Policy Recommendations for acceleration of ITS deployment
NEWBITS Policy Recommendations

- Sharing insights from four ITS case studies
- Explaining why we need new business models for ITS
- Shedding light on pathways and good practices for ITS innovation diffusion and agile business modelling
- Highlighting the necessity of policy approaches to allow the emergence of new business models for ITS services

http://newbits-project.eu/publications/
Policy recommendation #1

• Reduce the innovation gap, i.e. the high fragmentation of research within the EU by
  • strengthening the implementation of the commitments that mostly favour the weakest members of the European Union
  • making financial resources from structural funds available for them.
**Policy recommendation #2**

- Strengthen the support from **local authorities** considering the need for:

<table>
<thead>
<tr>
<th>Sharing Mobility</th>
<th>MaaS</th>
<th>CAVs</th>
</tr>
</thead>
<tbody>
<tr>
<td>measures to</td>
<td>stakeholder</td>
<td>user acceptance</td>
</tr>
<tr>
<td>overcome the</td>
<td>cooperation</td>
<td>ad-hoc regulatory</td>
</tr>
<tr>
<td>critical mass</td>
<td>user’s willingness to move from a car ownership culture</td>
<td>actions</td>
</tr>
<tr>
<td>barrier</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Policy recommendation #3

• Make use of **market segment-specific knowledge** on deployment barriers as an input for the development of policy incentives to increase the effectiveness of these activities

  • by e.g. differentiating policies to market segments or

  • by developing a policy framework that provides some **flexibility** to deal with differences between market segments
Policy recommendation #4

- Apply two types of KPIs, deployment and benefit KPIs, to properly measure (i) the extent by which an ITS service is implemented and (ii) its overall impact.
  - Define deployment KPIs to properly monitor the implementation of ITS services (despite the lack of universal deployment KPIs)
  - Define benefit KPIs in line with the primary objective (e.g. safety, efficiency, environmental performance) of the service – as direct measures of the intended impacts (e.g. emissions level, number of accidents) instead of indirect measures (e.g. transport volumes).
Policy recommendation #5

• Take into account the **psychological resistance** of the end-users in using certain ITS services to encourage mobility behaviour change

• Apply conjoint analysis, market research analysis, crowdsourcing and educational campaigns as well as co-creation workshops to
  • understand **end users’ preferences** and the specific characteristics to achieve higher end-user acceptability, but also to
  • fine-tune services to the end-users needs in terms of technical features and prices.
Policy recommendation #6

• Facilitate **design and creation of networks** in the ITS industry to enhance the sustainability of business models for ITS services
• Facilitate **cooperation** among all stakeholders
  • including **end-users** to stimulate the creation of complementary services and supporting the core activities in a network through strategic planning, technical know-how and policy development support
• ensuring **continuous political support** for the ITS industry through (i) regular meetings between the industry representatives and Parliament’s Transport groups (ii) publication of explanatory materials about ITS
Policy recommendation #7

- Base regulations on ITS innovation and diffusion on the **business ecosystem concept** making use of the concept and the methodology of **value network analysis** – as an instrument to measure the created value.
- Provide incentives to stakeholders of a value network to cooperate, collaborate and exchange information and knowledge stimulating **open innovation approaches** in the ITS sector.
- Promote **open access** to commercially designed platforms for collaboration also for educational and public purposes.
Policy recommendation #8

- Design and implement policies which encourage "learning-by-doing" approaches when adopting new ITS solutions to overcome current behavioural inertia of some end-users segments.

- Support measures in which a critical mass of early adopters
  - acts as a role model for an engagement mechanism
  - sets multiplicative exchange processes in motion supporting new business models to be developed across transport sectors.
Policy recommendation #9

- Reinforce **public-private partnerships** – a very typical form of ITS application development to seize capital to
  
  - foster the stability in the ITS innovation process
  - facilitate the creation of new business models for ITS services.
Policy recommendation #10

- Design and implement policies which
  - promote **collaboration** and **multidisciplinary** innovation initiatives
  - allow the implementation of novel strategies to reduce the number of private vehicles that arrive on specific areas of a city on a daily basis
  - concomitantly enable the collection of high-value data on user mobility for the design of new strategic options

  capturing a series of financial and social benefits for the city.
Policy recommendation #11

• Design and implement policies which help local authorities and entities responsible for traffic management

  • to overcome the administrative issues relating to the maintenance and upgrading of C-ITS infrastructure
  • to guarantee the interoperability of different systems to manage traffic flow.
Policy recommendation #12

- Design and implement policies which stimulate the development of integrated track-and-trace services for an efficient hinterland transport of goods by
  - aligning the costs and benefits of C-ITS companies operating the services and their logistic partners.

  capturing societal benefits by **stimulating modal shifts** of hinterland transport from road to inland navigation
Policy recommendation #13

- Design and implement policies that encourage collaboration and support railway infrastructure owners and operators across the EU in the implementation and standardisation of a purpose-oriented maintenance system capturing benefits of predictive maintenance, primarily in safety, reliability and comfort for passenger and communities.
Policy recommendation #14

• Facilitate collaboration of ITS stakeholders to foster a network-business modelling proves by
  • becoming members of the proposed communities
  • supporting membership of all ITS stakeholders
  • publishing and openly negotiating policies

• Maintain a comprehensive repository of results of implemented ITS pilot projects
  • ensuring that lessons learnt are effectively shared among stakeholders to further improve ITS business models.