

QS/EC Competencies in Europe

The position of the QS/EC

CEEC study October 2017



Comité Européen des Economistes de la Construction
The European Committee of Construction Economists



Part 2 -> 2 questions !

- ◆ Team Building :
the place of the QS/EC in the design /construction phase ?
- ◆ Process of design / construction phase / Schedule
What the QS/EC does ?



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QS/EC Competencies Part 2

Answers received :

DENMARK

FINLAND

FRANCE

GERMANY

IRELAND

HUNGARY

THE NETHERLANDS

UNITED KINGDOM

And soon ... Estonia – Spain - Switzerland



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The Netherlands

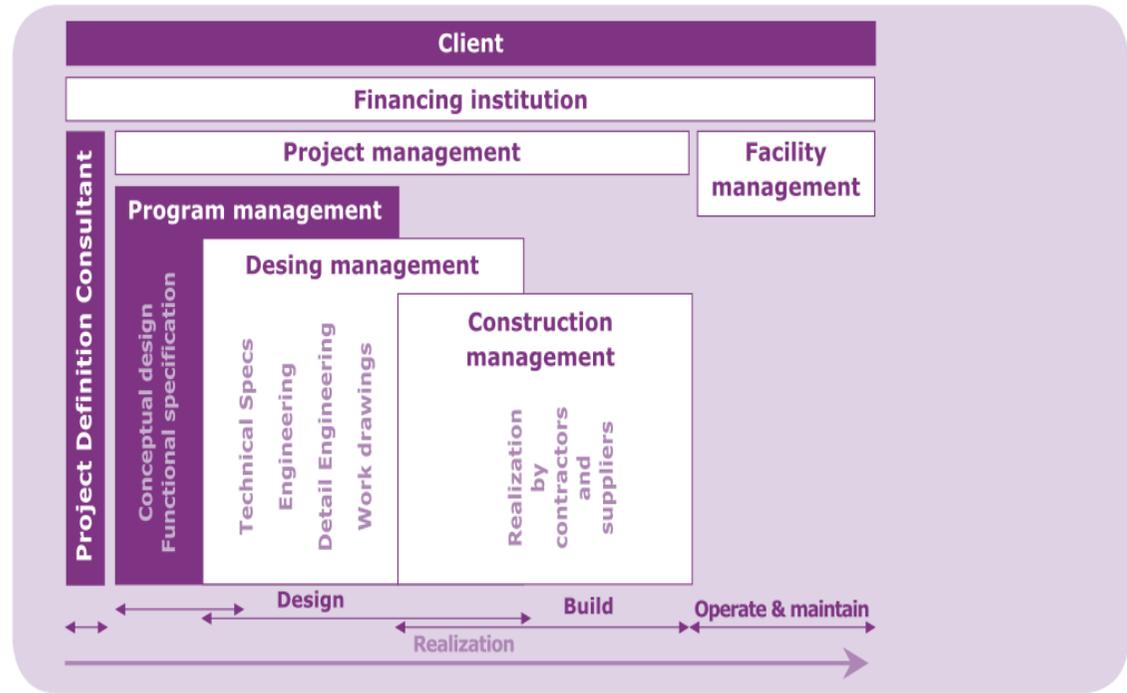
From NVBK



The Netherlands

1 // Two base schemes

Purple blocks are the clients primary responsibility. He/she should be capable to define the economical and functional scope boundaries. In nearly all integrated processes the initiation phase or project definition phase is carried out by the help of consultants. They cannot have any future commercial concern/interest. At the clients side continuation of the consultants role is possible off course. Somewhere during the design process (so, between definition phase and shop-drawings) the hand-over of responsibilities takes place. This is the transition from consultants to the builders. The moment of handing-over the responsibilities determines the level of integration of the contract for the building phase.

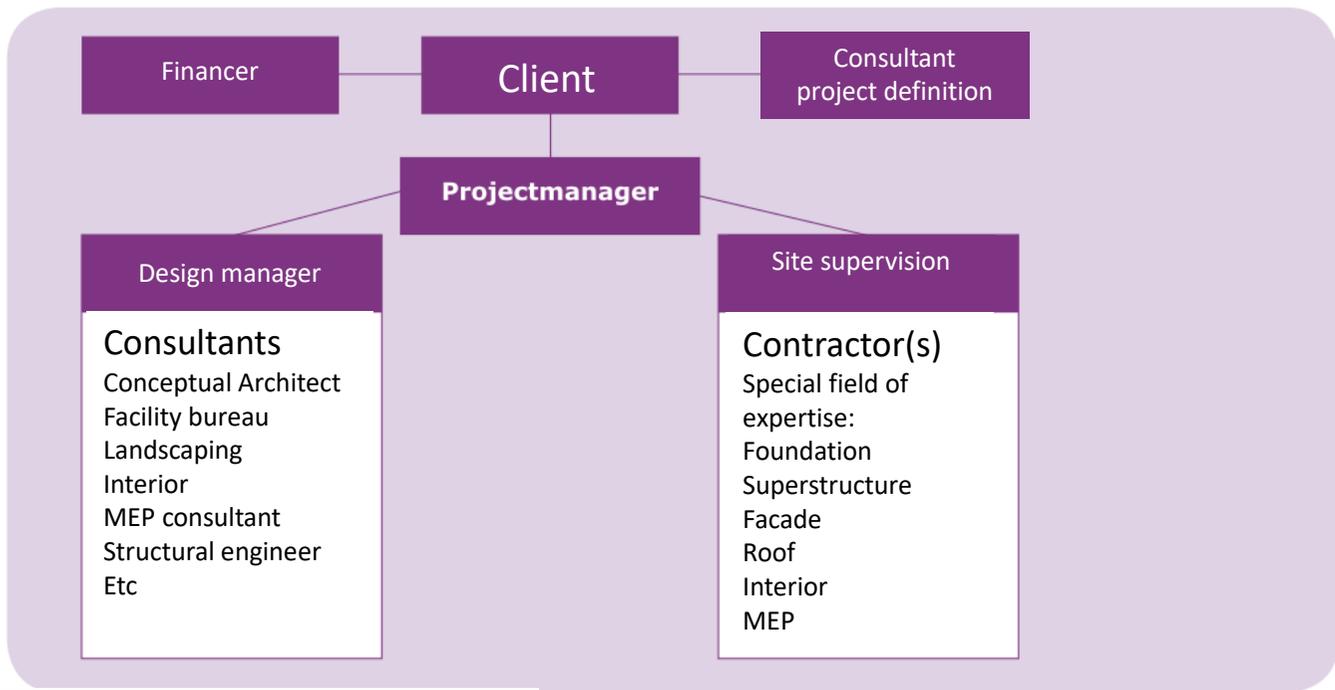


Source: www.nlingenieurs.nl



The Netherlands

1 // Two base schemes



This is another representation of such a typical scheme. The base for every building organisation is very traditional and involves 3 parties. Client, consultant and builder. If we add modern roles like financer and consulting roles (project manager, design manager and execution manager) to the classical scheme this scheme evolves. Based on this scheme many contract and process type can be structured.

Any party (client, consultant, independent specialist or contractor) can be responsible for these roles: project management, design management and execution management. The acceptance of these responsibilities dictates the contract type.

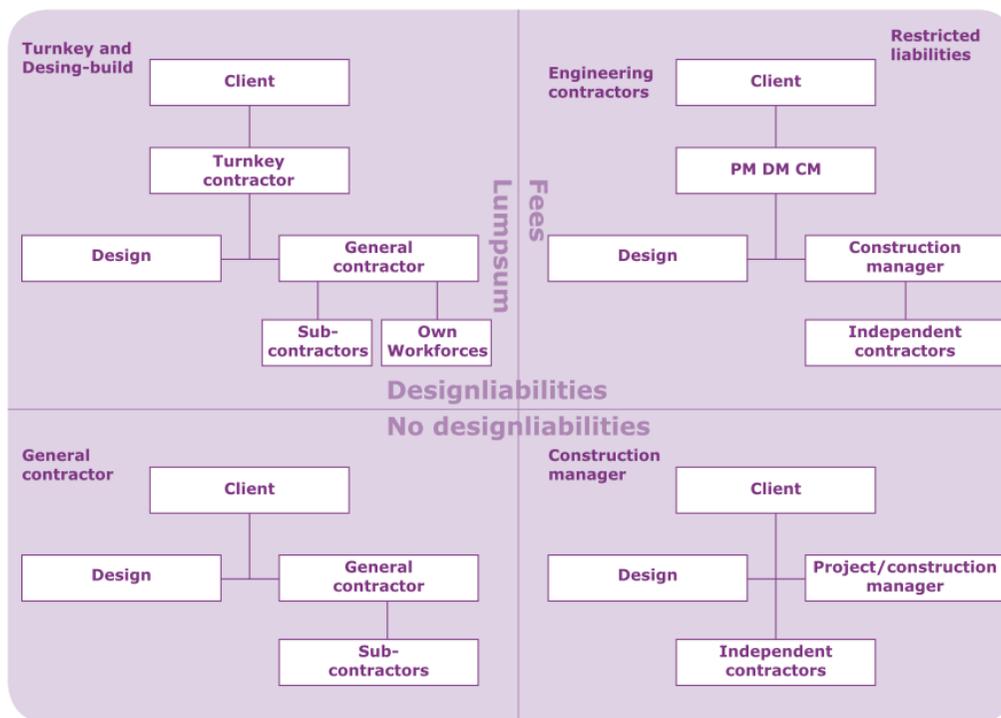
Source: www.nlingenieurs.nl



The Netherlands

2 // Contract strategies & design liabilities

This scheme shows the most important decision models for the consultant. The contract strategy impacts the liability. On the top left one can see a lumpsum or fixed amount versus the time-material type where all hours are multiplied by a fee. Another distinction can be made by design responsibility.



Source: www.nlingenieurs.nl



The Netherlands

3 // Main contract structure types

In the Netherlands we distinguish 5 main contract schemes.
The cost consultant is involved in all phases.

In the initiation phase a rough estimate will be made to decide go/no-go and/or a budget. Later at each design stage a cost estimate is created as a 'gate' getting more and more mature. The uncertainties and risk become less as the design evolves. Depending on the moment the building contractors place their bid, the cost consultant judges their offer and sometimes negotiate (depending on the contract type). Also during the project execution the cost consultant still is involved to judge additional work proposals. Sometimes if construction goes wrong (technical, timewise or financially) the cost consultant can also be hired by a court as independent consultant.



The Netherlands

3 // Main contract structure types

- **Financed integrated contracts**
Two parties: client and contractor. E.g. FBOOMT, BOOT, FBOT, DBFO, BFO, DBFM en DBM
- **Integrated building contracts**
Two parties: main contracting, Turnkey Contracting, Engineering Procurement Contracting, Design & Construct, Detailed Design and Construct and Design & Build
- **Traditional contracts**
Three parties: client, design and execution phase.
- **Integrated engineering contracts**
Management Contracting, Construction Management, Total Engineering, Target Fee Contracting, Engineering Contracting and Professional Construction Consultant
- **Management contracts**
Architect, Structural engineer, specialized consultant, Project Manager, Design Manager, Construction Manager and Facility Manager (consultants)

The cost engineer may be spotted (at dawn ;-)) in all organisations and during all project phases. Some of them are self-employed and operating as independent consultants, others are working at an engineering consultancy firm or at a building contractor. Large client organisations (governmental) also employ cost engineers, smaller clients normally hire cost engineers.

