

# **Towards User-centric transport in Europe**



Brussels
23 April 2017



#### **SETRIS**

Strengthening European Transport Research and Innovation Strategies

A collaborative approach to develop multimodal research and innovation strategies

Prof. Mark Robinson ECTRI and Newcastle University





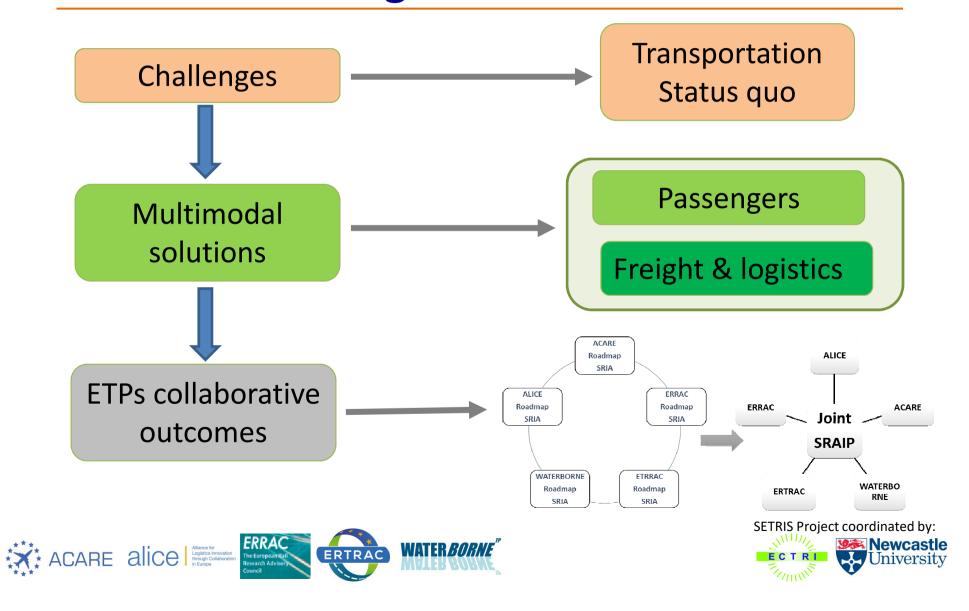






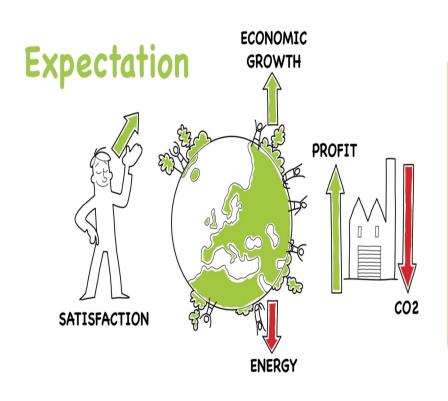


### **SETRIS – Challenges to Solutions**





## Challenges identified by all ETPs

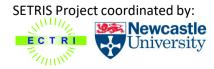


- **Competitiveness** of EU transport stakeholders
- Decision to decarbonise transport
- Information technology new opportunities and threats e.g. cyber security and big data
- New mobility systems/services concepts
- Progress towards an integrated transport
   system is slower than expected
- Security and Resilience of transport systems











### **Specific Challenges**

#### **Passenger**

- •Customer satisfaction by improving systems e.g. ticketing and charging.
- Passenger behavior (and needs)
- •Safety and security, reducing injuries and fatalities

#### **Freight and Logistics**

- •Customer satisfaction delivery time and reliability of the systems.
- •Increase safety and security, cargo loss or damage.

 Understanding the market for long distance passenger transport with changing demographics  Seamless network and transport integration including cross border co-modal transport operations





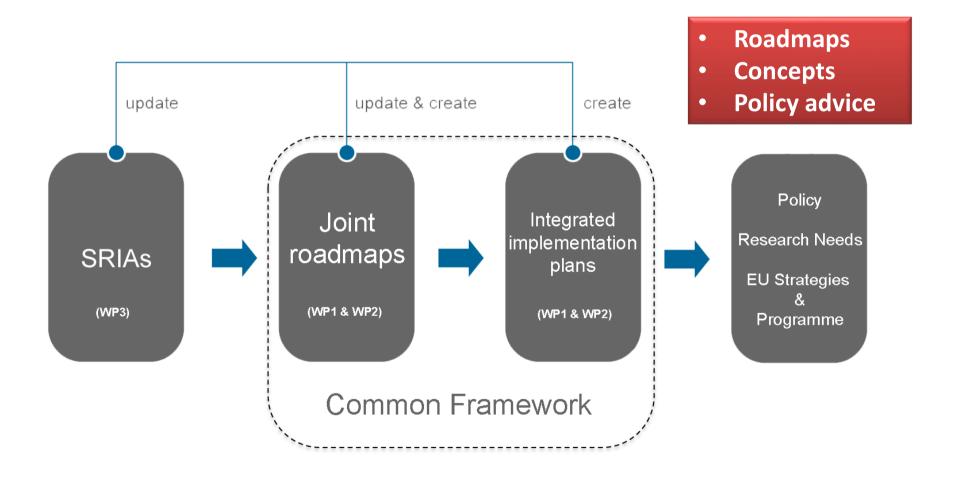








### **SETRIS Solutions**

















## **Integrated transport Enablers - Passengers**

# Integrated transport infrastructure data/information systems

- Active infrastructure;
- Common data meta-information architecture;
- Data/information sharing developing the meta-information layer;
- Data/information security

#### **User information management**

- Transport user expectations and acceptance factors;
- Market opportunities and acceptance factors;
- Coordinated travel process management;
- Disruption and recovery management

# Safe and secure transport infrastructures and operations

- Advanced safety technology;
- Advanced safety management systems;
- Advanced security systems







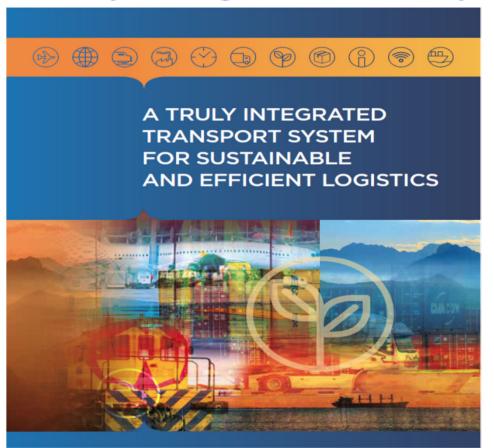








## Truly integrated transport- Freight & Logistics





















#### Important definition developed

A truly integrated transport system for sustainable and efficient logistics is based on an open and global system of transport and logistics assets, hubs, resources and services operated (in an open environment and framework conditions) by individual companies. They are fully visible and accessible to market players hence creating a network of logistics networks. Coordination of logistics, transport, infrastructure and supply networks aim to move, store, supply and use physical objects throughout the world in a manner that is economically, environmentally and socially efficient, secure and sustainable. The system will be based on physical, digital, and operational interconnectivity, enabled through modularization as well as standardisation interfaces and protocols.







### **End-to-end logistics Enablers**

- Reaching consensus and support from all transport and logistics stakeholders.
- Current development on robotics for logistics and autonomous operations.
- Autonomous transport.
- Internet of Things.
- Big Data.
- Crowdsourcing and sharing economy.
- Fast evolution of interoperability towards easier connectivity of independent ICT systems.
- Leadership and entrepreneurship.











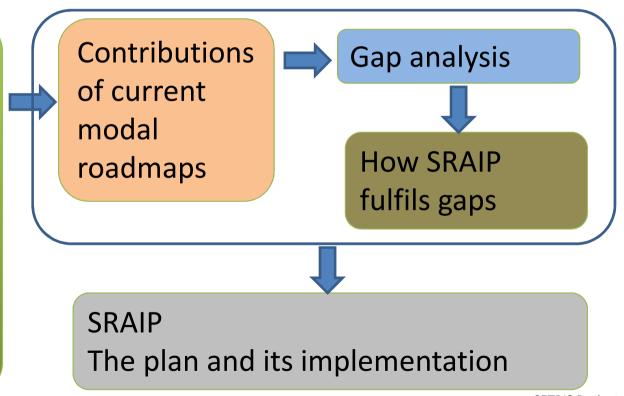




## **Process to Multimodal SRAI Plan (SRAIP)**

 Moving from defining "truly integrated transport for sustainable and efficient system" to SRAIP

Defined:
Truly
integrated
transport
system for
sustainable
and
efficient
logistics













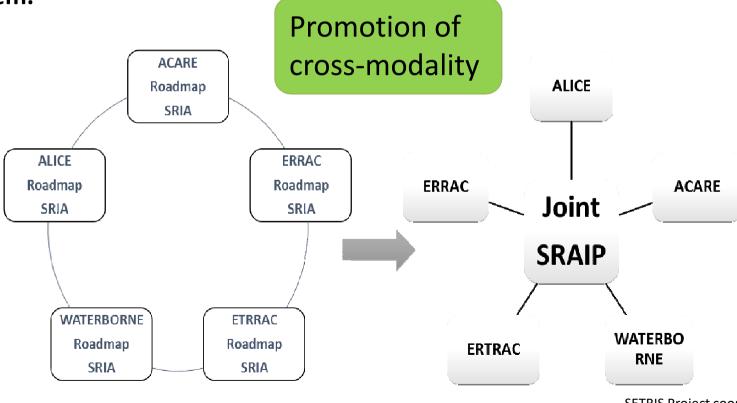




### **ETP Collaborations**

The contributions of the different transport European Technology
 Platforms, ETPs, to the achievement of the truly integrated transport

system.















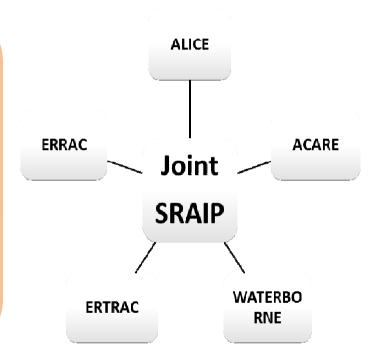






### **Impact of ETP collaborations**

- **Optimised the research and** innovation capacities of Europe in the transport sector
- Improved communication, dissemination and use of results
- Well defined relevant transport policies













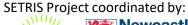






















## Thank you for your attention!



















