

# TG41 - Benchmarking Construction Performance

This Task Group was established last year and has lost no time in getting down to serious work. Its active Coordinator Dr. Vassos Chrysostomou, who is Director of the Centre for Performance Improvement in Construction at the BRE, United Kingdom, reports on the two meetings held to date and what transpired at each.

## Membership

The Task Group currently has 26 members from 16 countries across the globe representing governments, research institutions, academia as well as individual consultants actively involved in benchmarking within the construction sector.

## Meetings

Attendance at both meetings was satisfactory. Details were:

- Tuesday 22nd February 2000 at the ASCE Conference in Florida, USA
- Friday 10th March 2000 at BRE, Garston, UK

The aims and objectives of both meetings were to:

- Define the scope of the group's work
- Enable each organisation to present their current benchmarking initiatives and to identify areas of common ground
- Identify deliverables and set a work programme

On both occasions the participants reinforced and supported the aims of TG41 to:

- Develop and promote good practice in construction benchmarking
- Identify and define a set of Key Performance Indicators, KPIs, that will form the framework for international benchmarking
- Facilitate the exchange of data, benchmarks and good practices between members
- Develop a proposal for international construction benchmarking systems at all levels of the construction industry:
  - National
  - Organisational / Business
  - Product
  - Process
  - Project
  - Component Level

## On-Going Initiatives

The group's membership had, at the meetings and through e-mail to the Coordinator, exchanged information on their current benchmarking initiatives. A detailed report of the initiatives is currently in draft and will be circulated to TG41 Members for comments in August and September. An interim summary follows.

UK - Vassos Chrysostomou - In the 1998 Construction Task Force Report, Rethinking Construction, benchmarking has been identified as a fundamental tool for the continuous improvement of the UK

Construction Industry. As a result a number of benchmarking initiatives are now in operation in the UK. A detailed listing with a short description of the work to date, as well as a route to dedicated web-sites can be found on the UK's Construction Best Practice Programme dedicated KPI portal [www.KPIzone.com](http://www.KPIzone.com) to be launched on 20th July 2000.

A number of peer group benchmarking clubs have also been formed in the UK, collecting data for defined Key Performance Indicators (KPIs) on a monthly basis on over 2500 projects. Details of these clubs can be found at [www.thebc.co.uk](http://www.thebc.co.uk) and at [www.dbfregistration.com](http://www.dbfregistration.com) respectively.

Plans are also well advanced for the National Construction Benchmarking Conference on 20 July at BRE at which the majority of the benchmarking initiatives available to UK Construction will be presented.

EU Pilot Benchmarking Study - Vassos Chrysostomou. The Federation of European Contractors, FIEC, has been appointed by the EU Commission to undertake a pilot benchmarking study within the EU membership, in order to ascertain the feasibility of a European wide benchmarking of the construction industry and to develop appropriate KPIs for such system. FIEC has appointed BRE to be the facilitator of this study. The initial KPIs considered include Time; Cost; Quality; H&S and Added Value of projects. Details of the pilot study can be found at [www.thebc.co.uk/eubench](http://www.thebc.co.uk/eubench).

Singapore - Toh Eng Shyan: Singapore's Building Construction Authority (BCA) has embarked on an international benchmarking project with a number of countries. The project (more details will be published in the forthcoming TG41 Report or can be obtained directly from [Toh\\_Eng\\_Shyan@BCA.gov.sg](mailto:Toh_Eng_Shyan@BCA.gov.sg)) consists of three parts:

- Macro-economic indicators, at the national level. This includes indicators such as GDP, population, labour force, inflation and interest rates etc., that provide an indication of the health of the economy and the development directions of the country.
- Structure of the Construction Industry. Includes indicators such as construction volume, distribution of construction organisations by volume, size etc.
- Competitive benchmarks. Benchmarking indicators at project level for productivity; cost; safety; quality; R&D; buildability and environment.

Netherlands - Dr Emilia van Egmond: Dr Egmond has developed at Delft University a generic methodology for mapping the status of the technological capabilities of the housing construction industry and the technologies in the production/construction process. The so-called Technology Mapping Methodology represents a benchmarking and management tool for technology management and policy making for the housing developments. Emilia is now looking for new partners to implement the methodology, compare with the existing database and share learning. Further details can be obtained from her directly [E.v.Egmond@tm.tue.nl](mailto:E.v.Egmond@tm.tue.nl)

USA -Pennsylvania State University - Randolph Thomas: Randolph has been involved in an international benchmarking study on labour productivity measurements (especially on brick and block work) for the last 15 years. The work has been reported previously under the CIB W55/W65. A Workshop has recently been held in Zagreb, in May where the methodology and a further implementation programme was set out. Details on [hrt1@psu.edu](mailto:hrt1@psu.edu)

USA - Dr Stephen Thomas: CII was established in 1993 and has a Construction Benchmarking Forum representing some 80-90 completed projects from club members which include both Clients and Contractors. The Club is mainly involved in identifying best practice processes within projects and closer links between CIB and CII over the Autumn will enable TG41 to obtain more information and data with regards to any further benchmarking opportunities. Meanwhile the contact for more details is Stephen R. Thomas, who is the CII Associate Director and responsible for the CII benchmarking initiative [sthomas@mail.utexas.edu](mailto:sthomas@mail.utexas.edu)

Brazil - Ubiraci de Souza: Currently working at the Department of Civil Construction Engineering

(University of Sao Paulo) Souza has been researching and benchmarking material waste and labour productivity indexes for building construction sites in Brazil for the last seven years. Data has been collected on formwork, rebar, concrete placement, brickwork, plaster and tile finishes on over 100 construction sites in Brazil and the work published during CIB W55/W65 meetings in 1996 and 1999 in conjunction with the Randolph Thomas initiative above. Details of the studies can also be found on [www.pcc.usp.br](http://www.pcc.usp.br) (in Portuguese) or [Ubisouza@pcc.usp.br](mailto:Ubisouza@pcc.usp.br)

## TG41 Deliverable and Programme

The following programme has been set out for the next six months:

1. Draft good practice guidelines in construction benchmarking for both companies and projects to be circulated by the 22nd September for comment
2. Draft set of Key Performance Indicators, KPIs, which will form the framework for international benchmarking identified and defined to be circulated by the 22nd September
3. Draft proposal for international benchmarking system to be prepared by TG41 Coordinator ready for the next TG meeting
4. Next meeting will be arranged in the USA or Europe subject to CII agreement in mid October (to be advised)

## Contact Data



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