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 ?

QS/EC Competencies Part 2

Answers received :

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

UNITED KINGDOM

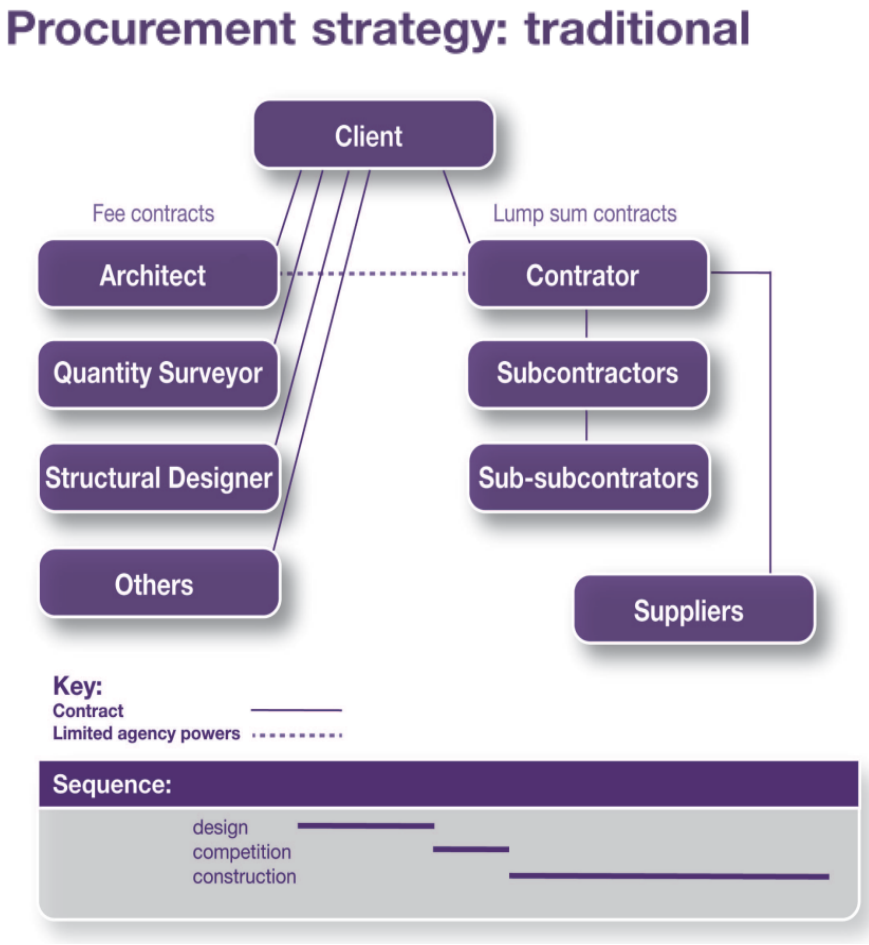
From Steven THOMPSON
Royal Institution of Chartered Surveyors (RICS) – London

United Kingdom

1 // The building team

As well as an architect and a Quantity Surveyor (QS), there is likely to be a Project Manager (PM) appointed by the Client and this is likely to be the first appointment. The PM will then advise the Client as to the other consultant appointments necessary and may even be involved in the commercial discussions around their appointment.

The PM is likely to assist the Client is writing the Client Brief: 'what I want, and how it is going to be achieved' – but in 'broad brush' form. The architect then prepares an outline scheme design to align with the Brief and the QS will estimate the expected cost – this estimating is likely to include option appraisal, so as to guide the Client as to his strategic options available.



United Kingdom

Other consultants are then appointed, such as: structural engineer, services engineer, health & safety consultant and other specialist consultants and these all work as a team to design and supervise the construction of the building.

With a 'traditionally' procured project, the architect will remain in place throughout the whole project as the design team leader –
these roles might include:

- full design of the architectural elements and design co-ordination of the rest of the design overall; materials and workmanship specification in respect of the architectural elements;
- submission of the Planning consent application and dealing with the Planners over approval and/or Conditions imposed;
- assistance with the tender enquiry documents;
- upgrading of the design drawings and other information to 'construction' standard;
- preparing revised design information during the course of the site construction phase;
- inspecting the works throughout and at the end to ensure that the build complies with the design intent.

(The architect may (but not typically) also act as the Contract Administrator (CA) and issue instructions and certificates to the Contractor during the work on site).

United Kingdom

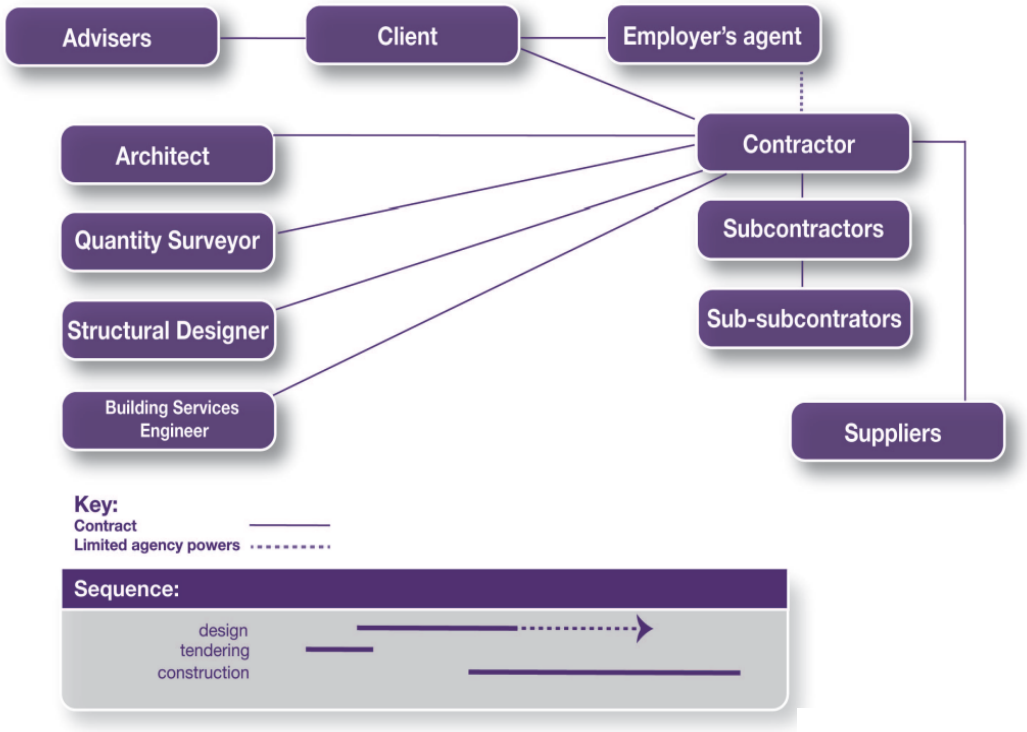
With the very common alternative of a 'design-and-build' procured project, the architect is unlikely to remain in place beyond the tender enquiry stage, as the successful Contractor takes over responsibility for the completion of the design. The Contractor may retain the services of the architect (for continuity) or the Client may require that the architect's appointment is 'transferred' to the Contractor (legally known as 'novation'). On some occasions, the architect may also continue to be retained by the Client to advise him.

With a 'traditionally' procured project, the QS will remain in place throughout the whole project as the lead consultant on cost management and cost advice to the Client. These roles might include (and in the case of every stage listed, the action or duty of the QS described here also includes the reporting of the same to the Client): cost estimating as the design develops; option appraisal; procurement strategy; tender enquiry preparation and managing the overall tender process; tender evaluation and recommendation to the Client; contract formulation; interim payment calculations; overall cost management; valuation and agreement of the cost of variations; claims management; agreement of the final account payable. (The QS may (quite typically) also act as the Contract Administrator (CA) and issue instructions and certificates to the Contractor during the work on site).

United Kingdom

Procurement strategy: design and build

With a design-and-build project, the role of the QS is very similar to the last section and they will not ever be transferred (novated) to the successful Contractor, given that then Client will wish to continue to receive independent cost advice.



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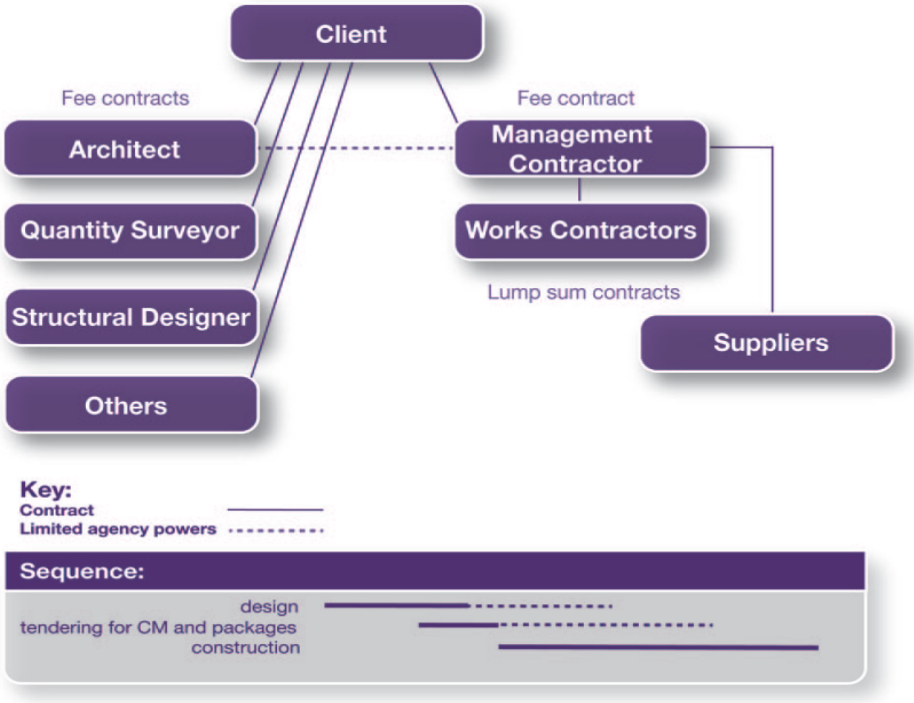
Organisational structure of a management contract

There are many other variations to the two procurement models shown above which are used in the UK market to a lesser extent, where the architect and QS play slightly different roles, although the same base set of duties and services apply.



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2 // Schedule

Design phase

The outline scheme design (as originally prepared by the architect – and others) is developed to the point where the Client approves it, based upon the concept put forward and the estimated cost as prepared by the QS.

The architect then submits the scheme for Planning consent, which is dealt with at the local level by the Local Authority (Council). Different arrangements apply in the case of nationally significant infrastructure schemes and/or where the Planning proposal is likely to be contentious.

A refusal at Planning may result in changes to the design and/or an Appeal, at which point a nationally appointed Planning Inspection decides. Very high profile projects may go to a Public Enquiry.

United Kingdom

2 // Schedule

Design phase /b

Planning consent is likely to be granted with Conditions to be fulfilled which the architect is typically responsible for dealing with – some of which relate to the construction logistics and site based operations (noise, dust, working hours and the like).

Further design development takes place by the design team (led and coordinated by the architect) such that Building Regulations (design basis – national UK building code) approval can be obtained. Throughout this process, the QS is further refining the cost plan estimate and the PM is reporting both cost and programme implications to the Client.

On larger projects, the use of Building Informational Modelling (BIM) will be central to the design phase.

United Kingdom

2 // Schedule

Tender phase

Further design development takes place and at some point (and this stage is not necessarily a common point in time for all projects – see below) competitive construction tenders are invited (from contractors or constructors who should have been pre-qualified to be on the short-list for tender).

The QS takes the lead in coordinating the tender enquiry documents and includes the design team information together with general information about the site and the conditions under which the work is to executed and commercial details in respect of pricing and the form of contract to be used.

The tender enquiry is sent to a select list of contractors and the tender process is managed by the QS. Having received the tender offers, these are examined by the QS (and in conjunction with other members of the team) a conclusion and recommendation arrived at as to the appointment of the successful Contractor, as captured in a tender report. This is submitted to the Client for approval to proceed.

United Kingdom

2 // Schedule

Construction phase

After the agreement of the programme duration and the Contract Price, the successful Contractor is appointed and a start on site date agreed. The QS will usually be responsible for drawing up and obtaining the execution of the agreed construction contract. The Contractor may then be involved in the second part of the Building Regulations approval process – to confirm that what is built complies with the national building codes.

Work proceeds on site, with the PM having an overview role across the whole project and reporting on progress and cost status to the Client, the CA administering the terms of the construction contract the architect (and other members of the design team) dealing with design queries within their particular fields, the QS dealing with the financial aspects of the project, including the valuation of the work for interim (monthly) payments, the valuation of variations and claims, regular cost reporting to the Client (via the PM) and the agreement of the final account (the final cost of the works).

United Kingdom

2 // Schedule

Construction phase

Regular site progress meetings are held to review progress, to ensure that the quality of the work is maintained and complies with the design intent, to address queries and clarifications and to solve current and upcoming problems that have been encountered.

If the project programme is delayed, then the PM, CA and QS are typically involved in evaluating whether the Contractor is entitled to an extension of the programme duration and if so, by who much time and with what resultant cost impact.

At the completion of the project, a check is made by members of the design team that there are no outstanding defects which the Contractor will be required to rectify, after which Completion is awarded to him. A fixed period (typically twelve months) is then available to the Client to have any further defects that become apparent to be made good at no cost.