

November 2014

Around the Commissions

TG90 - Information Integration in Construction

Introducing a New Task Group

The CIB Board approved establishment of the new Commission TG90 - Information Integration in Construction, and appointed three joint Coordinators, Professor Keith D Hampson and Ms Adriana X Sanchez, MSc, both at the Sustainable Built Environment National Research Centre (SBEnrc) - Curtin University, Australia, and Mr. Rasmus Rempling, at Chalmers University of Technology, Sweden.

Objectives and Scope

The Task Group will focus on addressing the need for:

- efficient knowledge creation, preservation and integration across the life cycle of constructed facilities
- relevant, reliable, interoperable and long-lasting data and information gathering and analysis
- monitoring and feedback from end-users into the different stages of design, construction and asset management of buildings and infrastructure.

This will create a more effective and reflective industry and deliver benefits to public and private asset owners.

The scope of the Task Group is limited to the housing, building and infrastructure design, construction and asset management sectors. The potential to translate findings into other sectors will be of particular interest to government agencies and firms making significant investments in knowledge and information systems integration for whole-of-life asset management. Examples may include manufacturing and equipment supply systems.

This will be achieved through analysis at the level of the project, firm and industry, brought together through assimilating buildings and infrastructure case studies across the international industry research partners. In particular, it is envisaged the Task Group's efforts contribute to more appropriate procurement models, including contractual frameworks, project team composition and governance, and information architecture and use.

Work Programme

The Task Group Work Programme includes:

- conduct industry-focussed international case studies
- develop procurement guidelines
- develop a research roadmap.

In addition to annual real meetings the Task Group will have regular online meetings in support of the production of its planned output.

Panned Output

2015: Task group designated website

2016: publication of an industry-focussed CIB report on knowledge and information integration strategies for whole-life asset management

2017: publication of an industry-focussed CIB book on knowledge and information integration strategies for whole-life asset management.

2017: publication of a research roadmap on Information Integration in Construction.



Introducing the Coordinators

Prof Keith D Hampson



Dr Keith Hampson is committed to building a more internationally competitive industry by promoting improved collaboration, applied technology and innovative practices. For more than 20 years Dr Hampson has been encouraging multi-disciplinary research collaborations across industry, government and academia to remodel the Australian construction industry in productivity, safety and sustainability for a stronger future. A key aspect of Professor Hampson's activity focuses on mechanisms of collaboration between private sector organisations and public sector agencies to maximise the value of research outcomes and encourage research into practice. Dr Hampson's ability to gain genuine buy-in from across industry has been essential to the long-term success of the teams he has led. As team leader Dr Hampson has been successful in securing research grants and corporate funding in excess of \$80 million (\$35m cash and \$45m in-kind).

Dr Hampson is currently CEO of the Australian Sustainable Built Environment National Research Centre (SBEnrc), successor to the CRC for Construction Innovation, for which he led the bid team and served as CEO for its nine years of operation. The CRC, and now the SBEnrc, has world-class Australian capability in key areas (including policy and practice in digital modelling, productivity, sustainability, safety, innovation and procurement) to address complex problems in the built environment. By enhancing international research collaboration and reputation; and increasing research training opportunities, it is attracting quality research students and providing research training and linkage opportunities for industry members across Australia and internationally.

Dr Hampson also has a distinguished record of scholarly publication having authored or co-authored 15 books, 50 refereed journals or book chapters, 80 refereed conference papers, and some hundreds of other conference and industry presentations. He is regularly invited to provide keynote presentations to

national and international industry and academic conferences and research review panels and to serve on the scientific panel of international conferences and highly respected journals.

Keith Hampson has a Bachelor of Civil Engineering with Honours, an MBA, and a PhD from Stanford University focusing on innovation and competitive performance in infrastructure.

Since 1995, he has been an active contributor to CIB activities globally as well as specific contributions to Task Group initiatives including:

- TG35 Innovation Systems in Construction 1999-2001 (book chapter author)
- TG47 Innovation Brokerage in Construction 2001-2004 (book chapter contributor)
- TG58 Clients and Construction Innovation 2004-2009 (Coordinator)
- TG85 R&D Investment and Impact 2010-2013 (Coordinator and book editor)
- TG90 Information Integration in Construction (ICON) 2013-2017 (Coordinator).

Dr Rasmus Rempling



Rasmus is currently Assistant Professor at Chalmers University of Technology, located in Gothenburg, Sweden. His research interest ranges from information management - in the whole life-cycle at all levels: strategic, tactical, operational and technological - to structural design and assessment and material mechanics. Within these areas, he performs research and supervises PhD's.

During his PhD he focused on the mechanical response of normal concrete subjected to cyclic loading. He has proposed - together with his colleagues - numerical models for analysing concrete behaviour on macrolevel as well as meso-level. He was co-coordinator of the EU-project Pantura - Low disturbance urban construction - and has worked internationally with design rules for concrete and fibre reinforced concrete. Currently, he is member of the "CEN TC250/SC2 WG1 - EuroCode 2 - TG8" with the task to review the section about fatigue of concrete in the EuroCode.



In education, Rasmus has performed research on criteria based learning objectives, dynamic in-class learning activities and effects of using constructive alignment in course development.

Rasmus has a Bachelor's degree with focus on construction management, a Master's degree in Structural Engineering and a PhD in Civil and Environmental Engineering with focus on concrete structures.

Ms Adriana X Sanchez



Adriana is currently based in Sydney, Australia as a Research Associate for the Australian Sustainable Built Environment National Research Centre (SBEnrc) where she has worked since 2012.

Adriana's experience focuses mostly on sustainable water and transport infrastructure management. Special areas of interest include procurement, risk management, translating policy into tangible outcomes, urban resilience and integration of information across the life-cycle of built assets. She has conducted research on four continents and is currently the Commission Secretary for CIB Task Group 85.

Adriana holds a MSc. in Sustainable Resource Management with honours from the Technische Universität München (TUM), majoring in water, soil and renewable resource management.

Prior to this role, Adriana carried out research support activities at the Department of Climate Change and Ecology of the TUM and at Smart Utilities Solution; an environmental consulting firm based in Munich, Germany. In this role she worked in international projects covering tailor-suited solutions in waste-to-energy, water management and off-grid green energy technologies for farmers and production plants. Adriana also worked for the German Technical Cooperation (GIZ) in a project partially sponsored by Deltares (Netherlands) in the development and implementation of a computerised interactive flood model for a local watershed in the Philippines.

This later led to her work as consultant for the same organisation to produce the flood hazard maps used now by the Local Government Unit for emergency evacuation.

Additional Information

For further information about CIB TG90 contact the Coordinators: Keith Hampson k.hampson@sbenrc.com.au, Rasmus Rempling rasmus.rempling@chalmers.se and Adriana Sanchez Gomez a.sanchez@sbenrc.com.au.

You can find more information on the activities of CIB TG90 here.

Personal statement of Prof Keith Hampson, Dr Rasmus Rempling and Ms Adriana Sanchez

We are an international group spread across a number of complementary disciplines in the Built Environment field who collaborate to consolidate international knowledge around integrated information.

We aim to combine industry-focused case studies with academic research to make a real difference in the built environment industry across the globe. We welcome you joining us in this exciting task!