The Norwegian governance scheme for major public investment projects

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Public project failure

• Cost overruns, delays, benefits not realized, hidden agendas, etc.
• Especially cost overruns have been a common problem across countries and over time. Well documented in the literature
• Norwegian study (background for the scheme)
  – Berg et al., 1999
• Common explanations
  – technical
  – cognitive
  – Political/strategic
Measuring Project Success

Conceptual solution → Project plan → Delivery → Effect

Operational success

Tactical and strategic success
Project governance

• “The term "project governance" refers to the processes, systems and regulations that society (the financing party) must have in place to ensure that projects are successful” (Samset and Volden, 2013)

• Minimum requirements for a project governance scheme (Haanæs et al., 2006)
  – Clearly defined project phases
  – Clearly defined decision points
  – Quality assured basis for the decisions
  – Simplicity
  – A certain standardization and common terminology
Project Governance in Norway

- The Quality Assurance scheme introduced in year 2000/2005 applies to major public projects (> 750 mill. NOK)
The content of the QA

Pre-study

Conceptual Appraisal Document CAD
- Needs analysis
- Project goals and requirements
- Possibility study
- Cost-Benefit Analysis

QA1
- Review the documentation, check for consistency and exploitation of opportunities
- Independent uncertainty analysis and CBA

Pre-project

• Overall project management document (steering document)
• Complete cost estimate
• Analysis of alternative contract strategies

QA2
- Review the documentation
- Independent uncertainty analysis
- Give recommendations regarding cost frame and steering frame

Project

Documentation to be produced by Ministry/agency responsible for the project
## Projects subjected to external quality assurance

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of projects</th>
<th>Hereof completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of projects subjected to QA1 (2005-2015)</td>
<td>76</td>
<td>0</td>
</tr>
<tr>
<td>Number of projects subjected to QA2 (2000-2015)</td>
<td>183</td>
<td>89</td>
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<tr>
<td>Number of projects subjected to QA1 and QA2 (2005-2015)</td>
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<td>0</td>
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<tr>
<td>Total number of reviews</td>
<td>232</td>
<td>89</td>
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</tbody>
</table>
Projects subjected to external quality assurance

- Road
- Rail
- Defence
- ICT
- Construction
- Other
Lessons regarding QA1

- The evaluation of effects is years ahead.
- CAD/QA1 has led to a more systematic approach to early project assessment.
- The quality of the analyses have improved steadily over time.
- A shift from bottom-up process guided by local stakeholders, to more power to the administration and Cabinet.
- However, not many projects are rejected, despite low profitability, and when recommendations from an authority and the QA conflict, the Cabinet more often follows the agency.
Lessons regarding QA1

65 QA-projects per Mars 2015 (100 %)

1. CAD
2. QA1
3. Ministries
4. Government

- Sent back for further investigation 9 %
- One concept 67 %
- Several 12 %
- Proceeding to the pilot project phase with one or more concepts 79 %

- The proposal was withdrawn 3 %
- The proposal was placed on hold 3 %
- The proposal was rejected (the zero-option was chosen) 6 %
Lessons regarding QA2

The reviewers’ recommended cost frames are based on stochastic estimation techniques.
Cost frame – P85
Target cost – P50
Lessons regarding QA2

Cost deviation relative to the P85 budget (percentages)

- 17 cost overruns and the rest, about 80 % with cost savings.
- The total net savings amount to 6 % of the total investments.
Lessons regarding QA2

Cost deviation relative to P50 estimates (percentages)

Cost overrun (%)

Cost savings (%)

N = 68
Transportation

Cost deviation relative to P50 estimates in three sectors

Construction

N = 13

Defence

N = 7
Cost overrun (%)

Cost savings (%)

Cost deviation relative to the size of the P50 budget (percentages)
Cost deviation relative to the P50 budget for projects approved by Parliament 2001 - 2011
Spin-offs and broader benefits of the scheme

- Ministries and agencies spend more resources in the front-end and invest in competence.
- Some agencies exempted from the QA regime have voluntarily introduced variants of it.
  - Health sector investments
  - Electricity transmission line projects
  - Investments at municipal level
  - Other countries are inspired by the Norwegian scheme
- Extensive research and education in the area of project governance at university level.
A remaining challenge...

- Cost creep between QA1 and QA2
Other countries with similar schemes

Samset et al., 2016
Conclusions

• After QA2 was introduced, 80% of public projects are completed within budget. Operational project success is definitely improved.

• No QA1 projects have yet been completed. Its effect on tactical and strategic performance therefore remains to be seen.
Thank you for your attention

www.ntnu.no/concept
References


• Haanæs, S., E. Holte and S. Larsen (2005): Beslutningsunderlag og beslutninger i store statlige investeringsprosjekter, Concept report No. 3


• Samset et al., 2016, Governance schemes for major public investment projects: A comparative study of principles and practices in six countries, Concept report no. 47

• Samset, K. and Volden, G.H., 2013, Investing for impacts. Lessons with the Norwegian State Project Model and the first investment projects that have been subjected to external quality assurance, Concept report no. 36