakeholders and their roles. New business models, enabling technologies and experimentations already underway will be presented, making this meeting a unique opportunity to learn, network and discuss the latest results and challenges about interconnected logistics. And, because logistics is global, participants will be from all over the world including researchers, industrial and international institution members, local authorities and standardisation committees.

Brought to you by:



Hosted by:



Sponsored by:



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## BROUGHT TO YOU BY:



The European Technology Platform ALICE is set-up to develop a comprehensive strategy for research, innovation and market deployment of logistics and supply chain management innovation in Europe. The platform will support and assist and advise the European Commission into the implementation of the EU Program for research: Horizon 2020 in the area of Logistics.

ALICE was created in the frame of WINN project having the European Green Cars Initiative (logistics section) and EIRAC, European Intermodal Research Advisory Council, as background and supporting initiatives. ALICE was officially recognised as an European Technology Platform by the European Commission in July 2013.

ALICE is based on the recognition of the need for an overarching view on logistics and supply chain planning and control, in which shippers and logistics service providers closely collaborate to reach efficient logistics and supply chain operations. ALICE engages with all different kind of stakeholders operating in the Logistics sector.

### ETP's

European Technology Platforms (ETPs) are industry-led stakeholder fora that develop short to long-term research and innovation agendas and roadmaps for action at EU and national level to be supported by both private and public funding.

ETPs are a key element in the European innovation ecosystem and will help turn Europe into an Innovation Union, by taking a holistic view and:

- *developing strategies and provide a coherent business-focused analysis of research and innovation bottlenecks and opportunities related to societal challenges and industrial leadership actions*
- *mobilising industry and other stakeholders within the EU to work in partnership and deliver on agreed priorities*
- *sharing information and enable knowledge transfer to a wide range of stakeholders across the EU.*

## HOSTED BY:



Department  
for Transport

The Department for Transport is the government department responsible for the English transport network and a limited number of transport matters in Scotland, Wales and Northern Ireland that have not been devolved.

The department is run by the Secretary of State for Transport, currently Chris Grayling.

**CATAPULT**  
Connected Places

The new Connected Places Catapult accelerates smarter living and travelling in and between the places of tomorrow.

We focus on growing businesses with innovations in mobility services and the built environment that enable new levels of physical, digital and social connectedness. The Connected Places Catapult operates at the intersection between public and private sectors and between local government and transport authorities. We convene the disparate parts of the market to help innovators navigate the complexity of doing business, creating new commercial opportunities and improving productivity, socio-economic and environmental benefits for places.



UK Horizon 2020

Horizon 2020 is the biggest EU Research and Innovation programme ever with nearly €80 billion of funding available over 7 years (2014 to 2020) – in addition to the private investment that this money will attract. It promises more breakthroughs, discoveries and world-firsts by taking great ideas from the lab to the market.

Horizon 2020 is the financial instrument implementing the Innovation Union, a Europe 2020 flagship initiative aimed at securing Europe's global competitiveness.

Seen as a means to drive economic growth and create jobs, Horizon 2020 has the political backing of Europe's leaders and the Members of the European Parliament. They agreed that research is an investment in our future and so put it at the heart of the EU's blueprint for smart, sustainable and inclusive growth and jobs.

By coupling research and innovation, Horizon 2020 is helping to achieve this with its emphasis on excellent science, industrial leadership and tackling societal challenges. The goal is to ensure Europe produces world-class science, removes barriers to innovation and makes it easier for the public and private sectors to work together in delivering innovation.

Horizon 2020 is open to everyone, with a simple structure that reduces red tape and time so participants can focus on what is really important. This approach makes sure new projects get off the ground quickly – and achieve results faster.



# IPIC 2019

6th International Physical Internet Conference | London

**Tuesday 9th July 2019**

09:00 - 10:00 | Registration

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10:00 - 10:45 | Opening Ceremony

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10:45 - 12:15 | Plenary:  
A Hyperconnect Transport System Supporting the Physical Internet

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12:15 - 12:30 | Minister of State – Michael Ellis MP

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12:30 - 13:30 | Lunch & Exhibition

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13:30 - 15:00 | Sessions:  
Rail Freight Innovation for the Physical Internet  
Autonomous Road Transport & Logistics Operations  
Ports & Hubs as the PI Cornerstone

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15:00 - 15:30 | Coffee Break

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15:30 - 17:00 | Sessions:  
Trade Facilitation enabled by Interconnectivity  
Revisiting Transport of Goods Modes: Pipelines, Tubes & Hyperloop  
Routing & Sychromodality

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17:00 - 18:30 | Start-up & Ventures Pitch & Awards

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## 09:00 - 10:00 | Registration

When you arrive at Church House you will see a small archway with a security cabin and a gate, next to Westminster Abbey. Go through the archway into Dean's Yard and head towards the large building facing you at the end of the yard – this is Church House.

You will find the reception in front of you on arrival.

## 10:00 - 10:45 | Opening Ceremony

### Welcome

Representatives from European Commission, Connected Places Catapult & ALICE open IPIIC 2019.

- **Herald Reuijters**. Director Investment, Innovative and Sustainable Transport, European Commission DG-MOVE
- **Nicola Yates OBE**. CEO, Connected Places Catapult
- **Sergio Barbarino**. Chairman ALICE & Procter & Gamble

## 10:45 - 12:15 | Plenary: A Hyperconnect Transport System Supporting the Physical Internet

Transportation is the backbone of logistics and the physical internet. In order to maximise the benefit of an open and interconnected network, transport modes need to operate in a seamless and interconnected way. Physical, digital and financial flows need to be fully interoperable to achieve a truly integrated transport system for sustainable and efficient logistics.

In this plenary session, we will address the subject by bringing the logistics dimension to the discussion and requirements. Afterwards, during the panel, we will get the views of high level representatives from the European Commission and the different transport modes.

### Chair:

**Sergio Barbarino**. Chairman ALICE, Procter & Gamble

### Keynotes:

**Helen Wylde**. Connected Places Catapult (CPC)

**Thomas Bagge**. Digital Container Shipping Association (DCSA)

### Panellists:

**Jean-Francois Aguinaga**. European Commission, DG RTD

**Carlo Borghini**. Shift2Rail

**Dr Stephan Neugebauer**. European Road Transport Research Advisory Council (ERTRAC) and BMW

**Torsten Klimke**. Deputy Head of Unit Innovation & Research, European Commission, DG Mobility & Transport

## PLENARY SPEAKERS



Sergio Barbarino is a Research Fellow of Procter & Gamble Research & Development organisation and Chairman of ALICE, the EU Innovation Platform for Logistic aimed at realising the Physical Internet. Born in Naples, Italy, Sergio has a master degree in Chemical Engineering from the University of Napoli Federico II and an MBA from the Solvay Business School in Brussels and is a Fellow Member of the Royal Society of Chemistry.

In 2007, Sergio created the first group of Logistic R&D within Procter & Gamble, called Supply Network Innovation Center, of which he is the Scientific coordinator. He has been leading the logistic chapter in the informal Industrial Advisory Board of the European Green Car Initiative and EIRAC, the Intermodal Advisory Council, now folded into ALICE of which Sergio is today the Chairman and for which he has been leading the Collaboration and Coordination Workgroup since the inception.

Sergio has been the scientific leader of 2 EU FP7 projects: the C0<sup>3</sup> consortium aiming at increasing shipper collaboration on Logistics in Europe and Modulushca, aimed at the development of new shareable and reusable logistic standard modules for the last mile delivery. Sergio has developed the manufacturing processes of many well known P&G Brands (e.g. Mr. Clean, Antikal,) and has been the chief designer for P&G of Innovative Liquid Manufacturing systems for developing markets. He is responsible for the P&G Academic network in Supply Chain and Logistics and has been visiting professor – among others at the Ecole des Mines de Paris, the City University of London, Laval University Quebec, Solvay Brussels School, ZLC Zaragoza. Sergio is an active rower and has been Social Director at the Royal Sport Nautique de Bruxelles in 2011-2015. Sergio has also a long history of LGBT rights activism: he has been a founding member of DIGAYPROJECT in Rome in 2000, of the BBA in Belgium in 2003 and the GABLE Group at Procter & Gamble in Brussels in 2014.



Helen joined Connected Places Catapult from her position as Managing Director UK & Ireland for Benelux company BringMe. During her career, Helen has specialised in shaping and delivering high-yield transformation, start-up, turnaround and growth strategies in both smaller companies and FTSE 100 players across the Telecommunications, Technology, Financial Services, Retail and Logistics arenas.

Prior to BringMe Helen was Sales & Marketing Director for Parclforce Worldwide. Helen has also worked as a Non-Executive Director and independent consultant, both in the UK and internationally. In addition, Helen has worked in a number of senior commercial positions at Lloyds TSB, ADT Tyco, O2 and Vodafone.



In April 2019 Thomas was appointed Managing Director and CEO of Digital Container Shipping Association, a neutral and non-profit association founded by A.P. Moller – Maersk, CMA CGM, Hapag-Lloyd, MSC and ONE.

Prior to joining DCSA, Thomas has been involved in various transformation activities covering people, process and technology over the past twelve years in Maersk. In addition to his transformational work, Thomas has worked with the Executive Board of by A.P. Moller – Maersk on strategy and strategic change. Most recently, Thomas held the position as adviser to the CIO on Strategy and Digital Transformation.

Thomas brings with him about two decades of working in the transportation and logistics industry, where he has an in-depth understanding of both industry drivers, as well as the challenges experienced by the customers.

Thomas holds a degree in Applied Finance from Copenhagen Business School as well as an Executive MBA. Aside from the role as CEO of DCSA, Thomas holds a number of board positions in other organisations.



Jean-François AGUINAGA is Head of Unit at the European Commission.

He was trained in leading business schools (INSEAD; Ecole Supérieure de Commerce de Paris). His PhD in roman languages and civilisations was received from the University of Paris, as well as his grade in public administration.

He joined the European Commission in September 1994, within a team in charge of economic co-operation with Latin America.

In 2002, he joined the Directorate General Enterprise and Industry (now DG GROW) as sherpa to elaborate and develop the financial instruments for SMEs (2007-2013), in liaison with the European Investment Fund (EIB Group). Between 2006 and 2010, he was first responsible for the EIC network, then for the phasing-in of the Enterprise Europe Network, the biggest network of business and innovation services ever set-up with the support of the European Commission. Between 2011 and 2015, he managed the Unit dealing with “textiles, fashion, design and creative industries” dealing with internal market and industrial policy topics. In 2015 and 2016, he led the Unit in charge of European standardisation for growth.

Since January 2017, he has managed in DG RTD the Unit in charge of surface transports policy, which merged in 2019 with urban systems.



Mr Carlo Borghini is responsible for the overall management of the Shift2Rail Joint Undertaking activities since he took up the position of Executive Director in February 2016. Prior to this posting, Mr Borghini held different senior management positions in different domains in private and international organisation, at corporate level.

Mr Borghini holds a Master Degree equivalent in Business Economics and speaks Italian, French and English. He is married with three children.



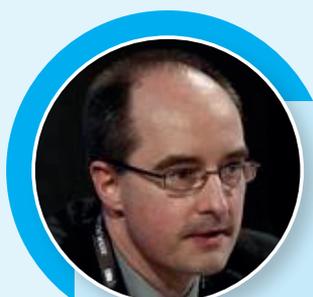
Dr Stephan Neugebauer is Director Global Research Cooperation at BMW Group and Chairman of European Road Transport Research Advisory Council (ERTRAC) since 2015.

He completed his university studies in mechanical engineering at the Technical University of Munich. He was a scholarship holder of Hanns-Seidel-Foundation. After this, while being a research assistant at the “Institute of Internal Combustion Engines and Vehicles”, he completed his doctorate by obtaining the title of Dr.-Ing.

Stephan started with BMW in the diesel engine development department in Steyr (Austria). In 1998, he returned to Munich in different functions in the development of BMW Gasoline Engines.

In 2005, he was transferred to the total vehicle development, taking over a new function as Head of the Energy Management Department and later as Head of the Thermal Management Department.

From 2012 to 2015, Stephan Neugebauer was Head of Vehicle Project, current BMW 3 series and 4 series.



Torsten Klimke is deputy Head of the Unit dealing with innovation and research in the European Commission’s Directorate General on Transport and Mobility (DG MOVE). Previously he worked in the maritime and aviation sectors in DG MOVE and DG Enterprise. Having studied electrical engineering, Torsten worked in several managerial and technical positions in a private air traffic management company.

12:15 - 12:30 | Minister of State – Michael Ellis MP

Michael Ellis was appointed as a Minister of State at the Department for Transport on 23rd May 2019. He was previously Parliamentary Under Secretary of State at the Department for Digital, Culture, Media and Sport from January 2018 to May 2019.

He was Deputy Leader of the House of Commons from 17th July 2016 to 8th January 2018.

He was elected Conservative MP for Northampton North in May 2010.



12:30 - 13:30 | Lunch and Exhibition

13:30 - 15:00 | Sessions:

**Rail Freight Innovation for the Physical Internet**

Digitalisation is enabling new concepts and innovation in rail freight to provide the required flexibility and reliability to the rail freight system meeting end users demand. In this session, we will revisit ongoing efforts in the rail sector to meet the requirements of the physical internet. Logistics on demand is growing in interest as a concept in the sector paving the way towards physical Internet. This means planning and scheduling in real-time and synchronised with customer demand, ensuring the availability of flexible, interchangeable, multipurpose and smart transport units to increase handling flexibility and infrastructure utilisation; and the development of automated yards, intermodal hubs, ports and cross-modal interchange locations.

**Chair:**

**Carlo M Borghini.** Executive Director, SHIFT2RAIL Joint Undertaking

**Speakers:**

**Filip Kitanoski.** Head of Department Rail Systems Research, Research Centre Virtual Vehicle, Graz  
*Presenting: Digital Freight Rail Operations within Shift2Rail Innovation Programme 5*

**Keith Dierkx.** Global Industry Leader for Rail & Freight Logistics, IBM  
*Presenting: AI in Freight Rail and Multi Modal Transport*

**Florence Delalande.** Rail Business Unit Director, Traxens  
*Presenting: Innovative IoT services for rail freight connectivity*

**Kelvin Davies.** Innovation Lead – Rail, Innovate UK  
*Presenting: Rail Freight Innovation in the UK*





## Autonomous Road Transport & Logistics Operations

Automation technologies will re-shape the future of freight transport and logistics and could support the progress towards the Physical Internet by removing barriers of physical interconnectivity of transport. Moreover, new freight transport and logistics organisational structures, processes and business models will be brought into the market. The aim of this session is to share potentials and cases of automation to increase efficiency of freight transport and logistics operations as well as the potential contribution to pave the way towards physical Internet. Advances at European level and European Commission supporting programmes and projects will be shared.

### Chair:

**Mats Rosenquist.** Collaboration Advocacy, Volvo Group Trucks Technology

### Speakers:

**Dr. Stephan Neugebauer.** Chairman of European Road Transport Research Advisory Council (ERTRAC) and Director Global Research Cooperation at BMW)

*Presenting: Be focussed – a multi stakeholder proposal for future research collaboration*

**Guido Sacchetto.** Policy Officer, European Commission, DG RTD

*Presenting: Autonomous Transport European Research Outlook and the future Horizon Europe Programme*

**Hans Schurmans.** Director Logistics Operations & Transformation, Proximus

*Presenting: The vision of a shipper and a logistics service provider*

**Dr Oliver Schauer.** Professor, University of Applied Sciences Upper Austria – LOGISTIKUM

*Presenting: Revealing mutual Relationships between Truck Platooning and Smart Hyperconnected Physical Internet Systems*

### Posters presented in this session:

*Intelligent Road Space Management for Freight' (IRoMF).* **Simon Barnes**

*Automated delivery of shipments in urban areas.* **Franz Kopica, Walter Morales and Cristina Olaverri-Monreal**

15:00 - 15:30 | Coffee Break

15:30 - 17:00 | Sessions:

### Trade Facilitation enabled by Interconnectivity

Full interconnectivity is key to enable trade so flows of licit goods, information and finance can make logistics chains run independently of the administrative, customs and other requirements. In this session we will gather presentations from different stakeholders that are working on concrete solutions to ensure seamless flows of goods from and to the United Kingdom independently of the future relation of the country with Europe: THREATS to the supply chain, OPPORTUNITY to survive and thrive, WEAKNESS in Brexit planning and STRENGTH in preparation will be addressed. Speakers will look at the border process challenges and how to make those work. The ability to excel and stand out from the crowd. The pit-falls in relying on others and the strength one can derive from careful planning, logistic innovation and technology overlays.

#### Chair:

**Dr Mike Short CBE.** Chief Scientific Adviser, Department for International Trade (UK)

#### Speakers:

**Robert Hardy.** Operations Director, Oakland Invicta Limited

*Presenting: Brexit a SWOT analysis in reverse*

**Keith Dierkx.** Global Industry Leader for Rail  
& Freight Logistics, IBM

**Nuno Bento.** CTO, MIXMOVE

*Presenting: Trade Facilitation and the Physical Internet*

**Jaco Voorspuij.** Senior Manager Transport and Logistics, GS1

*Presenting: Cross border procedures in the Physical Internet*



#### Posters presented in this session:

*Intelligent Road Space Management for Freight' (IRoMF).* **Simon Barnes**

## Revisiting Transport of Goods Modes: Pipelines, Tubes and Hyperloop

The session revisiting transport of goods modes: pipelines, tubes and hyperloop will present different state-of-the-art approaches to the fifth mode of transport. Three alternative modes as well as a view on how to manage and integrate such new modes will be presented and discussed in an interactive panel discussion. The session will provide a clear understanding of the different alternatives, what is and what is not, clarify the added value of the concepts and discuss the relevance to the core concept of Physical Internet.



### Chair:

**Kris Neyens.** Manager Internationalisation, VIL Flanders Innovation Cluster for Logistics  
*Presenting: Could the Hyperloop enhance the Physical Internet's efficiency?*

### Speakers:

**Phill Davies.** Co-Founder & Commercial Director at Magway Limited  
*Presenting: A revolutionary delivery utility*

**Dr Bart Vannieuwenhuysse.** Chairman Mobility Working group BIG – FPTI, TRI-VIZOR  
*Presenting: New governance models to integrate tubes in a multimodal transport system*

**Dr Roger Miles.** Owner, Mole Solutions  
*Presenting: Underground Logistics Systems – The Freight Transport Mode for 21st Century Supply Chains*

## Routing and Sychromodality

In this session we will revisit latest research advances in regard to routing through the physical internet. A few key research papers and contributions will be shared in this session.

### Chair:

**Lori Tavasszy.** TY Delft

### Paper contributions presented in this session:

*Conceptual Model of a Decentralised Transport Organisation in the Increasingly Uncertain Transport Environment of the Physical Internet.* Georg Brunthaller, **Georg Schett**, Christina Hess and Stefanie Kritzing.

*Decision making in a Dynamic Transportation Network: a Multi-Objective Approach.* Max Ortega Del Vecchyo, **Frank Phillipson** and Alex Sangers.

*Reduction of Variables for Solving Logistic Flow Problems.* Kishan Kalicharan, **Frank Phillipson**, Alex Sangers and Myrte De Juncker.

*User Equilibrium in an Agent-Based Transportation Space-Time Network.* Lianne Bruijns, **Frank Phillipson** and Alex Sangers.

*Sychromodality in the Physical Internet: Real-time Switching in a Multimodal Network with Stochastic Lead Times.* **Hannah Yee**, Joren Gijsbrechts and Robert Boute.

*The Digital Twin concept and its role in reducing uncertainty in sychromodal transport.* **Tomas Ambra**, An Caris and Cathy Macharis.



17:00 - 18:30 | Start-up & Ventures Pitch & Awards

**Chair:**

**Paola Cossu**, CEO, FIT Consulting and SENSE H2020 Project Consortium

A few Start-ups have been selected as finalists out of the IPIC 2019 Call for Start-ups & Ventures. In this session, the candidates will pitch for their company and the Physical Internet Community will assess their potential and contribution to the implementation of Physical Internet concepts. Based on the opinion of the audience and the jury, the IPIC 2019 Start-up Award will be awarded. *The selected candidates pitching will be:*

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**Capillar.it**

*Business intelligence, data strategies and architecture solutions for clean, Smart City logistics*

**Javi Esquillor**, Flows & scales

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**Last Mile Team**

*Last Mile Digital Platform*

**Angel Batalla**, Founder and CEO

[www.lastmile.team](http://www.lastmile.team)

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**Ogoship**

*Your digital warehouse network*

**Henri Mehto**, COO at Ogoship

[www.ogoship.com](http://www.ogoship.com)

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**Ponera Group**

*Paving the Way Towards Sustainable Logistics*

**Matthew Reali**, Co-founder and Business Development

[www.poneragroup.com](http://www.poneragroup.com)



# CATAPULT

## Connected Places

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The new name for  
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or follow us on twitter at @cpcatapult



# IPIC 2019

## 6th International Physical Internet Conference | London

**Wednesday 10th July 2019**

08:00 - 08:30 | Registration

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08:30 - 10:30 | Sessions:  
ALICE/SENSE Roadmap Workshop  
SELIS Workshop  
Cargo Bundling & Logistics Optimisation

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10:30 - 11:00 | Coffee Break

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11:00 - 12:30 | Plenary:  
Physical Internet answering to Retail & City Logistics Challenges

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12:30 - 13:30 | Lunch & Exhibition

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13:30 - 15:00 | Sessions:  
Sustainable Distribution & E-Commerce Logistics  
Physical Internet Retail & Distribution Networks  
Transport Collaboration, Interconnected & Shared Warehouses

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15:00 - 15:30 | Coffee Break

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15:30 - 17:00 | Sessions:  
Urban Logistics & Parcel Distribution  
LOGISTAR Workshop  
Physical Internet Access & Adoption

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17:00 - 18:30 | Entertainment Activities (Optional)

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19:30 - 22:30 | IPIC Summer Rooftop BBQ Dinner

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### 08:00 - 08:30 | Registration

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### 08:30 - 10:30 | Sessions:

#### **ALICE/SENSE PI Roadmap Workshop**

The project SENSE: Accelerating the path towards the physical Internet funded by the European Commission H2020 programme and coordinated by ALICE is developing an industry driven roadmap towards physical internet realisation. The main aim is to define the main benefits that Physical Internet concepts may bring to logistics stakeholders in the short time defining specific generations for physical internet.

In this session, chaired by ALICE, we will share and discuss the main elements of the roadmap with the Physical Internet Community and will gather your feedback that will define the main pathways of development and support for ALICE accelerating the path towards the Physical Internet.

#### **Agenda:**

**08:30** – General (short) introduction to SENSE project.  
Fernando Liesa. Secretary General, ALICE.

**08:40** – Physical Internet Roadmap: Main streams and generations.  
Andreas Nettsträter. Fraunhofer IML & Sergio Barbarino, ALICE Chair and P&G

**09:00** – Getting the Physical Internet Community Feedback on the roadmap (all attendees)

**10:30** – End of workshop

**Project duration:** 01/10/2017-30/03/2020

**Grant agreement ID:** 769967



## SELIS Workshop

### SELIS: Towards a Shared European Logistics Intelligent Information Space



#### Project Fiche

SELIS unifies business, technology and capacity innovation for Green Logistics in order to deliver a Shared European Logistics Intelligent Information Space with a clear path towards 30% reduction of energy consumption and greenhouse gas emissions.

An exceptionally strong consortium of 38 European logistics stakeholders and ICT providers are leveraging EU IP from over 40 projects so as to create proof of concept Common Communication and navigation platforms for pan-European logistics applications, which will be deployed in eight living labs representing the principal logistics communities. SELIS embraces a wide spectrum of logistics perspectives and creates a unifying operational and strategic business innovation agenda for Green Logistics.

Project results will be available in the form of easily deployable cloud infrastructure, aligned with leading industry regulations, operating standards and recognised best-practice to guarantee Quality of Service, Quality of Experience, and High Availability.

**Project start:** 01/09/2016

**Duration:** 36 months

**GA no:** 690588

**Coordinator:** Inlecom Systems Ltd.

**Project website:** [www.selisproject.eu](http://www.selisproject.eu)



## Cargo Bundling & Logistics Optimisation

In this combined session we will revisit latest research advances in the field, running projects such as LOGISTAR and industry initiatives.



### Chair:

**Shenle Pan.** Mines ParisTech – PSL and PI Pioneer Award 2017

Several contributions will be shared:

*Trends changing the shape of supply chain networks.* Andrew Palmer. Director, Preston Solutions Ltd.

*Enhanced data management techniques for real time logistics planning and scheduling.* Miguel Van Asch. Innovation Project Manager, Ahlers Belgium.

*Logistics tracking and synchronisation solution of CommaTech.* Dr. Xiang T.R. Kong. CEO, Comma Technology Ltd.

*A New 'Gain-Sharing' Business Model to facilitate the Physical Internet via a Competitive, Collaborative Logistics Platform.* **Alix Vargas**, Andrew Traill, Carmen Fuster and **David Corne**.

### Posters presented in this session:

*Freight Share Lab: New 'Gain-Sharing' Collaborative Logistics Platform Offering a Stronger Business Case and Accelerating Developments Towards the Physical Internet.* **Alix Vargas**, Andrew Traill, Carmen Fuster and **David Corne**.

10:30 - 11:00 | Coffee Break

11:00 - 12:30 | Plenary:  
Physical Internet answering to Retail & City Logistics Challenges

Retail Industry is in full transformation, as e-commerce has opened a very diverse way to reach the consumers. This trend is enhancing people quality of life, and it is also an opportunity to deliver goods in a sustainable way, as highly efficient professional logistics and parcel services may replace inefficient shopping trips. However, successfully managing this paradigm change is creating a lot of pressure on cities, logistics service providers and integrators that are also facing tremendous challenges due to the needs from cities to ensure safety and a good air quality. These opportunities and associated impacts will be discussed in this session bringing together the perspective of the cities, logistics service providers, integrators and research. In particular, the expected contribution of Physical Internet concepts to these challenges will be brought forward.

**Chair:**

**Benoit Montreuil.** Professor & Coca-Cola Material Handling & Distribution Chair. Georgia Tech

**Keynotes:**

**Prof. Phil Blythe CEng FIET.** DfT Chief Scientific Adviser. Professor of Intelligent Transport Systems (ITS) at Newcastle University

**Alex Williams.** Director of City Planning at Transport for London (TfL)

**Panellists:**

**Richard Wilding OBE.** Chartered Institute for Logistics/Cranfield School of Management

**François Regis Le Tourneau.** Corporate Supply Chain Standards and Prospective Director at L'Oréal

**Christian Lafrance.** CEO, Cleardestination. **WINNER IPIC2017 VENTURE AWARDS**



## PLENARY SPEAKERS



Dr. Montreuil is leading the International Physical Internet Initiative, engaging academic, government leaders worldwide into research and innovation projects on smart, hyperconnected and sustainable logistics, supply chains, transportation, businesses and regions. His main research interests generically lie in developing concepts, methodologies and technologies for creating, optimising, transforming and enabling businesses, supply chains and value creation networks to thrive in a fast evolving hyperconnected world. From 2000 to 2014, Dr. Montreuil has held the Canada Research Chair in Business Engineering.

He is a founding member of the CIRRELT Interuniversity Research Centre on Enterprise Networks, Logistics and Transportation. He is also past president of the College-Industry Council on Material Handling Education and its Liaison to the Board of Governors of MHI, the North American industry association of material handling, logistics and supply chain solutions and technology providers. Dr. Montreuil graduated in 1978 from the Université du Québec à Trois-Rivières (UQTR). He earned a master's and a Ph.D. in Industrial Engineering from Georgia Tech in 1980 and 1982 respectively. After serving on the industrial engineering faculty of UQTR and Purdue University, from 1988 to 2014, he was a Professor of operations and decisions systems in the faculty of Business Administration at Université Laval in Quebec City, Canada.



Professor Phil Blythe is Professor of Intelligent Transport Systems (ITS) at Newcastle University. Prior to joining the Department for Transport he was Director of the Transport Operations Research Group for 13 years.

Phil's academic focus has been the development of ITS – the use of information, communications and computing technology applied to transport. His research portfolio covers a wide range of areas where ITS has been applied to transport including: road to

vehicle communications; road user charging systems; ITS for assistive mobility, smartcards and radio frequency identification (RFID), wireless / smartdust technologies, electromobility and future intelligent infrastructure.

His research is also forward-looking and attempts to bridge the technology-policy gap in terms of what technologies may evolve to meet future policy objectives or influence future policy thinking to meet the challenges.

Phil chairs the Institute of Engineering and Technology (IET)'s Transport Policy Panel, is a member of their Lectures Committee and supports the IET in the UK and abroad in areas such intelligent transport, connected and autonomous vehicles, electro-mobility and smart cities and on the Big Data / Internet of Things agendas. In March 2012 Phil was awarded the Reece-Hills Medal for a lifetime personal contribution to ITS.

In his role at the Department for Transport Phil provides a challenge function to the department on the use of science and engineering evidence in policy-making and also ensures the department is well-informed on new innovations and technologies that may impact on the delivery of transport schemes. He builds, supports and champions the science and engineering community within the department and associated agencies. Through the Chief Scientific Adviser network he ensures that there is significant cross-government cooperation on science, engineering and technology issues.



Alex is the Director of City Planning at Transport for London.

His responsibilities are:

- Working with the Mayor to develop/deliver his Transport Strategy for London
- Develop and gain powers for major infrastructure projects such as tube extensions/new river crossings
- Provide transport advice on Land Use Planning applications referable to the Mayor; Manage relationship with London Boroughs

- Ensure our work is underpinned by a robust evidence base through modelling and analysis

Alex was formally appointed to the post in April 2017 having held it on an interim basis since April 2016. Before that he was Director of Borough Planning (from 2007). Prior to TfL he worked in LB Camden and LB Ealing.



Professor Richard Wilding OBE, BSc, PhD, CEng, Eur Ing, FIET, FCILT, FCIPS, PFHEA is recognised globally for his thought leadership in Logistics & Supply Chain Management.

Richard is a highly acclaimed presenter and regularly speaks at Industrial Conferences and has undertaken lecture tours of Europe and Asia at the invitation of local Universities; Confederations of Industry. He is passionate about taking and creating academic knowledge that creates ACTION in business.

He has published widely in the area of supply chain management and is Editorial Advisor to a number of top journals in the area. Richard was appointed in 2005 as the first ever Full Professor and Chair of “Supply Chain Risk Management” in the World in recognition of his significant contribution to this subject area.



François-Régis Le Tourneau is of French and German nationality and speaks multiple languages. He has a strong track record in executive positions in Controlling & Finance as well as Supply Chain Management.

During the last 25 years at L'Oréal, François-Régis has managed organisational and transformational projects on selective and consumer channels with impacts on large teams.

He is a team leader with a strong focus on identification and development of individuals skilled to collaborate. His role is always to anticipate, innovate and obtain results in complex organisations.

He is now in charge of setting and digitalizing the referential and standards for the company. He runs subsidiary compliance assessment along the supply chain and benchmarks organizations' performance.

François-Régis develops prospective watch of trends and innovation in Supply Chain on a global scale. He also defines training programs and vision for the Supply Chain community.

The management of Supply Chain transformation and its exposure to the outside world is one of his passions along with the external representation at leading professional organizations. As such he is member of the board of ASLOG (the French Supply Chain Association), BVL (the German Logistic Association) and ALICE (Alliance for Logistic Innovation & Cooperation in Europe).

Last but not least, he defines, deploys and animates the Corporate Social Responsibility Program for Supply Chain, embedded in the Sharing Beauty With All Coporate Program of L'Oréal.



Christian is the founder of a logistics software company, ClearDestination, which develops a delivery logistics platform for big and bulky items. Clear Destination is currently being used by major manufacturers and retailers across North America.

He firmly believe that smart logistics networks are currently the missing link in today's hyper competitive market. Thanks to tight interoperability, fully integrated operational management and seamless communications among all stakeholders in delivery logistics value chain,

he envisions solutions for manufacturers, retailers and carriers to improve their delivery networks, maximise efficiency, reduce costs and improve customer experience.

12:30 - 13:30 | Lunch & Exhibition

13:30 - 15:00 | Sessions:

### Sustainable Distribution & E-Commerce Logistics

Environment, pollution and congestion are high on the agenda of both cities and private stakeholders operating in last mile distribution. Cities need to ensure good quality of life which means securing healthy conditions while providing citizens with easy access to services and goods. Industry needs to reach their customers while keeping themselves highly competitive and sustainable. E-commerce is changing the way freight services are offered in cities. In this session we will discuss how the Physical Internet can help to solve the nuances of this new paradigm.



#### Chair:

**Charlotte Migne.** Group Sustainable Development Director, FM Logistic

#### Speakers:

**Richard Wilding OBE.** Chartered Institute for Logistics & Cranfield School of Management  
*Presenting: Presenting: An overview on sustainable distribution and e-commerce*

**François-Régis Le Tourneau.** Corporate Supply Chain Standards and Prospective Director, L'Oréal  
*Presenting: An industry perspective on sustainable distribution and city logistics*

**Jeremy Bassinder.** Executive Partner, IBM  
*Data Leverage in an Urban Environment*

**Devrim Kara.** Sales Director, PTV UK  
*Presenting: Modelling & Designing Cities for PI Distribution*

#### Poster presented in this session:

*On-demand transshipment of freight deliveries in urban areas: A physical Internet-enabled multi-mode mobility service.* **Olivier Labarthe, Walid Klibi, Jean-Christophe Deschamps** and Benoit Montreuil.



## Physical Internet Retail & Distribution Networks

In this session we will revisit latest research advances and benefits of Physical Internet concepts implementations in Retail and distribution networks.

### Chair:

**Luo Hao.** Associate Professor & Head, Department of Transportation Economics and Logistics Management College of Economics, Shenzhen Univ

### Paper contributions presented in this session:

*Digital Twin-enabled Synchronization Mechanism for Pick-and-Sort Ecommerce Order Fulfillment.*

**Kong Xiangtianrui**, George Q. Huang and Hao Luo

*Physical Internet enabled bulky goods delivery and pick up solution in city logistics.* Siyu Tian, **Hao Luo** and Xuan Yang

*Hyperconnected Megacity Logistics: Multi-Tier Territory Clustering and Multi-Plane Meshed Hub Network Design.* **Dan Tu** and Benoit Montreuil

*Optimizing Product Availability in a Hyperconnected Network of Dealerships.* **Jinyong Yim**, Shahab Derhami and Benoit Montreuil

*Hyperconnected Showcasing-Based Retail and Distribution of High-Value Products.* **Jisoo Park**, Benoit Montreuil, Iman Dayarian and Shahab Derhami

### Poster presented in this session:

*Hyperconnected Logistics for Farm-to-Table Platforms.* **Isabella Sanders**, Jiali Zhao and Benoit Montreuil.

## Transport Collaboration, Interconnected and Shared Warehouses

Transport collaboration and interconnected and shared warehouses are concepts that are gaining importance. Several research and innovation projects and initiatives have addressed these concepts lately that we see now being realised in practice. In this session we will review some successful cases already in the market as well as current and future challenges, trends and outlook.

### Chair:

**Kirk't Hooft.** ALICE Strategy and Communications Director

### Speakers:

**Bart Vannieuwenhuysse.** Co-founder, TRI-VIZOR  
*Presenting: Cargill and Skretting Horizontal Collaboration Case*

**Nikolina Apostolova-Riehl.** CEO & Founder, Stockbooking  
*Presenting: The big jump: from shared warehouses to interconnected warehousing network*

**Marianne Richeux & Peter Murphy.** Program Lead for Zero Waste World & Development Collaborative Supply Chain Solutions, CHEP  
*Presenting: Move more with less – CHEP transport collaboration programme*

**Knut Fedrik Ramstad.** CEO MIXMOVE  
*Presenting: Transport Collaboration Shared and Interconnected Warehouses*

**Jon Sleeman.** Head of EMEA Industrial & Logistics Research, JLL  
*Presenting: Interconnected & Shared Warehousing: The Real State Perspective*



## Urban Logistics & Parcel Distribution

In this session we will revisit latest research advances on Physical Internet urban logistics and parcel distribution concepts.



### Chair:

**Walid Klibi.** KEDGE Business School & PI Builder Award 2018

### Invited presentations:

*Last mile harmonised parcel label.* Agata Horzela, T&L Manager, GS1 Poland & Malgorzata Kirchner, Acting Deputy Director for Sales and Commercialization, Lukaszewicz – Institute of Logistics and Warehousing

### Paper Contributions presented in this session:

*Parcel lockers for the pickup and delivery problem with transshipment in Hyper-connected City logistics.* **Chaojie Guo**, Russell Thompson and Greg Foliente.

*On the Potentials and Dilemmas of Cooperative/White-Label Deliveries based on Selected Austrian Demonstration Cases.* **Matthias Prandtstetter**, Benjamin Biesinger, Bin Hu, Pamela Nolz et al.

*Parcel Lockers for B2B Distribution in Central Business Districts.* **Russell Thompson**, Lele Zhang, Michael Stokoe and Hadi Ghaderi

*Integrating passenger and freight transport via public transport based crowdshipping for sustainable last-mile deliveries.* Edoardo Marcucci, **Valerio Gatta**, Marialisa Nigro, Michela Le Pira and Michele D. Simoni

*Physical Internet Enabled Hyperconnected Fulfillment of Delivery Time Sensitive E-Commerce Orders.* **Nayeon Kim**, Benoit Montreuil and Walid Klibi

*Self-organisation in parcel distribution – SOLiD's first results.* **Hans Quak**, Elisah Van Kempen, Bernd Van Dijk and Frank Philipson

### Poster presented in this session:

*Decentralised freight intelligence in the parcel delivery industry: An experimental study into the impact on routing efficiency.* Rosemarie M. Cramer & **Paul Buijs**.

## LOGISTAR Workshop

LOGISTAR is a three year EU Horizon 2020 funded project ([www.logistar-project.eu/](http://www.logistar-project.eu/)) which seeks to develop a system to allow effective planning and optimisation of collaborative and synchromodal freight transport operations using real time data gathered from an interconnected environment. It will develop state of the art real time decision support and visualisation tools using advanced technology and apply it in three living lab use cases.



The aim of this workshop is to introduce the project to a wider audience who can provide diverse thoughts and ideas about our approach and can objectively consider the way we intend to develop the system to meet the needs of a user community. The attendees will be asked to provide guidance as to the project's direction and will promote the project by encouraging and supporting the exploration of new ideas. It will also enable consortium partners to establish direct contact with representatives from selected companies to strengthen the business relevance of the outputs. This will help the consortium partners to gain valuable market feedback for the further development and success of the project.

It is expected that attendees at the workshop will be a balanced mix of experts from a wide range of companies and organisations, drawn from across Europe, and embracing a range of interests and knowledge of collaborative logistics and synchromodality issues in the broader context of the EU and international freight transport and logistics sector.

### Provisional Agenda:

15:30 - 15:40 – Welcome and introductions by Preston Solutions

15:40 - 16:10 – Overview of the LOGISTAR project by Deusto

16:10 - 16:55 – User needs and functional requirements by Preston Solutions

16:55 - 17:30 – Description of living lab use cases by Ahlers

17:30 - 18:20 – Discussion of actions and proposed approach chaired by Preston Solutions

18:20 - 18:30 – Closure and next steps



## Physical Internet Access & Adoption

### Chair:

**Eric Ballot.** Professor of Supply Chain and Logistics and Scientific Director of the Physical Internet Chair. Director Centre de Gestion Scientifique. Mines Paris Tech. PI Pioneer Award 2014

### Paper Contributions presented in this session:

*Is Collaboration Really Necessary? Or Is it Possible to Reach the Physical Internet by Internalization?* Sandra Stein, **Matthias Prandtstetter**, Fritz Starkl and Gerald Reiner

*“protoPI” – Development of a prototypical Gateway to the Physical Internet.* **Christian Landschuetzer**, Bartosz Schatzlmayr-Piekarz, Hans-Christian Graf and Florian Ehrentraut

*Comparison of Freight Transport Centralization and Decentralization in the Physical Internet Through Gamification.* Mariam Lafkihi, **Eric Ballot** and Shenle Pan

### Invited Presentations:

*Supply Chain Digitalization paving the way toward the Physical Internet Adoption.* Matthias Wurst. Director Business Development & Dennis Joswig, Business Development, INFORM GmbH

*ALICE Physical Internet Knowledge Platform: Bringing Physical Internet Community together.* Fernando Liesa. Secretary General, ALICE



17:00 - 18:30 | Entertainment Activities (Optional)

19:30 - 22:30 | IPIC Summer Rooftop BBQ Dinner



## IPIC 2019 Summer BBQ

Join us on the rooftop of 30 Euston Square, the home of the Association of General Practitioners, for a memorable evening of summer food, drinks, entertainment and networking.

Arrive to summer cocktails before indulging in a street food inspired \*BBQ followed by dessert. Watch your food being prepared in front of you and make it bespoke to your taste with live chef food stations. There will also be plenty of time for networking over a cool drink and getting to know your fellow attendees.

Embrace the stunning city views whilst enjoying giant games of Jenga, Connect 4 and table football and take your souvenir photos in the photobooth (with props!) before relaxing and networking on the beautiful decking.

Ticket entry only (please ensure you have your ticket or ID with you)

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# IPIC 2019

6th International Physical Internet Conference | London

Thursday 11th July 2019

08:00 - 08:30 | Registration

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08:30 - 10:30 | Sessions:  
ICONET Workshop  
Data Leverage for Interconnected Logistics  
Smart Containers, Intelligent Cargo & Digital Infrastructure

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10:30 - 11:00 | Coffee Break

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11:00 - 12:30 | Plenary:  
Advancing the Next Steps towards Physical Internet

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12:30 - 13:30 | Lunch & Exhibition

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13:30 - 15:00 | Sessions:  
Physical Internet Impacts & Learnings from other Networks  
Transport Systems Modularisation

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15:00 - 15:30 | Coffee Break

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15:30 - 17:00 | Closing Ceremony

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## 08:00 - 08:30 | Registration

When you arrive at Church House you will see a small archway with a security cabin and a gate, next to Westminster Abbey. Go through the archway into Dean's Yard and head towards the large building facing you at the end of the yard – this is Church House.

You will find the reception in front of you on arrival.

## 08:30 - 10:30 | Sessions:

### ICONET Workshop

ICONET, New ICT Infrastructure & Reference Architecture to Support Operations in Future PI Logistics Networks (<https://www.iconetproject.eu>) aims to establish a “cloud-based PI framework and platform”, which builds upon these latter leading-edge technologies, in a pathway that integrates PI-driven capabilities, by means of an incremental and verifiable approach that exploits progress in digital and physical interconnectivity through open and public Application Programming Interfaces (APIs).

### Agenda Part 1:

ICONET Introduction (INLECOM) – 10min

Simulation Framework in the PI context (ITAINNOVA) – 20min

GPICS presentation (ITAINNOVA) – 15min

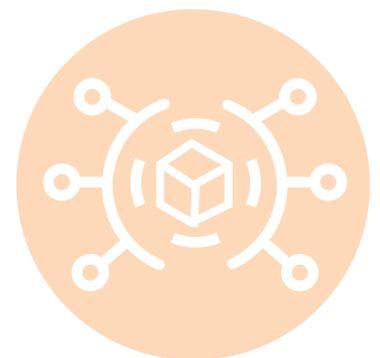
Part 1 – QA (all) – 10min

### Agenda Part 2:

Application of Simulation models in Living Labs and presentation of initial results (ITAINNOVA) – 30min

Presentation of potential improvement areas and potential questions (ITAINNOVA – INLECOM) – 10min (to trigger discussion)

Interactive session (all) – 20min



## Data Leverage for Interconnected Logistics

### Chair:

**Paul Buijs**. University of Groningen and PI Builder Award 2018

### Paper Contributions presented in this session:

*Maintaining data sovereignty in the Physical Internet: enabling data sharing as a commodity in an open, multi-tenant ecosystem.* **Simon Dalmolen**, Harrie Bastiaansen, Maarten Kollenstart, Matthijs Punter, Erwin Somers and Somayeh Djafari

*Interoperability in Logistics: An Ontology Alignment Approach.* Majid Mohammadi, **Wout Hofman** and Yao-Hua Tan

*Supply Chain Visibility Ledger.* **Wout Hofman**, Jacco Spek and Simon Dalmolen.

*Data sharing in supply and logistics networks – towards an open technical infrastructure for the Physical Internet in an open dynamic ecosystem of organizations.* Wout Hofman and Simon Dalmolen

### Invited Presentations:

*Data sharing platforms and ecosystems: SELIS and FENIX Projects.* Eusebiu Catana.  
ERTICO ITS-EUROPE



## Smart Containers, Intelligent Cargo & Digital Infrastructure

### Chair:

**Dr Angelos Amditis.** Research Director, Institute of Communication and Computer Systems (ICCS)

### Paper Contributions presented in this session:

*IoT enabling PI: towards hyperconnected and interoperable smart containers.* Francesco Marino, Stefano Bocchino, Phuong Dao, Ilias Seitanidis, Piero Castoldi and **Claudio Salvadori**

*Cognitive Logistics Operations through Secure, Dynamic and ad-hoc Collaborative Networks: The COG-LO project.* **Kostas Kalaboukas**, George Lioudakis, Mariza Koukovini, Marios Zacharias et al.

*RTPORT: the 5G-based Model-Driven Real Time Module for General Cargo Management.*

**Alexandr Tardo**, Anna Sessler, Rossella Cardone, Luca Stroppolo et al.

*Key Capabilities to Thrive at the Nexus of Supply Chain Management and Digitalization.*

**Patrick Brandtner**



### Poster presented in this session:

*New Critical Aspects for the Future Information and Communication Infrastructure of the Physical Internet.* Dovile Zulanaite, Gerke Schaap and **Nick Szirbik**

10:30 - 11:00 | Coffee Break

11:00 - 12:30 | Plenary:  
Advancing the Next Steps towards Physical Internet

The Physical Internet concept is increasing in interest. More and more companies and organizations are looking into it, progressing on research and also on implementation of the concept and even building on it as their business case. In this session we will have as keynotes different examples on how the concept is being introduced and expanding. During the panel, different perspectives will be given in regard to its development, impacts and next steps.

### Chair:

**Paola Chiarini.** DG MOVE

### Keynotes:

**Matt Whelan.** Ocado Technology

**Birgit Hendriks.** Eco2city

### Panellists:

**Ben Kraaijenhagen.** MAN Truck & Bus AG

**Bill Pawluk.** Convertible Trailer Concepts

**Knut Fredrik Ramstad.** MIXMOVE

**Marcel Huschebeck.** PTV Group

## PLENARY SPEAKERS



Matt Whelan is Head of New Technology Development at Ocado Technology. He joined Ocado Group in 2010 working on simulations of future systems, where he designed and simulated the groundbreaking grid solution used in Ocado's highly automated warehouses, the most evolved of their kind in the world.

Matt's next role was as a software architect for the bots running on the grid, encompassing the firmware, the simulation framework to test it, and the complex analytical data pipeline that feeds it. In 2016, Matt moved to Stockholm to set up a research lab, where his team work on implementations of the Ocado Smart Platform beyond retail.



Birgit Hendriks is cofounder and CEO of Eco2city. Eco2city aims at reducing negative impact of urban freight traffic by inventing and implementing new concepts on city logistics. While working for Eco2city, Birgit developed the Dutch Binnenstadservice, the concept of the Freight Circle (neighbourhood distribution combined with urban mining) and the Triple X – Triple P vision on optimising city logistics.

The newest project Eco2city is working on is establishing GoodHubs 500. The goal is to create a cooperation of 500 member-Urban Consolidation Centers (UCC) in Europe. GoodHubs 500 will contract shippers that want to enjoy the service of the UCC's.



Grown up with trucks and transport of freight and in business since mid-1982. More than 35 years of expertise in many countries worldwide.

He is leading the Foresight team, having an in-depth expertise in trend analysis, the creation of scenarios, product stewardship, mobility and logistics and public funding programs. Derived from this expertise he and his team identify the research and innovation roadmaps including project ideas to develop new concepts and new technologies meeting the challenges of the coming decades.

He held many workshops and interviews with focus groups to discuss and mirror future challenges, needs, and requirements.

He is engaged in many platforms and associations, e.g. ALICE, ERTRAC, IFRTT, Metropolregion Munich, EUCAR, and ACEA, to shape the future of a sustainable and competitive Europe.

Since October 2017, he is leading the project AEROFLEX, AERODynamic and FLEXible trucks for the next generation of long-haul freight trucks in Europe. 23 partners out of 7 European countries and Turkey. A project funded by Horizon 2020 and supported by a Sounding Board counting 45 members from industry, logistics, research institutes, associations, and policymakers.

Since December 2018, he is appointed as the Director Innovation of the EIT Urban Mobility, a consortium of 48 partners from 15 countries. EIT UM is dedicated to accelerating solutions that improve our collective use of urban spaces, while ensuring accessible, convenient, safe, efficient, sustainable and affordable multimodal mobility. The objective is to rethink urban spaces, over-coming fragmentation by integrating all urban mobility players – including cities and citizens – and increasing social inclusion and equality. His vision is sustainable mobility for freight and people, being efficient and affordable with a minimal negative impact on the environment, health, safety, and society. To achieve this, he is convinced that we need a paradigm shift in our thinking and ways of doing business. He is more than happy to support the industry and communities to face these challenges and turn them into real projects.



For more than 20 years now, Bill has been focused on the transportation sector and specifically the auto carrier industry.

Bill first founded CTM WW in North America, developed the equipment and championed the methods necessary to capture a major opportunity and solve a significant global problem for this industry.

Today, the company is in a place where we have been educating the transportation industry now for over a decade, not only on the monumental waste that exists in this industry, but on the solutions that we have developed to help overcome them. It is important to understand that the Convertible project is challenging the legacy style of doing business in automotive logistics around the world. When such systems and habits are challenged, there is resistance and hesitation unless a full and comprehensive solution can be proposed and proven.

With various hardware solutions coupled with new software and processes, we can change the status quo to something far more efficient. We are working hand in hand with the automotive industry to understand their concerns and come up with ways to mitigate and minimize the inefficiencies and maximize the benefits. Trucks, trains and ocean vessels no longer need to run empty on their returns.

Our vision is to create viable and responsible alternatives to the present inefficient process of moving finished and unfinished vehicles. Furthermore, we believe that general freight logistics can be blended with automotive logistics to gain new levels of productivity never before experienced. Wasted fuel will become a thing of the past, and we will then move on to the next step of efficiency improvements, whatever it may be.



Knut Fredrik Ramstad, MIXMOVE



Marcel Huschebeck is a Chief Logistics Research at the PTV Group Karlsruhe where he is an expert and leads the PTV logistics research projects.

Marcel is visiting lecturer at the University of applied science in Kehl teaching master students on cluster management and city logistics. Born in Offenburg, Germany, Marcel has a master degree in Economics from the University of Freiburg.

Marcel became head of department of logistics research since 2008 and formed the department called Concepts&Solutions being responsible for the R&D and prototypical implementation of software solutions in the logistics domain in PTV customer projects leading a group of up to 10 researchers. He has been core group member of the logistic chapter in the informal Industrial Advisory Board of the European Green Car Initiative, Digital Transport Logistics Forum and in the Advisory Council of ALICE.

Marcel has been the co-ordinator and scientific leader of 9 EU projects on developing topics on intermodal optimisation and synchromodality, optimising city logistics and last mile deliveries as well as on Physical Internet. Marcel is presently co-ordinator of the CLUSTER2.0 project.

12:30 - 13:30 | Lunch & Exhibition

13:30 - 15:00 | Sessions:

### Physical Internet: Overcoming Barriers and Learnings from other Networks

Transport networks are evolving in a similar way to energy, postal and communications networks, so resources and services are fully interconnected and available all this supported by digitalization. In this session we will revisit what we can learn from those other networks and which could be the impacts for transport and logistics in the physical internet. We will get an overview of the impacts for Truck Manufacturers and OEMs that physical internet will bring and how specific cases on how physical internet concepts can be implemented.

#### Chair:

**Fernando Liesa**. Secretary General, ALICE

#### Paper Contributions presented in this session:

*The bumpy road to the adoption of the Physical Internet – Overcoming barriers from a stakeholder perspective.* **Tobias Meyer** and Evi Hartmann.

*Softwarization extended to logistic networks.* Miodrag Djurica and **Wout Hofman**

*Is social capital relevant to the Physical Internet?* **Luis López-Molina, Rosario García García,** Angel Cervera, Vanessa Rodriguez Cornejo et al.

#### Invited Presentations:

*Advancing the Next Steps towards Physical Internet: Learning from other networks.* **Steffen Kaup**, Head of Transport and Logistics Future Research, Daimler AG

*Disrupting the urban logistics – The Mesh Network Approach.* Yossi Rabinovitz, CEO, Quay

#### Poster presented in this session:

*Would the Physical Internet Deliver in Poor, Deprived Areas?* Patricia Assen, Bart Louwerse and **Nick Szirbik**.

## Transport System Modularisation

Modularisation is one of the core elements facilitating the physical internet. Modulushca Project was pioneering the concept that is being further developed in research and innovation projects and in practice.

In this session we will showcase different developments in the field as well as some running concepts in practice.

### Chair:

**Bill Pawluk.** Convertible Trailer Concepts

### Speakers:

**Marcel Huschebeck.** Chief Logistics Research, PTV Group  
*Presenting: Transport Modularization, a Cluster perspective*

**Ben Kraaijenhagen.** Head of Foresight, Central Engineering, MAN Truck & Bus AG  
*Presenting: Road Vehicles Developments for the Physical Internet*

**Tom Bertens.** manager, R&D, Van Eck Trailers  
*Presenting: New Modular Logistics Units, synergies between Cluster 2.0 and AEROFLEX*

**Matthias Haubenreißer.** Senior Manager ECR & Supply Chain Management , GS1 Germany  
*Presenting: New Modular Logistics Units, synergies between Cluster 2.0 and AEROFLEX*

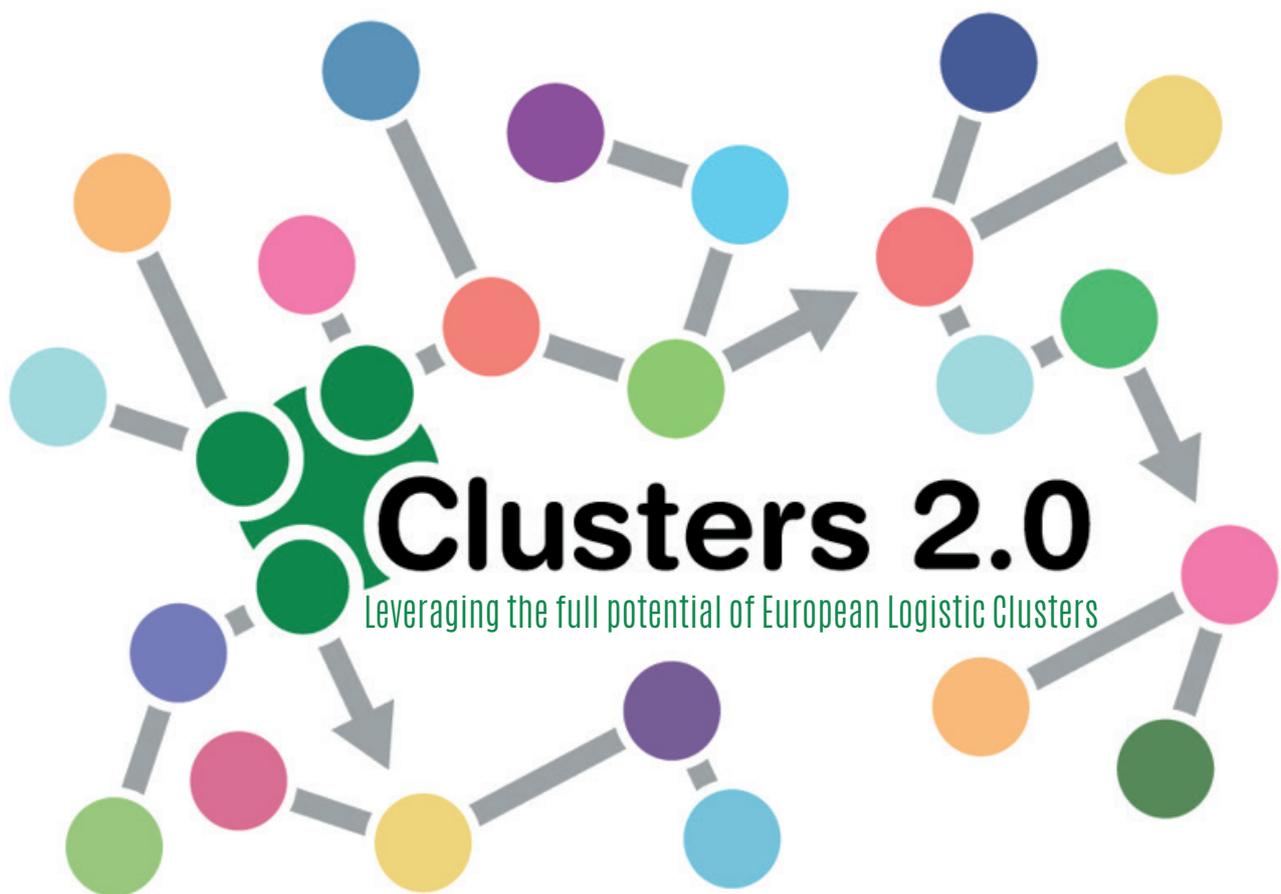


### Poster presented in this session:

*Decision support tool for containerization problems.* Sihem Be Jouida, Eric Ballot and Shenle Pan.

15:00 - 15:30 | Coffee Break

15:30 - 17:00 | Closing Ceremony



*enide*



Clusters 2.0 is a project funded under the European programme Horizon 2020. Our vision is to leverage the full potential of European Logistics Clusters for a more sustainable, efficient and fully integrated transport system. Clusters 2.0 will use an Open Network of Logistics Clusters operating in the frame of Ten-T and supporting local, regional and European development, while keeping neutral the local impacts such as congestion, noise, land use and local pollution levels.



SELIS is aimed at delivering a 'platform for pan-European logistics applications' by:

- Embracing a wide spectrum of logistics perspectives and creating a unifying operational and strategic business innovation agenda for pan European Green Logistics.
- Establishing an exceptionally strong consortium of logistics stakeholders and ICT providers, that can leverage EU IP from over 40 projects so as to create proof of concept Common Communication and navigation platforms for pan-European logistics applications deployed in 8 living labs representing the principal logistics communities.
- Establishing a research and innovation environment using the living labs to provide data than can be used for discovery of new insights that will enable continuous value creation supporting the large scale adoption of SELIS.



LOGISTAR project proposes the intensive use of Internet of Things, Open Data, Artificial Intelligence, Optimisation techniques and other ICT advances for effective planning and optimising of transport in the logistics sector. The project results will be tested in the Living Labs by the relevant stakeholders: FMCG, Logistic Transport operators and 4PL.



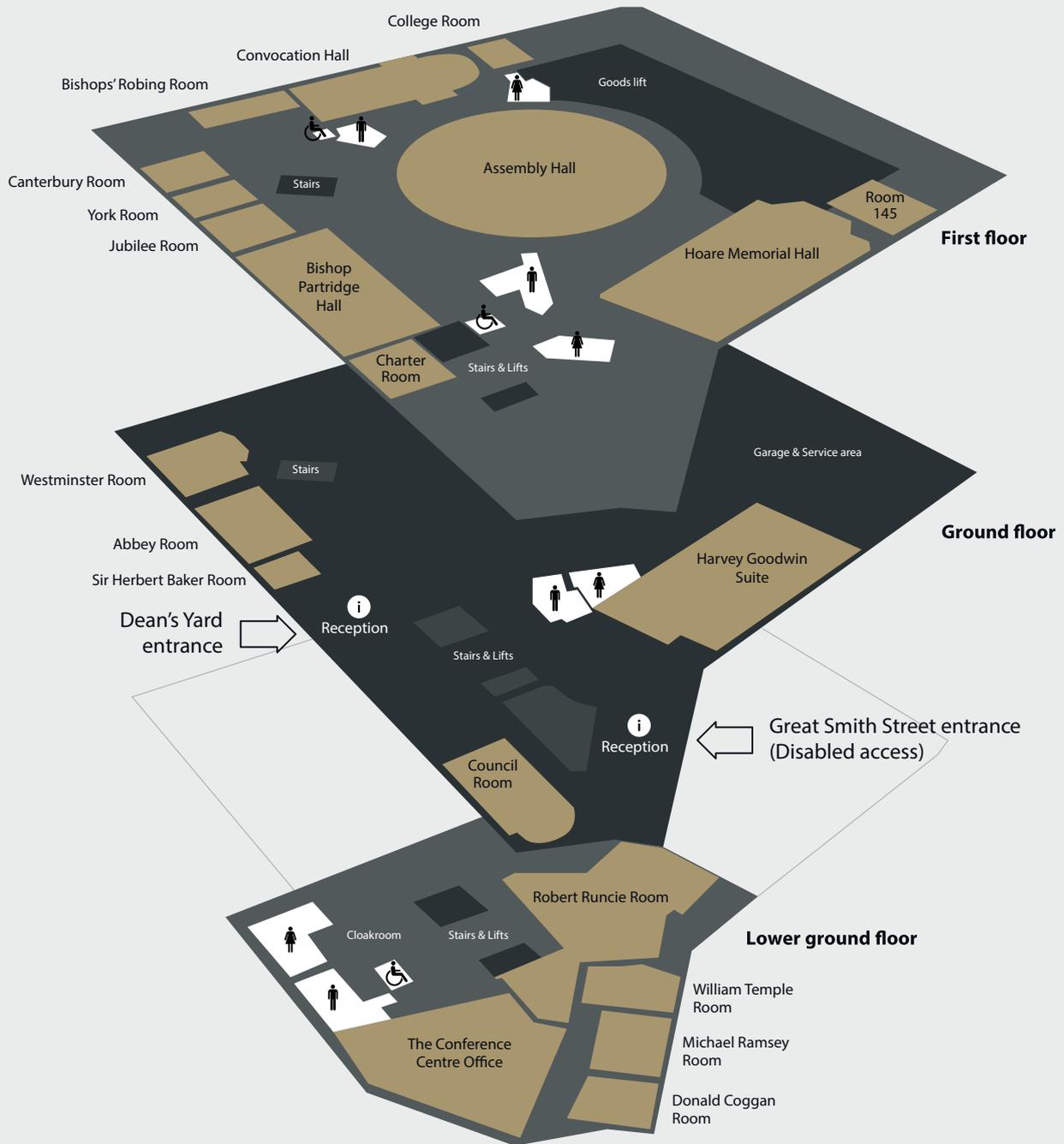
Shift2Rail's vision is to deliver the most sustainable, cost-efficient, high-performing, time-driven, digital and competitive customer-centred transport mode for Europe. We do this through research and innovation, which develops cutting-edge innovative solutions to create railway systems of the future for passengers and freight. This is made possible thanks to our members and stakeholders, including SMEs and research institutions, working together across Europe. Shift2Rail fosters the introduction of better trains to the market which can reliably operate on an innovative rail network infrastructure at a lower life-cycle cost, with more capacity to cope with growing passenger and freight mobility demand. Shift2Rail is committed to contributing to the achievement of the Single European Railway Area (SERA).



ICONET is a 30 month project and will significantly extend the state of the art research and development around the Physical Internet (PI) concept in pursuit of a new networked architecture for interconnected logistics hubs by focusing on the following:

- Research, under the PI umbrella, into new business models that underpin intermodal transport, warehousing and ecommerce fulfilment.
- Development of an experimental ICT proof of concept (PoC) Infrastructure Platform to support the simulation and testing of the PI concepts
- Development of representative PI solutions for each of the three Focus Areas for the corresponding Living Labs.

# FLOOR PLAN



Towards a smart hyperconnected era of efficient and sustainable logistics, supply chains and transportation

**IPIC 2019 – 6th International Physical Internet Conference**

**9th-11th July, 2019 | Church House, Westminster, London, the UNITED KINGDOM**