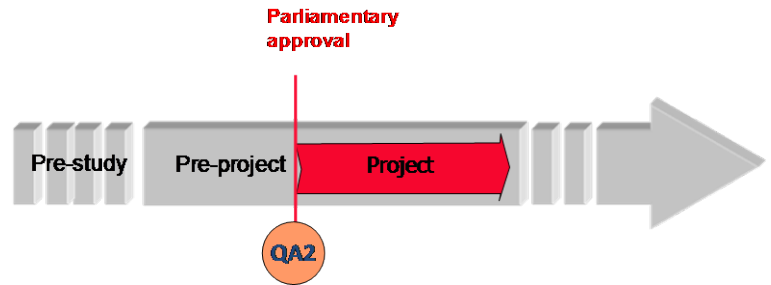


# Quality Assurance of the management base and cost estimate (QA2)



## Purpose

To ensure the quality of the decision basis including cost estimates and uncertainties associated with the chosen project alternative before it is submitted to Parliament for funding. The control aspect is the main feature in this exercise. Also, the evaluation shall focus on challenges related to project management in the implementation phase.

## Projects subjected to QA2

Budget exceeding NOK 750 million (EUR 95 million).

## Basis for the QA2 exercise

Before the start-up of QA2 the following documents must be prepared by the responsible ministry/agency:

- Overall project management document (steering document).
- A complete base estimate for costs and (if relevant) incomes
- An assessment of at least two alternative contract strategies.

## Scope of quality assurance

The consultant shall give recommendations regarding:

- The cost frame, including necessary contingency reserves
- How the project should be managed and organized to ensure an efficient implementation.

More in detail, the consultant shall:

- Control that the project concept is well defined and that it has been developed in line with the suppositions defined in QA1.
- Review the overall project management document to decide whether it is sufficient for estimation, uncertainty analysis, and management.
- Control the cost estimate (complete, realistic, transparent)
- Review the assessment of contract strategies.
- Map success factors and pitfalls.
- Undertake an independent uncertainty analysis, with a special focus on the following effects on project costs:
  - Estimation uncertainty in individual and aggregated cost estimates.
  - Event uncertainties, represented by a binary probability distribution.
  - Risk reduction. Ways and means to reduce risk must be analysed, including the economic potentials and corresponding costs.
  - Potential simplifications and reductions in the project ('cut list') to be realized if necessary, without threatening the quality of deliveries.
- Give an overall recommendation regarding cost frame, including necessary contingency reserve and the cost frame for the responsible agency. The cost frame to be approved by Parliament is usually set to P85 minus the effect of possible simplifications. The cost frame for the responsible agency is usually set to P50.
- Recommendations regarding organization and management of the project, including the choice of contract strategy. A particularly important question is the management of contingency reserves.

## Timing of QA2

To be performed before the project is formally submitted to Parliament for approval and funding. Normally, this will be at the end of the pre-project phase.

