



CIB TG90: Information Integration in Construction (IICON)

Outcomes of WebEx 5 - Thursday, 18 February 2015 (3.00 pm Perth, Australia time)

Attendees: Abanda, Henry; Amor, Robert; Bakens, Wim; Bougrain, Frédéric; Bröchner, Jan; Hampson, Keith (Coordinator); Haugbølle, Kim; Kurul, Esra; Knotten, Vegard; London, Geoffrey; Lupica Spagnolo, Sonia; Månsson, Daniel; Mbachu, Jasper; Meistad, Torill; Sanchez, Adriana (Coordinator); Santos, Ruben; Støre-Valen, Marit; Rempling, Rasmus (Coordinator); Tallgren, Mikael; and Jun, Youngsoo.

TG90

Presentation: Vegard Knotten – Learning across Trades

- Vegard is doing his PhD at NTNU looking into design management after over 20 years of working in the industry. He is working within a 4-year research project titled Integrated Methodology for Design Management, delivered in collaboration between industry and academia. Project partners are NTNU, University of Adger, Veidekke, Cowi, Nymo and Ulstein International.
- The objective is to develop a theoretical understanding of the design management process and deliver specific practical outcomes to the project industry partners around new methods for design management.
- Part of this research has been used to develop a CIB WBC16 conference paper which will inform a section of one of the chapters of the TG90 book. This paper focuses on design management in different trades and the complexity of design management.
- There can be four kinds of interdependencies within the design process which are differently managed: pooled, sequenced, reciprocal and intensive. The research is looking at different characteristics of the trades and whether they can be used for comparison across projects.
- Findings include: In all the industry, especially the shipbuilding and AEC industries there is a lot of focus on using drawings as a planning method. In the shipbuilding there was significantly less reciprocal design processes after they had secured the contract and focused more on making drawings. The off-shore had a larger number of and more detail drawings than the other two industries. Even though one of the companies had a lot more creative work, they were looking at the maturity level and using BIM while using an agile approach; this allowed them to have a more matured design by delaying the phase at which they create the most number of drawings.

Discussion

- The question was raised of why the shipbuilding industry had to make more drawings than the other two industries. The reason found was that the drawings are used by the manufacturers so they need to be a lot more detailed than in other industries.
- It was also explained that several papers are being leveraged to write a single chapter, which is why this section was presented separately.
- The view of the life-cycle is important in the design process, but it was considered by the authors that it is only one of the factors influencing design management.

Book Outlines

- Professor Geoffrey London has joined the editorial team for the TG90 book. He currently works at the University of Western Australia. He served as Government Architect for the last 12-13 years in Victoria and Western Australia; this is a role that nourishes the production of well-produced sustainable buildings. This role is involved with the public procurement process and the review process as projects develop.

- Geoffrey recommended that as author's write their chapters if they refer to design, they should define what it means within the context of the chapter because this can vary from one country and sector to another.
- Comments on the reviewed outlines from the three editors (Adriana, Keith and Geoffrey) were sent to the individual authors as well as a set of general comments sent to all the authors. Adriana recommended authors to not only read the individual comments but also the general ones. A copy of the latter has been saved to the common TG90 dropbox. If any of the authors have any questions they should direct them to Adriana and she coordinate with the other editors to answer them as soon as possible.
- It was highlighted that it would be useful for the authors to have a copy of the first chapter. However, Adriana explained that they are working on the same timeline as the other authors, so the chapter will be ready by 07 March, then go through an internal review process and then be made available to all the authors once finalised in early April. Those who definitely would like to read the early draft of the chapter may contact Adriana to join the review process of that chapter.
- It was also requested that some chapters have an extended deadline for the first draft because they are waiting for the comments from the WBC16 review panel on the conference papers that will inform parts of their chapters. The editors highlighted that although there can be some especial considerations for a few authors, it is important for the majority of the group to deliver their draft on time so the review process can take place. The outline review process was significantly delayed because all the outlines were needed to get it started and some were received almost 2 months late. The chapter review process can be done separately but still needs to be done within the timeframe allocated so we can meet the timeline developed and agreed by the group.

CIB World Building Congress, Tampere, Finland, May 2016

- TG90 session will be on 01 Wednesday 2016; the room has been booked and a discussion session is being organised around the topic of information integration in the built environment.
- The coordinators are organising a 2 hour discussion session. The session will start with an introduction to the group and some of the main outcomes (e.g. the book) followed by an open discussion. Three experts will open the discussion by briefly exploring the relevance of information integration to their areas of expertise, then there will be a group discussion that will feed into the TG90 roadmap.
- The group was invited to provide suggestions about the session and whether there are other issues or format that should be considered.
- There will also be a social event at the end of that day organised by the coordination team. They are currently considering different options and are welcoming any suggestions for a venue that is at walking distance of the conference venue and has good food/environment.

Research roadmap

- This will be the last publication by the group and highly based on the book. This is why authors are encouraged to address the four levels presented by Rasmus as this pyramid would guide the development of the roadmap. The approach to the roadmap will be part of the discussions of at the TG90 session during the WBC16. The outline is now available in the TG90 dropbox folder.

FOLLOW-UP ACTIONS

- **Monday 07 March 2016:** Members to send Adriana their first chapter draft (~6,000 words complete draft).
- **Monday 04 April 2016:** CIB WBC16 camera ready paper due.

NEXT MEETING

- Thursday, 12 May 2016 at 3.00 PM AWST/9.00 AM CEST.

