



ADDRESSING KEY CHALLENGES OF SUSTAINABLE URBAN MOBILITY PLANNING

Why is **identifying the most effective measures and measure packages** a challenge for SUMPs?

Authors:

Transport Engineering Institute for Transport Studies University of Leeds

Prof. Anthony D May OBE FREng

Dr Caroline Mullen

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1 Aims of CHALLENGE

The EU co-funded project CHALLENGE addresses significant barriers for the wider take-up of SUMP in Europe. In a joint undertaking together with research and resource institutions, the project will support European cities at different stages of advancing the take-up of SUMP. Building on previous experiences and lessons from earlier and on-going national and European SUMP initiatives, the consortium has identified common challenges which pose significant barriers in the wider take-up of SUMP in Europe. The project will work on innovative and transferable solutions for four SUMP-challenges.

 Participation	Actively involving local stakeholders and citizens in mobility planning processes
 Cooperation	Improving geographic, political, administrative and interdepartmental cooperation
 Measure Selection	Identifying the most appropriate package of measures to meet a city's policy objectives
 Monitoring and Evaluation	Assessing the impact of measures and evaluating the mobility planning process

The following sections explain in detail why identifying the most effective measures and measure packages in particular is a challenge for the take-up of SUMP in European cities.

2 What is meant by “effective measures and measure packages”?

This challenge relates to the process of identifying the most appropriate package of measures to meet a given city's policy objectives. Once a city has specified its objectives and identified the problems to be overcome, the next step is to identify possible policy measures; this is sometimes referred to as “option generation”. The resulting long list of possible measures then needs to be assessed for appropriateness, resulting in a shortlist of more promising measures. These need to be specified in more detail for application to the city in question and then assessed in more detail. These two stages involve a process of “option appraisal”, which should consider effectiveness, acceptability and value for money. The most promising measures will then be considered for implementation at a later stage in the SUMP process.

While individual measures may be implemented on their own, it is more common for a SUMP to result in a package of measures, in which individual measures reinforce the effectiveness, acceptability or value for money of one another. The development of packages can start in the option generation step, but is more commonly addressed once a shortlist of measures has been developed. Potential packages can then be appraised using the same procedures as for option appraisal for individual measures.



Photo 1: ITS Leeds, Policy Instruments

The requirements for developing effective measures and packages are described in Element 6 of the SUMP guidelines, which provides a useful set of references and of good practice databases.

By **“measure”** we mean an action which can be taken to contribute to one or more policy objectives in a SUMP, or to overcome one or more identified problems. Examples range from building new transport infrastructure to managing the way in which that infrastructure is used, and from service provision to regulation and pricing. In some of the related literature, “measures” are referred to as “policy instruments”. These terms are interchangeable.

By **“measure package”** we mean a combination of different measures which have been grouped together in a package to contribute more effectively to policy objectives or to the resolution of problems. An example would be the combination of a measure to discourage car use, such as parking controls, with a measure to promote alternatives, such as improved bus services. Some literature refers to the development of “integrated strategies”. This term has a somewhat broader meaning, but an “integrated strategy” would be expected to include a package of measures.

By **“option generation”** we mean the process by which possible measures (or packages) are identified. The most common sources of suggestions are the existing knowledge and pre-conceived ideas of policy makers and professionals. However, there are a number of more formalised techniques for stimulating suggestions.

By **“option appraisal”** we mean the process by which a proposed measure or package is assessed in advance of its implementation. Effective appraisal involves assessing likely performance against each of the city’s objectives (effectiveness), likelihood of being approved (acceptability), and implications for the city’s budget (value for money). The requirements for appraisal are in many ways similar to those for evaluation, which is being addressed in another Challenge. However, appraisal involves an *ex ante* assessment, and needs to address acceptability, while evaluation involves *ex post* assessment, once an accepted measure or package has been implemented.

A review of the definitions of measures and packages can be found in:

- May AD, Kelly C, Shepherd S and Jopson A (2012): An option generation tool for potential urban transport policy packages. *Transport Policy* **20** pp162-173.

A broader review of techniques for option generation can be found in:

- Jones, P, Kelly C, May A D and Cinderby S (2009): Innovative approaches to option generation. *European Journal of Transport Infrastructure Research* **9** (3) pp 237-258.

References on option appraisal can be found in the fact sheet on the Evaluation Challenge.

3 Why is “effective measures and measure packages” important for SUMP?

By definition, a policy measure which more effectively meets a city’s objectives will be able to generate greater benefits. One that is more acceptable will stand a greater chance of being implemented and thus actually producing benefits. One which offers greater value for money will be able to realise those benefits while making less demand on limited budgets.

An effective package can combine those policy measures which are themselves most effective in ways which achieve synergy – by making the whole more effective than the sum of the parts – and which increase acceptability. Examples of both these concepts are described more fully in May et al (2012) above.

The benefits to the SUMP process, and to cities, of improved procedures for identifying effective measures and packages are thus in:

- making the process more efficient;
- making the policy content more acceptable and affordable; and, above all, in
- making the resulting policy more cost-effective.

4 What research and information is available on “effective measures and measure packages”?

The ELTIS, CIVITAS and EPOMM websites all provide a wide range of examples of individual policy measures. The KonSULT website (www.konsult.leeds.ac.uk) which is being developed further in this project currently provides information on 46 examples of policy measures, with a number of case study applications for each. Examples of the process of option generation can be found in the references above.

There are fewer good examples of effective packages, but the SUMP Guidelines, under Step 6: “Development of effective packages of measures”, provides examples from London and Krakow.



Figure 1: Screenshot, Knowledgebase on Sustainable Urban Land use and Transport (www.konsult.leeds.ac.uk)

There is an extensive literature on the barriers to effective SUMP, as summarised in May AD (2013): Encouraging good practice in the development of sustainable urban mobility plans; Proc 13th World Conference on Transport Research, Rio de Janeiro. All of those studies highlight failure to identify effective policy measures and packages as one of the most serious barriers to effective policy making.

A more detailed review for the UK by Eddington, cited in Jones et al (2009), sets out the requirements clearly: “Unless a

wide range of appropriate options is considered, there is a risk that the best options are overlooked and money could be wasted. A good option generation process is crucial to ensure that the transport interventions that offer the highest returns can be found. The full range of options should look across all modes and include making better use of the existing transport system, including better pricing; investing in assets that increase capacity; investment in fixed infrastructure; and combinations of these options.”

More specifically, the principal barriers for cities in identifying effective measures appear to be:

- an over-reliance on preconceived ideas;
- a tendency to focus on supply-side measures such as infrastructure and management rather than demand-side measures such as regulation and pricing;
- lack of awareness of the wider range of policy measures available;
- lack of evidence of the performance of those measures in other contexts;
- lack of a formalised approach for option generation;
- lack of expertise in designing a given policy measure to meet local needs;
- failure to appraise the resulting options appropriately in terms of effectiveness, acceptability and value for money.

A similar set of barriers applies to the process of package formulation, but with the added problem that there is very little documented evidence on the performance of packages of measures.

In terms of the state of the art, there are:

- a wide range of information sources on the types of policy measure available (in particular those cited in the SUMP guidelines);
- several well documented evaluations of many of the policy measures but, at the same time, a lack of objective empirical evidence on many of the more recently introduced measures;
- a limited understanding of the principles of transferability of performance from one context to another;
- a few formalised techniques for option generation in urban transport, of which the KonSULT website is probably the most developed;
- limited guidance on the process of designing a given policy measure to meet local needs;
- a wide range of appraisal and evaluation tools which could be applied to the appraisal process (and which will be considered more fully in the Evaluation Challenge).

5 How does CHALLENGE address the development of effective measures and measure packages?

The CHALLENGE project is addressing these issues in a sequential process which involves:

- a survey of the nine partner cities and the 30 follower cities to determine their objectives; problems; current and foreseen list of applied policy measures; procedures for identifying, selecting and designing those measures; perceived barriers to their implementation; experience with package development; and perceived barriers to that process;
- a review of the appropriateness of the current KonSULT website in terms of those responses;
- enhancement of the policy measure content of KonSULT to reflect cities' needs and at the same time increase coverage from 46 to around 70 policy measures;
- enhancement of the measure and package option generation facilities in KonSULT to reflect cities' needs and to incorporate a more detailed assessment of the interactions between pairs of policy measures;
- testing of the enhanced KonSULT facility by the partner cities, including KonSULT's suggestions of measures and packages to meet their requirements, and the cities' assessment of the appropriateness of those suggestions;
- more detailed development, specification and appraisal of the preferred policy measures and packages in the majority of the partner cities, to understand the appropriateness of KonSULT and other approaches to option generation, and to relate the work on this Challenge to that on the Challenges of Participation, Partnership and Evaluation;
- production of a CHALLENGE measure generator based on the enhanced KonSULT facility and the results of Task;
- a review of lessons learnt and incorporation of them into a quick facts document and a self-learning e-course.

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