



What are the research, innovation and deployment problems which need to be solved to achieve an energy efficient urban mobility

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Session B2: Mobility: the Door-to-Door Strategy

SUSTAINABLE URBAN MOBILITY How to achieve it?

- Less energy consumption?
- Less CO2 emissions per passenger x km?
- Less Congestion?
- More Safety?

**=> Huge competitive advantage of
public transport and soft modes within
concentrated (dense) urban areas**

SUSTAINABLE URBAN MOBILITY How to achieve it?

However:

- Many citizens are reluctant to use public transport/rail
(Low easyness of use? Poor performances?)
- Many cities are not “friendly” for public transport and soft modes
(Urban sprawl?)
- Many political decision makers are reluctant to promote public transport and rail
(Cost of public service requirements?)



What are the **research, innovation and deployment** problems to be solved to achieve an efficient sustainable urban mobility?

URBAN MOBILITY *DOOR-TO-DOOR STRATEGY*

First difficulty: **Meaning of Door-to-Door Strategy**

- Different approaches of mobility for citizens:
 - 95% of citizens living within their metropolitan city limits
 - 5% of citizens travelling outside their home city
- Within a given local territory, different meaning for the various categories of populations:
 - Pupils
 - Students
 - Active people with a job
 - Unemployed
 - Retired people
 - Mothers with child
 - Wives' whose husband has taken the car...
 - Rich and poor...
- For a given person, different meaning depending on the purpose of the trip:
 - Study
 - Work
 - Business
 - Shopping
 - Culture
 - Leisure
 - Tourism...



⇒ **Very large variety of needs regarding door-to-door mobility**

⇒ **No simple and no “one fits all” solution: each city is unique**

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PROBLEMS REGARDING RESEARCH & URBAN MOBILITY

1 (1/5). Lack of strategic vision from actual stakeholders

– Public transport operators

- Short term contracts (5-10 years)
- Contracts with public service requirements & shortage of public funds
- Focus on daily & local problems

⇒ Difficult to gather a “critical mass” of operators able & ready to invest in EU R&D

– Competent (local) Authorities

- Short term elective mandate (5-7 years) usually not compatible with long term investment (needing large consensus over long periods)

⇒ Difficult to achieve long term commitment on major projects outcomes

– EU R&D current main actors: Consultants & Academics

- Usually not aware of real-life constraints

⇒ Low market uptake of most EU R&D projects

PROBLEMS REGARDING RESEARCH & URBAN MOBILITY

2 (2/5). Huge fragmentation of responsibilities influencing urban mobility in a given metropolitan area

- **Different departments in charge (and sometimes different public authorities: State, Region, Municipalities) for (e.g.):**
 - Land use planning
 - Land use control
 - Transportation planning
 - Traffic management
 - Public transport...
- **Usually poor coordination between metropolitan departments**
- ⇒ **Difficult to set up a global sustainable urban mobility approach (and relevant research) covering short-, medium- and long-term considerations**



PROBLEMS REGARDING RESEARCH & URBAN MOBILITY

3 (3/5). Lack of “European urban mobility vision” of local stakeholders

- **“Citycentric” approach of solutions**
- **Limited short term added value of standardised solutions**
- ⇒ Low/very low interest in a coordination with other cities/regions/states (sometimes national approach, very scarcely European)
- ⇒ **Weak representation of local competent authorities in European instances**
- ⇒ Research focusing on technical harmonisation across EU not a priority



PROBLEMS REGARDING RESEARCH & URBAN MOBILITY

4 (4/5). Lack of tools at EU level to ease an EU approach of urban mobility

- EC has given priority for a “modal” approach: air, rail, road, waterborne...(see current ETPs)
- Each EC Directorate has its own work programme sometimes overlapping with others
- One intermodal platform: freight only

⇒ Inappropriateness of current ETPs to properly deal with “transverse” (multimodal) urban mobility problems and relevant research

PROBLEMS REGARDING RESEARCH & URBAN MOBILITY

5 (5/5). Current distortion of EU R&D research programmes in favor of “road” urban mobility

- **Most research projects impacting urban mobility have favored the car industry against public transport (EC has given priority for R&D projects – and urban mobility policies - facilitating the use of cars)**
- ⇒ **With regard to important topics like ticketing, ITS and passenger information, very low consideration up to now for those leaving their car at home**



PROBLEMS REGARDING INNOVATION & URBAN MOBILITY

1 (1/4). Innovation impacting urban mobility is very present at the metropolitan city level (e.g. Travel planners, integrated contactless ticketing...), however:

- **Innovation has an initial cost usually high (e.g. Use of alternative energy)**
 - **Within ICT sector, no real coordination of those in charge of implementing solutions, no risk sharing**
 - **When such coordination exist (e.g. IFM-Project for Ticketing), no real endorsement at the political level (by competent authorities)**
- ⇒ **For those issues aiming at technical harmonisation, lack of adequate EC support**

PROBLEMS REGARDING INNOVATION & URBAN MOBILITY

2 (2/4). Innovation impacting urban mobility is a very competitive domain when technical solutions are at stake, and manufacturers, and even more and more now operators, are facing competition between them

- ⇒ For those issues aiming at technical harmonisation, reluctance to invest in joint R&D actions, especially for one assuming he has a leading position



PROBLEMS REGARDING *INNOVATION & URBAN MOBILITY*

3 (3/4). *Technical expertise in the rail sector suffers from insufficient attraction of young researchers & engineers*

- **Lack of coordination at EU level to tackle this problem**
- ⇒ Risk of weakening the competitive advantage of European rail manufacturing industry within and outside EU



PROBLEMS REGARDING DEPLOYMENT OF SOLUTIONS IMPACTING URBAN MOBILITY

1 (1/2). *Deployment problems very similar to “Problems regarding EU Research”*

- Lack of strategic vision from decision makers in charge of implementation
- Lack of appropriate partners for developing EU Research projects
- ⇒ Low market uptake of EU R&D projects outcomes



PROBLEMS REGARDING DEPLOYMENT OF SOLUTIONS IMPACTING URBAN MOBILITY

2 (2/2). Specific obstacles regarding the deployment of innovative solutions

- Time consuming decision making process for adoption of innovative products to be deployed EU wide (slow consensus building at EU level)
- Importance of required investment in mega cities for full deployment
- Time needed for deployment conflicting with the short life cycle of ITS products
- Long life time of rolling stock and infrastructure conflicting with the short life cycle of ICT components
- ⇒ Low interest in EU solutions requiring a large consensus between decision makers from different countries. In most cases, cooperation for deployment remains limited within national borders

THANK YOU FOR YOUR ATTENTION

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