



International Council for Research and
Innovation in Building and Construction

W115 - "Construction Materials Stewardship"

Report on the sixth business meeting of
CIB Working Commission W115 "Construction Materials Stewardship"
2012

Friday, 28 September 2012, 2:00 – 4:00 PM (+1:00 Greenwich)

The sixth business meeting of the CIB W115 was held in conjunction with the Green Design Conference in Sarajevo, Bosnia Herzegovina.

Most of the participants joined the meeting by videoconference.

The meeting was attended by participants from the United States, Germany, Norway, Portugal, The Netherlands, Canada, Israel, Japan and Sweden.

Meeting Attendees

Surname	Name	Affiliation	Country	Email
Chini (Coordinator)	Abdol	University of Florida	United States	chini@ufl.edu
Schultmann (Coordinator)	Frank	Karlsruhe Institute of Technology (KIT)	Germany	frank.schultmann@kit.edu
Bohne	Rolf André	NTNU - Norwegian University of Science and Technology	Norway	rolf.bohne@ntnu.no
Dinis Silvestre	José	Technical University Lisbon	Portugal	silvestre@civil.ist.utl.pt
Durmisevic	Elma	TU Delft - Faculty of Architecture	The Netherlands	E.Durmisevic@bk.tudelft.nl
Gorgolewski	Mark	Ryerson University	Canada	mgoro@ryerson.ca
Hobbs	Gilli	BRE - Building Research Establishment	United Kingdom	HobbsG@bre.co.uk
Katz	Amnon	Technion - Israel Institute of Technology	Israel	akatz@technion.ac.il
Kibert	Charles	University of Florida	United States	ckibert@ufl.edu
Kühlen	Anna	Karlsruhe Institute of Technology (KIT)	Germany	anna.kuehlen@kit.edu
Nakajima	Shiro	Building Research Institute	Japan	nakajima@kenken.go.jp
Peled	Gil	Eco-Challenges Sustainable Design and Consultancy	Israel	g-peled@hotmail.com
Russell	Mark	University of New Mexico	United States	russ1307@unm.edu
Wallbaum	Holger	Chalmers University of Technology	Sweden	holger.wallbaum@chalmers.se

Minutes of the Meeting

1. Abdol Chini and Frank Schultmann welcomed the participants and the participants introduced themselves.
Three guests with an architectural background from Sarajevo attended the meeting.
2. **Reports of the subgroups** were presented by the respective person in charge.

Subgroup 3:

Develop systems to mitigate and ultimately avoid construction material waste

Gillian Hobbs

The CIB Publication 364: "Construction waste reduction around the world" was published in October 2011 and can be accessed online through W115 website (www.cibw115.org).

It was suggested to write a white paper summarizing best practices in waste reduction in different countries. With respect to this Gillian will send an Email to everybody, asking for further input. This can be for instance, waste prevention plans of the governments. Within this context Rolf Bohne pointed out the national report in Norway about recent and future activities in waste reduction.

Subgroup 4:

Develop ways of using material waste as raw materials for making construction materials

Shiro Nakajima

See item 3.

Subgroup 5:

Develop methodologies for designing for close loop materials use and the effective recovery of materials and components from existing buildings

Charles Kibert

See item 4.

Subgroup 6:

Develop design and construction methodologies for transformable and adaptable buildings and spaces to extend service life and so reduce overall construction material resource use

Elma Durmisevic and Catarina Thormark

Elma will look at the proceedings of this present Green Design Conference in Sarajevo 2012 and will select suitable papers.

Furthermore she wants to look at the topic of new design methods especially in the Netherlands.

New Subgroup 7:

Life cycle assessment (LCA) in construction

Mark Gorgolewski and Holger Wallbaum

The proposal for a new W115 subgroup on LCA by Mark and Holger was discussed (see attached). Among the general issues suggested in the proposal (integrate LCA into Green building ratings, use of LCA for Environmental product Declaration, use of LCA methods as design tools, etc.), the group decided to focus on the use of LCA to analyse the differences of renewable and non renewable construction materials as well as the specific role of material wastes as raw material for making construction material. These topics are linked to the mission of W115.

The members approved formation of the LCA subgroup with the initial focus on renewable and non-renewable materials as well as design for deconstruction and reuse of materials. Holger and Mark will formulate these core objectives of the group. Furthermore Holger encouraged members to submit papers with respect to this topic to the International Journal of Life Cycle Assessment (<http://www.springer.com/environment/journal/11367>). Furthermore, he plans to submit a proposal related to use of LCA in the EU. Other EU countries are welcome to join

preparing this research proposal. Gillian, José and Frank pointed out their interest in this proposal.

3. The report "**Barriers for deconstruction and reuse/recycling of construction materials**" by Shiro Nakajima is planned to be published in the end of 2012.

4 reports based on the survey, sent out by Shiro, had been submitted (Japan, USA, Germany, and Singapore). Mark will be submitting a report for Canada and Gilli for UK. John Storey has submitted a report for Australia that needs to be reformatted. Elma will contact her colleagues in the Netherlands and will notify if she can deliver a report. Rolf plans to provide a report for Norway within 3 weeks. José from Portugal is going to contact the other W115 members from Portugal (Abdol should send him the survey). In general the reports should follow the format sent by Shiro but not all the questions need to be answered.

The target is to collect at least 8 reports in total. The deadline for submission is 31 October 2012.

4. **Publication for 2013: Designing for close loop materials use and the effective recovery of materials and components from existing buildings** by Charles Kibert

The format for the publication is discussed with respect to the following three options:

- Country report → country related
- Thematic report → subject related
- Proceedings of the CMS 2013 conference to be held in Singapore

After considering advantages and disadvantages of each option it was decided to initially solicit papers for the CMS2013 conference under the theme of the Design for close loop materials and publish these papers in the conference proceedings. Upon review of the submitted papers there might be an opportunity to publish a separate thematic report considering information provided for different countries in the papers.

Charles will draft a call for papers for the CMS 2013 conference to be held in Singapore after coordinating with Edward.

Charles suggested considering a single report for EU rather than writing individual reports for countries in Europe.

Gilli responded that there is not much within this topic at EU level, there might be general directions but no detailed approaches. She thought differences, drivers and activities in each European country need to be pointed out. For example, in UK, there are several voluntary agreements that are very important.

Abdol suggested making efforts to bring more industry people into the W115 and seek ways to provide some benefits to our industry partners through our research.

Elma suggested organizing a meeting with W115 members and industry people from the Netherlands.

5. **Country Reports/Updates**
United Kingdom

Gilli, Amnon, Anna, and Rolf provided updates for UK, Israel, Germany, and Norway.

6. **7th annual meeting in 2013**

The 7th annual meeting of W115 in September 2013 will take place as commissions' own Conference on Construction Materials Stewardship (CMS2013) in Singapore. Hence it is important that members of W115 have active participation. CMS 2013 will be held in conjunction

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with the regional SB13 conference in Singapore and the Singapore Green Building Week. The CMS conference is being held every four years (CMS2009 was held in Twente, The Netherlands). Five members expressed their desire to attend the CMS 2013 conference. It was suggested to provide video conference access for the members who are not able to attend the W115 business meeting 15 in Singapore. Frank will provide further information on the conference, when it is available.

Suggestions for a location for the 2014 annual meeting are welcome. Elma mentioned that there will be a conference in Sarajevo in 2014.

7. **The 2014 publication of W115** (theme, targeted publication date, responsible person)
A report of the new subgroup in LCA was suggested.
Mark and Holger will discuss with members of the subgroup.
8. **Expanding the commission membership base** (Australia, Brazil, Chile, France, India, Russia, South Africa, South Korea, ...)
There might be people on the present conference in Sarajevo, who are interested in W115 and in becoming a member. The members on site, Elma, Gilli and Frank will talk to them.
Gilli suggested "Rachel Blumentin" from the University of Brasilia as a potential new member. She will contact her.
Abdol Chini and Frank Schultmann will check the members and country representatives listed on the website and will contact those who are not currently active.
9. **Liaisons with other CIB Task Groups and Working Commissions**, being active in the area of sustainable buildings and construction.
W104: Open Building Implementation
Elma Durmisevic reported that there will be a W104 conference (18th International Conference on Open Buildings) in Beijing, 19-21 November 2012. She plans to attend this conference and will report its recent activities afterwards.

W116: Smart and Sustainable Built Environments
Frank Schultmann reported that there will be a business meeting in conjunction with the CIB world congress in Brisbane in May 2013. Jay Yang the coordinator of W116 launched a scientific journal "Smart and Sustainable Built Environment". W116 and W115 work on related issues, but W116 does not focus on materials.
10. **The W115 website** is available under the link: www.cibw115.org, connected to the homepage of the Karlsruhe Institute of Technology (KIT). It is regularly updated. For any issues regarding the website Frank Schultmann and Anna Kuehlen can be contacted. Documents and reports can be downloaded from the website. Holger will send a report on "A Guide on Concrete Usage Index" in Singapore to be posted.

11. Other action items

None