# QS/EC Competencies in Europe

The position of the QS/EC

CEEC study October 2017





# 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 ?



# QS/EC Competencies Part 2

# Answers received:

DENMARK
FINLAND
FRANCE
GERMANY
IRELAND
HUNGARY
THE NETHERLANDS
UNITED KINGDOM
And soon ... Estonia – Spain - Switzerland



Part 2 – The EC/QS Position

# HUNGARY From Gyorgy SPANYI SPANYI PARTNERS Ltd





# 1 // The building team

#### 1/ Architect

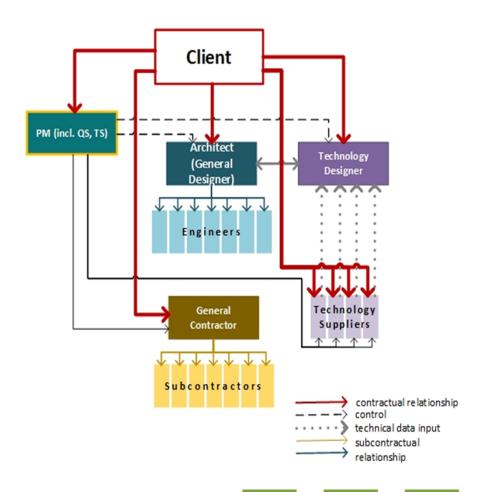
The architect is responsible always for

- concept design
- building permit design

and usually, but not necessary for the detailed or execution design;

The Architect is responsible for employing the engineering team (structural engineer, mechanical engineer, electrical engineer, etc), therefore we refer to the Architect as "General Designer";

Usually the Architect is preparing the B/Q (Bill of Quantities), but oddly enough he is not responsible for its accuracy (B/Q's are often useless). The architect is not responsible for the overall cost of the building he designed (although Clients try to enforce some sort of responsibility, but it is not part either of the legal framework, or of the Hungarian traditions);





Architects must have Professional Liability Insurance, but usually it covers very little amount, moreover I have never heard a customer filing claim against to the architect;

Architects are providing Architect's (and engineer's) supervision of works, what is limited to issues missing or not clear in the design. Quality control is not included in the Architect's scope.





#### 2/ Project Manager

Project Manager covers three roles:

- project management
- technical supervision
- cost control

the three roles are often performed by the same person (or same company). For larger projects they can be split, but more often than not by the same company;

Project Managers are qualified architects or engineers with university degree;

Project Manager and Cost Manager are not required by law. Technical Supervisor is required. Technical supervisors must have licence and go through regular training and earn credits for re-qualification due in every two years;

Recently the Project Manager (wearing his technical expert's and cost manager's hat) have more and more role in value engineering works;

Typically the Project Manager is responsible for the procurement (the majority of this task is done by his Cost Manager). In Hungary the vast majority of projects are awarded to a General Contractor.



#### Part 2 – The EC/QS Position

# **HUNGARY**

The Project Manager hands over the site to the General Contractor and takes over the completed building;

The Project Manager (his Cost Manager) is responsible for cost control during the construction;

The Project Manager (his Technical Supervisor) is responsible for the quality of works;

The Project Manager controls the entire building project;

The Project Manager is not legally responsible for cost overrun (although it is changing);

The Project Manager is (his Technical Supervisor) is legally responsible for improper works.





#### 3/ Contractor

Usually (but no exclusively) the Client hires a General Contractor who is responsible for the realization of the project;

The General Contractor is selected by competitive tender;

The General Contractor is preparing the proposal for the design documentation provided by the Client. He must prepare a fix lump sum price, including all missing part on the design. His price should be fixed, even if the B/Q turns to be inaccurate;

During the tender the tenderers are allowed to submit alternatives. It is up to the Project Manager if the alternatives are approved or not. It is common, that the scope fixed in the contract is very different from the original design;

The General Contractor works from design prepared by the Architect (=General Designer), although there are several project when the General Contractor is responsible for preparing the detailed/execution design;





## 2 // Schedule

The customer is the central point. Unless the customer is a professional developer, he assigns lot of tasks to the Architect (early stage of the project) and to the Project Manager (after he is assigned). The needs are defined by the Client.

The feasibility is also the Client's responsibility, however it is very common that the Client gets the first figure from the Architect (usually the Architect is selected first) what later turns out be inaccurate.

The Client choose the Architect usually directly, in case of larger public project by public procurement. Architects' competition is very rare.

Architect has total freedom to select his engineering team (structural engineer, mechanical engineer, electrical engineer, soil mechanical expert, acoustic expert, etc.). All the engineers work as subcontractor employed by the Architect. That is why we refer to "General Designer" (always lead by the Architect).

The building program (required functions, floor areas, etc.) is developed by the Architect.

Project Manager selected ideally in early stage (conceptual design phase), but often later (after building permit had been granted). It happens that the project management is provided by the Architect, but it is unusual and there is a lot bad experience.

Concept design is developed by the Architect with support of the Project Manager. Project Manager is providing cost control and value engineering. The project Manager drafts the budget.

The same applies for building permit design. I good projects the Project Manager is expected to prepare detailed cost plan prior to submit building permit application.





### 2 // Schedule

After Building Permit obtained, the Architect starts to work on the execution design. During design period the Project Manager is expected to exercise value engineering and costing. Oddly, the Architect is preparing the B/Q. However, the Architect is not responsible for the accuracy of B/Q. Recently, in larger projects the B/Q is omitted from the Architect's scope; the PM's Cost Manager is preparing it.

Procurement is the responsibility of the PM. The Architect might be invited to seat in the tender negotiation; his role is limited to comment alternatives recommended by the tenderers. The Client is responsible for concluding the contract.

Work area is handed over to the General Contractor by the Client.

The PM is chairing all project meetings, his TS is responsible for daily inspection of works, his CM for handling variations and approving the General Contractor's monthly performance. (Monthly payment is the norm). In Hungary building authorities do not inspect the site. However, there is an obligatory electronic construction log (the most important building document, maintained by the government), where representatives of the authorities are allowed to log in (and they do).

Takeover and commissioning is the PM's responsibility.

