


International comparison of elemental classifications

FIG Congress
Munich
October 2006
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Purpose of the paper

- Describe the development of the CEEC *Code of Measurement for Cost Planning*
- Allocate ASTM *Uniformat II* Elements to the Code
- Discuss some issues that arise


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CEEC?

- Comite European des Economistes de la Construction
- Construction Economists from
 - Belgium
 - Ireland
 - Netherlands
 - France
 - Italy
 - Switzerland
 - Germany
 - Denmark
 - Spain
 - UK


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CEEC Objectives

- Harmonisation of working methods
- Exchange of information

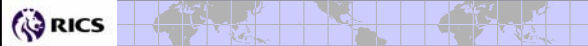
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CEEC cost comparison: Objectives

- Compare approaches to cost planning
- See how elements varied
- Compare cost data sources
- Compare how costs were adjusted for:
 - Scale
 - Location
 - Time

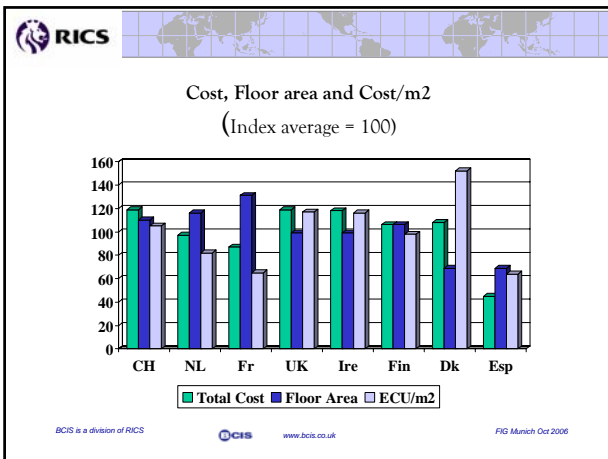
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CEEC Cost Comparison: Information provided

- University advanced technology building
- Layout drawing 1:300
- Outline specification
- Elemental quantities (based on SfB elements)

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RICS

Cost, Floor area and Cost/m2

	Total Cost	Floor Area	ECU/m2
	ECU	m2	
Switzerland	2,917,000	2875	1,015
Holland	2,372,700	3007	789
France	2,138,300	3412	627
UK	2,910,370	2585	1,126
Ireland	2,900,006	2585	1,122
Finland	2,607,000	2758	945
Denmark	2,639,000	1800	1,466
Spain	1,111,650	1800	618

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- RICS**
- Cost per floor area
- It is the common language for comparing costs
 - But different countries are measuring both the costs and the floor area differently
 - HELP!
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- RICS**
- Comparability of results
- Quality assumed from outline spec
 - Standard specifications between countries
 - What was included in total costs
 - Taxes
 - Fees
 - Land costs
 - Etc
 - Floor area
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- RICS**
- Requirements for comparisons
- Definition of elements
 - Group building elements for direct comparison
 - Identify other cost groups
 - Scope of total costs
 - Measurement of floor area
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RICS

Purpose of Code

To provide a standard basis for the sub-division of costs and for measurement of basic quantities of buildings for pan european budgetting, comparison and analysis at management level.

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RICS

Purpose of Code

The structure is organised to permit the use of the existing national classifications at a more detailed level of information (subsidiarity principle)

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RICS

General principles

Not all Cost Groups or Basic Quantities will be applicable in every country. Where Cost Groups or Basic Quantities are not used this will be clear and *avoid misunderstandings on scope and content*

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RICS

CEEC Code

European Code of Measurement: Concept

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Basic quantities

- Site area
- Footprint area
- Floor areas not fully enclosed
- Gross external floor area
- Gross internal floor area
- Area ancillary to main function
- Ancillary areas for services
- Circulation area
- Usable floor area

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Cost Groups 1

- Construction Cost
 - Preliminaries
 - Substructure
 - External superstructure/envelope
 - Internal superstructure
 - Internal finishes
 - Services installations
 - Special equipment
 - Furniture and fittings
 - Site and external works
 - Construction contingencies
 - Taxes on construction



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Group C External superstructure/envelope


All external building work above the substructure including roofs (together with associated beams, balustrades and the like), external walls (together with associated columns and beams), external windows (with external sun protection), external doors and external finishes but excluding internal finishes. *Where costs of suspended or cantilevered balconies, or frame members to external structures cannot be identified separately they should be included in group D*



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Cost Groups 2


- Design and incidental costs
 - Design team fees
 - Ancillary costs and charges
 - Project budget contingencies
 - Taxes on design and incidental costs
- Cost in use
 - Maintenance
 - Operation
 - Disposal
 - Decommissioning
 - Taxes



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Cost Groups 3


- Land and finances
 - Land costs
 - Finances
 - Grants and subsidies
 - Taxes on land

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Publication in three languages

- English
- French
- German



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Countries currently included


- Belgium
- Germany
- Holland
- Ireland
- Switzerland
- United Kingdom



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Adding Uniformat II


- Most elements map at level 2
- 'Basement'
 - 'Excavation' to 'Substructure'
 - 'Walls' to 'External superstructure/envelope'
- 'Superstructure'
 - 'Floor construction' to 'Internal superstructure'
 - 'Roof construction' to 'External superstructure/envelope'
- 'Special construction'
 - Loosely defined done my best to offer guidance

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Floor area

- Surprised that it is not defined in *Uniformat II*
- Nor in *Standard Terminology for Building Economics*
- Good practice would dictate that a definition is included with data expressed in \$/ft².
- Reference to definitions by:
 - Means
 - AIA
 - BOMA

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Floor Area Definitions

- Means: Sum of floor plates at grade measured to external face of external walls - excludes basements
- AIA (D101): similar but includes basements and 50% of covered balconies and the like
- BOMA: Total constructed area enclosed by the dominant portion, which seems to be internal face of external wall.

CEEC Code

Available on the RICS website

www.rics.org

Search for 'ceec code'

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