



Blockchain applications for logistics

March 25th 14.00 to 16:00 (CET)

alice | Alliance for
Logistics Innovation
through Collaboration
in Europe

ELU^{LTD}PEG

2021

Blockchain applications for logistics

25th March 2021 online

Agenda

- Welcome and introduction. *Jon Kuiper and Fernando Liesa*
- Learnings and value proposition from a practical perspective
 - Transparency wins. *Norbert Kouwenhoven*. TradeLens Global Authorities Leader for IBM/[Tradelens](#)
 - Collaboration is the Key. *Cristina Martin*. CEO & co-founder. [my e-customs](#)
 - Building trust and enabling collaboration between competitors. *Gosling Mast*. Product owner of the Vinturas finished vehicle blockchain network. [VINTURAS](#)
 - Blockchain enabling decentralized data sharing in port clusters. *Raoul Tan*. Director. Naviporta.
- Panel discussion and interactive session. Have your say!
- Panel conclusion and get engaged!

Jon Kuiper. ALICE-ELUPEG blockchain applications for logistics group leader

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25th March 2021 online

Welcome and introduction

- **Fernando Liesa.** Secretary General, ALICE
- **Jon Kuiper.** ALICE-ELUPEG blockchain applications for logistics group leader

ALICE membership is bringing an holistic approach → All key logistics stakeholders represented!

Type of Organization	Members	EU/International Associations
Shippers & Retail		
Logistics Service Providers, Courier and Postal operators & Freight Forwarders		
Ports, Hubs, Real State, Intermodal terminals & Transport Infrastructure		
Transport and industry vehicles, packaging & material handling		
Information and Communication Technologies & Consultancy		
Regional & National Logistics Clusters & Associations		
Research and technology Centers		
European Technology Platforms / PPPs		
Member States and innovation Funding*		

* Involved in ALICE Mirror Group

Develop medium-long term vision for logistics and support its implementation

- Recommendation to European Commission (H2020 & Horizon Europe), Member States & Industry and support pioneers



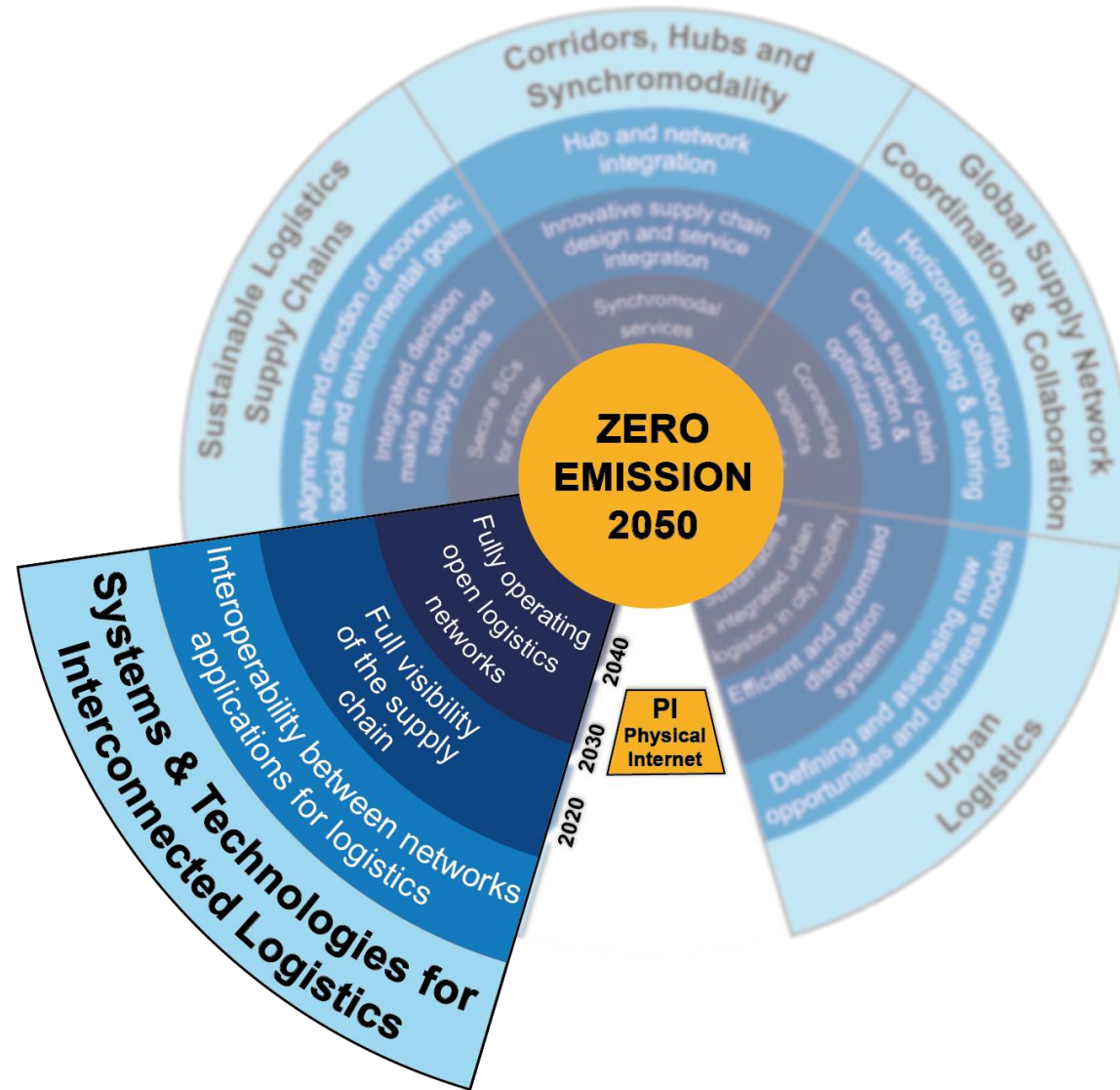
Mapping and analysis of progress: R&I projects, Industry initiatives, Start-ups

- Share innovation projects & best practices, company results → *Internal exchanges, Events and webinars*
- Facilitate access to knowledge generated → *Knowledge Platform*

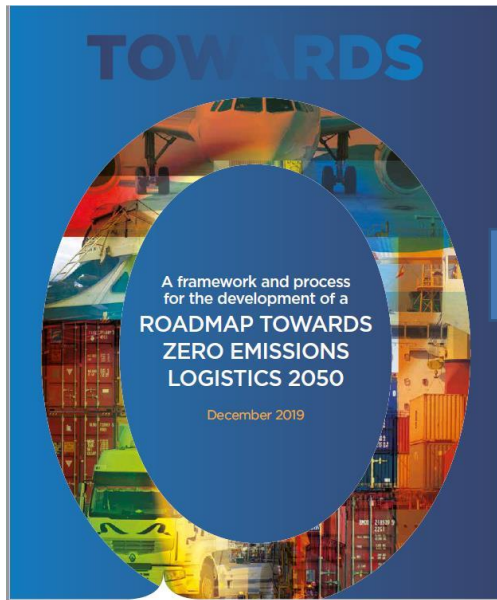
Network for collaborative innovation in logistics

- Find the right partners, at the right organizations, with the right level and mindset
- Develop collaborative innovation projects supported with public funding

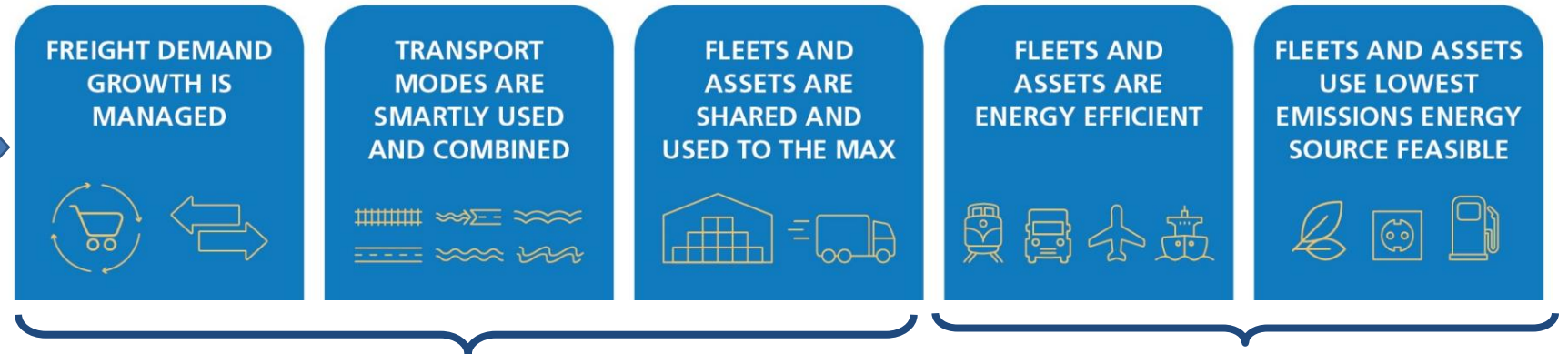




Solution areas towards zero emissions

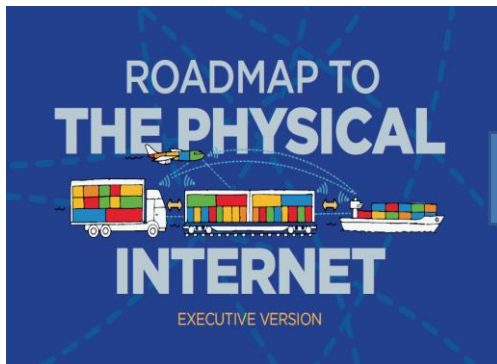


[Link to the document](#)



Additional focus needed

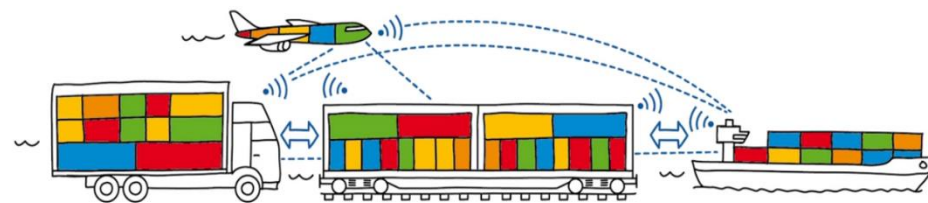
Current focus



[Link to the document](#)

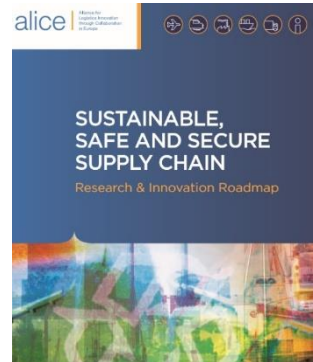
THE PHYSICAL INTERNET

Interconnected logistics networks, sharing assets and capabilities



Digitalization supporting access and efficient use of resources

Systems & Technology for Interconnected Logistics main themes



- Low intrusive security technologies
- Visibility of end-to-end supply chains
- Seamless data interoperability
- Supply chain resilience
- Advanced supply chain risk management
- System based supervision
- Coordinated border management
- Intelligent objects, smart devices, IoT, ITS
- Big data & Data analytics
- Dematerialisation
- Intelligent (information) nodes
- PI support and planning systems
- Logistics Business Processes as a Service
- Autonomous logistics operations
- Data governance : improved security , privacy ...
- Data ownership and management services
- Info and data sharing policies and services
- Supportive legal and regulatory practices

- Shared assets & infrastructure
- Collaboration tools
- Revenue/gain sharing

New themes / technologies

Digital Twins

Artificial
Intelligence

Blockchain
/ DLT

5 G

New clustering of topics

ICT components and
focused applications

Secure
Data
Exchange

System Level
Integration

IoT
Appl.

Big Data &
Data
Analytics

C-ITS
applications

Governance

AI Applications

Automation
and Robotics

Blockchain/DLT
Applications

List of focus applications

- several evolution steps
- review after one year

- Blockchain has the potential to **disrupt the supply chain industry**
- A number of **promising initiatives** exist today in Europe
- **Yet the journey to success is long.** Technology and applications are new. Value creation is based on collaboration rather than head-on competition

The interest group will bring together the knowledge, expertise and experience of members that are operationally working with blockchain or plan to do so



Under which conditions blockchain is a suitable technology solution for logistics applications?

key advantages or specific conditions/pain points for which blockchain can be a competitive solution.

Barriers & Solutions: Share and discuss main barriers and hurdles as well as strategies to address them

Business applications:

Focus on platforms or use cases facilitating horizontal collaboration:

- Shared load carriers in open networks ([GS1 Germany](#), [RTI Blockchain](#))
- Supply Chain Visibility and Collaborative platforms ([TRADELENS](#), [Vinturas](#), [my e-customs](#), NAVIPORTA)
- E-freight documents and eFTI regulation (E&Y initiative)

Governance Models: developing best practices

- Joint Venture/Company with shareholders being the recipients of the services ([Vinturas](#))
- Platform providing a service based on blockchain ([TRADELENS](#), [RTI Blockchain](#), [my e-customs](#))

Development of collaborative projects**Technology and technological solutions for supply chain applications:**

- Technologies vs applications

Legal aspects of Blockchain applications

- Terms of use, contract once and access all, peer to peer contracts.

Supply Chain Visibility Collaboration Platforms

Company

Segment



Finished vehicles logistics

TRADE+LENS

Maritime and Container
Logistics

NAVIPORTA

Trade



International shipments

Sharing of load carriers (pallets, boxes, etc.)

Company/pilot

Segment



Pallet exchange



load
carrier administration

Building knowledge, creating connections and collaborations

- Gather ALICE/ELUPEG members active in the field of blockchain applications for logistics:
 - Identification of **use cases and pain points** tackled through Blockchain
 - Defining **key advantages or specific conditions for which blockchain can be a competitive solution**.
 - What are the main **hurdles**?
 - What are do's and **don'ts**?
- Discuss main challenges and potential next steps in the development of blockchain platforms: **When to choose for a blockchain application**
- Enable a framework for the **development of collaborative projects** with a focus on innovation implementation into (new) market solutions and scalability.
- Define R&I needs that need to be further explored. **Where R&I should focus on to overcome the hurdles and facilitate blockchain implementation.**



- Companies developing **blockchain solutions for logistics**.
- **User Companies** using solutions/willing to explore blockchain solutions for logistics.
- **Research centres** addressing specific challenges or with **solutions/prototypes**.
- **R&I projects using** the technology to test/develop solutions and concepts.

Provide **background information** through the following [survey](#)



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- **Every 6-8 weeks meetings** (90-120 min) focussed on specific topics according to Group Interest or to get 3 or 4 members in depth presentations
- **Open webinars** (as the one today) **every 4 months** to share group cases and advances to engage a broader audience.
- **Invite externals** to present their solutions/approach and engage in a discussion with them. *On demand.*



Meeting and webinar schedule

Based on the above we would like to ask you to reserve the following dates in your agenda:

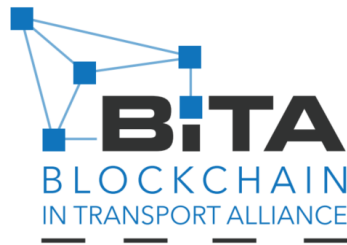
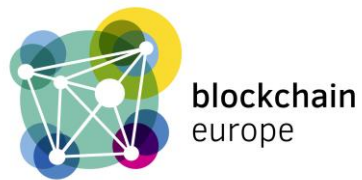
October 27, 2020	Launching of the Group!
January 27, 2021	Topic: Barriers to use blockchain technology
February 25 th , 2021	Topic: Barriers to use blockchain and potential Solutions/strategies to overcome them
April 19 th , 2021	Topic: Defining priorities for next meetings

webinars:

March 25 th , 2021 (14.00-16.00)	Topic: Operational applications of blockchain technology
June 2021 during IPIC meting	Topic: Blockchain applications for load carriers
October 2021	Topic: Research and innovation findings

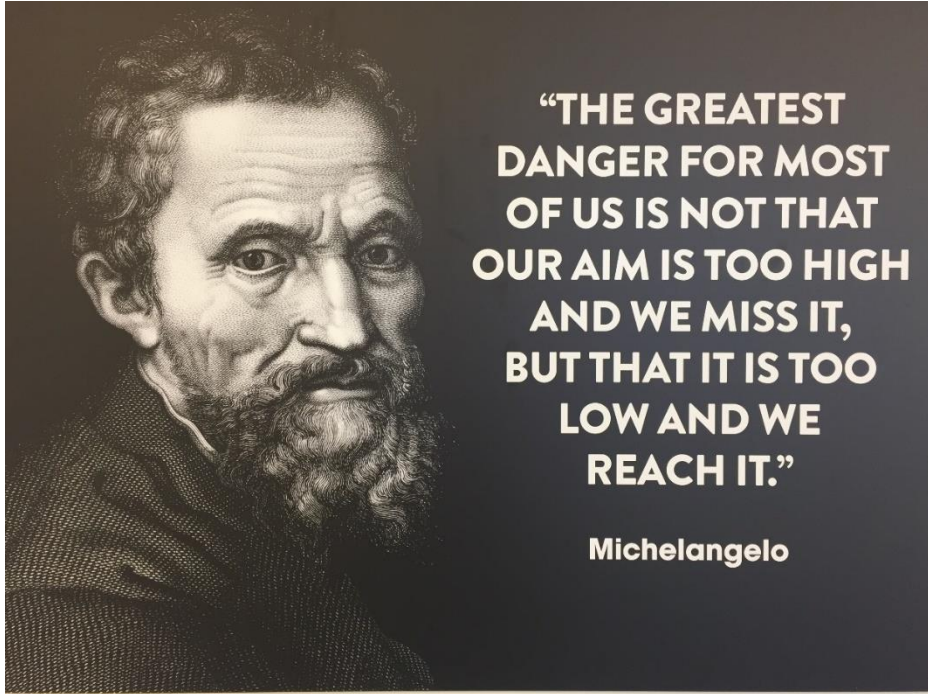
Keep Sharing News and Experiences with the Group! 😊





And you?





“THE GREATEST
DANGER FOR MOST
OF US IS NOT THAT
OUR AIM IS TOO HIGH
AND WE MISS IT,
BUT THAT IT IS TOO
LOW AND WE
REACH IT.”

Michelangelo

*Logistics innovation for a more
competitive and sustainable
industry*

Thank you!

The Best Way To Predict The Future Is To Create It!

Source: President Abraham Lincoln



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