

MINUTES**2ND PREPARATION PHASE WORKSHOP****MADRID, SEPTEMBER 21-22, 2015****TORROJA INSTITUTE. CSIC IS LOCATED IN CALLE DE SERRANO GALVACHE, 4, 28033 MADRID****ATTENDANCE**

Participants present in person:	Participants present online:
Maria (Carmina) Bocanegra-Yanez (CBY) University of Strathclyde, Glasgow, UK	Bedriye Kaplan (BK) Danish Technological Institute, Taastrup, DK
Carsten Rode (CAR) - Operating Agent (OA) Technical University of Denmark, Kgs. Lyngby, DK	Bjarne Olesen (BWO) only 22.9. Technical University of Denmark, Kgs. Lyngby, DK
Dimitrios Kraniotis (DK) Norwegian Institute of Wood Technology, Oslo, N	Henrik Knudsen (HK) Danish Building Research Institute, Aalborg University, Copenhagen, DK
Gabriel Rojas-Kopeinig (GR) Universität Innsbruck, A	Jensen Zhang (JZ) Syracuse University, NY, USA
Jakub Kolarik (JAKOL) Technical University of Denmark, Kgs. Lyngby, DK	John Grunewald (JG) TU Dresden, G
Jan Tywoniak (JTW) Czech Technical University in Prague, CZ	Menghao Quin (MQ) only 22.9. Nanjing University, CN
Jos v. Schijndel (JS) TU Eindhoven, NL	Thomas Witterseh (TW) Danish Technological Institute, Taastrup, DK
José Antonio Tenorio Ríos (JT) Eduardo Torroja Institute for Construction Science, Madrid, E	Wei Pan (WP) The University of Hong Kong, HK, CN
Karin Kompatscher (KK) TU Eindhoven, NL	
Kristine Nore (KN) Norwegian Institute of Wood Technology, Oslo, N	
Marc Abadie (MA) Université de La Rochelle, F	

ACTION ITEMS FROM THE CURRENT MEETING

No.	Responsibility	Action Item	Deadline
1	OA, STL-1, STL-5	Modification of Annex text to reflect measurements conducted in ST5 and the fact that no measurements will be conducted in ST4	27/9/2015
2	OA	Correction of table summarizing ST lead and co-lead	27/9/2015
3	All STL	Collect RID forms and upload to Sharepoint	1/11/2015
4	OA	Correct RID form – Staff months->man-months	ASAP
5	All	Upload signed national letters of participation	30/9/2015

6	OA	Upload graphical file with EBC logo	ASAP
7	All STLs	Revision of ST description in Annex text.	27/9/2015

ACTION ITEMS FROM PREVIOUS MEETING

No.	Responsibility	Action Item	Status

LIST OF ATTACHMENTS

No.	Attachment
A	Workshop agenda

LIST OF ACRONYMS

AI	Action Item
ASAP	As Soon As Possible (in connection to AI)
BEPS	Building Energy Performance Simulation
CSIC	Torroja Institute
ExCo	EBC Executive Committee
IAQ	Indoor Air Quality
OA	Operating Agent
RID	Research Item Description
ST	Subtask
STL	Subtask Leader

21 September, 2015

1. Start of the meeting and welcome

The meeting was started by CAR on September 21 at approx. 9:00. Participants introduced themselves during “tour de table”.

2. Review of agenda

CAR briefly introduced the agenda (ATTACHMENT A) for 2nd preparation workshop and announced the change in time of lunch. The lunch was moved to 13:30. Additionally the visit to laboratories of Torroja Institute was planned to take place on September 22, 10:00-10:30.

3. Approval of minutes

N/A

4. Introduction to CISC (hosting the meeting)

JT introduced CSIC as well as his interest in Annex 68. JT is involved in development of Spanish legislation with respect to limits of indoor air pollutants and their practical applicability to building code. His research interests include nearly zero energy buildings, ventilation, heating/cooling and building materials. He is also involved in AIVC, which Spain recently joined.

JT's department: Quality in construction.

JT himself is interested in Annex 68 but may not be able to contribute in the continuation. The Annex could be of interest to his colleague, Sonia García Ortega.

5. Status about the Annex description and Action items from ExCo meeting

CAR commented on actions requested by ExCo which include:

- Including influence of ambient conditions on VOC concentration indoors
- Comment on Peter Wouters on necessity to include practical implications with respect to building codes – building with high IAQ would get a “benefit” in a form of less strict requirements for energy use

CAR explained the required changes to the draft of the Annex text to be done before the next ExCo meeting:

- The summary of the Technology Readiness Assessment should be moved to the main text
- The Annex text indicates that ST4 will include field measurements while ST5 will deal with new building projects where the results of the Annex can/will be demonstrated. It was agreed that ST4 will not comprise measurements, and aiming on testing of Annex results in ST5 seems not to be realistic. The Annex description should be appropriately modified **(AI1)**

6. Presentation of new participants and their institutions

JTW introduced Civil Engineering Department at Czech Technical University in Prague and UCEEB

JOS introduced TUE and his PhD student Karin, who will actively participate in the Annex.

Maria (Carmina) Bocanegra-Yanez represented University of Strathclyde, Glasgow, UK, where she is a PhD student with Paul Strachan.

7. Leadership of particular Subtasks

CAR updated participants on status regarding ST leadership. Uncertain situation remains for ST3, Germany did not receive national funding. JG is applying for local Saxonian funding, there is a good chance of success, but final decision will come after the application has been evaluated. JG expressed the interest to lead ST3.

Due to problems in INSA Lyon, the institution will not be able to actively participate on the Annex. Therefore INSA will not co-lead ST4. INSA will inform OA in the case that situation changes.

There is no leader for ST5. Norway indicated some possibility to accept the task, but they would rather stay as a co-leader on ST5. In relation to ST5 a short discussion emerged regarding the content of the ST. It was agreed that ST5 should mostly focus on description and analysis of currently available case studies. The contributions will be very country-dependent, not every country can offer suitable case studies. It was decided that the discussion will continue next day in the time slot dedicated to ST5 in the agenda.

CAR should make corrections in the table for ST lead and co-lead with participating countries and institutions according to the comments from participants (HK will not co-lead ST4, Czech Republic is represented by TU Liberec and CVUT Prague, TU Kosice is from Slovakia) **(A12)**.

8. Research Item Descriptions (RID)

CAR reminded participants to use RIDs as a tool to generate overview about research conducted within particular STs. STLs should collect RIDs for their STs and upload them to Sharepoint by 1 November 2015 **(A13)**. In connection to that, OA will update the RID template: "Staff months" should be changed to "Person months" to acknowledge the possibilities that students offer work for the Annex project **(A14)**.

9. National letters of participation

CAR provided an update on National letters of participation. These letters have to be signed by participating institution and national ExCo representative in the particular country. It is absolutely necessary to provide the signed letters to OA before next ExCo meeting. All participants should send signed letters of participation to OA by 30th September, 2015 **(A15)**.

10. Activities between Annex meetings

It was discussed that activities taken between particular expert meetings are highly dependent on particular STs and should be therefore primarily coordinated by STLs.

JTW raised the question regarding common publication policy for the Annex. CAR explained that documents uploaded to the Sharepoint should be available for all Annex participants, but they do not have to be necessarily freely available official publications. Therefore all participants should not share the documents from Sharepoint with third parties without direct permission of the author.

Regarding scientific publications, these will be primarily organized by particular involved participants, but is of course possible to use reference to Annex 68 as an umbrella framework for the research conducted. The same is valid also for applications to research foundations in order to attract further funding for activities that are supposed to generate results relevant for the Annex.

CAR reminded that the common code to name the documents for Sharepoint was established during the meeting in Copenhagen. This code should be used for documents that express official outcomes from the STs or Annex as a whole. The code doesn't need to be used for work documents, which should however be stored in different folders than official outcome documents.

Furthermore, the final reports for particular STs should be issued by the institutions where the editor is affiliated.

There are no official document and presentation templates for the Annex. Participants volunteering to create such common presentation layout are very welcome. In the meanwhile, the logo of EBC should be used in the header of all outcome documents as well as in the presentations of the Annex. OA will upload a graphical file with the logo on Sharepoint **(A16)**.

Involvement of Univ. of Syracuse, USA. JZ joined the meeting online. He explained the situation for US participation. US will be involved in ST2+3, however they need to submit application for funding. JZ confirmed the capacity to contribute to both STs.

11. Discussion of ST 1 description

MA presented slides prepared for the AIVC conference. The presentation was followed by discussion on the Annex text with respect to ST1.

KN pointed out importance of concentration of particles in low energy (zero energy) houses.

JT mentioned issue of static electricity, which becomes more pronounced in low energy, tight buildings.

Results and indicators can be drawn from the HealthVent project (JAKOL) and from IRCC Committee, which gathers information from 12 countries on pollution sources (JT).

Particular problems in highly energy efficient houses were mentioned.

MA will, together with Pawel Wargocki, prepare revision of ST1 description in the annex text **(A17)**.

12. Discussion of ST 2 description

MA presented slides prepared for the AIVC conference. The presentation was followed by discussion on the Annex text with respect to ST2.

The Pandora database gathers information from several other databases on Indoor Air Pollutant Emissions (MA).

CHAMPS-BES interface was discussed as well as the possibilities of integration of tools with BEPS simulation. JG explained that it is not currently possible to add particles into emission source-sink models.

Involvement of stakeholders in the ST was discussed. CAR mentioned that involvement of stakeholders could be described in separate paragraph in the whole Annex text.

JG informed that Saint-Gobain is interested in the topic of emissions from building materials and JG was contacted by Saint-Gobain's Italian branch regarding possible common project. JG will inform the Annex participants about development in this case.

STL-2 will update the ST2 description in the Annex text **(A17)**. Moreover, the word "residential" should be added into the ST2 title.

22 September, 2015

13. Discussion of ST3 description

JG introduced his view on the work programme of ST3. The ST should be focused on classification of available tools for CHAMPS modelling. There are many research oriented tools available. The main point is not to further develop tools, but to include all and develop classification methodology – a reference system.

GR commented that the “modelling” itself seems to be lost when ST goes the indicated direction. We should strive to get physical problems depicted in modelling.

JG reminded that it will be difficult to find money for concrete implementation of modelling tools.

JS supported GR’s comment that ST3 misses the point when no modelling is included.

HK reminded that the focus should be on the Annex Guide, thus the ST has to provide some practically usable results. We need to model demand controlled ventilation. Requests for modelling should come from ST4.

Classification should tell which phenomena are modelled.

JS will update ST3 description in the Annex text **(A17)**.

GR presented slides for the AIVC conference. GR suggested that ST2 should provide guidance on which tools to use to answer the open questions the practitioners may have.

14. Discussion of ST4 description

JAKOL Introduced small changes suggested in the ST4 description. Activity on literature review-information collection has to be added. The text will be modified so that it is clear that ST4 will take into account modern IAQ sensors, but will not directly focus on them. Focus on “model based control” will be omitted.

JAKOL will update ST4 description in the Annex text **(A17)**.

JAKOL presented slides for the AIVC conference. It was decided to shorten the presentation to reach 8 minutes time limit. Slides regarding detailed objectives were removed.

15. Discussion of ST5 description

KN presented slides for the AIVC conference.

HK reminded of the importance of synchronization of particular STs.

It was discussed that focus should be on existing case studies that can provide data. There will probably not be time to start our own demonstration projects/cases.

It was misunderstanding that China (WP) would lead the subtask. Norway stays as a co-lead with a possibility to lead if the funding allows. JZ mentioned that Univ. Shanghai is interested to be involved in ST5. OA will contact them regarding possible co-lead on this ST.

KN will update ST5 description in the Annex text (A17).

16. Common exercises

CAR initiated discussion on “common exercises”. This is used in other Annexes to promote cooperation among participants between expert meetings. The possible form of common exercises has been discussed.

It was agreed that common exercises will be most probably defined within specific STs and will be thus coordinated by STLs.

17. Stakeholders and collaborators

CAR expressed a wish that we make stakeholder and/or site visit activities at every occasion of future meetings. This could be in the form of inviting local stakeholders or representatives of authorities to participate in a public part of the meetings.

18. Sharepoint, Homepage and Dissemination

CAR was asked to check if it is possible to change the password to access the [Sharepoint](#). The answer is that it can be changed under guest.dtu.dk

KK offered that she might be able to assist in maintaining the [homepage](#) if she could be granted access to the Sitecore system on which it is hosted.

A list of upcoming relevant conferences is maintained on the [Sharepoint](#) under [Documents / Meetings / Conferences](#). It is encouraged that we give presentations about the Annex work or arrange seminars/workshops in conjunction with these conferences.

19. Next meetings

If the project gets approved by the EBC ExCo at its meeting on November 12-13, 2015, then we will start the working phase immediately thereafter. (Postscript: As it may be known, the project was approved by unanimous vote by the ExCo at its November 2015 meeting in South Korea).

The first meeting of the working phase is scheduled to be hosted by the [Norwegian Institute of Wood Technology](#) in Oslo on March 14-15, 2016.

The subsequent meeting will be hosted by [Syracuse University](#), NY, USA, on October 8-10, 2016.

Meeting information will be in subfolders to the [Documents / Meetings](#) folder on the Sharepoint.



Picture: 1 Participants in the meeting at CSIC, Madrid

Draft Agenda for the 2nd preparation phase workshop

IEA EBC Annex 68 - Indoor Air Quality Design and Control in Low Energy Residential Buildings

Madrid, September 21-22, 2015

Venue:

Instituto de Ciencias de la Construcción Eduardo Torroja. CSIC. Madrid. Torroja Institute. CSIC is located in Calle de Serrano Galvache, 4, 28033 Madrid. Meeting room: Banderas. <https://www.google.es/maps/place/Calle+de+Serrano+Galvache,+4,+28033+Madrid/@40.4722461,-3.670376,17z/data=!3m1!4b1!4m2!3m1!1s0xd42293777c2abe3:0xb5715e2b3b402607B>

September 21:

- 9:00-9:15 Introduction
- 9:15-9:30 Instituto de Ciencias de la Construcción Eduardo Torroja and practical issues
- 9:30-9:50 Status about the Annex description.
- 9:50-10:10 Action items from ExCo meeting. Targets for this meeting.
- 10:10-10:30 Alignment with AIVC activities and other IEA EBC Annexes
- 10:30-11:00 **Coffee break**
- 11:00-12:30 Brief presentations from around the table
(new participants and updates since Copenhagen meeting)
- 12:30-12:50 Subtask leaderships and commitments. RID.
- 12:50-13:10 General about form of work. Activities between meetings
- 13:10-13:30 Funding and formalities
- 13:30-14:30 **Lunch**
- 14:30-16:00 Subtask 1 – Defining the Metrics: Activities, action text, commitment of participants.
Possibility to (briefly) present ideas and intended input for the subtask.
Input to AIVC 2015
- 16:00-16:15 **Coffee break**
- 16:15-17:45 Subtask 2 – Pollutant loads in buildings: Activities, action text, commitment of participants
Possibility to (briefly) present ideas and intended input for the subtask.
Input to AIVC 2015
- 19:30 Joint dinner

September 22:

- 8:30-10:00 Subtask 3 – Modelling: Activities, action text, commitment of participants
Possibility to (briefly) present ideas and intended input for the subtask.
Input to AIVC 2015
- 10:00-10:30 **Coffee break**
- 10:30-12:00 Subtask 4 - Strategies for design and control of buildings: Activities,
action text, commitment of participants
Possibility to (briefly) present ideas and intended input for the subtask.
Input to AIVC 2015
- 12:00-13:30 Subtask 5 - Field measurements and case studies: Activities, action text,
commitment of participants
Possibility to (briefly) present ideas and intended input for the subtask.
Input to AIVC 2015
- 13:30-14:30 **Lunch**
- 14:30-15:00 Common exercises
- 15:00-15:15 Annex description – what's next
- 15:15-15:30 Stakeholders and collaborators
- 15:30-15:45 **Coffee break**
- 15:45-16:00 Deliverables and webpage, Sharepoint
Presentation at conferences:
(AIVC 2015)
Clima 2016
ASHRAE IAQ 2016
- 16:00-16:15 Miscellaneous side activities, e.g. for PhDs
- 16:15-16:30 Next meetings
- 16:30 End of workshop