JRC - UITP Workshop

Future urban mobility: Mobilising different knowledges in the debate
9 October 2019 – 11:30 - 13:00

A critical reflection of the large-scale implementation of electric vehicles in Europe (10')

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The reflection will be informed by the results of the Horizon2020 research project MAGIC – Moving to Adaptive Governance in Complexity. Acknowledging the unavoidable presence of scientific uncertainty and the irreducible complexity of social challenges and stakeholder interests, MAGIC stimulates reflexive thinking about sustainability through Quantitative Story Telling (QST). In the case of electric vehicles (EVs), MAGIC proposes three quality checks - QST lenses – to be used to frame this innovation: (i) what are the concerns addressed by the proposed policies (is it about mobility or technology)?; (ii) how plausible are the narratives used to justify the chosen solutions?; (iii) are there knowledge gaps in the existing framings? and (iv) can we imagine more effective procedures that deliver better quality policy making? These same questions can apply to other technological hopes like connected and automated (mobility) vehicles.

(i) Starting from a text analysis of relevant EU policy documents, the first lens will explore the justifications and context associated with the promises associated with EVs in EU. The aim is to stimulate a collective brainstorming: which problems are EVs aiming to solve? Why should a massive implementation of EVs in the EU by 2050 be considered better than a massive implementation of public transport and/or car-sharing in relation to greenhouse gas emissions, imports and jobs? Likewise, why a massive implementation of CAVs would solve current problems of mobility? In which scenario of future mobility do all these technologies make sense?

(ii) A multi-scale integrated assessment can be used to check whether the EV solution alone or in combination with automation and connectivity is feasible when considering a large-scale implementation – what are the main constrains and potential problems that we should expect with a massive implementation of EV? What if we compare the effects of a full implementation of electric vehicles in the EU by 2050 with the effects of an increase in public transport and/or car-sharing, non-motorised mobility, etc. in relation to greenhouse gas emissions, imports and jobs?

(iii) Finally, we will be discussing the robustness of current knowledge claims about mobility and EV and CAVs. The quality check on the existing framing of the EV issue will cover not only the quantitative assessments of the performance of electric vehicles, in particular but also the choice of performance attributes to be considered when discussing how to improve future mobility.

The goal of the world café exercise is to stimulate an open and informed reflection about the uncertainties and trade-offs inherent in technological innovation to guarantee a better quality and fairness to the process of decision making.