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INFORMATION

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Pro-Active Approach Theme 3

Re-Valuing Construction

Revaluing Construction 2005 – The Challenge of Change Rotterdam, The Netherlands – 22-23 March 2005

by



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THE CHALLENGE OF CHANGE IN CONSTRUCTION

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The second CIB 'Revaluing Construction' conference that was jointly organised with the Dutch Construction Reform Programme PSIBouw, took place in March. With over 220 registered participants from 19 countries, attendance was nearly double that at the first conference held in 2003 in Manchester, an indication of the way that construction industry reform and performance improvement is becoming a subject of world-wide attention and action.

Revaluing Construction is a Pro-Active theme within CIB. It embraces the many changes in procurement strategies, relationships between project parties, project management etc now being promoted in construction reform programmes around the world, together with supporting technologies such as the use of off-site construction techniques. These changes aim to enhance the value provided by construction to its clients, its firms and workforce, and to society, and thus to change perceptions of construction so that it is no longer associated with dirt, low technology, delays



and cost over-runs but takes its place as an advanced, profitable and safe industry delivering high-quality outputs on time and to budget.

The conference differed from CIB's usual 'scientific' conferences in that all speakers were invited and most came from industry, client bodies and national construction improvement programmes. But the role of research in supporting industry change was considered in presentations from CIB Co-ordinators and other prominent members of the intentional research community.

The conference provided a global perspective on national construction change initiatives and the way in which these were being supported by specific programmes, for example the development of performance indicators and benchmarking systems and new approaches to the education and training of construction professionals and site workers. Several sessions focussed on the implications for individual firms of the changed relationships and practices associated with Revaluing Construction.

Dimensions of Value

In a keynote presentation, Professor Graham Winch of the Manchester Business School set out the dimensions of value in construction and the built environment. There were financial, symbolic and operational aspects of value and particular, there was increasing evidence of the value of a well-designed and constructed built environment: in improving productivity, enhancing health and education outcomes, reducing crime etc. Designers should be concerned with the whole value function. However, the fragmented structures and processes of the industry inhibited its ability to retain an appropriate share of the financial value and 'human' value (corporate learning etc) that it generated and its wider role as a generator of social and economic value was not yet recognised. Revaluing Construction should embrace, and aim to make more effective, all dimensions of value generation.

The need to understand and articulate all aspects of value, but particularly the way in which the outputs of construction influenced and assisted the activities of their users, was taken up in other presentations. There was evidence that the value generated indirectly by construction was far greater than the figures conventionally associated with the industry. One implication was that the construction industry should be redefined to include everyone who contributed to the creation and operation of a facility over its lifetime.

Experience of Change

The conference also demonstrated that construction could be reformed through new processes and relationships, but it required steady long-term

commitment, notably on the part of governments and clients, to achieve this. George Ang of the Government Buildings Agency in the Netherlands summarised the findings from study missions to six countries that had taken place in 2004 under the auspices of the Dutch PSIBouw programme (the principal financial sponsor for the conference). These had shown the importance of having a clear focus for reform, generally in the form of a high-level government/industry board, and of the need for all sectors of the industry, and clients, to be committed to change. Reform of procurement processes had been a feature of all programmes, with the introduction of more collaborative relationships and a move away from price-based competition. In another presentation, the changes achieved in New South Wales were reviewed by Ted Smithies of the Value Network. These had demonstrated how effective co-ordinated public procurement could be. And Rodger Evans of the Constructing Excellence programme in the UK presented the latest results from the demonstration projects which showed that new approaches were consistently producing superior outcomes.

In highly complex projects also, the impacts of new ways of working were evident. In an inspiring presentation, Andrew Wolstenholme, Project Director for the construction of Terminal 5 at Heathrow Airport, London showed how BAA, the client for the development, had put into practice the experience gained from ten years of innovation in their procurement processes, to address the challenges of this 6 billion Euro project. In a radical break from normal practice, they had from the start accepted the risks of the project, actively exposing and managing these and thus enabling the integrated teams for the 16 major packages of work to concentrate on producing the best solutions. With up to 6000 workers on the site, BAA had given health, welfare and site safety the highest priority, and at the half-way stage there had been no major accidents.

A number of presentations focussed on the implications of change for individual firms. Subjects covered included:

- The changing roles of architects in more integrated project structures, where they acted as custodians of client value and facilitators amongst stakeholders, as illustrated by the experience of a prominent UK architectural practice in leading a 'private finance' project
- The emerging need for a 'Technology Service Provider' with a distinct co-ordinating function in projects with complex services such as hospitals, where IT systems are fundamental to effective operation but, because of the pace of development, these may not be defined at the outset of the project.

- Global networking of expertise, as demonstrated by an Dutch engineering consultancy operating internationally
- The response of a leading Japanese contractor to much more competitive market conditions - focussing on customer value and radically reviewing its production processes

Other sessions covered the development of tools for promoting and reinforcing change – through education and training, through benchmarking and by helping clients to be more effective in articulating their needs and managing their procurement processes.

A more elaborate report on the RC2005 conference (11 pages) can be downloaded from within the website of the co-organiser of the RC2005 conference PSIBouw at

www.psbouw.nl/upload/documents/Verslag_RC_2005.pdf

Summaries of all the presentations may be found on the conference Website www.rc2005.nl.



The Contribution of Research

Several sessions were designated as 'research sessions'. CIB Coordinators reviewed the way that the aims and outputs of their Commissions (W065, W099) and Task Groups (TG23, TG57) related to industry change. IT research goals, as identified in the European ROADCON project, were presented along with the results of a study by NIST in the USA that concluded that lack of inter-operability between different IT systems was costing the US economy around \$16 billion annually through additional costs for capital works.

Research was a core theme also in the closing session when Jesus Rodriguez of Dragados, as Chairman of the European Construction Technology Platform Support Group, outlined the vision of construction being developed by the Platform. He stressed the need for the industry to focus on client requirements, as well as meeting its social responsibilities as an employer and in relation to the environment. Complementing this, Professor Peter Barrett, Chair of the CIB Programme

Committee, presented an overview of the CIB Global Agenda for Revaluing Construction being developed under his leadership and to be launched at the W065/W055 International Symposium. 'Combining Forces' in Helsinki on 12-16th June.

It was clear that the changes encompassed by Revaluing Construction are being reflected in international research agendas. However, there is perhaps still a need for 'value' as a concept to be more prominent in the activities of relevant CIB groups, so that they fully contribute to the better understanding of value creation and distribution and to the development of tools that will assist the development of new structures and relationships in the industry. There is a large research agenda in such issues as:

- exploring the interactions of buildings with their occupants
- modelling relationships within a team and predicting their performance
- providing tools for articulating and reconciling the objectives of society, clients and users in relation to the built environment

The Global Agenda will provide a framework for developing the necessary programmes.

Research also has much to offer in the development of a better understanding of 'performance' of construction sectors, and tools for comparing the way in which the industry works in one country with another. It was notable that some countries with large construction sectors, eg France and Germany, were either poorly represented, or not represented at all, at the conference. Maybe their industries already offer high value to clients and society – perhaps CIB could provide the means of exploring this.

And small firms are responsible for a large proportion of construction design and site works. but it was clear that national programmes had great difficulty in communicating with them. Further work is required on the drivers and mechanisms of change in SMEs.

Conclusions

From comments made during and after the event, it was clear that Revaluing Construction 2005 – the Challenge of Change achieved its aim of providing participants with a wide range of insights into issues involved in improving construction industries and demonstrated the value of international exchange of experience in this field. It confirmed the role of CIB in facilitating such exchanges and in bringing together leaders of change programmes and of research. After two successful conferences, 'Revaluing Construction' is now firmly established internationally as a concept which can illuminate construction change. This is a sound foundation on which to take forward plans for the third conference, scheduled for 2007.