

SATIE

Presentation

FOT-NET Stakeholder meeting

28 november 2011

Wil Botman, Royal Dutch Touring Club ANWB

What is SATIE?

- ‡ SATIE = Support Action on a Transport ICT ELSA
- ‡ ELSA = European Large Scale Action

History

What is an ELSA

- ❑ Mentioned in EC Communication 'Raising the game' (2009) as a possible instrument
- ❑ To cut through the innovation cycle, to speed up implementation of new ITS applications
- ❑ Demand side in the lead, in stead of supply side
- ❑ Oriented towards societal goals, not products
- ❑ Broad areas of application (safety, environment, efficiency, services), solutions (infrastructure, vehicles, cooperative, internet), and geography (European test-beds)

New EC initiatives

‡ Oct 2010 COM: Innovation Union
new Research and Innovation Plan
+ European Innovation Partnerships

- Zero emissions
- Zero accidents
- Smart connected electro mobility

‡ Sept 2011 Partnering in research & innovation

‡ Nov 2011 Horizon 2020

15 December 2009

- Task Force created in eSafety Steering Group
- Chairs:
 - Bengt Hallstrom, Swedish Transport Authority
 - Wil Botman, FIA, users

Core Group:

- ERTICO, EUCAR, INRETS, PTV, TNO, VTT, DGINFSO.

1st Workshop 31 March 2010

‡ Presentations by demand side:

- + Member States
- + Lower authorities + users

‡ Discussions on

- + Common priority solutions
- + Cutting through the innovation cycle
- + Contribution of an ELSA

2nd Workshop 28 April 2010

‡ Presentations by supply side

- + Manufacturers (Fiat, Volvo)
- + Suppliers (Continental)
- + Traffic management (Satellic, PTV)
- + Nomadic devices (Medion)
- + Computing industry (Hermia)
- + Research institutes (EARPA)

‡ Discussions on contribution of ELSA

Description of demand side goals

- ‡ Traffic safety
- ‡ Traffic efficiency
- ‡ Environmental sustainability
- ‡ Maturity of solutions
- ‡ What about European service platforms?

Current offer from industry (1)

<i>Demand side goals and prioritized systems</i>	<i>Societal goals</i>			<i>Supply side priority system/actions with solutions provided by the market or in co-operation with road operators/public authorities.</i>
	<i>Road safety and security</i>	<i>Environment and energy efficiency</i>	<i>Efficiency & mobility</i>	
Systems for Clean & Efficient travel and transport		◇	◇	Systems that have impact on the environment <ul style="list-style-type: none"> • Eco-Routing, Platooning (HGV), Road charging (emission toll), Eco-driving strategies on guidance level (e.g. adapted acceleration / deceleration) Clean and efficient mobility <ul style="list-style-type: none"> • Eco-driving and eco-navigation • Eco-HMI for driver behavioural change • Eco-travel information systems • Eco-traffic management and control systems • Eco-demand and access management systems • Interoperable systems requested
Systems for Safety and security	◇			Systems having impact on Traffic Safety. <ul style="list-style-type: none"> •ACC, LDW , Curve speed warning, Intelligent Speed Adaptation (ISA), Traffic Risk Monitoring, Near miss Detection, Alcolock, Virtual lanes separation (dedicated lanes), Cooperative systems (Recommended speed profiles, Recommended lane use), eCall,
Passenger Transport Urban Mobility			◇	Systems having impact on mobility. <ul style="list-style-type: none"> •Real-time traffic condition information, Dynamic route guidance, •Dedicated lanes/dedicated infrastructure, •Multimodal traffic information, •Cooperative systems (recommended speed profiles, recommended lane use)

Current offer from industry (2)

<i>Demand side goals and prioritized systems</i>	<i>Societal goals</i>			<i>Supply side priority systems with solutions provided by the market or in co-operation with road operators/public authorities.</i>
	<i>Road safety and security</i>	<i>Environment and energy efficiency</i>	<i>Efficiency & mobility</i>	
Urban Mobility		◇		Fully electric vehicles <i>Electric mobility – research, development and innovation;</i> <ul style="list-style-type: none"> • Architectures, (power) electronics and smart systems for energy storage including energy management, drive train • On-board systems, safety aspects of new vehicle concepts: passive, preventive safety and crash mitigation, safety of high-voltage systems • Vehicle-infrastructure aspects: information systems, energy measuring systems • Vehicle-charging system: interoperability and integration of the electric vehicles in the transport system • Extensive trials: from public transport to fleets
Freight Transport Green freight corridors	◇	◇	◇	Freight transport <ul style="list-style-type: none"> • Safe and secure parking areas • ICT equipped freight vehicles, containers etc • Increased penetration of Cooperative Systems – costs of technology, multiple suppliers, open for new solutions – yet stable • Open secure and robust environment for Services development and operation • Need for standardisation and harmonisation of regulations globally • Customers needs for cost-efficient integrated solutions • Harmonised city zone regulation • Harmonised access control for Environmental city zones and congestion charging • Parking zones for distribution vehicles • Competitor neutral procurement • Open ITS architecture for common ITS services

Current offer from industry (3)

<i>Demand side goals and prioritized systems</i>	<i>Societal goals</i>			<i>Supply side priority systems with solutions provided by the market or in co-operation with road operators/public authorities.</i>
	<i>Road safety and security</i>	<i>Environment and energy efficiency</i>	<i>Efficiency & mobility</i>	
Green freight corridors		◇	◇	Borders and Transurban <ul style="list-style-type: none"> • ICT equipped infrastructure. • Trans-European and international transport information management (the lack of standards). • Open platform for ITS services. • Cost for connectivity (roaming issues) and availability of alternative connectivity. • Availability of low-cost high-quality real-time data. • Harmonized regulation and global standards.
Co-operating systems	◇	◇	◇	Co-operating systems <ul style="list-style-type: none"> • Integration of all ICT-equipped elements into the transport infrastructure for efficient and clean freight transportation. • Towards automated driving – the research and development and a harmonized view on the Vienna Convention.
Systems for Safe, Clean & Efficient travel and transport	◇	◇	◇	Connected car and future internet <ul style="list-style-type: none"> • Eco services, customer services (calendar & contact management, communities & blogging, contents & media, traffic & driving preferences). • Safety services (eCall, pedestrian, road departure, accident & collision warning, parking & merge assistance, pre-crash sensing). • Vehicle services, remote & maintenance diagnosis. • Theft immobilizer, service & repair invitations. • Commercial services (weather & road condition, news & popular media, secure payment, etc). • European wide service platforms – pilots, implementation and pan-European harmonization. • The connected car – maximum efficiency with low penetration.

Proposal of an ELSA (1)

- ‡ Technological areas:
- ‡ Connected cars and connected travellers
- ‡ Cooperative vehicle infrastructure systems in combination with smart and ecological traffic management
- ‡ Proactive network operation and mobility management
- ‡ Co-modal information services for travellers and goods
- ‡ European wide service platform for advanced traffic information services
- ‡ Internet of the future
- ‡ Green freight and intelligent freight transport on corridors and in urban areas
- ‡ Electric vehicles
- ‡ Bringing together ITS + ICT

Proposal of an ELSA (2)

- ‡ Development and testing will take place in test-beds throughout Europe
- ‡ Each test bed offers a home to subsequent 'activities'
- ‡ Each activity has the aim to bring technologies closer to the market, with scaling up in testing, evaluation and go/no-go
- ‡ Timeframe: 8Y with 2Y activities

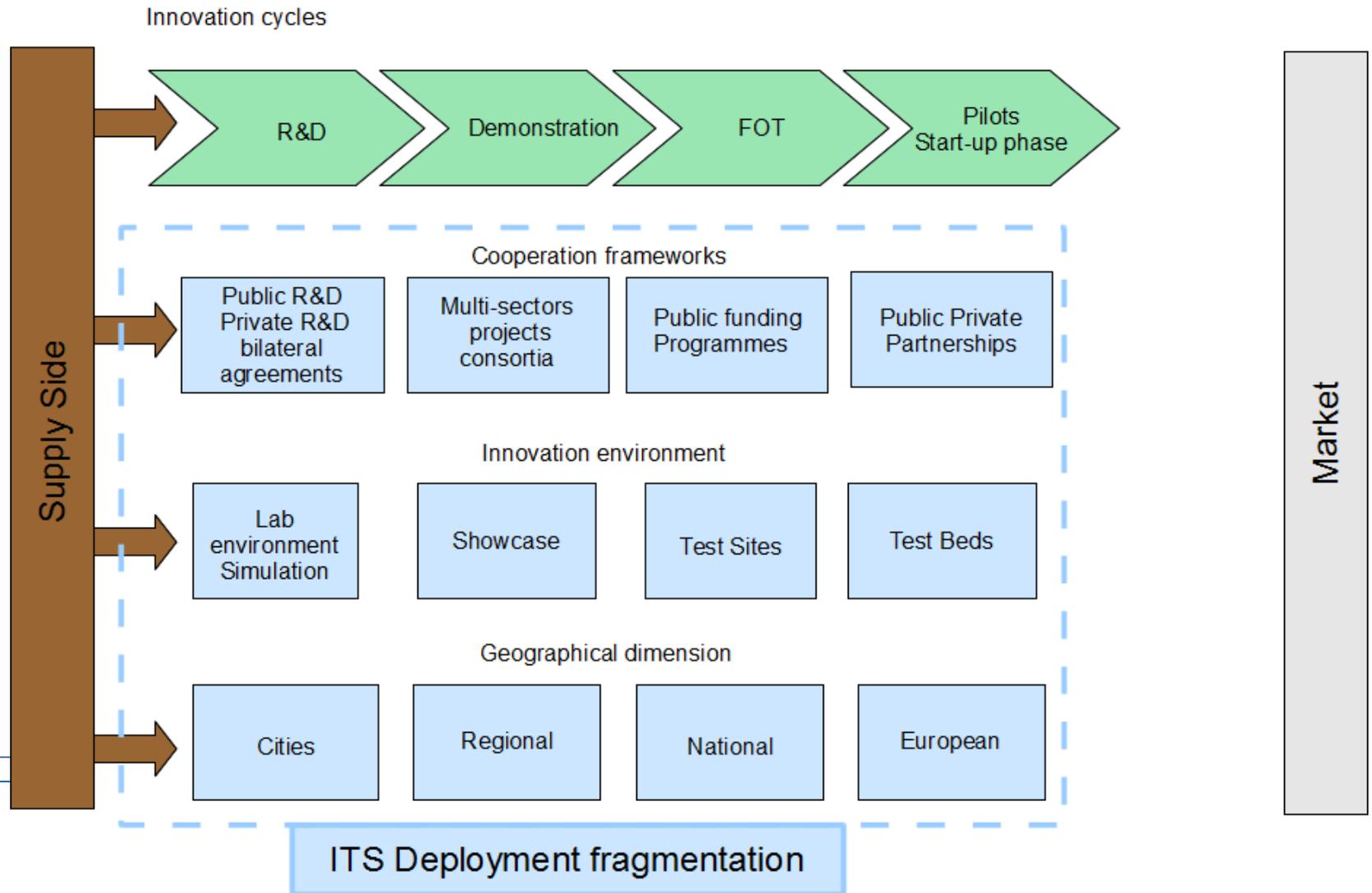
Proposal of an ELSA (3)

- ‡ Cooperation between authorities and industry essential
- ‡ Simultaneous development of business models
- ‡ Funding from European, national and regional level
- ‡ Format of PPP (link with Green Car PPP, Future Internet PPP)

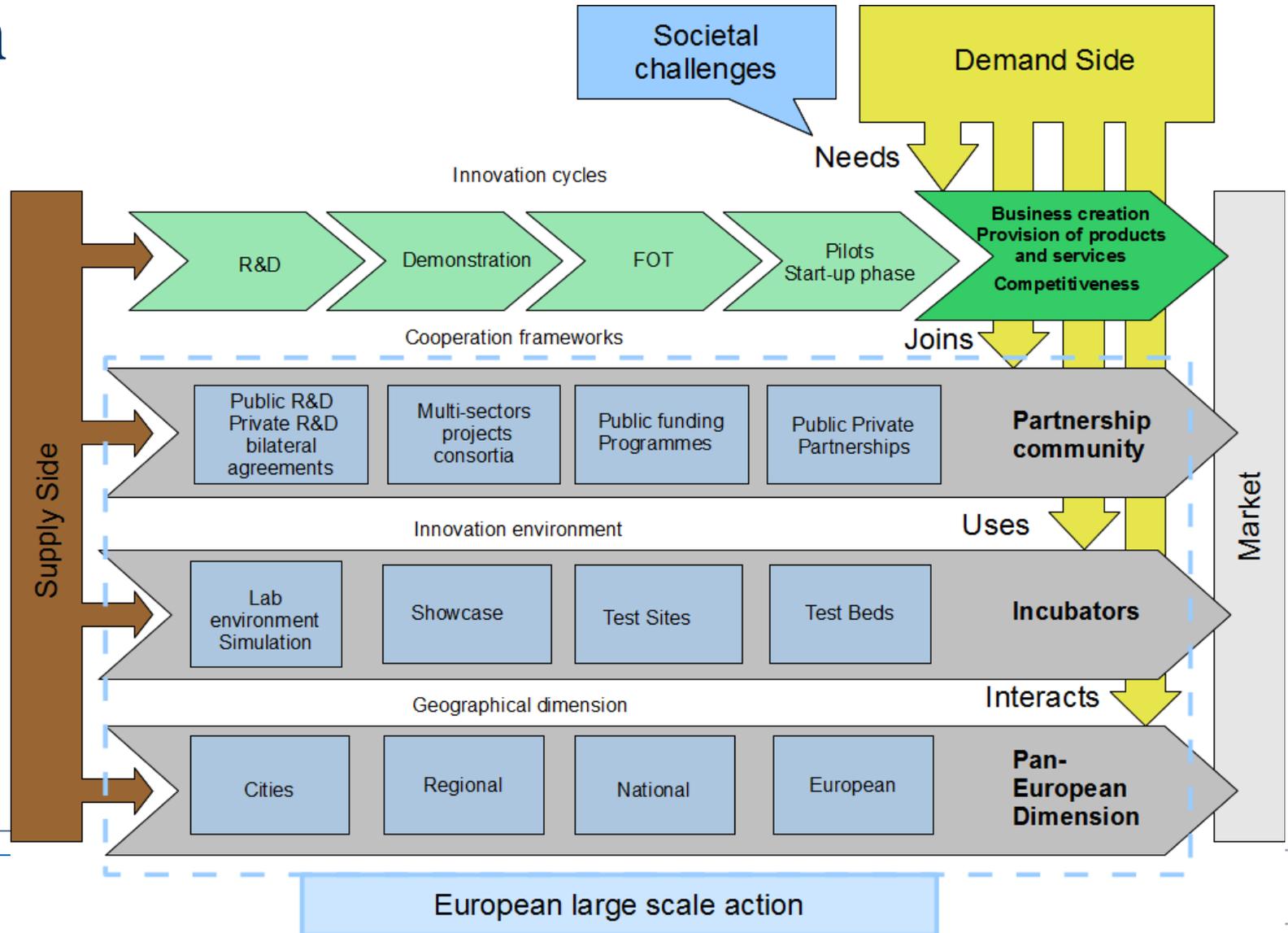
ELSA report: concept and benefits

- ‡ Linking various innovation stages
- ‡ Bringing together partners in a more permanent structure
- ‡ Connection between European and National approach
- ‡ Bringing together actions from authorities and industry
- ‡ Programming of stepwise development
- ‡ Less time lost between projects
- ‡ Gradual development of business models

How we understand the current situation

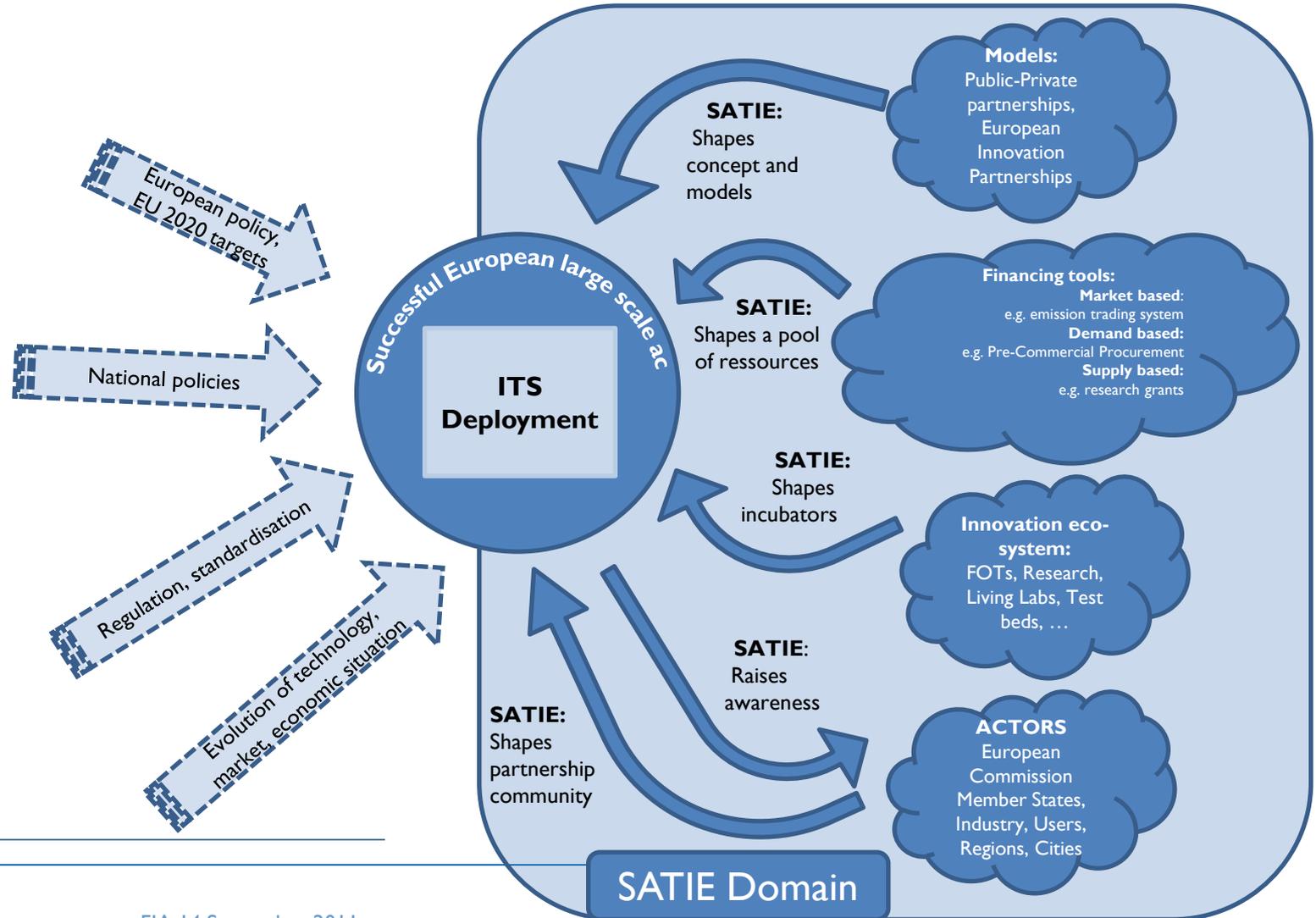


How we understand the concept of an elsa



What SATIE will do

The SATIE domain of activities



Project activity blocks

- ‡ WP1 – SATIE Management & Governance
 - + Management of the Support Action
- ‡ WP2 – Awareness raising and networking events
 - + Develop and use a range of communication means to achieve a maximum awareness and understanding of the elsa concept, through a maximum participation to the SATIE activities from relevant stakeholders
- ‡ WP3 – elsa concept
 - + Deepen the initial concept of elsa to make it a new instrument for European R&D programmes
 - + Develop the concept in an “elsa Handbook”
- ‡ WP4 – Elements for an operational elsa
 - + Identify initiatives
 - + Define pan European test beds and incubators
- ‡ WP5 – elsa implementation scenarios
 - + Provide input to evaluate the use of a large scale action as a possible instrument for European Research & Innovation funding
 - + Develop and assess implementation scenarios for large scale actions

What we will deliver

‡ Main results

- + D3.2 The “elsa Handbook”
- + D5.2 Assessment of the effects of elsa
- + Three high-level meetings

‡ Main outcome

- + Successful launch of an elsa (e.g. as an European Innovation Partnership) of ICT for sustainable mobility and transport

Partners of SATIE

- ‡ ERTICO, Project leader
- ‡ ANWB, chairman of steering group
- ‡ Swedish Transport Authority
- ‡ TNO, Netherlands
- ‡ VTT, Finland
- ‡ IFFSTAR, France
- ‡ PTV, Germany
- ‡ EUCAR, European
- ‡ ASECAP, European
- ‡ ITS Niedersachsen, Germany



SATIE

Thanks for your time!