

POLICYMAKING FOR TRANSPORT INNOVATIONS

Applying Adaptive Policymaking for ISA Implementation

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ABSTRACT

Each day, in the European Union on average about 116 people die from traffic accidents, which is the equivalent of a major plane crash on a daily basis, 365 days a year. One out of three fatalities is estimated to be the result of speeding. Innovative technology is available to make speeding more difficult or even impossible. This technology involves intelligent speed limiters (called ISA devices), which support the driver in complying with the legal speed limit using e.g. digital maps and throttle control in vehicles. However, the implementation of ISA has been limited, amongst others due to the uncertainties surrounding implementation of ISA devices (e.g. about costs of ISA implementation, about liability in case of accidents with ISA, about driver acceptance to buy and use ISA, etc.).

Traditional research for ISA implementation focused on reducing these uncertainties by e.g. eliciting opinions about acceptance from experts and stakeholders and modeling the performance of ISA using all kinds of models. Although useful, these studies were not able to resolve the uncertainties, which resulted in policymakers postponing decision making on ISA. Therefore, an adaptive decision making approach was proposed (Walker et al., 2001), which starts with the implementation of a basic, promising ISA policy and monitors how associated uncertainties evolve over time. Based on the monitoring process, the policy adapts to changing conditions, and allows the policymakers to learn as the future unfolds. In the past, several examples of adaptive policies for ISA implementation were developed (see e.g. Agusdinata et al., 2009, Marchau et al., 2009). However, these examples are all based on authors' insights and desk research, and as such are rather theoretical efforts. This paper

presents the next step in the development of adaptive transport policies: having stakeholders and experts from the various disciplines related to ISA implementation develop adaptive policies at a workshop. The workshop uses a participative policymaking approach and reflects the core characteristics of a process oriented design that should lead to a solution to the problem (De Bruijn et al. 1998).

In this paper, the development of an adaptive ISA policy is described, using a structured expert workshop. In addition to describing the workshop and the tools used, we present the insights gained from preliminary workshops (with students and University colleagues), and the insights gained from the expert workshops.

We expect two type of results from the expert workshops (to be held in November): (1) recommendations with respect to the adaptive policymaking method, indicating how adaptive policies for the implementation of transport innovations can be developed in a multi-stakeholder context, what the pitfalls and benefits are, and how the method can be improved; and (2) specific examples of what such an adaptive policy (developed by experts) for the case of ISA implementation might look like.

REFERENCES

Agusdinata, B., J.W.G.M. van der Pas, W.E. Walker, V.A.W.J Marchau (2009) An Innovative Multi-Criteria Analysis Approach for Evaluating the Impacts of Intelligent Speed Adaptation, in: *Journal of Advanced Transport Systems*, 4(4), pp. 413-454.

Agusdinata, D.B., V. Marchau, W.E. Walker (2007) Adaptive policy approach to implementing intelligent speed adaptation, in: *IET Intelligent Transport Systems*, 1(3), pp. 186-198.

Argiolu, R., J.W.G.M. van der Pas, N. Dragutinovic, G. Hegeman, V.A.W.J. Marchau (2006) *The future of advanced driver assistance systems, Reporting the results of an expert survey*, paper presented at the TRAIL in Motion conference, Rotterdam.

De Bruijn, J.A., E.F. ten Heuvelhof, R.J. In 't Veld (1998) *Process Management*, Academic Service, Schoonhoven.

Marchau, V.A.W.J. W.E. Walker, R. van Duin (2008) An adaptive approach to implementing innovative urban transport solutions in: *Transport Policy*, 15(6), pp. 405-412.