

BOOSTLOG

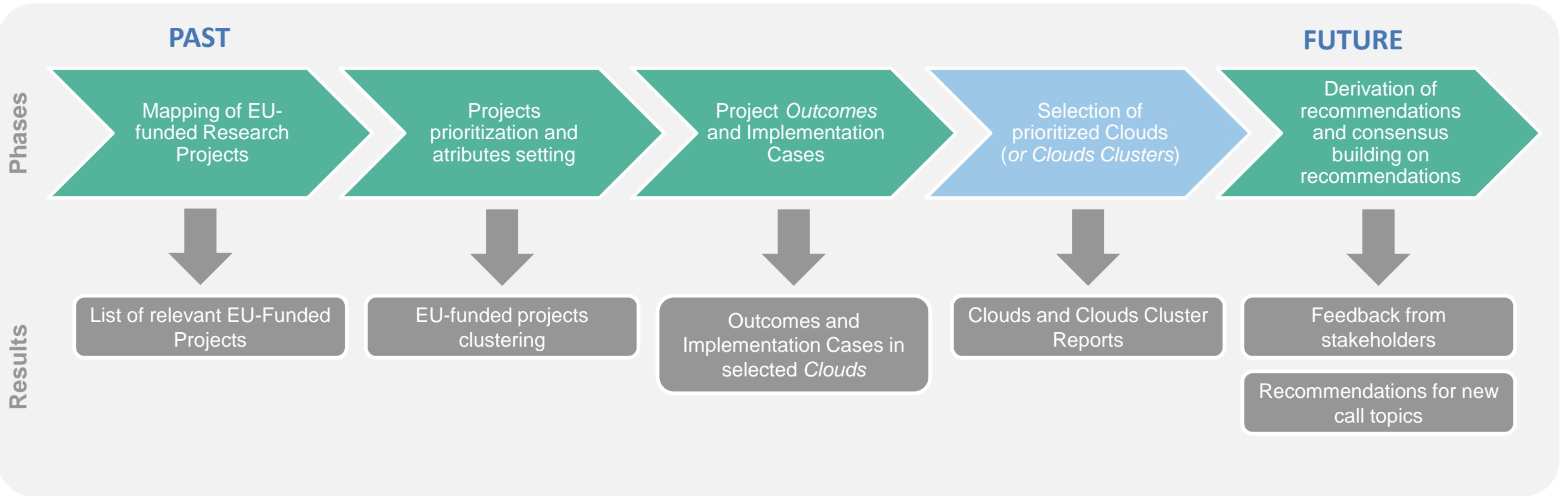
Collaboration and Coordination Cloud Report

Carolina Ciprés, ZLC Director of Research



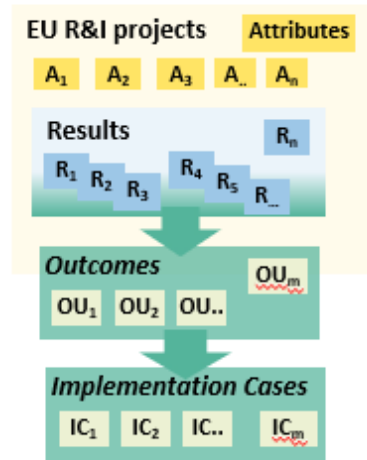
- **EU funded project results (including products, services and solutions) are difficult to find and valorize.**
- **Regulation, market fragmentation and resistance to change are barriers that slow down the uptake of R&I results by companies and hinder impact generation.**
- **Attribution of impact as a result of R&I projects and funding is challenging and not well communicated.**





Map the most relevant EU-funded R&D projects

Identify main Outcomes and Implementation cases

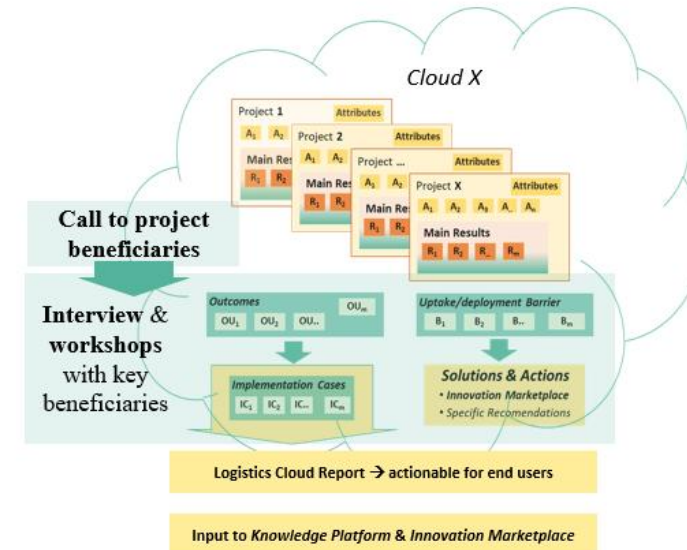


Logistics clouds with higher impact of R&D funding

Barriers and positive framework conditions

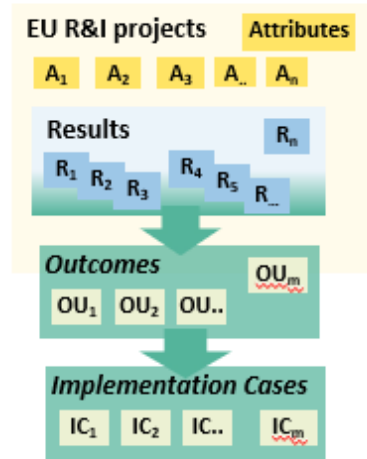
Industry reports - logistics clouds

- Urban logistics
- Logistics nodes
- Multimodal freight corridors and transport networks
- Freight and logistics data sharing
- Logistics coordination and collaboration
- Modularization and transshipment
- + 2 more (TBD)



Map the most relevant EU-funded R&D projects

Identify main Outcomes and Implementation cases

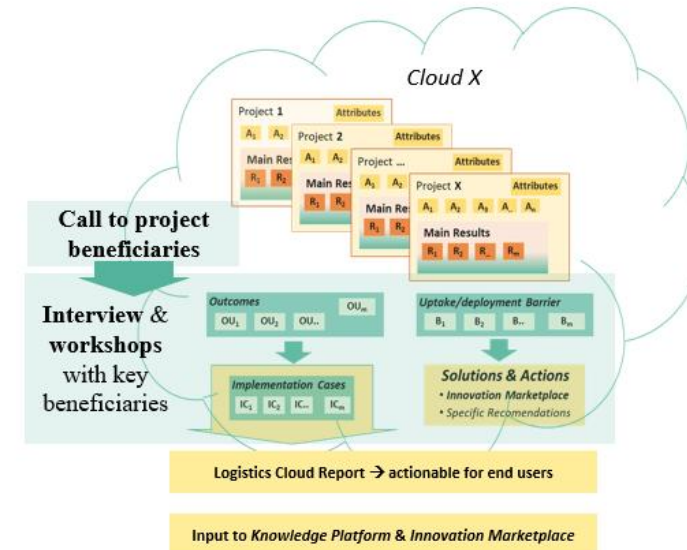


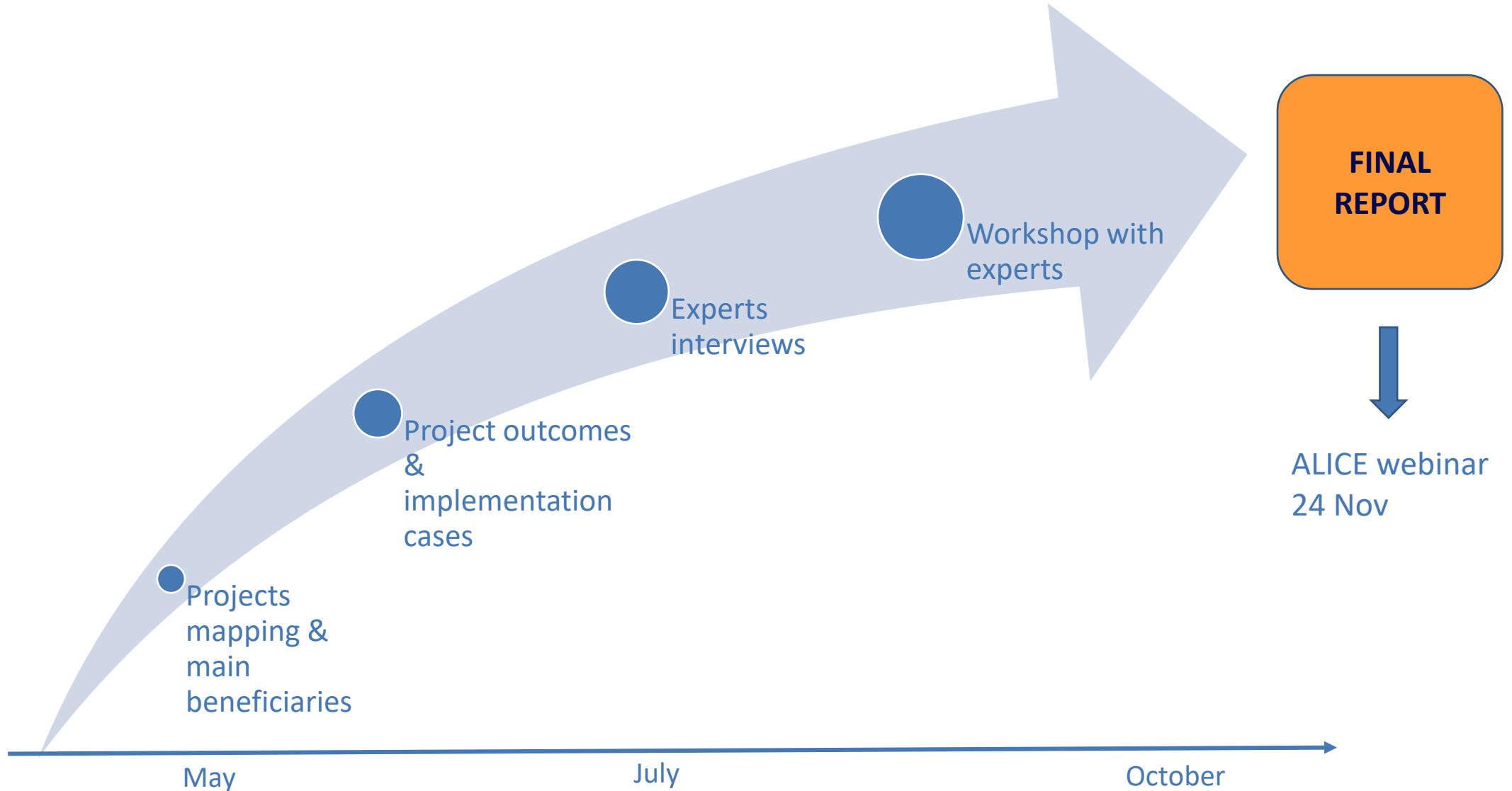
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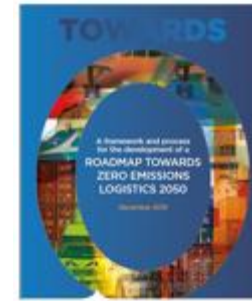
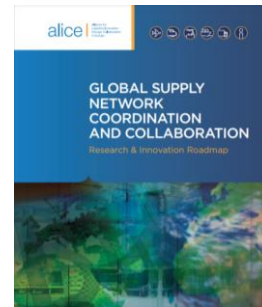
Industry reports - logistics clouds

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1. Introduction and methodology
2. Market current practice analysis



3. Projects' Outcomes

- Governance, Business and Operational models
- Managing the transition: reducing set up and transactional costs
- Legal aspects

4. Implementation cases

NIXMOVE

TRI = VIZOR
THE WORLD'S FIRST CROSS SUPPLY CHAIN[®] ORCHESTRATOR[™]

GS1 SMARTBox

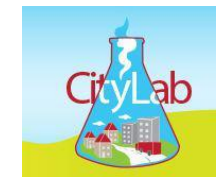
CRC
services

5. Potential implementation paths



PRODCHAIN

MAIN-E



2001

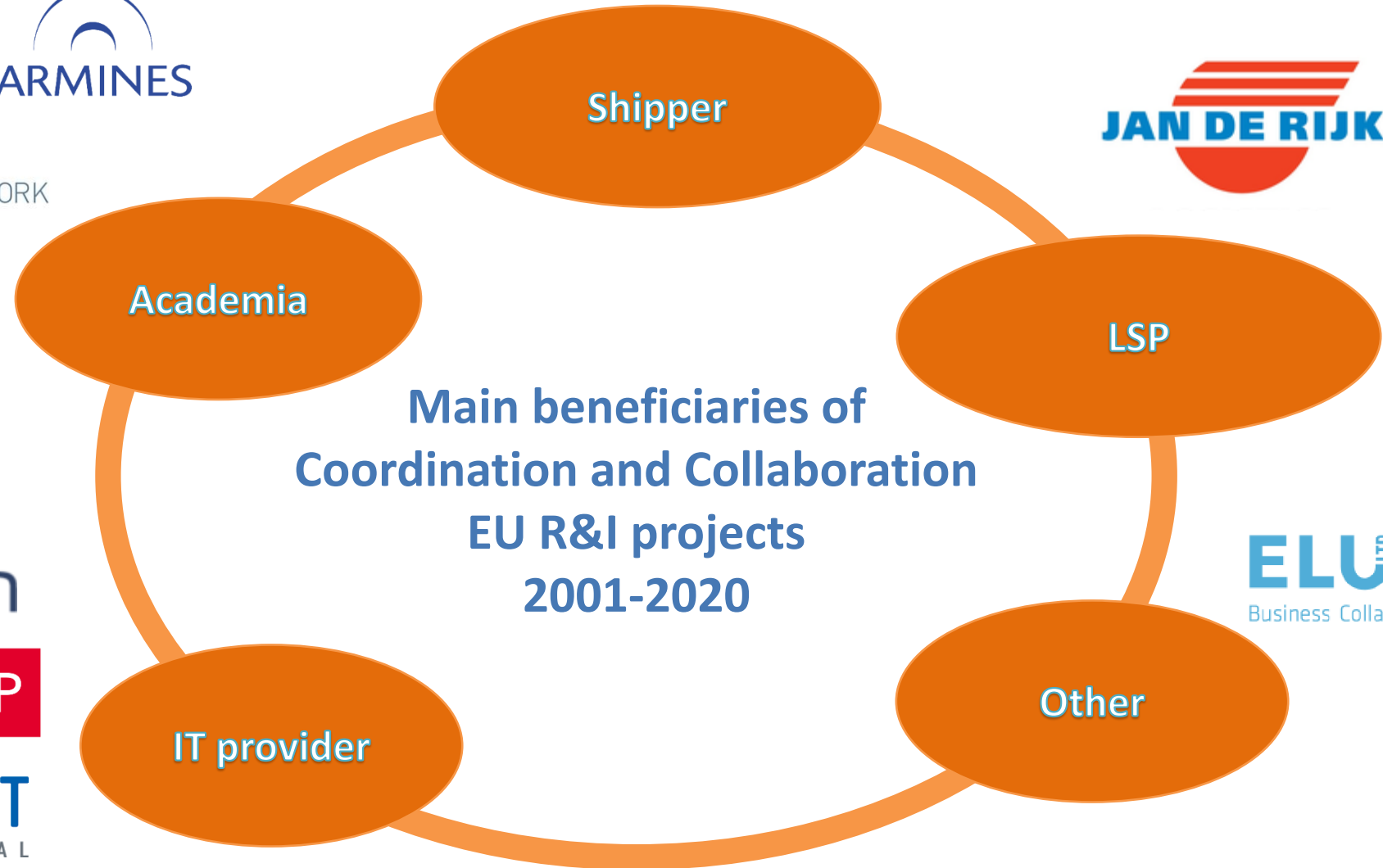
2006

2008

2011

2015

2020



1. Introduction and methodology – Why improving collaboration

Targeted Impact	Nr. of projects	Status
Decrease of environmental impact in terms of GHG emissions, pollutants, and noise	11	IMS
Increase transport efficiency (load factors, empty trips, shorter delivery routes, reduce failed deliveries)	10	ISS
Reduction of congestion	9	ISS
Decrease of overall transportation and logistics cost	4	ISS
Achieving and increase in modal shift to rail freight/waterways transport	4	PoC
Increased reliability of the Supply Chain	2	TD
Decreased Lead Times	2	TD

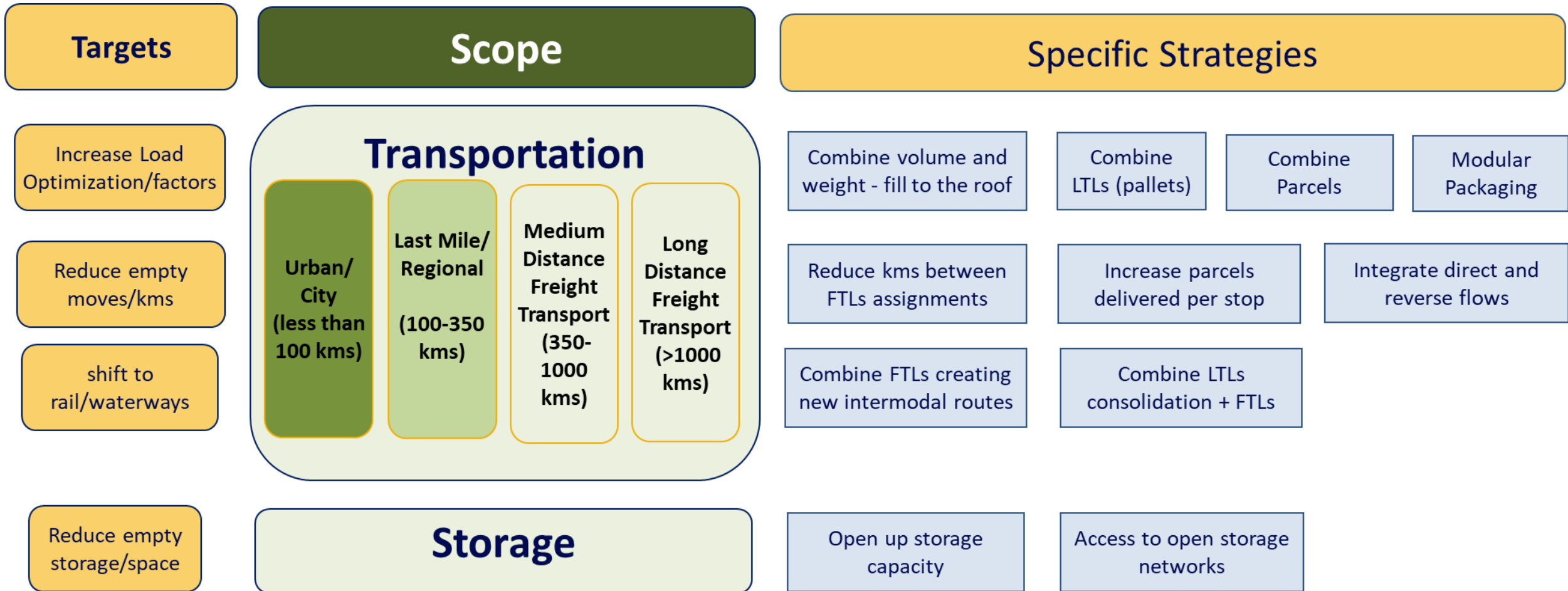


1. Introduction and methodology – Why improving collaboration

Expected Impact	KPIs	Projects
Decrease of environmental impact	CO2 emissions	CITYLAB, COG-LO, CLUSTERS 2.0, CO3, iCARGO, ICONET, LOGISTAR, MODULUSHCA, NEXTRUST, NOVELOG, SUCCESS, U-TURN
	Local pollutants	CITYLAB, NEXTRUST, NOVELOG, SUCCESS, U-TURN
Increase transport and logistics efficiency	Increase load factors (urban, non urban, both)	CITYLAB, COG-LO, CLUSTERS 2.0, CO3, iCARGO, ICONET, LOGISTAR, NEXTRUST, NOVELOG, MODULUSHCA
	Reduce empty trips/kms	NEXTRUST, MODULUSHCA, iCARGO, CO3
	reduce empty storage/space	ICONET
	shorter delivery routes	CITYLAB, NOVELOG, SUCCESS, U-TURN
	Reduce failed deliveries	CITYLAB, U-TURN
Reduction of congestion	Reduced vehicles movements /Nr. of vehicles	CITYLAB, COG-LO, CLUSTERS 2.0, ICONET, LOGISTAR, NEXTRUST, NOVELOG, SUCCESS, U-TURN, iCARGO
Achieving and increase in modal shift to rail freight/waterways transport	Create new intermodal connections	CO3, CLUSTERS 2.0, ICONET, NEXTRUST, LOGISTAR
Decrease of overall transportation and logistics cost	Cost/unit of transport	CITYLAB, NOVELOG, SUCCESS, U-TURN, iCARGO
Increased reliability of the Supply Chain	On time delivery	COG-LO, LOGISTAR
Decreased Lead Times	Reduced Travel time	COG-LO, LOGISTAR



1. Introduction and methodology – Scope and strategies



1. Introduction and methodology – Barriers and guidelines

BARRIERS	GUIDELINE
<p>Scalability of governance, business and operational models</p>	<ul style="list-style-type: none"> • Smaller prizes, fragmented flows in terms of volumes or destinations, not stable with high variability may direct you to a “platform” solution trusting in the system: online trustee (e.g. TRANSPOREON, CRC-SERVICES, OGOSHIP, MIXMOVE). • Stable and big flows may direct you to customized trustee models (TRIVIZOR) • Be concrete in defining your case (see section 1.1. and 1.2). • Start within your company, looking for complementary flows or how to combine volume and weight in your shipments. Define these as KPIs • The more companies participating the more resilient/sustainable is the model.
<p>Complexity of the transition management: Transactional, set-up and operational costs hinder benefits from efficiency gains</p>	<ul style="list-style-type: none"> • Clearly define the prize/benefit which will direct to a concrete governance or business model. • Identify clearly what needs to change in your supply chain to achieve the benefit: some flexibility will be needed! • Start with higher prizes opportunities. • Test small but think big in terms of potential impact.

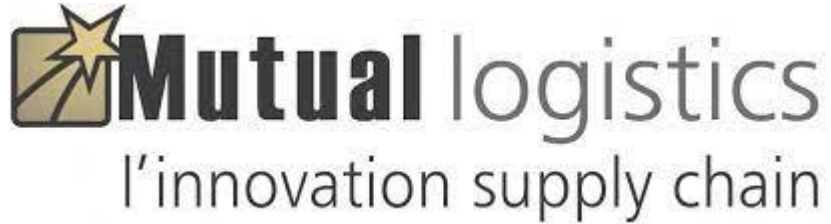


1. Introduction and methodology – Barriers and guidelines

BARRIERS	GUIDELINE
<p>Legal issues: Competition rules compliance</p>	<ul style="list-style-type: none"> Go beyond the myth: “Logistics Coordination and Collaboration is not legal” Several governance models (see above) are demonstrated already with a solid legal framework: choose the one that fits better your needs. Make sure you are supported properly in the process: there is plenty of knowhow market ready.
<p>The collaboration framework requires soft/behavioural aspects to be addressed</p> <ul style="list-style-type: none"> Not finding good partners Collaboration culture Unbalanced flows in terms of time and volumes Losing SC control (including losing purchasing power) Work with competitors 	<ul style="list-style-type: none"> Create your company framework: investigate the different governance, business and operational models and legal framework clearly addressing all the guidelines mentioned in this table. Complementarity is key. Define who are your potential collaborators. Organisations should share goals and be committed to overcome barriers and ready for change. Start with those ones already understanding the prize and the requirements. Do not press companies that are not ready /have a clear interest. Let them return naturally. If competitors are around the table, a trusted organization (trustee) needs to arrange the collaboration and arrange processes.



2. Market current practice analysis



3. Project outcomes: Governance, Business and Operational models

- Horizontal Collaboration Business Model - Web Accessible Set of Methods and Tools Supporting Collaboration And Co-Modality:
 - Collaboration and Co-modality Example
 - Shapley Gain Sharing Calculator
 - Collaboration Trustee Game
- Horizontal collaboration in Less-than-truck-load (LTL) transport flows across shipper in a trusted network environment to create “collaborative FTLs”
- Business models considering the Physical Internet approach to use modular cargo units
- Physical Internet governance models



3. Project outcomes: Managing the transition: reducing set up and transactional costs

- CargoStream, an independent Pan-European platform that creates scale among shippers to drive horizontal supply chain collaboration through bundling their transportation needs with other shippers
- Massification project to develop horizontal collaborations among shippers to bundle their freight volumes on a same train towards one destination



3. Project outcomes: Legal aspects

- Legal framework for horizontal collaboration
 - Collaboration agreement between the shippers
 - Agreement between shippers and trustee
 - Framework carriage contract between shippers and LSPs
- Legal framework
 - Legal aspects in the pre-contractual phase
 - Competition law aspects
 - Legal definition of the trustee concept
 - The effect of the absence of an international convention on multimodal transport
 - General framework for e-commerce



4. Implementation cases



From



to



5. Potential implementation paths

- Growth of initiatives in terms of market share
- Disruptive initiatives with scalability potential
- Decarbonization
- Reducing transition cost - digitalization and connectivity
- Implementations in the rail sector – governance
- Inclusion of carbon emission costs into the total costs



Thank you!

For more information please contact:

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 www.zlc.edu.es