



UIA second Call for Proposals: Policy trends from the proposals under the topic of urban mobility



Author: Dr. Gereon Meyer

October 2017

Introduction

The 2nd call for proposals of the Urban Innovative Actions, an initiative of the European Commission under Article 8 of the European Funds for Regional Development, included the topic of Urban Mobility. It provided consortia led by city authorities with funding opportunities for experimental projects focused on “bold, yet untested and innovative solutions” in the domain of sustainable urban mobility. More specifically, the funding objective was to establish transportation solutions that would meet the individual mobility needs of all citizens, provide higher levels of safety, save energy, cost and time, and last but not least reduce pollution and thus lead to better public health in cities. Examples given in the call text included e.g. cycling, multimodal hubs and mobility services, city logistics solutions, shared mobility concepts, and alternative fuels infrastructure. The applicants were expected to involve citizens, businesses and public transport providers in the design and the implementation of the proposed solutions. By the application deadline on February 16, 2017, authorities of 86 cities from 20 European member states submitted applications of projects in the domain of urban mobility that were eligible for funding. While a panel of independent international experts rated these proposals towards the criteria of innovativeness, partnership, measurability, and transferability, and established a ranking list of top-scoring projects to be recommended for funding, this paper aims to summarize the major policy trends identified. Highlighting the motivations, the proposed solutions, the strengths and weaknesses and drawing some general conclusions on the competing projects, it shall serve as general feedback to all applicants and a source of advice to stakeholders and program owners.

Motivations

The proposals assessed were found to be widely in line with the general objectives of sustainable urban mobility as expressed in the call text. Most of them emphasized one or more of the following dimensions:

Environmental protection

With transportation, particularly on the road, being a major source of CO₂, NO_x and noise emissions, cities are concerned about climate protection, air quality and public health. Zero emission power train technologies, particularly electric ones, are seen a desirable alternative for urban transportation, and many city authorities are aiming at promoting their broader diffusion by the appropriate mix of push-and-pull measures.

Socio-economic progress

With economic growth and social welfare critically dependent on the availability of reliable, cost-effective and fast means of transportation, city governments are at high alert of underserved communities and limitations of access. At the same time, they are worried about public space being wasted for parking and congestion. Hence, they promote shifts to soft modes, supported by on-demand mobility solutions.

There is a solid understanding that these objectives require novel technologies, services and processes, and that it is necessary to complement these by regulation and business models. In addition to that, a change of citizens' behavior from individual to collective transport is needed, which requires an involvement of the users' perspectives in planning and decision making processes regarding urban transport, preferably by co-creation processes.

These observations are well in line with the findings of a current EU-funded Coordination and Support Action “Action Plan for the Future of Mobility” (MOBILITY4EU) that analyses social drivers of mobility in a user-centric approach.

Proposed Solutions

The technical solutions, services and processes proposed in the applications submitted to the Urban Mobility topic are manifold, and many of the proposals are focused on several innovations with different weights. Therefore, it is difficult to detect trends in a comprehensive way. Nonetheless, some first indications can be derived from identifying the most prominent solution of each proposal and counting the numbers of proposals with same goals. Many of solutions considered are also subject to current research and innovation activities outside the Urban Innovative Actions in Europe and worldwide. This certainly applies to the items on the top of the list: Electric buses are seen as a “low-hanging fruit” of road transport electrification, and pilot actions for their deployment have been taken, e.g. in Gothenburg, Sweden. Shuttles, minibuses and pods with high degrees of automation, i.e. autonomous or self-driving capabilities, represent the “revolutionary” development path of automated driving, arising from public transport. First demonstrations of this technology have been carried out in the framework of the EU-project CityMobil2 in several locations in Europe, and first pilot lines exist, e.g. in Sion, Switzerland. Mobility-on-demand offers such as managed bike, car or ride sharing fleets are a matter of growing new commercial activity by vehicle manufacturers (Car2Go) and IT companies (UBER) alike. Shared mobility concepts are also expected to provide business and usage models in support of electrification and automation of vehicles, and thus may help to exploit synergy potentials between those two domains. Interestingly, the Smart City Challenge, an action launched by the U.S. Department of Transportation in 2015 which shows some similarities with the Urban Innovative Actions led to comparable preferences of the 78 applicant U.S. cities for automated, electric and shared mobility solutions.

It should be noted, however, that the more niche solutions are not less innovative. In contrary, some of the proposed ideas are new to a surprising degree, e.g. mobility-as-a-service platforms that provide public transport users with real-time travel advice, platforms aiming at behaviour change by measuring environmental impact of individual traffic behaviour and providing incentives, multimodal hubs claiming the role of public to innovate for the benefit of citizens, city logistics solutions based on crowd sourcing etc.

Strengths

The strategic assessment of the proposals for the Urban Mobility topic clearly revealed that European cities are well aware of the objectives, impacts and planning instruments of sustainable urban transportation. Many have established Sustainable Urban Mobility Plans (SUMPs) or are in the process of doing so. It is also widely understood that integrated, multi-modal approaches are a prerequisite for changing transit behaviour from individual to collective transport, but also that particular efforts are needed to motivate citizens to actually make that change. Bottom-up approaches for co-creating solutions with the involvement of stakeholders and individual citizens are considered a powerful approach in this regard, and many ways of nudging and incentivizing the adaptation of new mobility mind sets are suggested, e.g. based on gaming methods. The applicant cities also acknowledge the added value of partnerships, e.g. with major companies and start-ups as technology providers, with

organizations that incentivize their employees for the use of public or on-demand transport, but also with academia and with other cities. Scalability and transferability of results is mostly given.

Weaknesses

Regrettably, the strategic assessment also showed that the abovementioned strengths in objectives, impacts and planning approaches are oftentimes contrasted with a clear need for improvements in the implementation concepts. Even though the proposed technologies, solutions and processes may be a novelty for the respective city, they oftentimes are not new per se: E.g. the deployment of electric vehicles and the necessary charging infrastructure in general has been a matter of innovation since almost a decade. At the other end of the spectrum, expectations regarding the maturity and applicability of technical solutions are sometimes overinflated. Self-driving, autonomous shuttles and pods, for instance, are still under development. Essential issues like the safe and reliable perception of other vehicles, cyclists and pedestrians are not yet fully solved, and sharply restrict the legal approval of pilot projects in complex urban environment with such vehicles. More mature and obvious solutions, like a better organization or upgrading of existing public transport, seems to be leapfrogged by overly ambitious concepts in some cases. Dead end solutions and concepts in search for problems sometimes indicate that there is still a misconception about the objectives of the Urban Innovation Actions at times. Hidden agendas, imbalanced budgets, limited quality management, or lack of knowledge about existing practice and projects may explain this situation.

Conclusions

Taken as a whole, the strategic assessment of the proposals for the Urban Mobility topic of the Urban Innovative Actions found serious intentions of European cities to develop, demonstrate and deploy sustainable transportation solutions. Many of the solutions considered are creative, and innovative, address clear needs and appropriately reflect users' expectations. Even though only a handful of the submitted proposals could be recommended for funding, the approaches, solutions, and partnerships sketched out by many others are worthwhile and should be further elaborated and implemented. Some of them surely even qualify for other sources of public (and maybe also private) funding. Therefore, it is highly recommended that the applicant cities continue the good work.

In more general terms, the following suggestions may help to further improve the quality of projects submitted to the Urban Mobility topic of the Urban Innovative Action:

- Establish a dialogue between city transport planners and technology providers about expectations from and maturity of technical solutions, e.g. in the context of European Technology Platforms (ERTRAC, EPoSS etc.) or the European Transport and Mobility Forum to be launched by the MOBILITY4EU project.
- Exchange of information about concepts, best practices and lessons learned among the applicant cities, e.g. by a dedicated platform for follow-up stakeholder dialogue initiated by the European Commission – similar to what the U.S. Department of Transportation set it up for the participants of the Smart Cities Challenge, recently.
- Improve the alignment of solutions considered with the European policy frameworks for transport innovation, e.g. the Strategic Transport Research and Innovation Agenda (STRIA), a comprehensive 2030/50 roadmap covering a number of transversal issues across all transportation modes that was published as part of the “Europe on the Move” policy package on May 31, 2017.