

Requirements for control measures

By Ole Jonny Klakegg

The challenge

Establishing good governance in major public investment projects includes many challenges. In order to understand how to choose between the multitude of possible means and measures, it is necessary to study the decision making processes, and the performance of the project organisation itself. Even more important is to understand the framework under which the decisions and projects are made. This includes understanding the political and administrative complexity which is more deeply underlying than the obvious problems of over-spending funds, wrong quality or reduced benefit.

Point of departure

A spectrum of indications of the shortcomings of today's decision making processes and project management can be found in scientific literature. Failure of public investment projects to deliver expected benefits, overspending public budgets, late delivery and below quality standards is well documented. There have been several attempts to identify the underlying reasons. Authors such as Morris & Hough, Flyvbjerg, Miller & Lessard, Nijkamp & Ubbels and many more have made important contributions to this understanding. A brief account of this literature is given by Klakegg, Samset & Magnussen, 2005.

The classic policy instruments, pointed out by Bemelmans-Videc, Vedung & Rist (cited in Samset, Berg & Klakegg 2006) gives an idea on where to start looking for measures and means to do something about the problems concerning failures in public investment projects. See Figure 1. By combining these instruments and

good principles, a governance framework can be constructed.

The introduction of control measures, best practices and quality systems are expected to improve the performance in projects. In Norway a Quality-at-entry regime is established with a clear focus on control measures. The challenge is to find the most appropriate measures. What requirements should we put in place for the control measures to meet?

The process

Since decisions concerning major public investment projects are very complex and truly multidisciplinary, a multitude of approaches should be examined in order to find ideas for good measures. The Norwegian Quality-at-Entry regime (QAE-regime) is constructed by combining Project Management and Applied Economics. This is obviously a natural place to start, but is it the only alternative? To evaluate this, the idea of re-constructing the QAE-regime using a different approach emerged. Systems Engineering was chosen as a theoretical platform and the Six-step model (Fet 1997, cited in Klakegg 2006) as working procedure. See Figure 2.

The Six-step model

- 1 Identify needs
- 2 Define requirements
- 3 Specify performances
- 4 Analyse and optimise
- 5 Design, solve and improve
- 6 Verify, test and report

Figure 2 The Six-step model (Fet 1997)

Control measures have to be:

- **Cost-effective** – represent value for money
- **Boosting transparency** – in order to reduce the possibility to use tactics and hidden agendas
- **Based on facts** – not on power distribution, loose assumptions or belief
- **Open** – able to include knowledge from all basic sciences such as politics, social sciences, economics, technology and ecology
- **Holistic** – perceiving the whole situation with all its aspects and the whole life-cycle
- **Realistic** – acceptable and coherent with previous decisions
- **Systematic** – include defined methods and tools for improving performance without systematic faults
- **Driving improvement** – stimulating to continuously look for better processes and solutions

The best system elements or control measures are those which best meet these criteria.

All of these requirements underpin the control aspect. They help to assure the quality of the basis for decision making and management of the investment projects. Securing this quality will in turn improve the probability of success in public investment projects.

References

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Before applying the Six-step model, Systems Engineering required starting with defining the decision making system with sub-systems, system boundaries and interactions. The rest of the task was to apply the six steps systematically. This started with the political and administrative needs, breaking them down and analysing each element step by step.

The result was a picture of the QAE-regime, a little different from the regime as it is established today. This was used to identify possible improvements to the regime. As an interesting spin-off, the question of which improvements and control measures to choose emerged. This initiated a process of discussion and analysis concluding with a set of requirements given below.

Conclusion

By re-constructing the Norwegian Quality-at-Entry regime, using methods of System Engineering, the author identified a list of requirements for quality systems or quality control measures.

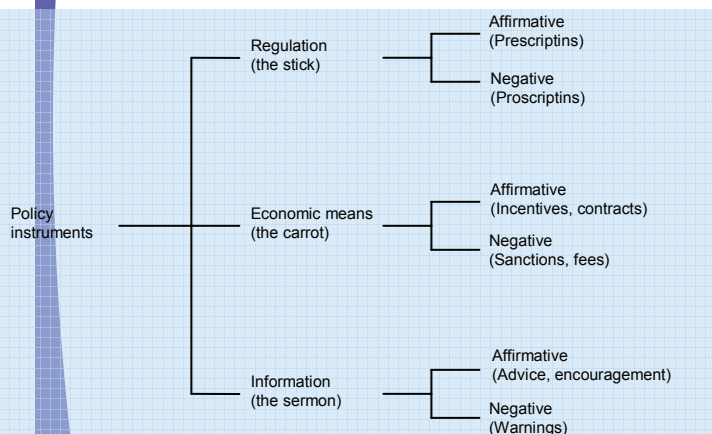


Figure 1 Policy instruments to improve governance in public sector. Source: Bemelmans-Videc, Vedung and Rist 1998)

The Concept Research Program

Norwegian University of Science and Technology
 Dept. of Civil and Transport Engineering
 NO-7491, Trondheim, Norway

Phone: +47 73594640
 Fax: +47 73597021
 E-mail: ole.jonny.klakegg@ntnu.no