CIB TG90: Information Integration in Construction (IICON)

Outcomes of WebEx 2 - Wednesday, 18 February 2015 (3.00 pm Perth, Australia time)

Attendees: Aguiar, Antonio; Amor, Robert; Bakens, Wim; Bougrain, Frédéric; Bröchner, Jan; Claeson-Jonsson, Christina; Edum-Fotwe, Francis; Hampson, Keith (Coordinator); Haugbølle, Kim; Lupica Spagnolo, Sonia; Meistad, Torill; Sanchez, Adriana (Coordinator); Rempling, Rasmus (Coordinator); Utiome, Erezi and Jun, Youngsoon.

TG90
Introduction to initial members
Due to several members experiencing technical issues, it was not possible to have a formal introduction of new members during the WebEx. However, the following introductions were provided via email.

- António Aguiar Costa is Assistant Professor at the Department of Civil Engineering and Architecture of the Instituto Superior Técnico, University of Lisbon. His major research interests are information management and integration in construction, interoperability, BIM implementation and standardization, BIM-based e-procurement and building intelligence.
- Robert Amor is a Professor of Computer Science at the University of Auckland, New Zealand. He is the coordinator of CIB W078 and was a co-coordinator of the CIB Priority Theme of Integrated Design and Delivery Solutions (IDDS). His research is on interoperability in the A/E/C industries especially focussed on BIM.
- Frédéric Bougrain works as a researcher for the Economics and Human Sciences Department at CSTB (a state-owned industrial and commercial research centre under the wings of the Ministry of Housing) in France. His research is concentrated on society issues with a particular focus on innovations in the building and construction industry and energy saving performance contracts.
- Erezi Utiome is a researcher and professional project manager driven by a passion for innovation and is involved in research at the Queensland University of Technology and Griffith University, Brisbane, Australia. He has experience in project management in the UK and Building Information Modelling in Australia.

TG90 Outputs
- Members were invited to provide feedback on the proposed timeline of TG90 outputs sent prior to the meeting. Wim suggested that a workshop during the CIB WBC16 is added to the timeline.
- Abstract submissions for the CIB WBC16 is due on 15 June 2015, members were encouraged to submit an abstract for a conference paper related to their chapter. The idea being to have an incremental approach to developing the individual chapters and the conference would also provide authors with the opportunity to receive early feedback on their chapters. If enough papers are submitted by the group members, a TG90 session could be arranged.

Book
- Members were invited to provide feedback on the suggested structure for the individual chapters sent prior to the meeting.
- Adriana requested adding one more item to the timeline so members who are contributing to the book send their abstracts before the next WebEx by 04 May 2015. This could also become the conference abstract.
- Robert offered to distribute the call for chapters to the IDDS commission distribution list. However, Rasmus highlighted that this distribution list contains a large number of people which might make handling responses challenging due to the potential large volume of answers.

Adriana suggested that, once all chapter themes have been provided by TG90 members, the editors identify gaps in the content of the book and work with Rob to find specific authors who would be in a position to write those chapters. Keith suggested to follow up the discussion over email.

- Sonia suggested that the chapter theme about public procurement is expanded to include private clients as well. She also mentioned that it would be good to include a chapter in asset and maintenance management. Adriana explained that this is definitely possible, the group just has to make sure that the chapters don't have overlapping information so each chapters provides a different view. The editors will follow up individually with authors to ensure this.
- Kim highlighted that the chapter structure description is very short so it is difficult to fully understand the proposed content of the chapter and suggested that the chapters include a section about the methodology used. Adriana highlighted that although this is the suggested structure, it is proposed as the minimum content. The actual individual chapter structure might change depending on the topic and whether they can provide several case studies or are based on a single program or developing a theory. She recognised that it would be expected that the case studies provide the methodology used and explained that the editors will keep note of his comment when reading the chapter outline later this year. Keith highlighted that this should become clearer as chapter drafts and outlines are received.
- Antonio suggested that some themes are too broad in scope and the authors should make sure that they provide more specific topics. Keith agreed that the book needs to be focused around specific themes that will be shaped by the authors and editors. Adriana suggested that getting abstracts for each chapter before the coming meeting will provide the opportunity to address this issue and provide timely feedback to those authors.
- Youngsoo suggested that each chapter might have different perspectives of the same issue where one provides the theory and the other provides information about practical implementation. Otherwise each chapter could aim to address these two sides providing issues and lessons learned. Adriana suggested that this might be addressed by the proposed structure where the introduction to the topic and theory is followed by case studies. Thus, each chapter would be addressing both theory and practice. Youngsoo also suggested that the practical issues should include considerations about the economic feasibility of applying those theories and invited the group to think about this as they develop their chapter.

Presentations and research roadmap
- Keith announced that Rasmus will be taking a leadership role in developing the roadmap.
- Wim suggested the group considers carrying out a workshop at the coming CIB WBC16 in Tampere, Finland. He explained that the WBC16 will be organised in sessions around roadmap themes that can be based on discussions or presentations. He suggested that this session could provide a forum to discuss the development of the roadmap and present the conceptual framework or the current state-of-the-art. This would help develop the book and the roadmap. Rasmus said that this would be a good idea, however the roadmap will not be ready to be presented at the WBC16. This topic will be discussed again by the group at a later meeting. There is no need to submit an abstract for the workshop but the group will need to request the timeslot and provide a brief outline.
- Rasmus provided a short summary of the decisions made in the previous meeting about the roadmap and highlighted that there are many good examples to follow. He also provided a brief outline of the structure. The research roadmap will be developed in parallel to the book.
- Kim suggested that it would be important to understand how this roadmap will be differentiated from the IDDS roadmap and those from TG related to Building Information Modelling (BIM).
- Wim asked whether BIM would be a chapter in the book. The book could consider that BIM will enable a very different type of information collection and dissemination but at the same time the implementation of BIM will require a different way of doing this. Adriana explained that

based on the abstracts received so far, there hasn't been one about BIM itself yet but several chapters mention how BIM can be used within their particular theme. Wim also suggested that the group thinks about how changes to the industry will enable BIM. Adriana explained that this might be addressed in the final chapter (*what next?*), given that it is likely that one of the general topics will be that the availability of more integrated information allows to do more with BIM.

- Rob suggested that a chapter on the technical side of BIM might be provided by members of IDDS group. Keith explained that although TG90 is more focused on the strategic side of information integration, the technical side should also be included. Once the book structure is more progressed this would be an area where we can collaborate with other groups. Francis suggested that some of his colleagues might fill this gap.

- Adriana suggested that once the discussions on the output structures are more progressed, the group might want to start individual presentations during each meeting. These would be 10-15 min presentation on the individual book chapter and would provide early feedback by the group to the authors as well as the opportunity for other authors to get insight into the rest of the book. Keith asked for volunteers for next meeting and Francis offer to do this, depending on his progress. Wim suggested that the first presentation should be about the conceptual framework to provide more consistency across the chapters. Keith agreed and suggested that the editors do this during the coming meeting instead.

FOLLOW-UP ACTIONS

- **Monday 04 May 2015:** Members to send Adriana their chapter abstracts (max. 300 words). These should be in line with the general theme of information integration in construction and be within the scope of the group which includes 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.

NEXT MEETING

- Thursday, 07 May 2015 at 3 pm Perth Time (TBC) - members are requested to start their login process 10 mins before the meeting so technical problems can be found and resolved before the start of the meeting.