EUROPEAN TECHNOLOGY PLATFORM FOR LOGISTICS INNOVATION

Scale of the market opportunity and vision

Logistics is a key enabling sector for the European economy. Not only does it contribute close to 14% to the GDP of Europe but its impact on the quality of the EU manufacturing and service sectors is substantial, It is estimated that logistics account for 10 to 15% of the final cost of finished goods, thereby determining the competitiveness of Europe vis-à-vis other world regions. A 10% to 30% improvement in efficiency in the EU logistics sector would potentially equal a € 100 – 300 billion cost relief for the European industry. Six countries out of the global top-10 logistic performers are from the EU in 2012 which means a potential EU leadership in the field. So efficiency in logistics is a key element for the further growth of industrial activity and trade on a global scale.

Logistics and supply chains develop towards a cheaper and more efficient, but at the same time a more customized and service-oriented sector, supported by a full integration and synchronization of manufacturing, inventory and transport chains, i.e. supply chain integration. The ultimate challenge will be to make European industry resilient by a true “people, planet, profit” oriented logistics and supply chain sector, i.e. a sector that is economically, environmental and socially sustainable contributing to both industry competitiveness and the EU policy targets.

European Technology Platform on Logistics added value

Logistics and Supply Chain Management is a very fragmented sector, in which a broad variety of companies and associations intervene. According to industry, there is no clear and univocal voice in the area of research and innovation on logistics, while there actually is a strong need for this. Moreover, there is a clear vision that research and innovation could leverage more added value to the industry. The innovation landscape in EU is fragmented as well. R&D programming in logistics is now spread across programs of different themes (e.g. in Transport, Information and Communication Technologies, Food (KBBE) or Security themes). Out of these programs 60+ R&D projects addressing relevant aspects of logistics and supply chain innovation have been funded between 2008 and 2011. As a result of this fragmentation, there has been a lack of paramount vision on the work done and important overarching logistics topics are not treated at all. The European Technology Platform will address these important gaps.

Scope: Logistics, more than transport

The current innovation roadmaps for logistics at EU level are too narrow in scope. The roadmaps are driven mostly from transport, information & communication technologies or security agendas, they lack sufficient shipper and logistics service providers contribution and thereby fail to address factors that are key in arriving at truly sustainable logistics. In particular, decisions on scale and scope as well as the nature of the goods flow are often made at a supply chain level, by shippers and/or OEM’s (being the owners of the products transported), not by the transport sector. The ETP on logistics 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 are indispensable and should closely collaborate to reach efficient logistics and supply chain operations.

The European Technology Platform on logistics is focusing on research and innovation, on the Horizon 2020**.** European transport and research policies increasingly recognize the importance of logistics for the economy and the sustainability of transport. This is evidenced by the High Level

Group on Logistics advising the Vice-president and Commissioner for Transport. The composition of the High Level Group (in which an important number of shippers are represented) stresses the importance of a full supply chain view that goes beyond (multi-modal) transport.

In Figures 1 logistics and supply chain scope and influences is included. In Figure 2, the different ETPs addressing aspects influencing logistics and the ETP on Logistics scope (In blue) are included. Strong collaboration with related ETPs included in Figure 2 is being established to properly address the ETP scope. Figure 3 (page 3) shows the view on supply chain logistics addressed in the ETP on Logistics.

Figure1. Logistics and Supply Chain scope and and influences

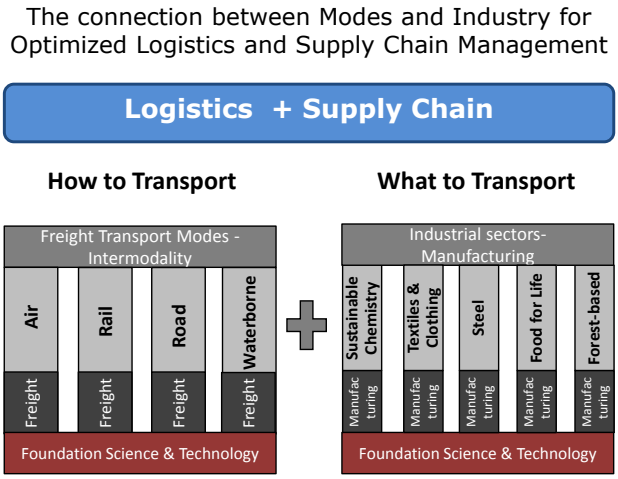
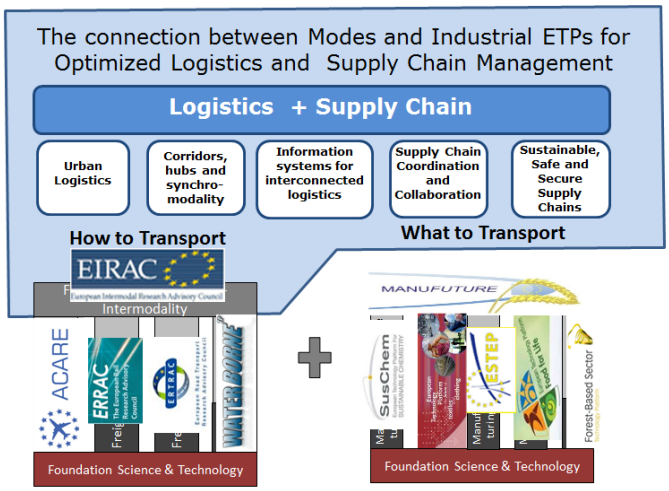


Figure 2. ETPs addressing Logistics issues (ETP Logistics in blue)

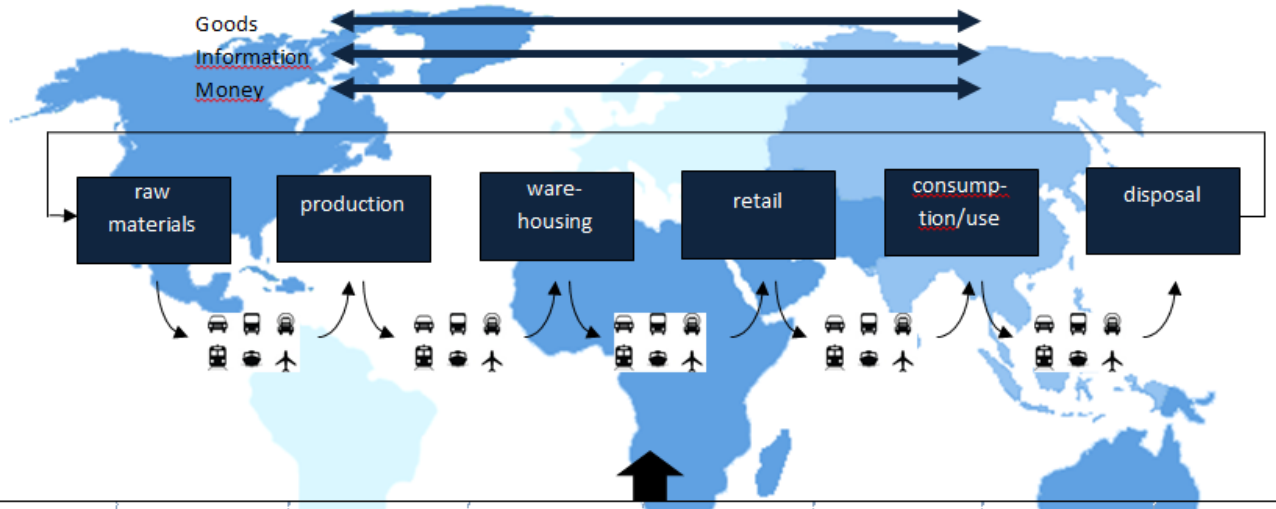


European Technology Platform on Logistics Mission

The mission of the European Technology Platform on Logistics is to contribute to the 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. To accomplish this mission the ETP will bring together as primary stakeholders: shippers and logistics service providers, as well as other relevant stakeholders including but not limited to: transport companies, terminal operators, support industry (Finance, ICT, Equipment/vehicle/vessel manufacturers, infrastructure providers, inspections) and research and education institutions to:

- Define research and innovation strategies, roadmaps and priorities agreed by all stakeholders to achieve the ETP on Logistics vision.
- 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.

A Supply Chain



Transportation

Decisions impacting (the need for) transportation

	Design	Manufacturing	Distribution	Sales	After sales	Finance	Inspections
Supply Chain decisions	Modular design, component commonality, new materials, miniaturization	Greater machine flexibility, smaller batches, lower set-up times, production locations	The time of information availability and the remaining time for transportation	Sales planning, promotions, packaging, product variety	Guaranteeing the upkeep of machines, return flows	Financing and insurance of goods, import duties and risk management, financial liquidity	Timing of inspections, the demands for inspections for different types of products
Impact on transportation	Ship less air and larger volumes, enable value added logistics close to market, safety stock reduction	Lower inventory, smaller batches, smaller lead times, higher transportation service required	Multi-modal transportation, lower vehicle utilization, more empty miles	Efficient use of warehouses and vehicles	Where to stock spare parts, how to transport and process return flows efficiently	Port of call choice, speed of transportation	When products can be shipped, how they are routed

Enablers and drivers

Technological improvement (e.g. 3D printing)
Energy costs
Resource scarcity / local4local
Knowledge availability
ICT
Labor costs
Growing economies
New materials
Regulation

Logistics and SCM: Effectively and efficiently design, organize, plan and perform logistical (or supporting) activities (incl. flows of information, money and freight) across multiple chains from sourcing to the final customers (including reverse flows).

The aim is to maximize the value of a product or service a product has to deliver with sustainable use of required resources

Figure 3