

## Accessibility and connectivity

**Chair:** Inger Gustafsson, Vice-chair of the JPI Urban Europe Governing Board, VINNOVA

**Key note speakers:** Prof. Cristina Pronello, Member of the JPI Urban Europe Scientific Advisory Board, Politecnico di Torino, Prof. Bert van Wee, TU Delft

**Organizer/Rapporteur:** Magnus Brink, Arjan van Binsbergen

**Participants:** Overall there were 18 people attending the session.

**Christina Pronello, responsible for the ‘Accessibility & Connectivity’ part of the SRIA**

**Intro on the theme Accessibility & Connectivity as part of the SRIA**

Defines accessibility as the ease with which activities and opportunities may be reached using a transport system. Christina highlights the link between accessibility/access and territorial cohesion and social in/exclusion.

Network connectivity is directness of routes, this might be achieved by using different modes. Policies for reducing travel times and costs should be rather aimed at enhancing connectivity (‘more connected systems’) than in making faster systems.

Some insights:

- Even when connectivity stays the same, the users’ *experience* may shift – for example due to ageing population
- Accessibility/access implies an *economical (budget) aspect*; reduced incomes or increased prices might reduce accessibility
- *Social interaction* is related to connectivity and the fit of the transport system to the spatial, urban system.

Topics to be addressed:

1. Users’ needs, behaviours and locational proximity – to better locate activities in cities and plan the transport system
2. Integration technologies – modern integrated transport systems should allow for improved accessibility through better network connectivity; technologies include advanced traveler information systems (ATIS) and integrated tariff (systems)
3. Bridging the gap between travellers’ needs and behaviours; special attention for low-density areas and for elderly, disabled, people without access to a car, ...

Possible points of discussion:

1. How will IT revolution affect travel behaviour
2. Role of sharing economy on mobility behaviour
3. What is the role of JPI UE

**Bert van Wee, TU Delft**

First: many positive aspects, with respect to the definition, the inclusion of public transport and the spatial differences in accessibility, the link with social inclusion, and the difference between ‘accessibility’ and ‘mobility’, and the balance between accessibility and sustainability.

#### Additional:

- Land use planning and planning for sustainable modes
- Important role of ICT as a mobility alternative/substitution and trip options
- Collaboration between travel providers
- Travellers needs'

#### Missing points:

- Limited attention to freight transport
- How to evaluate accessibility effects of candidate policy options
- How to value such evaluations; how to include them into evaluation methods such as CBA's
- Missing: perception of accessibility (for instance, quality of the route – especially for 'slow'/active modes
  - > this could be tackled in the task of investigating the travelers needs

#### Discussion points:

ICT: substitution or complementary? *Net* effect is zero, however, the overall impact is quite big.

ICT as a 'pain killer' – thanks to ICT we're possibly less vulnerable for disruptions

Sharing economy/mobility as a service: today, a poorly understood phenomenon, hardly any literature > so a great need for research.

Note the importance of taking into account 'cohort thinking' instead of age-thinking.

Role of urban planners: they should be in the front seat, however we should be aware of the fact that they have multiple objectives and aims. We need to take into account differences in cultures and traditions between land use planners and transport planners.

Therefore, we need a combined, agreed-on evaluation and assessment system. Also we need to justly 'frame' discussions: laying the emphasis on easy and quality and immediate/direct effects – perhaps – not on restrictions and limitations, and high-order targets (like CO2 emission reduction).

#### Important notes:

- advanced accessibility indicators tend to be hard to communicate, therefore we would need easy to understand and communicate indicators.
- the pain of measures is often not in the results, but in the change-process.
- We need robustness indicators
- We need to think about 'transport planning' in areas of shrinkage/population decline

#### Discussion

EU / Commission perspective:

One of the core ideas of the union is freedom of movement of goods and people, and the concept of fairness. This should be maintained.

A need for finding a balance between local circumstances (like urban roads) versus the interests of regional, national or even international operating companies.

It's important to share knowledge, experiences; POLIS and other networks can help to this end.

Accessibility/connectivity and sustainability are in fact the blades of the scissors, it's good that JPI UE recognizes this issue.

In H2020 (en FP7) the EC has supported the development of tools and models, now, attention should be paid to the application of these tools and the users' perspective (also the users' of tools!)

With respect to ICT: the net effects might be almost zero, the local effects might be differently distributed. (Self-driving cars in the same congestion than normal cars...)

With respect to sharing concepts: at the European level already some research has been done, but indeed, still more research will be needed.

*It's not clear – to both the audience and the SRIA writer (Christina Pronello) – why 'freight transport' is dropped from the agenda. This should be an element in the agenda. There is interest to take up this issue.*

An important issue for research is data availability and usability, especially real time data. Often these data are kept confidential for business and privacy reasons, even in public companies. It would be good if such data would become (a bit more) better available.

With respect to CBA methods, rail and even bus lines often score low; it's unclear whether this relates to wrong or missed indicators? During the discussion, it is argued that smaller and urban transit projects could result in positive CBA's; the large 'prestigious' projects – like HSR – are often negative. Further, we sometimes underestimate the 'option value' and maybe the CO2 emission reduction value.

High transit costs might limit a sustainable urban sprawl; tariffs should therefore be taken into account in planning as well.

Mixing activities (shops, schools) can be beneficial for sustainable mobility, this doesn't work for 'work' facilities.

## Conclusion

- The ideas put forward in the SRIA are largely recognized
  - Apply the integrated perspective (land use/ICT/social inclusion/...)
  - Strengthen the users' perspective
  - Stress the importance of balancing accessibility/connectivity to sustainable development
- Some additional, fitting ideas:
  - Include accessibility indicators better in land-use planning evaluation tools
  - Develop robustness indicators
  - Design for shrinking cities/areas
  - The balance between accessibility/connectivity and related socio-economic advantages at the one side and sustainability issues would need extra attention (some options might prove be beneficial for both issues, some other will induce opposite effects)
- It would be good when all type of data, especially real time data, could be made better available to scientists/researchers; it would be needed to overcome issues of business sensitivity and privacy
- Make (better) use of available knowledge (FP7, H2020) and networks; make existing models/tools better usable for end-users
- The SRIA/calls should pay more attention to freight transport in urban areas