

Workshop Output WS 3.1.A

Title of workshop: Mobility and Transport

Prepared by

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General questions to please be answered in the workshop reporting

- 1) What was the focus of the workshop? Methodological issues and advancements or thematic issues (systems knowledge, transformation knowledge, target knowledge). Please check and fill in the matrix in the output section.

Methodological issues and advancements	Thematic issues		
	System knowledge	Transformation knowledge	Target Knowledge
	X	X	

- 1) Which key points were discussed in the workshop as a whole? (This should be more a synthesis and not simply a summary of the key points in each presentation)

The discussion was focused on three questions:

Question 1: How can mobility patterns be transformed and traffic infrastructure be adapted to face the social-ecological challenges of the future?

Key statements and discussion points:

Changes regarding lifestyle (recreation vs. gathering experiences/adventure) and demographic structure (high population densities in urban areas → increasing demand for recreation in nature), but where are the limits (capacity of transport infrastructure or systems)?

Are people keen to travel?

Making systems faster makes them more attractive

As the majority of tourists are living in urban areas, they are already quite familiar with new mobility services

The populations becomes older, in 2030 the 65+ will be an important group that might travel more (daily trips and holiday trips)

- ➔ It not only needs new technologies and services but also regulations and restrictions to change mobility patterns towards sustainability (push-and-pull-strategy) and avoid rebound effects from new services (eg Automated Vehicles).
- ➔ Interdependencies (travel – spatial planning – lifestyle – demography,...) have to be considered, there is no “simple transport planning”!

Question 2: How can mobility services and traffic management contribute to resilience of mobility and transport in mountain regions?

unlocking vehicles using smartphones make them useful, otherwise they are just placed around us and waiting for their (one and only) owner

natural hazards and blocking of transport infrastructure have to be considered

➔ New services and traffic management can make the transport system more efficient and also more resilient, but at the end business cases and human behavior will be decisive how new services will be. Rebound effects have to be considered to avoid negative effects (see above).

Question 3: How will electric and autonomous vehicle influence mobility and traffic in mountain regions considering the specific conditions and requirements of these regions?

Autonomous fleets could complement and support Public Transport in peripheral (sparsely populated) areas, but today mobility services mostly concentrate on urban (densely populated) areas (more customers, better business cases)

change of infrastructure might be challenging due to topographic situation, traffic management might enable operators to change the capacities of infrastructure

housing prices are forcing people to move to remote areas and valleys, if they can rely on autonomous vehicles they will travel even longer distances since they can make use of their travel time

what about autonomous vehicles and motion sickness especially on mountain roads?

➔ autonomous vehicles may result in more traffic – transport planners have to show what effects may occur and possible solutions or strategies

- 2) What is your opinion on the current state of knowledge concerning your topic(s) (focusing on mountain regions)? *Please check and fill in the matrix on the following page.*

Generally, research on new mobility services and changes of mobility behavior is mainly focused on urban areas, there is not much research considering the situation and special challenges in mountain regions up to now

Impacts of new (transport) technologies for remote areas has to be studied in more detail. Tourism travel at the destination has to be considered: There is lack of knowledge regarding mobility patterns and needs of tourists during their stay

Since changes in the transport sector and related strategies are important to reach the goals to restrict climate change and for adaption in mountain regions (eg tourist travel, threat of natural hazards on infrastructure, tailored mobility services,...) “mobility and transport” should be included in future conferences and higher awareness of the “transportation research community” should be strived for

