

Summary

In the 2008 report, *Sneller en Beter* (in English: *Faster and Better*), the Elverding Commission proposed speeding up and improving the process of decision-making in infrastructure projects in the Netherlands. The Dutch Ministry of Transport, Public Works and Water Management's *projectdirectie Sneller & Beter* (in English: project directorate Faster & Better) then further developed this proposal and implemented it. The *project directorate 'Faster and Better'* studied the environmental impact assessment (MER) and cost-benefit analyses, which are both part of assessing need and necessity during the decision-making process, as described in the *spelregelkader MIRT (Meerjarenprogramma Infrastructuur, Ruimte en Transport; in English: the framework for Long-Term Programme for Infrastructure, Spatial Planning and Transport)*.

The KiM Netherlands Institute for Transport Policy Analysis assessed and elaborated the possibilities for speeding up and improving the application of cost-benefit analyses during infrastructure projects. To conduct cost-benefit analyses, the government uses what is known as OEI (*Overzicht Effecten Infrastructuur*, or in English: the Overview Impacts Infrastructure). This analysis is intended to help to prepare the preference decision at the end of a project assessment. The KiM's objective was to firmly establish which decisive information is required to quickly yet responsibly assess the need and necessity of a project. The focus here is on the decision-making processes pertaining to infrastructure projects; however, the insights gained are also applicable to larger, spatial development projects, of which infrastructure is one component.

The recommendations stemming from *Faster and Better* were elaborated by KiM for assessing the need and necessity of projects. In addition, the KiM not only studied the possibilities for accelerating the decision-making process, but also for making other improvements aimed at preventing delays from occurring later in the decision-making process.

1 Fewer and simpler calculations

By incorporating a first moment of screening alternatives (*'zeefmoment'*), as well as by making simpler calculations during this stage, the research required to arrive at a preference decision (*'voorkeursbeslissing'*) can be reduced in the interim. On the basis of less detailed information, decision makers choose preferably three or less most promising alternatives from a large number of potential alternatives. This means that fewer alternatives need to be calculated during the next step, when the preference decision is made. Detailed calculations are however required to arrive at a substantiated preference decision, and for this transport models are used. As such, the research load is limited and the information refined in a step by step manner.

The KiM conducted research to determine if modifications to the cost-benefit analyses were required - in this case, an OEI. The *spelregelkader MIRT* prescribes that cost-benefit analyses should not be initiated at multiple moments, but rather only at *one* moment; namely, during the preference decision stage. The KiM has concluded that it does not cost too much extra time to initiate a cost-benefit analysis, and that, moreover, a cost-benefit analysis is sufficiently flexible for conducting quick scan analyses of smaller projects as well comprehensive societal cost-benefit analyses for large projects. There are indeed profits to be gained from improving the correspondence between the various analyses. The potential problem of doing the same work twice can be avoided by using the results of other analyses (cost estimates, business case, MER and OEI) and by employing the same input data and basic principles.

2 Comprehensive and consistent assessments

For infrastructure and other types of projects, it is vital that tenable (irreversible) decisions be taken. This prevents decision makers from subsequently having to reverse a decision, because, for example, new information has led to other conclusions. For this reason, the KiM advises that one must first ensure that the assessment framework devised for determining need and necessity contains all the relevant information required for decisionmaking, and that this comprehensive framework is adapted during every step - also in a global context.

This information is intended to answer the following key questions:

- Is there a problem?
- Is there a role for the government?
- What are the possible solutions?

- To what extent will the problems be solved?
- What does it cost and who is paying?
- How does this affect society, the environment and safety?
- How does this impact Dutch society (how do the societal costs compare to the benefits)

It is vital that, during all stages of the decision-making process, the assessment of need and necessity remains along the same broad outlines. The information can be global or highly detailed, depending on the stage of the decision-making process and the time available. To be able to answer these questions during the preference decision stage, the MER, the business case and the OEI serve to supply the requisite data.

3 Future-proof solutions

The solutions selected prior to the start of a project must be future-proof. Future developments can profoundly influence costs or expected benefits and can lead to projects becoming unprofitable. The KiM therefore advises that such uncertainties be carefully considered when assessing a project's need and necessity, and that one agrees on including certain adjustment options to adapt in advance, in case these risks should materialize. Scenarios and sensitivity analysis provide crucial information for assessing risks. At least two realistic future scenarios – that is, a minimum and a maximum scenario – can be employed to illustrate the maximum bandwidth of future uncertainties. Prior to initiating necessary preparations and establishing agreements about 'when and how to make adjustments' in cases involving unexpected events, it is important then to ensure that adjustments can be made at a later stage (for example, by means of land reservation, a capacity reserve or financial reserve).

After a decision has been taken, it must then be determined which project components can still be adapted, given the fact that the conditions have changed (flexibility). For this purpose, a catalogue, including examples of options to adapt, is included in this study.

4 Using first insights

Finally, the step by step decision-making process offers opportunities for early identification of crucial cost generators, benefits and uncertainties, which in turn offers a method for optimizing and future-proofing the available solutions. It is crucial to exploit these opportunities, because, once the cost-benefit analysis has been completed at the end of the assessment, there is rarely time for conducting new research or implementing supplementary measures to generate greater benefits or lower costs. These proposals are implemented in outline form in the *OEI bij*

MIRTverkenningen (in English: *OEI for MIRT-assessments* (RWS-DVS, still to be published)) and in 'Procesontwerp Sneller & Beter' (in English: *Faster & Better Process Design*' (project directorate Faster & Better, 2010)).

This pertains to the proposal for completing the first moment of screening alternatives (see point 1: simpler calculations), the required level of detail of calculations at that moment and the setting the OEI and the use of future scenarios (see point 3: future-proof solutions).

Further implementation must occur on the project level. This particularly applies to the use of a comprehensive assessment framework (see point 2), the incorporation of options to adapt, and the use of first insights (see points 3 and 4). At the start of an assessment, it is important to come to clear agreements about this.

A comprehensive assessment of a project's need and necessity is therefore an important building block for achieving a faster and better decision-making process.