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“ITS and cooperative systems for Smart and safe urban mobility: some introductory thoughts for discussion”

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The meaning of SMART AND SAFE URBAN MOBILITY :

ITS assisted multimodal door-to-door mobility, that features:

- Full scale data communication and information provision to all trip makers*
- Safe and accessible infrastructures with provisions for the **Mobility Impaired** - MI (13% of EU population) + **elderly** (another 20-35%)*
- Effective and sustainable urban freight distribution*
- Sufficiently safe operation (e.g. “zero vision”)*
- Provisions for citizens as well as visitors*

Core notion: The systems approach

Core components of the “whole safe mobility”



Real-time Travel System Information:

Focus on:

- Public transport
- multimodal trips
- Traffic congestion / incidents
- Parking

Infrastructures & Networks:

- Stations and hubs
- Multimodal terminals
- Off street parking
- PT priority, green traffic control based on real-time traffic events
- Increased connectivity for drivers and vehicles

TRIP MAKING / PLANNING FULL CAPABILITY

Focus on:

- ✓ public transport,
- ✓ Multimodality
- ✓ Energy and environmental sensitivity

Efficient urban freight services:

- ❖ Safe
- ❖ Efficient
- ❖ Environmentally compatible

Provisions for all users

- ✓ “Accessible” infrastructures (for MI users),
- ✓ “Accessible” Information to all (locals and visitors)
- ✓ VRU-friendly
- ✓ Compatible with “livability needs”
- ✓



Key issues for unlocking the *ITS* potential

*Based on a set of recommendations originally formulated by ECTRI's
Thematic Working Group on Urban Mobility*

(56 experts from 21 Institutes)

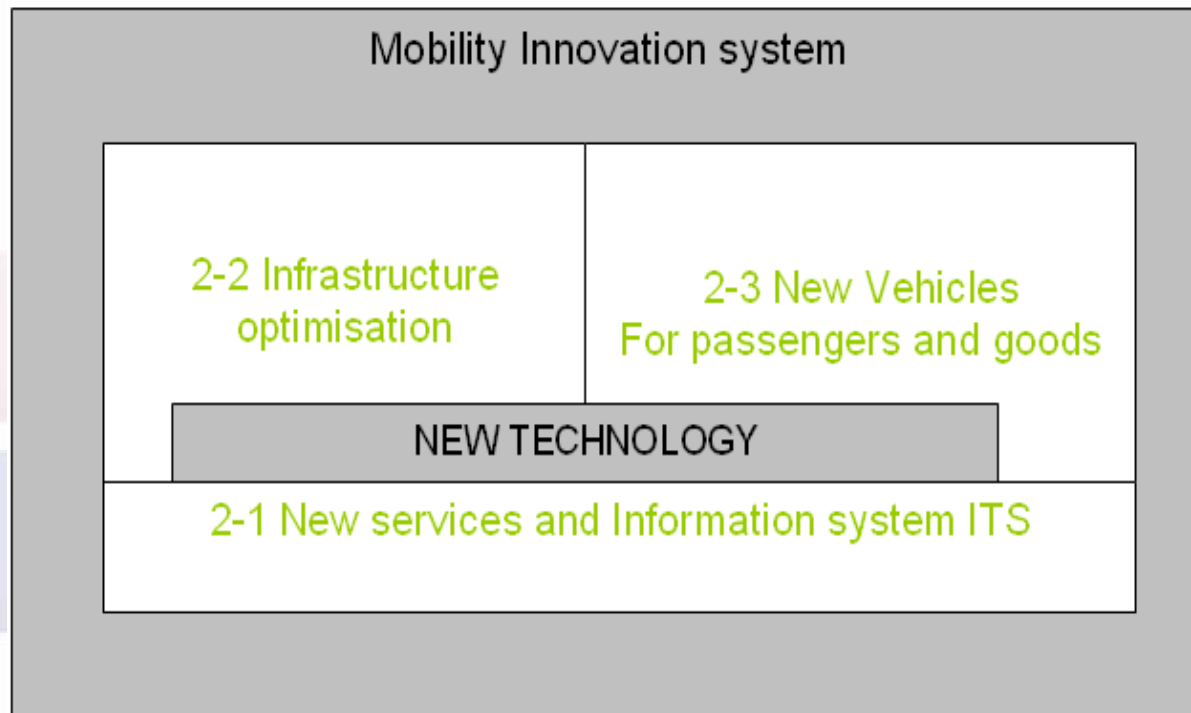
- **1: Promoting interoperable mobility knowledge and management**
- **2: Implementing innovative ITS in all “components” of smart & safe urban mobility**
- **3: Re-organising / integrating urban and suburban transport system services**
- **4: Meeting real societal needs (liveable urban areas)**
- **5: Achieving economic and environmental effectiveness.**

Issue1: Mobility knowledge & management (persons and goods)

KN OWLEDGE	MANAGEMENT
Individual behaviour and mobility demand	
New mobility concepts and solutions	
Network optimization for intermodality, interoperability	
Institutional strategies for Urban mobility	

- *Improved knowledge of mobility issues*
- *Promote optimal methods for interoperable transnational mobility info provision and management*
- *Promote innovative mobility concepts*

Issue 2: Implementing innovative ITS on all “components” of urban mobility (infrastructure, vehicles, users)



- New services and information systems.
- New ideas on infrastructure optimization as well as new vehicles.
- New mobility system concepts and integration.

Issue 3: Re-organising / integrating urban and suburban transport system services

- Urban planning and organization concepts
- Exploit all planning tools in relation to urban mobility aims and strategies.
- Urban / suburban transport integration

Issue 4: Meeting real societal needs

- Safety and security aspects
- Social inclusion and equity
- “Liveable” urban areas
- Investigate social behaviour and acceptance.

Issue 5: Achieving economic and environmental effectiveness

Economic effectiveness

- *Impact on urban economy*
- *Effective economic policy instruments and regulation (Cost / benefit - subsidisation of Public transport)*
- *Use of economic modelling and forecasting*

Environmental Effectiveness

- *Energy efficient vehicles*
- *New energy sources and electrification issues*
- *Reduction of carbon emissions.*
- *Reduction of noise as well as assessment of its effect on health.*
- *Green mobility concepts and solutions.*

