Discussion Roadmap "ICT for Sustainable Freight Transport and Logistics

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How to proceed to overcome the challenges?

- What do we need to do in order to overcome the challenges in term of:
  - Do we need more research and development, and in which period?
  - Is there a need for more pilot applications
  - In which period do we see the market innovation

- Zero Emission Urban Logistics
  - Connection of the vehicles and the road infrastructure
  - Interoperability between traffic management and freight distribution management systems
  - Connection of goods information and car information => Total set of information about cars transporting in urban areas

- End-to-End Security
  - Standards
  - Different regulation
  - Hardware/Software cost, maintenance
  - Interconnection of different solutions
  - Challenges reg. security and multi-modal

- Increased Logistic Efficiency
  - Standardization
  - Hardware/software related
• European Multi-Modal transport information, management and payment system
  • Wireless Sensor networks adoption in Logistics industry - Integration of intelligent sensors
  • Cloud (Private/ Public) interoperability
  • Federated Open Platforms in Logistics – Services easily configured, discovered, composed and used by companies with different IT maturity levels

• Cooperative Vehicle and Infrastructure
  • Single technology testing and validation replaced by sub-system evaluation
  • Merge currently existing domains to enable information sharing, aiming towards openness.
  • Agreement on concepts, services and stakeholder involvement
  • Resolving the “Chicken-and-egg”-problem of ICT investments

• Low-carbon freight transport services:
  • Exchange platforms for environmental data on freight transport services
  • Quality-of-service monitoring of the supply chain
  • Multi-actor, multi-criteria freight transport planning
  • Widespread cooperation infrastructure for logistics stakeholders
  • Standard indicators and methods for environmental performances of freight transport services
  • Visibility and accessibility of low-carbon transport alternatives
Green freight corridors

Transportation Network Management (Co-operative Systems)

Transport Demand

Supply chain security and Compliance

Transport Supply

Corridor Management

ITS

TAF/TSI

RIS

eMaritime