# Quality Assurance of the choice of concept (QA1)

### **Purpose**

To ensure that the choice of concept has been subjected to a political process of fair and rational choice. The ultimate aim is that the chosen concept is the one with the highest economic returns and the best use of public funds. The choice of concept is a political decision to be made by the Cabinet, while the consultant's role is restricted to assert the quality of the documents supporting the decision.

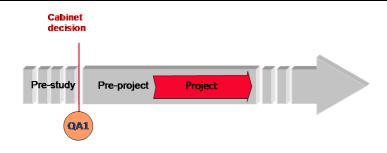
# Projects subjected to QA1

Budget exceeding NOK 750 million (EUR 95 million). Purely upgrading projects, where there are no obvious alternatives, are exempt.

### Basis for the QA1 review

The responsible ministry/agency is required to prepare a "KVU" (Concept Evaluation) which should include the following chapters:

- Needs analysis mapping all stakeholders and affected parties, and assessing the project's relevance in relation to societal needs and priorities.
- Overall strategy defining the project's goal and purpose (first order and long-term effects), with emphasis on consistency, realism, and verifiability.
- Overall requirements specifying important requirements which need to be fulfilled when the project is implemented. These requirements may follow from the project's own goal/ purpose, or they may be non project-specific purposes within the overall strategic framework. The focus is on effects and functions, not on technical solutions and details.
- Possibility study. Needs, goal, purpose and requirements will together constitute the 'opportunity space'. It is essential to ensure that the opportunity space is not too narrow.
- Alternatives analysis which should include the zero-option and at least two alternative main concepts. If the zero-option lifetime is very short, a 'zero-plus' option should also be developed. For all alternatives, outputs, uncertainties, and a fiscal plan should be specified. The alternatives should also be subjected to a Benefit-Cost analysis.



 Guidance for the pre-project phase, including an implementation strategy for the chosen concept.

## Scope of quality assurance

The consultant is required to:

- Review the documentation with emphasis on internal and reciprocal consistency.
- Assess the process and methods used for mapping the opportunity space, and if it is sufficiently wide to allow all relevant alternatives to be considered.
- o Provide an assessment of the presented alternatives, their:
  - capability of attaining goal and purpose
  - compliance with overall needs/ requirements
  - whether they capture the most interesting and feasible alternatives within the opportunity space
- Undertake an independent uncertainty analysis
  of all alternatives, using the same framework
  as in QA2 for investment costs, but with a level
  of precision adapted to the pre-study phase.
  Also quantify uncertainty related to the longterm flows of costs and benefits.
- Undertake a Benefit-Cost Analysis using the expected values and stochastic spread (for the systematic elements) from the uncertainty analysis as inputs.
- Give recommendations regarding decision strategy.
- Rank the proposed alternatives, based on an overall assessment of impacts (expressed in monetary or other terms), as well as the alternatives' decision flexibility and feasibility of the fiscal plan.
- Give recommendations regarding the implementation strategy. Focus on benefits realization and aspects regarding the owner perspective (governance). Give advice on which elements from QA1 should be included in the project's overall project management document (steering document).

# **Timing of QA1**

To be performed sufficiently early, at a time when the choice between alternative concepts is still open.