### **Discussion Tables**

### What are the discussion tables?

After so long in virtual meetings, the best way to use our time is creating specific opportunities to exchange informally around key topics for freight transport, logistics and supply chain innovation. You will meet your peers in tables of 8-10 people for around 30 minutes so you can exchange your views, ideas, and interest with other individuals. We expect you can bring forward and share your knowledge on the different subjects to build the next steps within BOOSTLOG and ALICE supporting the whole freight, logistics and supply chain innovation community.

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### Sustainability, decarbonization and circularity

### 1. Enabling Circular Economy – Coordinating Material and Logistic Flows

**Description:** Leveraging the opportunities opened from **circular** models and sustainable solutions for the development of new technology solutions, logistics services, and business models. Main concepts:

- Circular economy as a key enabler for environmentally friendly products, logistics, and a prospective method to address upcycling and production cycles.
- Sustainable logistics practices and processes aimed at improving the sustainability of supply-chain activities (ranging from the supply of raw materials to the transformation processes, the storage, the packaging, distribution and management of the End-of-Life products).

Discussion points with guests: The purpose is to interpret the significance of participant's findings in relation to the identified problem and to explain any new insight that emerged because of your activities.

- ✓ Sustainability and Circularity: State-of-The-Art and outlook in
- ✓ Alternative Supply of Critical Raw Materials (CRMs): Take-Back and Industrial Symbiosis Schemes
- Zero-emissions: Sustainability / Carbon Emission Accounting and Measurement Schemes

#### Moderated by:





Sustainability Director

Ruben Guisson



MooV Manager



Technology-driven supply chain quality management

Environmental, social and corporate social responsibility (CSR) as drivers for transparency.



A strategic supply chain optimization service

Adopting circularity and sustainability as a and governance (ESG) criterion in supply chain optimization

### 2. What's in it for freight and logistics in the towards zero emission road transport (2Zero) co-programmed Partnership?

**Description:** The 2Zero partnership focus on R&I on Battery Electric Vehicles (BEV) and Fuel Cell Electric Vehicles (FCEV). With the support of five Technology Platforms (ERTRAC, EPoSS, ETIP-SNET, Batteries Europe and of course ALICE). It will continue investigating new vehicles technologies and the integration of zero tailpipe emission vehicles in their eco-system addressing user needs. Andrea will share the developments in this partnership, the main calls and topics addressed so far (2021 & 2022) and will share the most interesting topics for ALICE members in the next calls WP 2023 & 2024. You will get the in-depth insights of the work done within 2ZERO and be able to discuss with Andrea on your views and interests

Discussion points with guests: Andrea would like to know more about:

- ✓ Your involvement in 2ZERO as member of the association and/or in 2ZERO projects.
- ✓ Which are your core topics of interest and priorities?
- ✓ Which are the gaps you perceive on current developments?
- ✓ Are the priorities of 2ZERO aligned with the needs of the freight and logistics industry?
- ✓ What should freight and logistics push for the next stages beyond 2024?

#### Moderated by:



Andrea Condotta

ALICE efficient and low emissions assets and energy vice-chair

&

Public Affairs & Innovation Manager





# 3. Practical use cases for zero emission heavy duty (40tn+) road transport' battery or fuel cell electric (H2)

**Description:** Road freight transport decarbonization is as critical as challenging to achieve freight transport is in line with climate neutrality objectives. Battery and/or fuel cell hydrogen trucks are seen as a promising solution for carbon emissions abatement, of long-haul freight transport and/or heavy goods (40 tn+)

Over the past years, Colruyt group has performed some trials and gather experiences on the subject. Pieter will briefly share Colruyt experience and would like to check what plans/initiatives other members have seeking for collaboration and acceleration

#### Discussion points with guests:

- ✓ What is your experience with heavy duty trucks: Battery or fuel cell electric?
- ✓ What are your plans and how these could be accelerated?
- ✓ Which is the main barrier for development? green hydrogen/renewable electricity, vehicles, refuelling/charging infrastructure, business models, others

#### Moderated by:



Pieter Leonard

Capability Manager Supply chain food – transport



# 4. Where are we in the roadmap on zero emissions trucks availability?

Description: In this discussion table you will meet John that will share and discuss with you the last insights on this ALICE activity field. 40 OEMs have been contacted to gather information on vehicles availability and ENTRANCE project is performing a market analysis gathering information from 60+ OEMs and 120+ zero emission vehicles models in the market or hitting the market soon. Moreover, the group is liaised with ACEA to find out more on zero emissions Heavy Duty Trucks availability.

As next step, we will be hosting a session on 15th of September from 10.00 to 11.30 in which the developments of the group will be presented and the materials above mentioned made available.

**Discussion points with guests:** You will interact with John and the rest of the discussion table guests addressing the following questions:

- ✓ Which questions you would like to get answered through the roadmap/activity?
- ✓ Are you interested in getting connected to the OEMs? Would you like them to present their zero emissions products briefly in a webinar series?
- ✓ Would you be keen to participate in a zero emissions trucks <u>purchase</u> <u>aggregation project?</u> (supported by ENTRANCE project)
- ✓ What would you like to see happening in the webinar on 15<sup>th</sup> of September? Which questions you would like to get addressed?

#### Moderated by:



John Smith

ALICE efficient and low emissions assets and energy vice-chair

&

Head of Sustainable Infrastructure and Facilities Management





#### 5. Measuring GHG Emissions from freight

**Description:** At present the calculation of scope 3 emissions from transport faces many weaknesses and shortcomings which need to be tackled to allow better comparison and procurement.

For example, Transporeon's Carbon Visibility, uses the network effect and integrates primary data. This solution can bring scalable results, optimization opportunities and identical findings among shippers and carriers.

#### Discussion points with guests:

You will interact with Rik and Lukas and the rest of the discussion table guests addressing the following questions:

- ✓ What can you do today to understand your carbon emissions and use it to decarbonize logistics?
- ✓ Which questions you would like to get answered?
- ✓ What are the weaknesses and shortcomings today?

#### Moderated by:





Rik Arends

Program Director at Smart Freight Centre & ALICE efficient and low emissions assets

Lukas Kramer

Head of Business
Development &
Sustainability
Innovation Lead



and energy vice-chair

#### TRANSPORE()N

## **Urban logistics**

6. CULT in Antwerp – how consolidation and collaboration can reduce urban deliveries traveling time by 25% and emissions by 90%?

**Description:** In this discussion table you will hear the CULT consortium to introduce their achievements in Antwerp: reduced urban deliveries traveling time by 25% and emissions by 90%, and deliveries in centrum Antwerp now almost 100% green (link).

By consolidating and collaborating urban B2C and B2B flows they obtained a sustainable urban distribution model from operational, financial and ecological perspective.

#### Discussion points with guests:

- ✓ Would you like to join CULT?
- ✓ What do we see benefits of consolidated delivery?
- ✓ What would you like to see happening in?

#### Moderated by:



Hans Schurmans

ALICE Urban Logistics chair (acting)

Director Logistics operations and transformation at Proximus





# 7. Implementation of joint guide towards zero emission urban logistics 2030: next steps!

**Description:** In 2021 ALICE and POLIS launched the joint guide on the ALICE-POLIS Joint Guide for advancing together towards zero-emission urban logistics by 2030 (download the Guide). In 2022, ALICE and POLIS launched webinar series for implementing the guide to:

- Disseminate the guide and improve it;
- Sharing best practices and lessons learnt;
- Be informed with new initiatives
- Deepen and broaden knowledge and filling gaps
- Facilitate collaboration.

Topics have been discussed include combination of passenger and freight transport; consolidated urban logistics; zero emissions zones & logistics solutions. Planned topics for 2<sup>nd</sup> half of 2022 are urban logistics for construction sites; urban logistics using inland waterways; and circulate economy.

#### Discussion points with guests:

- ✓ Any feedbacks on our activities in 2022?
- ✓ How to define topics for webinars/workshops/meetings?
- ✓ How to give options to involve with all ALICE members? Currently, we have the group leadership with support of ALICE and POLIS.
- ✓ How can we ensure that all members benefit from our activities?

#### Moderated by:



Hans Schurmans

Director Logistics operations and transformation at Proximus ALICE Urban Logistics chair (acting)



# 8. Urban Logistics & Circular Economy: how to engage with consumers?

**Description:** To enable Circular economy, we need to rethink urban logistics and supply chains. Engagement of consumers are essential. This will have impacts on how we operate urban logistics.

#### Discussion points with guests:

- ✓ What if Apple starts up with a delivery company?
- ✓ One of the successes point for e-commerce is for companies to be placed nearby their clients (deliver on customers' promises): how proximity and instant messaging (e.g., Facebook messenger) is changing the way we shop, and at the same time support supply chain sustainability?
- ✓ What are major impacts on rebound policy for retailers towards smarter, and sustainable returns?
- ✓ Can we indicate to 2-3 disruptive solutions to improve reverse logistics and waste management?
- ✓ What about potentials for data driven anticipatory service to customers?
- ✓ Are we able to indicate effects of collaboration in reverse logistics to enhance end-to-end visibility and transparency of supply chain?

#### Moderated by:



Paola Cossu

C.E.O of FIT Consulting
ALICE Urban Logistics vicechair (acting)





### Transportation, logistics nodes and networks

#### 9. Logistics nodes cloud report in practice

**Description:** <u>BOOSTLOG</u> project developed the <u>cloud report on Logistics Nodes</u> including the core areas of intervention and topics to be addressed.



In this table you will be able to share your experience and discuss latest developments and findings.

#### Discussion points with guests:

- ✓ Which is your experience and interest in the subject in terms of areas of intervention and topics?
- ✓ Which are the key trends and societal drivers for the Logistics Nodes? (We can show Figure 1 to facilitate discussion)
- ✓ Which are the barriers hindering more efficient and sustainable Logistics Nodes? How to face them? (We can show Table 1 to facilitate discussion)

#### Moderated by:



Salvador Furió

Director of Innovation & Port
Cluster Development





### 10. Hyperloop as enabler for seamlessly connected networks?

Description: Considering the challenges of existing transport modes, be it congestion, poor alignment of combined use of these modes or their vulnerability to external factors such as climate change or other factors, the emergence of a new transport mode that could support the overall efficiency of advanced logistics supply chain concepts while at the same time offering real zero emission solutions is a very exciting prospect indeed.

Hyperloop is currently gravitating towards cargo applications as this is a way to valorise existing technical capabilities much faster and offers major opportunities to create emission free, faster, safer, and more resilient transport solutions.

#### Starting point:

- ✓ The different approaches to cargo transport within the hyperloop community
- ✓ Integration of cargo in international/continental networks
- ✓ Dedicated cargo networks based on hyperloop technology (individual business cases and derived technologies)
- ✓ Technological spill over being applied in various operational environments such as ports...

#### Discussion points with guests:

#### Moderated by:



Kris Neyens
ALICE Corridors, Hubs and
Synchromodality vice-chair

Manager Internationalization at VIL Flanders Innovation Cluster for Logistics





- ✓ Supply Chain Opportunities (and applications of Hyperloop)
- ✓ Market requirements for success (#)

### 11.EU Ukraine Solidarity Lanes

**Description:** In the support of and by the European Commission, Transporeon undertakes a joint procurement event for all stakeholders in the agricultural supply chain to facilitate matchmaking.

In parallel a real-time map showing bottlenecks, congestions and transit-times at terminals, port and border locations is put up to allow all stakeholders to make better decisions.

**Discussion points with guests**: You will interact with Serge and the rest of the discussion table guests addressing this challenge and identifying how you could support addressing it.

#### Moderated by:



Serge Schamschula

Transporeon Senior Partner Manager & Sustainability Spiritus Rector



### 12. Freight and logistics in Europe's Rail partnership

Description: The <u>Europe's Rail partnership</u> was launched as part of the Horizon Europe Programme and the first calls have just closed recently. In this session you will get insights from Lars on how freight and logistics is addressed, and you will have the opportunity to share your interests and suggestion for next activities.

Discussion points with guests: Lars would like to know more about:

- ✓ Your involvement in Europe's Rail.
- ✓ Which are your core topics of interest and priorities?
- ✓ Which are the gaps you perceive on current developments?
- ✓ What should freight and logistics push for the next stages of the programme?

#### Moderated by:



Dipl.-Ing. Lars Deiterding
Executive Director HaCon
ALICE systems and technologies
for interconnected logistics cochair

Governing Board Europe's Rail
Partnership



#### 13. Ports, freight and logistics in the Waterborne Partnership

Description: The <u>Waterborne partnership</u> was launched as part of the Horizon Europe Programme and the first calls have just closed recently. In this session you will get insights from Salvador on how ports freight and logistics is addressed, and you will have the opportunity to share your interests and suggestion for next activities.

Discussion points with guests: Salvador would like to know more about:

- ✓ Your involvement in Waterborne's partership.
- ✓ Which are your core topics of interest and priorities?
- ✓ Which are the gaps you perceive on current developments?
- ✓ What should ports, freight and logistics push for the next stages of the programme?

#### Moderated by:



Salvador Furió

ALICE systems and technologies for interconnected logistics cochair

Director of Innovation & Port Cluster Development



# 14.Inland waterways transport supporting logistics decarbonization

Description: Inland waterways form an imperative pillar to decarbonize our freight transport sector. However, model shift to inland waterways has remained modest at best. The Inland Waterway Transport (IWT) discussion table presents an action that contributes to the overall strategy of the newly launched ALICE IWT program. The program's objectives are to create a stable IWT group within ALICE, contribute to creating links across projects by supporting crossfertilization, and share innovative initiatives as well as technologies in the IWT sector that are in line with ALICE roadmaps. This discussion table extends the program activities by engaging more members of the ALICE community who are welcome to join our IWT endeavour.

**Discussion points with guests:** The table discussions will concern barriers and opportunities regarding technologies, business adaptation, resilience, and sustainability. You will interact with Zisis and the rest of the discussion table guests, further addressing the following:

- ✓ Which are the most interesting topics you would like to get in focus through the roadmap/activity?
- ✓ Are you interested in getting connected to the ALICE-IWT programme sharing your use cases, experiences and results?

#### Moderated by:



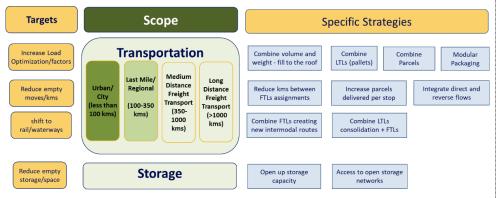
Zisis Palaskas

General Manager at Inlecom BV & ALICE Corridors, Hubs and Synchromodality vicechair



# 15.Logistics collaboration and coordination cloud report in practice

**Description:** <u>BOOSTLOG</u> project developed the <u>cloud report on coordination and collaboration</u> including targets, scope and strategies to realize collaboration & coordination benefits. Barriers and guidelines for collaboration were assessed.



In this table you will be able to share your experience and discuss latest developments and findings.

#### Discussion points with guests:

- ✓ Which is your experience and interest in the subject in terms of target, scope, and strategy?
- ✓ Which novel governance, business and operational models you know?
- ✓ Which are the key enablers to reduce transition cost to set up collaboration?
- ✓ Are companies ready to collaborate? Where to start with?

#### Moderated by:



Fernando Liesa

Secretary General



Alliance for
Logistics Innovation
through Collaboration
in Europe

## Systems, technologies and data sharing for interconnected logistics

#### 16.AI in logistics: technology and applications

**Description:** Artificial Intelligence (AI) is one of the promising systems and technologies for interconnected logistics. Al encompasses a wide range of technologies and learning methods enabling many applications in the areas of e.g. intralogistics, ports, freight transport planning, simulation and forecasting.

#### Discussion points with guests:

- ✓ What technology areas within AI are of special interest to the logistics sector?
- ✓ What applications of AI in logistics have the biggest potential?
- ✓ What are the main challenges to overcome to reach the potential benefits of AI logistics?

#### Moderated by:



Andrea Nettsträter

Lead Strategic Initiatives & International Cooperation and CEO Open Logistics Foundation





# 17. Will the EU digitalization and data strategy and related initiatives succeed and is the market doing its job?

Description: The EU digital strategy highlights the role data should play in the future. In parallel, how data should be shared has become much clearer in the past few years. The European data strategy, European Data Governance Act and Data act all provide clear anchors for the data-sharing world of the future. The EU also supports and encourages data sharing initiatives. We are familiar with the FENIX and Federated initiatives of DGMOVE and the DTLF. Initiatives that try to define possible standards for data sharing. Private/public initiatives like GAIA-X are aiming to define common architectures for the data-spaces of the future.

#### Discussion points with guests:

- ✓ Will this approach be successful?
- ✓ Will market developments always be faster than what the EU tries to drive?
- ✓ How should we act in this accelerating world where so many possibilities exist for companies to enter the next stage of digitalization and data sharing?

#### Moderated by:



**Jon Kuiper** Senior Policy Advisor



Ministerie van Infrastructuur en Waterstaat

#### 18.5G in logistics: technology and applications

**Description:** 5G is one of the promising technologies to advance and support more interconnected logistics and multiple applications in several logistics field:

- Real time control of operations in ports, terminals, warehouses, logistics nodes and beyond.
- Autonomous transport and logistics operations (e.g. yards, etc.)
- · Remote operation of vehicles, vessels and handling units (e.g. manoeuvring, driving, etc.).
- Human-autonomous robots collaboration.

#### 5G supports the Physical Internet realizations:

- Physical communication layer enabling (real/less latency time) applications.
- Global, open, scalable and interconnected network of collaborative devices, assets and smart interfaces
- Development of sustainable, interconnected and highly collaborative logistics models and autonomous applications
- Optimization of logistical processes towards more efficient, effective, and sustainable supply chains(Multi-connectivity, Sensor measurements, Large-scale infrastructure/operations monitoring, customizable network coverage

#### Discussion points with guests:

- ✓ What technology areas within 5G are of special interest to the logistics sector?
- ✓ How 5G can support the development of Physical Internet?
- ✓ What are the main challenges to overcome to reach the potential benefits of 5G logistics applications?

#### Moderated by:



Giannis Kanellopoulos
Unit Leader Logistics &
Maritime







# 19. Can blockchain make the difference in logistics datasharing processes?

**Description:** Blockchain has been a promising technology for supply chain applications in the past years. With the launch of Tradelens, an initiative of Maersk and IBM, a few years ago blockchain appeared to make a solid entry into supply chain operations. Yet since then, blockchain has not been widely used in supply chain operations. Promising start-ups are struggling to create volume and to reach profitability.

#### Discussion points with guests:

- ✓ Is blockchain still a relevant technology in a world where "data sharing" is the next big topic for logistics?
- ✓ If so, what additional value can blockchain bring in a connected supply chain world?

#### Moderated by:



**Jon Kuiper** Senior Policy Advisor



Ministerie van Infrastructuur en Waterstaat

### 20. Digital Twin for logistics - experience and challenges

**Description:** Digital Twins is a disruptive technology that promise to transform industrial and transport businesses. One of the main advantages is that it will make possible to detect problems earlier and solve them quicker. In this discussion table we want to better understand the importance of Digital Twin technology and hear inspirational examples in logistics (intermodal transport, urban logistics, warehouse management...)

#### Discussion points with guests:

- ✓ What is your experience with Digital Twins? Any experience with collaborative Digital Twins?
- ✓ What are your recommendations for Digital Twins adoption?
- ✓ What are the barriers to adapt Digital Twins?

#### Moderated by:



**David Ciprés** 

Research Line Leader IoT, Blockchain and Data Analytics applied to industrial and logistic processes



### From research to innovation uptake: priorities and strategies

# 21. What gives you sleepless nights when you think about future logistics?

#### Description:

Defining priorities for R&I is essential to ensure that R&I projects serve priorities of the logistics sector.

#### Discussion points with guests:

- ✓ Which current trends and topics, whether technological, economic or social, do you think will have the greatest influence on logistics, networks and supply chains?
- ✓ Which developments can help minimize the negative impact and maximize the benefits?
- ✓ Are there already logistics concepts that will play an increasingly important role in the future?

#### Moderated by:



Andrea Nettsträter
Lead Strategic Initiatives &
International Cooperation
and CEO Open Logistics
Foundation



# 22. From projects to real impacts: how to advance uptake of R&I project results?

Description: Huge investment has been made by the EU and member states into R&I projects. All projects have tasks and resources on dissemination and exploitation. However, only few of these R&I results are further developed by consortium partners or find their way towards the market. With limited visibility of impactful R&I results, it is a challenge to motivate industry partners to engage in research and to develop R&I with the impact envisaged long term.

#### Discussion points with guests:

- ✓ How can we support R&I investments will deliver impact?
- ✓ How can we build project proposals and consortia to increase impact after a project?
- ✓ How could the European Commission effectively monitor impact?

#### Moderated by:



Liesbeth Brugemann
Program Manager at TKI
Dinalog, Dutch Institute for
Advanced Logistics



# 23. Going beyond TRL to move from R&I results to market scale innovations

**Description:** The European Union has been investing heavily in research addressing critical challenges, often with great success in enabling new solutions. But there is frustration that proven innovations struggle to deliver the envisaged impact, not because they prove to be bad ideas but because the barriers to widespread adoption go beyond proving that something works.

For many years Technical Readiness Levels have been used to assess progress from an idea towards a proven solution. This is not a new thought. Various organisations have looked at this from different perspectives: **societal readiness** (society focus), **market readiness** (customer focus), and **commercial readiness** (investor focus) all have their champions. And this list is not complete, with **regulatory readiness** being an obvious gap.

**Discussion points with guests:** We expect you can contribute to the following questions:

- ✓ Do you recognize the gap between technically proven and ready to buy?
- ✓ What are the criteria for recognising an innovation as "ready to buy"?
- ✓ Who would need to champion a "Scale Readiness Level"?
- ✓ If such a tool existed, who would lead its widespread adoption?

#### Moderated by:



**Michael Archer** Strategy Development Director

ALICE supply network coordination and collaboration chair



A Brambles Company

# 24. How to engage with stakeholders who are not familiar with the EU projects?

**Description:** There are many benefits to join EU funded projects and use EU funded project outcomes to address challenges the logistics sector is facing. However, there are still large numbers of stakeholders who are not aware or familiar with EU funded projects.

Smart Freight Centre developed Smart Freight Week, an event that represents an opportunity for the logistics industry to get together and exchange knowledge associated with the latest developments tied to reducing GHG emissions originating from freight and logistics.

Among the topics to be included, The BOOSTLOG session was the first session of the Smart Freight Week, named as 'Collaborative Research and Innovation for Sustainability and Competitiveness', since many members from Smart Freight Centre are not familiar with EU funded projects.

#### Discussion points with guests:

- ✓ What are companies' key interests in R&I projects to address their challenges?
- ✓ What kind of messages should they receive and how?
- ✓ How to use platforms such as Smart Freight Week and ALICE for delivering such messages?

#### Moderated by:



Rocío Espinosa

Project Manager at Smart
Freight Centre



