Background and Scope

Construction is a major economic component of every nation’s economy. Globalization is taking place and consequently brings new challenges and opportunities for the construction industry. It is recognized that information is a key resource in any construction project and knowledge is a vital organisational asset. But how to capture and manage information and knowledge in synergy with opportunities provided by the global economy is a key challenge for construction researchers and practitioners. The real issue for construction organisations is how to manage information and knowledge to meet the challenges of global markets and to reap benefits from it. CIB W102 has been an important facilitator of international research in the information and knowledge management field. Every CIB 102 meeting provides us with the opportunity to develop and further our understanding and awareness of information and knowledge management processes and technologies. Following the successful work of CIB W102, the conference presents an opportunity for a landmark gathering of those from around the world concerned with the future of construction industry. The symposium takes place at the time of great change and significant opportunity for the construction industry.

Mission

The aim of this conference is to explore current advances in information and knowledge management research focused on the construction industry. Emphasis should be placed on new research in information and knowledge management applied to design, construction, operation and rehabilitation processes. Papers reporting work in progress are especially welcome. Case studies are also welcome. In particular, papers should focus on new research themes and topics and should demonstrate innovation and insight, have well defined research aims and objectives, and discuss research strategy and methodological issues.

Objectives

The objectives of CIB W102 2005 conference are:
- Explore the potential of information and knowledge management processes and technologies to improve performance of construction organizations in construction supply chains
- Explore the benefits of information and knowledge management processes and technologies from a "whole-life" perspective of a construction project: design, bid, construction and operation
- Explore the challenges of global markets to professionals, firms and the construction industry in different countries
- Explore the challenges of innovation, information and knowledge transfer to Small and Medium Enterprises
- Explore how construction companies manage information and knowledge in order to reap the benefits of global markets
- Explore how the exploitation of information and knowledge management could benefit construction education
- Present and demonstrate how innovations in research in the areas of information and knowledge management can be used to help construction organisations in a global economy

Who Should Attend the Conference?

The CIB W102 2005 conference is a major event for practitioners and researchers from different countries in the areas of information management, knowledge management construction supply management, project management, real estate management and facilities management. It is a significant gathering for accessing recent research results from different institutions, to share knowledge and to network globally with experts around the world. The symposium will bring together an international audience of:
- construction academics and educators
- researchers in architecture, construction, engineering and management
- company and project managers
- construction industrialists
- owners and managers of construction facilities and government officials
- design and construction software producers and vendors
- students in Architecture, Engineering and Construction
- members of professional organisations

Conference Themes

This landmark conference will be concerned with the dramatic changes impinging on the congruence of developments in advanced information and knowledge management thinking, the opportunities and challenges presented by information and knowledge in a global economy and the rapidly developing information, knowledge management practices and technologies, and collaboration between Universities and Construction Industry stakeholders. The conference looks to improve awareness, critique issues; and will deliberate on several sub-themes including but not limited to the following:
1. Global Construction Organizations
   - Virtual teams and organisations
   - Managing information on E-markets
   - Global knowledge communities and networks
2. Competitiveness, Innovation, Quality and Change
   - Improving competitiveness in construction global markets
   - Information and Innovation
   - Knowledge management and innovation
   - Quality management and knowledge management
3. Building- Whole Life Management and Sustainability
   - Building performance and sustainability
   - Information, knowledge management and sustainability
   - Managing Information and knowledge and the 'whole-life' concept
4. Construction Supply Chain Management
   - Construction supply chain integration
   - Managing Information and knowledge throughout the construction supply chains
   - Construction information and knowledge management processes
   - Implications of knowledge management for individuals, managers and organisations
   - Information, knowledge management and procurement methods
5. Design and Construction Management
   - Managing project information in a global context
   - Project information and knowledge memories
   - Best practices on managing site information: case studies
   - Knowledge communities and networks
   - Information and knowledge management on project sites and in organisations
6. Risk Management
   - Information and risk management
   - risk management and knowledge management
7. Research and Education
   - Innovative processes, techniques and technologies
   - Research agenda and research management
   - Knowledge stocks and flows
   - Knowledge management in Architecture, Engineering and Construction education and curricula

Keynote Speakers

- Professor Peter S. Brandon is Professor at University of Salford in the UK. He is former Pro-Vice Chancellor at University of Salford and a leading researcher in property and built environment. Peter will address issues of how construction organizations can manage information and knowledge to reap benefits from rapidly developing global markets.
- Professor Derek Walker is Professor at University RMIT, Melbourne, Australia. He's just finished a book on the "Knowledge-Advantage for Construction organizations" as part of a CRC project. Derek will address the issues of the Kadv concept and framework. The K-Advantage framework can be used as a strategic tool to help organisations develop a better understanding of how they can develop their core competencies, by managing an environment that supports and harnesses knowledge to deliver innovation that in turn delivers competitive advantage.

- Professor Zahir Irani is Professor of Information Systems Evaluation at Brunel University. He co-authored with Prof. Peter Love and Dr. Patrick Fong a book on Knowledge Management in Projects that will be published this year by Butterworth’s. Zahir will address issues of the role of Knowledge Management in evaluating information systems in construction.

- Dr. Paul Rodgers is reader in design at School of Design and Media Arts of Napier University. He co-developed the Web CADET decision-support tool. Web CADET places the right knowledge into the designer’s hands. Paul will address issues of knowledge management in design and Web CADET applications.

### Special Conference Features

The perspective of the conference is on emerging information and knowledge management research and thinking, and exploring how this could be exploited for the benefit of the practitioner community and the wider industry. Thus, the conference is expected to gain considerable interest amongst professionals, academics and researchers. For these stakeholders, the conference will provide new knowledge and information from leading experts and researchers worldwide on different aspects of organisational change and organisational processes. This conference will contribute to the on-going works of the CIB W102, relevant to construction industry development.

### Language

The official language of the symposium is English. CALL FOR EXTENDED ABSTRACTS Participants wishing to present a contribution are invited to submit an abstract, relating to the conference themes. The abstract should be typewritten in English (preferably in MS Word or PDF format), not exceeding 400 words, on one A4 size page. The abstract should be emailed to the Conference Secretariat by 30 June, 2004: loforte@civil.ist.utl.pt

All abstracts should be structured as follows:

- **Title**: The title should be short, preferably less than 15 words.
- **Author(s)**: Provide contact details of the authors including names, surnames, organisations, email and full postal addresses.
- **Keywords**: Provide up to 5 keywords.
- **Background**: Short summary of relevant background and problem addressed.
- **Objectives**: Define the "tangible and measurable" objectives of the work presented in the paper.
- **Methodology**: Describe briefly the methodology that you are using or have used to achieve your objectives.
- **Results**: Provide a short summary of the results.

Abstracts should not include any graphics or pictures.

### Refereeing Policy and Publication

All abstracts and full papers will be rigorously refereed by members of a high profile and appropriately qualified international technical and scientific committee to the highest standards of refereed conference papers in the discipline. All papers will be included in conference proceedings made available to delegates attending the conference. Journal of Enterprise Information Management (formerly known as Logistics Information Management) will publish selected papers. A book publication on information and knowledge management in construction is also being considered.

### Key Dates

Please note the following important dates:

- **July 30, 2004**: Notification of acceptance of abstract
- **November 30, 2004**: Submission of full paper
- **January 15, 2005**: Notification of acceptance with comments
- **February 28, 2005**: Submission of revised final paper

### Organising Bodies

**CIB W102** This is the working commission of the CIB; active in international research and which by provides appropriate networking and coordination activities related to information and knowledge management in construction.

**IST - Instituto Superior Tecnico, IST**, created in 1911, is the largest and most reputed school of engineering, science and technology in Portugal. Today, IST offers 21 undergraduate programmes attended by more than 8600 students, covering a wide range of areas of knowledge, including not only all the traditional engineering specializations, but also...
other modern areas such as Biological Engineering, Aerospace and Physics Engineering. Postgraduate training is also very important with over 1500 students enrolled in 28 Master programmes, 21 doctoral courses and various specialized courses.

GCU - Glasgow Caledonian University has over 90 undergraduate, 40 postgraduate programmes and a large number of students engaged in research for PhDs in topics that put them at the forefront of their disciplines. The teaching staff, not only teach but also engage in research and are expected to publish the results of their scholarships.

In fact a recent survey of major employers in Britain ranked Glasgow Caledonian University one of the leading Universities in the UK due to both of these facts.

EDCU - A market leader in education for the service professions, Edith Cowan University (ECU) is located in Perth, Western Australia, a gateway to Asia. The University's international enrolments exceed 3,000 with students originating from more than 80 countries. The University has three metropolitan campuses in Churchlands, Mount Lawley and Joondalup and a regional campus in Bunbury, a city 200kms south of Perth. More than 330 courses are offered through the five faculties.

Sponsors

Conference sponsors are welcome. These are the following types of sponsors:
- Gold sponsors: 2000€. This gives a reference banner on the main conference room, on the proceedings, on the conference web site and an exhibition place in the main hall.
- Silver sponsor: 1500€. This gives a reference of the on the proceedings, on the conference web site and allows the attendance of one nominated delegate.

Confirmed sponsors:

Centre for Advanced Built Environment Research (CABER)

www.caber.org.uk

The centre for the BUILT ENVIRONMENT

www.cbe.org.uk

Symposium Venue

The conference will be held at the internationally renowned conference centre of the Instituto Superior Tecnico. This is located at Av Rovisco Pais, the major business centre in Lisbon and close to major city hotels www.ist.utl.pt. Lisbon can be easily reached from almost any European capital.

Arrival by plane brings you to Lisbon Airport (Aeroporto da Portela) located just a few kilometres from the city centre. Regular or express buses serve it, and taxis are not too expensive, but beware of attempted overcharging by some drivers. The train brings you to Oriente station (Estação do Oriente), a transport hub, where you can have access to buses, taxis and the metro - red line, that ends up directly at Alameda (where IST is located). Coming from either the Airport or Oriente station, a taxi should cost around 6 Euros to get you to IST.

Exhibits

Exhibitors from construction, AEC, software, publishers companies, academic institutions and organisations are welcome. Display rooms are available for over 50 exhibitors. Exhibits are important valuable aspects of the CIB W102 2005 conference. For details please contact at: sofia.raimundo@netcabo.pt
Conference Hotel

Holiday Inn Lisbon, [www.holiday-inn.com/lisbonprt](http://www.holiday-inn.com/lisbonprt), located at a walking distance from the conference venue (90 metres). Special rates will apply to CIB W102 2005 delegates. Please quote CIB W102 2005 when making your reservation at reservashil@grupocontinental.com.