

# THE WORK OF THE QUALITY SURVEYOR

BUTE – Faculty of Architecture  
Department of construction technology and  
management

*István Vidovszky PhD*

CM4  
Controlling of construction technology

2016.03.08.

0

**Introduction**

**Rules and prescriptions**

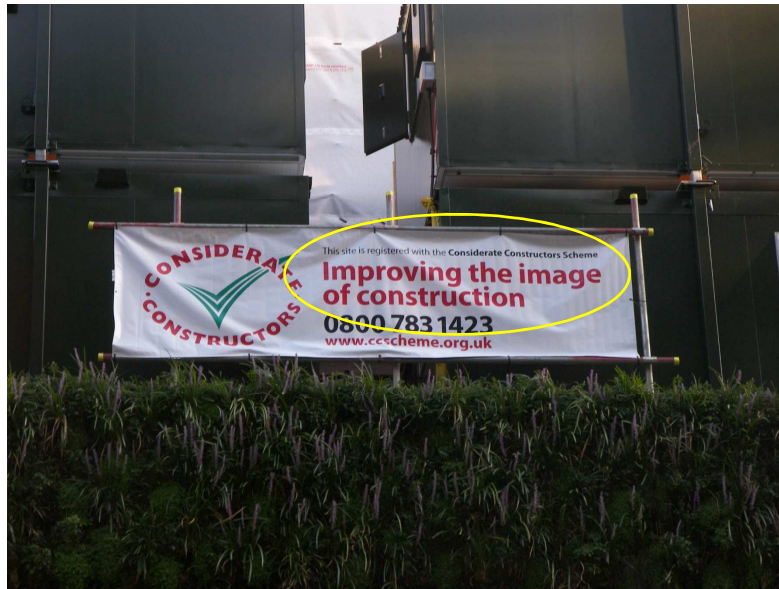
**Tasks and duties**

**Table of content**

Vidovszky – BUTE – Department of Construction Technology and Management

o

Table of content



Vidovszky – BUTE – Department of Construction Technology and Management

o

Table of content



Vidovszky – BUTE – Department of Construction Technology and Management

**1** **SYSTEMS WORLDWILDE**

Local (Hungarian) system  
- controls technical and economic aspects

↑  
↓

Anglo-Saxon system

Building surveyor  
- controls mainly technical aspects  
- gives various advice regarding to a construction project

Quantity surveyor  
- controls economic aspects

**Introduction**

Vidovszky – BUTE – Department of Construction Technology and Management

**1** **SYSTEMS WORLDWILDE**

typical activities of a building surveyor :

- ensuring projects are completed on budget and to schedule
- preparing scheme designs with costs, programs for completion of projects and specification of works
- preparing documents for tender and advising on appointing contractors, designers and procurement routes
- determining the condition of existing buildings, identifying and analyzing defects, including proposals for repair
- negotiating on professional fields representing the client
- carrying out feasibility studies
- advising on specialist's fields

**Introduction**

Vidovszky – BUTE – Department of Construction Technology and Management

<b>1</b>	<b>SYSTEMS WORLDWILDE</b>
<b>Introduction</b>	<p><b><u>Building surveyors</u></b> are usually specialized on one of the following fields:</p> <ul style="list-style-type: none"> <li>• disabled access</li> <li>• fire safety engineering</li> <li>• energy efficiency and sustainable development</li> <li>• construction law</li> <li>• forensic inspection</li> <li>• dispute resolution</li> <li>• maintenance</li> <li>• private certification</li> <li>• building materials science</li> <li>• code development &amp; legislation</li> <li>• expert witness</li> <li>• alternative building solutions</li> <li>• health and safety</li> <li>• preservation/conservation of historic buildings</li> </ul>
Vidovszky – BUTE – Department of Construction Technology and Management	

<b>1</b>	<b>SYSTEMS WORLDWILDE</b>
<b>Introduction</b>	<p>typical activities of the <b><u>quantity surveyors</u></b> (cost engineer):</p> <ul style="list-style-type: none"> <li>• preparing <b>tender and contract documents</b>, including bills of quantities with the architect and/or the client;</li> <li>• undertaking <b>costs analysis</b> for repair and maintenance project work</li> <li>• assisting in establishing a client's requirements and undertaking <b>feasibility studies</b></li> <li>• performing <b>risk and value management</b> and cost control</li> <li>• <b>advising</b> on procurement strategy</li> <li>• identifying, <b>analyzing</b> and developing responses to commercial <b>risks</b></li> <li>• preparing and <b>analyzing costs</b> for tenders</li> <li>• <b>allocating work</b> to subcontractors</li> <li>• providing <b>advice on contractual claims</b></li> <li>• <b>analyzing outcomes</b> and writing detailed progress reports</li> <li>• valuing completed work and <b>arranging payments</b></li> <li>• <b>maintaining awareness</b> of the different building contracts in current use</li> <li>• understanding the implications of <b>health and safety regulations</b></li> </ul>
Vidovszky – BUTE – Department of Construction Technology and Management	

<b>1</b>	<b>SYSTEMS WORLDWILDE</b>
<b>Introduction</b>	<p><u>Quantity surveyors</u> can be specialized on one of the following fields:</p> <ul style="list-style-type: none"> <li>• offering advice on <b>property taxation</b></li> <li>• providing <b>post-occupancy advice, facilities management</b> services and <b>life cycle costing</b> advice</li> <li>• assisting clients in locating and accessing additional and alternative <b>sources of funds</b></li> <li>• enabling clients to <b>initiate construction</b> projects</li> <li>• advising on the <b>maintenance costs</b> of specific buildings</li> </ul>
Vidovszky – BUTE – Department of Construction Technology and Management	

<b>1</b>	<b>SYSTEMS WORLDWILDE</b>
<b>Introduction</b>	<p><u>quantity surveyors</u> :</p> <p>on the client's side:</p> <ul style="list-style-type: none"> <li>• professional quantity Surveyor</li> </ul> <p>on the constructors side:</p> <ul style="list-style-type: none"> <li>• main contractors quantity surveyor</li> </ul> <p>RICS – organisation for QS-s</p>
Vidovszky – BUTE – Department of Construction Technology and Management	

**1 HOW TO BE A QUALITY SURVEYOR IN HUNGARY?**

**Introduction**

- intermediate education:
  - superstructure construction (bricklayer, carpenter)
  - substructure construction
  - general formen
  - electrical installer
  - plumbers
 + years of practice
   
 → quality surveyor II. with limited competence (only on their own fields – since 2013 not any more possible )
- BSc or higher degree in the field of construction
  - engineers (civil, building, construction)
  - architects
 + years of practice
   
 → quality surveyor I. with unlimited competence (every fields)

(+ 6 months education as quality surveyor) + exam

Vidovszky – BUTE – Department of Construction Technology and Management

**1 THE MAIN ROLE OF A QUALITY SURVEYOR**

**Introduction**

participant	controlling process	controlling aspect	
client	quality surveyor	every aspect	INNER CONTROLLING
designers	architectural supervision	aesthetical quality/ accordance with the plan	
contractor	daily controlling routine	every aspect	
authority	before construction, after hand over	accordance with the plan	OUTER CONTROLLING
state	during the construction	every legal aspect	

Vidovszky – BUTE – Department of Construction Technology and Management

2

**TO HIRE A QUALITY SURVEYOR**

Rules and prescriptions

A) independently:

- as a private person
- as an employee of a private company

B) as a service:

- provided by the designer
- provided by a PM company

**CANNOT be provided by the contractor company!!**

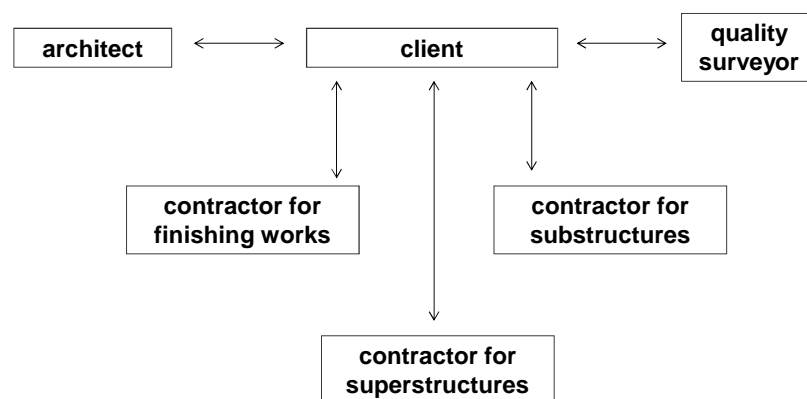
Vidovszky – BUTE – Department of Construction Technology and Management

2

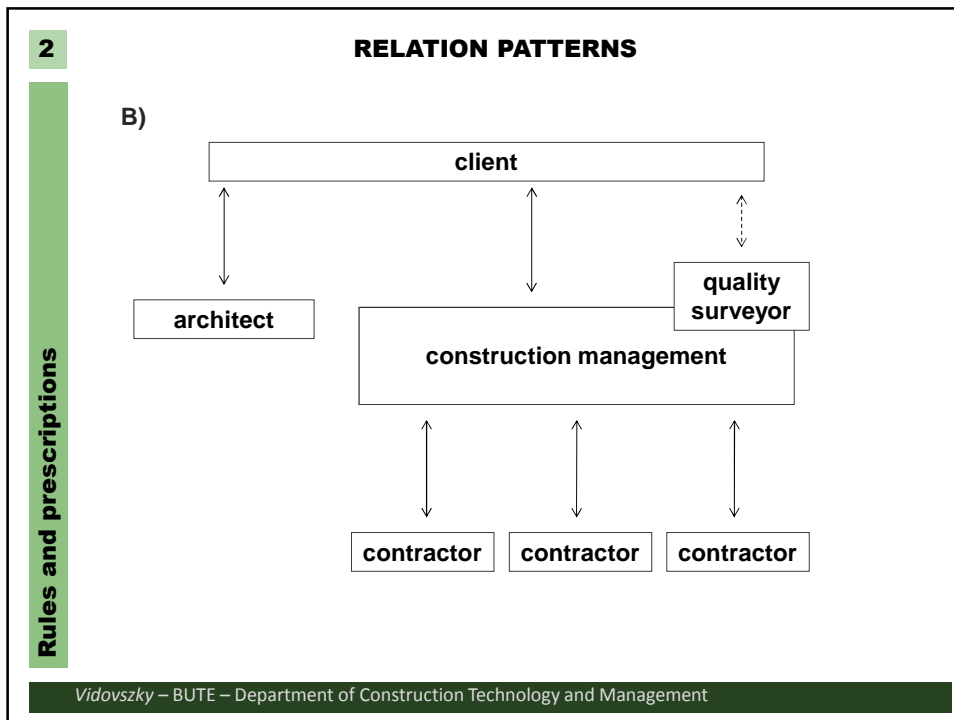
**RELATION PATTERNS**

Rules and prescriptions

A)



Vidovszky – BUTE – Department of Construction Technology and Management



**2**

**CASES OF APPLICATION**

Obligatory	Facultative
<ul style="list-style-type: none"> <li>• in case of private investment if there are more than one contractor</li> <li>• if it is a public procurement</li> </ul>	<ul style="list-style-type: none"> <li>• in case of private investment if there is a general contractor</li> </ul>
!	?

**Rules and prescriptions**

Vidovszky – BUTE – Department of Construction Technology and Management



2

**LEGAL ENVIRONMENT**

Rules and prescriptions

regulations concerning to the work of quality surveyor:

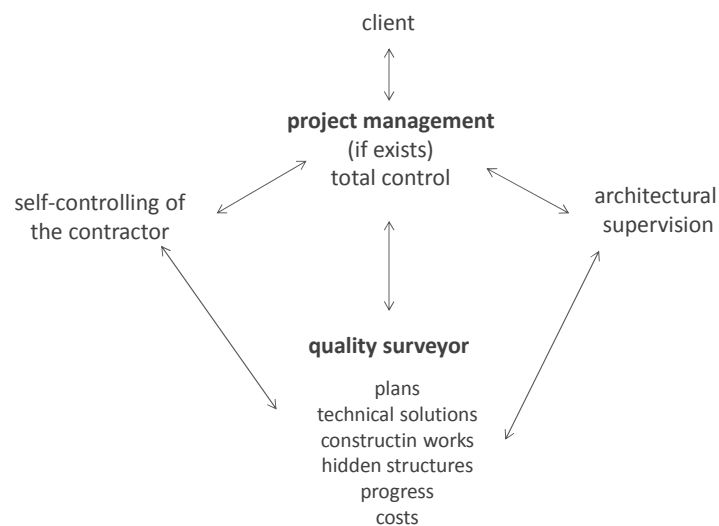
- 1997 LXXVIII. Act – On the built environment
- 133/2010 governmental order - on the education
- 191/2009 governmental order – on the construction

Vidovszky – BUTE – Department of Construction Technology and Management

3

**INNER CONTROLLING PROCESSES**

Tasks and duties




Vidovszky – BUTE – Department of Construction Technology and Management

**3**

**CONTROLLING THE PLANS**

**Tasks and duties**

- controlling of the plans in accordance with the
  - standards
  - regulation
- proposing alteration of the plan if
  - technically
  - financially reasonable.



Vidovszky – BUTE – Department of Construction Technology and Management


**3**

**CONTROLLING THE CONSTRUCTION**

**Tasks and duties**

**1. QUANTITY**

- controlling of the setting out of the building
- controlling the geometry of the building (in accordance with the plans)
- controlling volume of the completed work



Vidovszky – BUTE – Department of Construction Technology and Management

3

**CONTROLLING THE CONSTRUCTION****2. QUALITY**

- ensure the prosecution of the prescribed tests
  - soil mechanics
  - humidity
  - strength
  - etc.
- controlling the quality that is prescribed by the standards
- note all failures (deficiencies and faults) in the construction logbook
- controlling the hidden structures before getting covered
  - reinforcement
  - electric wiring
  - plumbing
  - insulation
  - screeds
  - etc.



Tasks and duties

Vidovszky – BUTE – Department of Construction Technology and Management

3

**CONTROLLING THE CONSTRUCTION****3. SAFTY RULES**

- controlling health and safety regulations related to each technology



Tasks and duties

Vidovszky – BUTE – Department of Construction Technology and Management

3

**IN CASE OF DEFICIENCY AND FAULTS...****decisionmaking**

- if the consequences of the failure do not risk health or work safety, and the building still meets the regulations – there are 3 choices:
  - demolition + repeated construction
  - correction of failures (if possible)
  - value reduction (discount from construction fee)
  
- in any other case – there are 2 choices:
  - demolition + repeated construction
  - correction of failures (if possible)

Tasks and duties

Vidovszky – BUTE – Department of Construction Technology and Management

3

**ADMINISTRATIVE TASKS**

- continuous controlling of the construction logbook, on the basis of the following aspects:
  - fulfillment of the formal requirements (first page, signatures, etc.)
  - regular updates (existence of the required notes)
  - existence of the required signatures
  
- controlling of the conformance of the applied material (CE, etc.)
  
- informing the client
  - if the completed work is according to the contract
  - about the progress
  - about the cost
  - if the interim invoices can be paid
  
- take part in the hand over process

Tasks and duties

Vidovszky – BUTE – Department of Construction Technology and Management

3

**CONSTRUCTION LOGBOOK / SITE RECORD**

Tasks and duties



former e-book



since 2013 online e-logbook has been used

Vidovszky – BUTE – Department of Construction Technology and Management

3

**CONSTRUCTION LOGBOOK**

Tasks and duties

- up to 2013 an original one and a copy was required on the site
- now online e-book is used
- content
  - general data about the contractor, client, architect, quality surveyor ...
  - daily reports (by the contractor)
  - reports and notes of the quality surveyor
  - reports and notes of the authorities
  - notes of the architect (in case of architectural supervision)
  - annexes (e.g. drawing details, statements or other documents)

Vidovszky – BUTE – Department of Construction Technology and Management

**S****SOURCES**

Neszmélyi L. (szerk.): Építési műszaki ellenőri szakképzés. Szabványügyi ismeretek. Minőségügyi és minőségirányítási ismeretek. Terc, 2011.

Neszmélyi L. (szerk.): Építési műszaki ellenőri szakképzés. Jogi ismeretek. Munkavédelem. Tűzvédelem. Terc, 2011.

[http://www.prospects.ac.uk/building\\_surveyor\\_job\\_description.htm](http://www.prospects.ac.uk/building_surveyor_job_description.htm) 2013-04-13

[http://www.prospects.ac.uk/quantity\\_surveyor\\_job\\_description.htm](http://www.prospects.ac.uk/quantity_surveyor_job_description.htm) 2013-04-13

[http://aibs.businesscatalyst.com/fabs/about\\_building\\_surveyors](http://aibs.businesscatalyst.com/fabs/about_building_surveyors) 2013-04-13

[http://en.wikipedia.org/wiki/Quantity\\_surveyor](http://en.wikipedia.org/wiki/Quantity_surveyor) 2013-04-13

Pictures:

<http://www.tabla.hu/termek/NYA018001> 2012-03-28