

ALICE: The European Technology Platform for Logistics Innovation

European Strategy for Logistics Innovation Management Innovation

Fernando Liesa
ALICE Secretary General



Develop medium-long term vision for logistics:

Trends, new business models... → Challenges and opportunities

Research & Innovation Strategy/agenda linked to Industry interest

→ Recommendation to European Commission, Member States & Industry

Formal mandate of the European Commission in defining R&I Program*

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

→ Facilitate access to knowledge generated → Knowledge Platform

Network for collaborative innovation in logistics

→ Network supporting members exchange and open innovation collaborative projects/initiatives



* [What are the European Technology Platforms, what do they do and what is the European Commission Role](#)



ALICE membership per type of organization

Type of Organization	Members	EU/International Associations
Shippers & Retail	     	   
Logistics Service Providers, Courier and Postal operators & Freight Forwarders	           	   
Ports, Hubs, Intermodal terminals & Transport Infrastructure	          	   
Vehicle Manufacturers & Logistics operations, handling (modular units)	    	
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

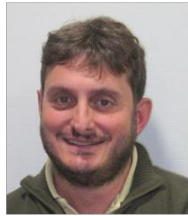
ALICE members as ULaaDs partners



rijksuniversiteit
 groningen



Executive Group/thematic leaders



Sergio Barbarino

Research Fellow



ALICE Vice-chair



Francois Regis Le Tourneau

Corporate supply chain Standards &
Prospective Director



ALICE Chair



Nik Delmeire

Coordinator



ALICE Vice-chair



Sophie Punte

Executive Director



ALICE Sustainable Logistics
Supply chains Chair



Salvador Furió

Director of Innovation & Port
Cluster Development



Corridors, Hubs &
Synchromodality Chair



Lars Deiterding

Executive Director



Systems & Technologies for
Interconnected Logistics Co-chairs



Angelos Amditis

Research Director



Alex Van Breedam

CEO



Global Supply Networks
Coord. & Collaboration Chair



Charlotte Migne

Group Sustainable
Development Director



Urban Logistics Chair



Fernando Liesa
secretary general



Dirk 't Hooft
director
communications



Indrek Ilves
member of the
secretariat

Secretariat

[**Link to who is who in ALICE**](#)

Mission

- **Development of new logistics and supply chain concepts and innovation** for a more competitive and sustainable industry.
- The ambition is to **contribute to a 30% improvement of end to end logistics performance by 2030.**
- The ETP on logistics aims to **accelerate** the **deployment** of more efficient, competitive and sustainable supply chains.

Way to achieve

- Bring together primary stakeholders: Shippers and Logistics Service Providers
- Together with relevant stakeholders: transport companies, terminals and terminals operators, support industry (IT, Consultancy, transport & logistics equipment, research and education
- Collaboration with related ETPs: ERTRAC, ERRAC (Shift2Rail), WATERBORNE, MANUFUTURE/EFFRA (FoF), Big Data (BDVA)

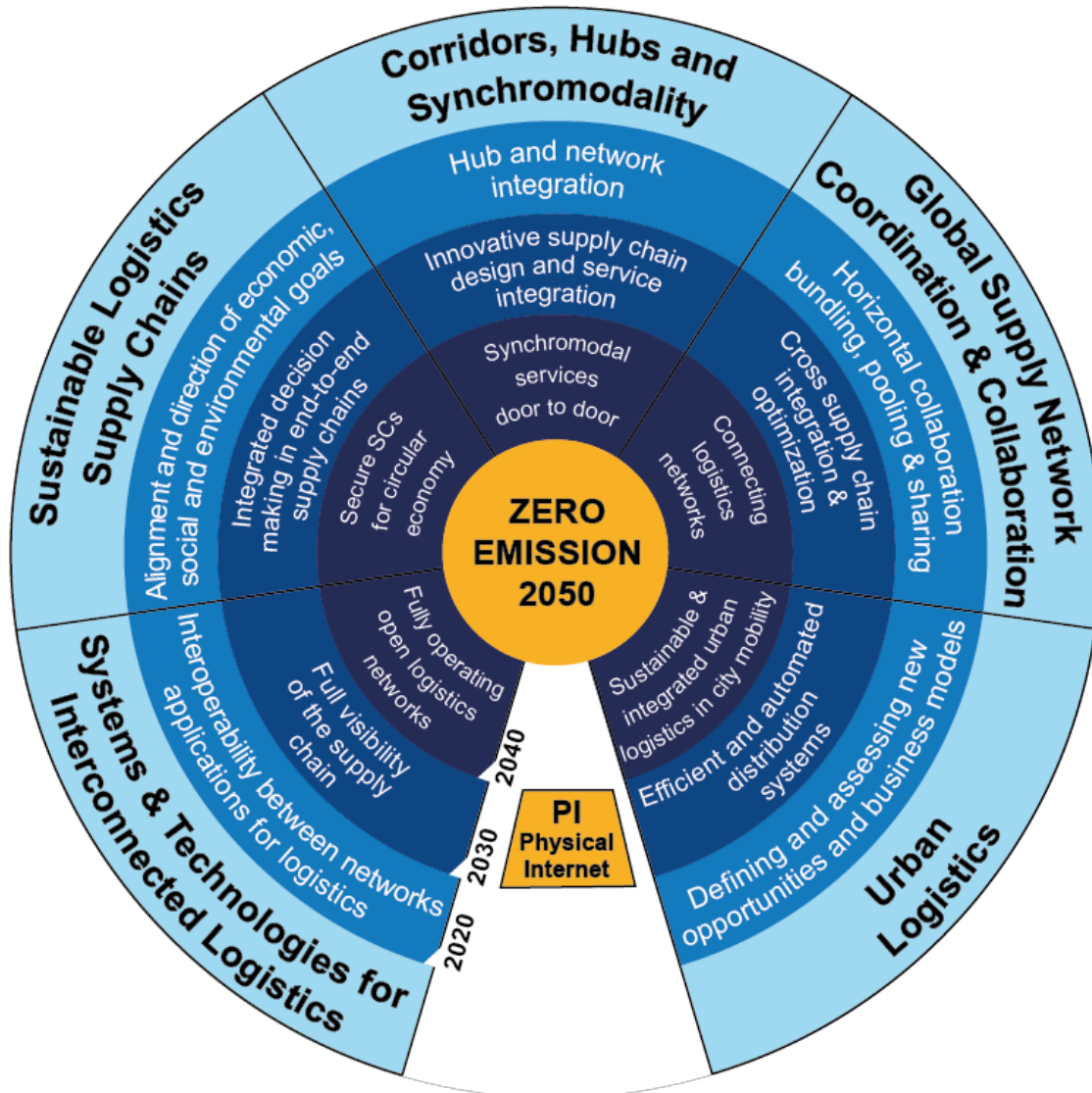
Activities/Output:

- **Define research and innovation** strategies, roadmaps and priorities agreed by all stakeholders to achieve the ETP on Logistics vision. These items will assist the European Commission in the definition of Research and Innovation Programs, i.e. HORIZON 2020
- **Foster innovation in logistics and supply chains**, stimulating and accelerating innovation adoption in order to make possible the growth of the European economy through competitive and sustainable logistics.
- **Raise the profile and understanding of new logistics technologies** and business processes, **monitoring progress and adjusting research and innovation roadmaps** accordingly.
- Contribute to a **better alignment and coordination of European, national, regional innovation programs in logistics**.
- **Provide a network for interdisciplinary collaborative research** involving industry, academia and public institutions.

ETP on Logistics will not...

- Will not focus on general logistics policy
- Will not include building of transportation infrastructure or vehicle manufacturing and optimization for unimodal transport → This is addressed by modal ETPs: Rail, Road, Waterborne, Air and ETP on infrastructure: Construction
- Will not include manufacturing and specifics on industry sectors → This is addressed by ETPs on: food, textile, chemical, forest, steel and manufacturing

ALICE Roadmap



ALICE VISION is to realize Physical Internet by 2030 to pave the way to Zero Emissions by 2050

Physical Internet will bring efficiency and sustainability to Logistics. It cannot fully solve the **Decarbonization Challenge**, but it will make it less onerous to meet.

And can deliver results in the critical next 10 years

TOWARDS

A framework and process
for the development of a
**ROADMAP TOWARDS
ZERO EMISSIONS
LOGISTICS 2050**

December 2019

Roadmap towards Zero Emissions Logistics 2050

([Link](#))

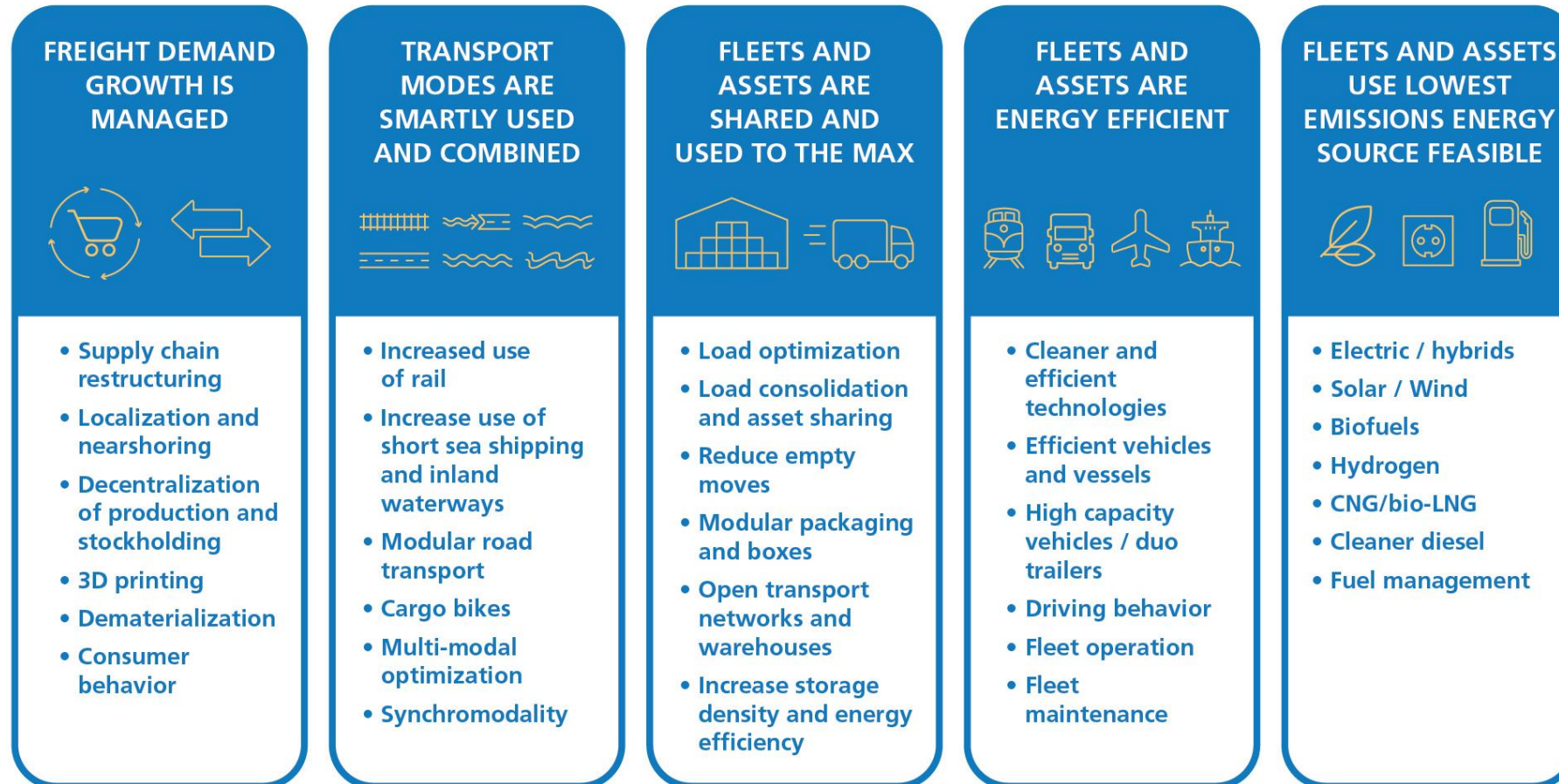
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Alliance for
Logistics Innovation
through Collaboration
in Europe

LEARN

Logistics Emissions
Accounting & Reduction
Network





© Smart Freight Centre and ALICE-ETP based on A. McKinnon 'Decarbonizing Logistics' (2018) Roadmap Towards Zero Emissions Logistics 2050. ALICE (2019) www.etp-alice.eu



ALICE Thematic Groups Chairs & Vice-Chairs

Sustainable Logistic Supply Chains



Sophie Punte

Corridors, hubs and synchro-modality



Salvador Furió

Systems and Technologies for Interconnected Logistics



Lars Deiterding

Angelos Admitis

Global Supply Network Coordination & Collaboration



Alex Van Breedam

Bart Vannieuwenhurse (deputy)

Urban Logistics



Charlotte Migne



Alain Baeyens Lóri Tavasszy Pieter Leonard



Willem Otto Hazelhorst Kris Neyens



Andreas Nettsträter Zisis Palaskas Wout Hofman Eusebiu Catana



Bas van Bree Dirk 't Hooft



Paola Cossu Hans Schurmans Lara Mika



Activities performed partially in the frame of WINN, SETRIS & SENSE Projects. WINN, SETRIS & SENSE projects have received funding from the European Union's FP7 and Horizon 2020 research and innovation Programme under grant agreements No. 314743, No. 653739 and No. 769967

Vision

Full integration of freight flows in cities operations and activities that allow citizens to access the goods and the goods to access the citizens they require and at the same time supporting sustainable development in cities

Mission

Identify and define research and innovation challenges to optimize flows of goods within, into and from urban conglomerates by leveraging existing infrastructure



Urban Logistics: Milestones

2020

- Defining and assessing new opportunities and Business Models

2025

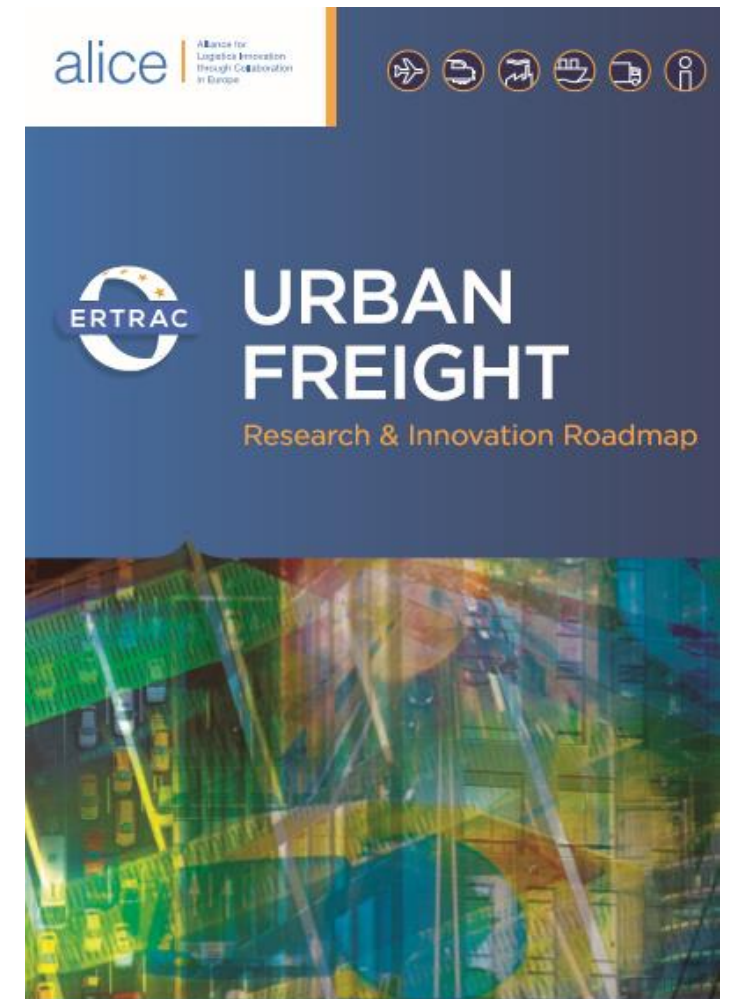
- Efficient and automated distribution systems

2030

- Sustainable and integrated urban logistics in the city mobility system

2030

- Physical Internet



Physical Internet video: focus on Urban Freight and logistics

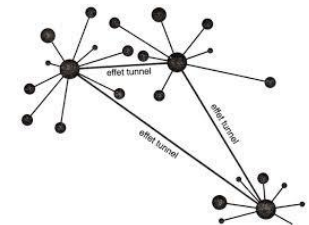
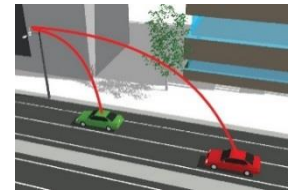


Disclaimer: The content of this video reflects only the author's view. Neither the European Commission nor the INEA are responsible for any use that may be made of the information it contains.

Challenges and themes

The roadmap identifies **data collection and knowledge building** on urban logistics as the first step for a relevant urban logistics research agenda.

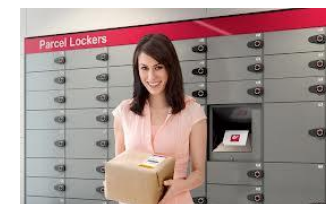
- **Identifying and assessing opportunities** in urban freight (measuring freight component, load factors, demand B2B, B2C, set KPIs)
- **Efficient integration** of urban freight in city:
 - Understand the **impact of land use** on urban logistics activities (parking spaces, lanes, availability mgmt.)
 - **Mobility Plans** taking urban freight into consideration
 - Improving the **interaction between long distance** freight transport and urban freight (e.g. freight corridors, locations of DC and consolidation centers)
 - Better **adapting the vehicles** to innovative urban freight delivery systems (sizes, modularity, intermodality, tech. for load consolidation)



Challenges and themes

- **Business Models** and Innovative Services

- Value creation **logistics services** and more efficient operations: Consolidation schemes, night deliveries, out of office hours)
- **Collaboration and concerted actions/regulations** between local authorities, shippers, retailers and LSPs
- New **Governance models**: Financing/Business models, roles
- **E-commerce implications**: Direct to consumer deliveries and functional logistics services, decoupling delivery/reception
- **Reverse logistics**: e.g. direct/reverse integration
- Designing and operating urban **freight delivery infrastructures**



- **Safety and security** in urban freight

- **Cleaner and more efficient vehicles**



Cities & Industry Dialogue Group presentation

Giacomo Lozzi, Polis Network

Fernando Liesa, ALICE








Why cities & industry need to collaborate in urban freight and logistics

- Enhance liveability
- Decrease emissions
 - Air pollution & noise
 - CO2
- Improve safety
- Reduce congestion
- Boost economy



Cities, regions & industry involved

Large Cities		Medium / Small Cities		Regions
1. Amsterdam	7. Lisbon	13. Bilbao	17. Liège	20. Arnhem Nijmegen City Region
2. Brussels Mobility	8. London (TfL)	14. Ghent	(Groupement de	21. Flanders MOW
3. Budapest (BKK)	9. Madrid	15. La Rochelle	Redéploiement	22. Ile-de-France
4. Dresden	10. Paris	16. Leuven	Economique)	23. Manchester (TfGM)
5. Dublin	11. Rome		18. Helmond	24. Province of Noord-Brabant
6. Gothenburg	12. Rotterdam		19. Southampton	

Type of Company	Members			
Shippers & Retail		L'ORÉAL		
Logistics Service Providers, Courier and Postal Operators & Freight Forwarders				
Real Estate				
Vehicle Manufacturers				
ICT & Technology	 the mind of movement			



Vision and Objective

Vision: Lead transformation in cities so urban freight and logistics is **proactively responding to the pollution, congestion, safety and environmental challenges.**

Objective: Ensure a strong strategic industry & cities dialogue to share practices and facilitate collaboration models between cities and industry to prioritize topics and **accelerate deployment of solutions towards sustainable zero emissions urban freight and city logistics**

Collaboration, Consolidation, Courage and Data

Solution areas & interventions

Smart Governance & Regulations

- Safety and Sustainability Urban Logistics Plans and emission reduction targets
- Rewarding, recognition, incentives and subsidies schemes
- Access Regulations Low Emission Zones
- Enforcement & Trust
- Stakeholders collaboration

Clean & alternative fleet

- New business models for take up of low emissions vehicles
- Procurement of zero-emission goods & services
- e-charging infrastructure
- Energy mix
- Transport modes are smartly used and combined

Urban freight & logistics operations

- Stop double parking
- Redefinition of delivery/logistics spaces
- Micro-hubs & consolidation strategies
- Decoupling transport and delivery
- Off peak deliveries → low noise operations
- Space management: Multi-use lanes, smart L/U bays, geofencing and sensors
- Retail offering

Purpose oriented data acquisition

- Better understand urban freight
- Information based policies and decision making

People engagement

- Consumer behaviours
- Workers skills and safety



Approach

Framework for compilation, sharing and discussion of measures, practices, policies and experiences



- Learning, take up, scale and replication
- Consensus building: matching / conflicting interests between cities & industry
- Identification of remaining gaps

Provide direction to cities, regions, industry and European Institutions



- Define common targets and shared principles
- Speed up innovation implementation
- Directions to Horizon Europe Program

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in Europe

www.etp-alice.eu

POLIS

CITIES AND REGIONS FOR TRANSPORT INNOVATION

www.polisnetwork.eu

ALICE & POLIS strategic dialogue

2019 ANNUAL POLIS CONFERENCE

Consolidated deliveries with clean vehicles

alice | Alliance for Logistics Innovation through Collaboration in Europe

Micro-hubs & cargobikes

Together with POLIS towards sustainable zero emissions City Logistics

Logistics & Truck Industry

- GEODIS
- Colson & Malin
- FM LOGISTIC
- Posteitaliane
- VOLVO
- MAN
- SCANIA
- TEVVA

PTV Software.
Data & algorithms are the basis.

FMCG, Retail, Real Estate & IT

- P&G
- L'OREAL
- proximus
- COLRUYT GROUP
- JLL
- PTV GROUP



For more information ([Link](#))



ALICE liaison with projects & industry initiatives ([Link](#))

New in 2020:



Running:



AEROFLEX



Finished:



“Social” Knowledge Platform

IPIC 2020 <https://knowledgeplatform.etp-logistics.eu/>

7TH INTERNATIONAL PHYSICAL INTERNET CONFERENCE
HYPERCONNECTING THE WORLD WITH PHYSICAL INTERNET

Go to IPIC 2020 in Shenzhen, CHINA

Physical Internet Knowledge Platform
The Physical Internet Social Knowledge Platform is powered by ALICE with the support of the European Commission H2020 funded project SENSE: "Accelerating the Path Towards the Physical Internet".

Member Login >

or Sign Up to get access!

PI PHYSICAL INTERNET

Projects

PI Companies

Funding Opportunities

Documents, Videos and Papers

- **670 Users** (170+ connected in the last 60 days)
- 15 Funding Opportunities
- 24 projects
- 19 PI Companies
- IPIC 2017 & 2019 Contributions and materials, videos, roadmaps
-



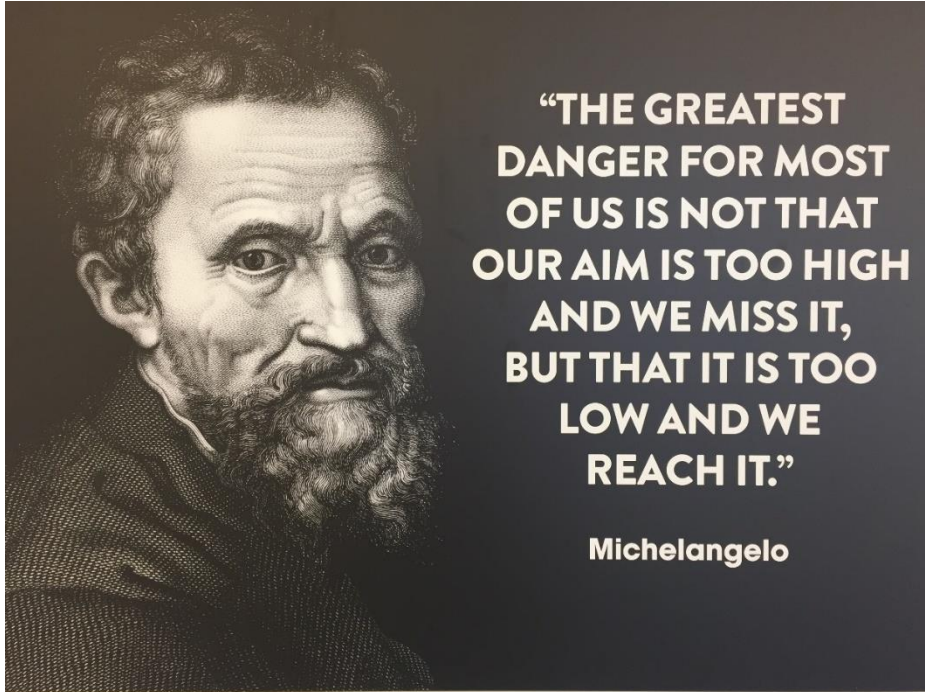
A **dedicated high-level final debate** will be organised towards the end of the project. ALICE-ETP will actively collaborate in the set-up of the event by outreaching stakeholders and participants through their network.

Dissemination of results and potentially supporting workshops with ALICE members

- Newsletter
- ALICE Knowledge Platform

Participation in ALICE Booth in TRA 2022





*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



www.etp-alice.eu

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