



CIB NEWS ARTICLE

International Council for Research and Innovation
in Building and Construction

Providing a global network for international exchange and cooperation in research and innovation in building and construction, in support of an improved building process and of improved performance of the built environment.

August 2010

Around the Task Groups and Working Commissions

TG77 - Health and the Built Environment

WHO Challenge

The CIB Congress in Salford in May 2010 provided an opportunity for CIB to demonstrate again its ability to respond creatively to important challenges issued by international organizations representing the interests of the whole world.

CIB can bring to bear on such challenges the unique combination of knowledge, experience, and research capability that is embodied in its international membership. In this case previous work carried out by a far-sighted Commission proved to be ideal preparation for the task of responding constructively to another challenge of international importance.

Origin of the Challenge

The challenge originated from the WHO (World Health Organisation), which shares with CIB an interest in the integration of aspects of healthy practice in the construction and operation of buildings. WHO recognises the international importance of healthy buildings, and the number of key issues in the field of housing and health, notably related to climate and thermal comfort, indoor environment and contamination, design and home safety, accessibility issues in developed and ageing societies, and the problem of solid fuel combustion and indoor pollution in developing countries. CIB started collaboration with WHO on the topic of healthy buildings.



Michal Krzyzanowski, WHO ECEH, Bonn Office

The collaboration led to the WHO challenge issued at the CIB Congress in May 2010 which was:

- To advise CIB members on healthy buildings and assist them in adapting their actions to foster such buildings
- To develop methods of carrying out Post-Occupancy Evaluations and Health Impact Assessments of selected projects
- To publish a comprehensive CIB healthy building manual
- To establish an internal CIB code of conduct promoting healthy building construction

History of CIB Activity in this Research Area

The CIB has a well-established history of engagement in matters to with health and building and construction ranging from the problems of building on contaminated land to performance criteria for health and comfort. The most recently established Task Group concerned with health matters is TG77 Health and the Built Environment established in late 2009.

The establishment of TG77 recognised that Buildings are built for people and therefore, their quality and their impacts on wellbeing and comfort of residents is crucial. However, vast evidence exists indicating that often the opposite is true. Buildings and indoor environments can be triggers of various diseases and negative health effects and too often, buildings and construction processes do not use their potential to support health.

CIB and WHO Collaboration

Acknowledging that there is still a long way to go to achieve healthy buildings, CIB started collaboration with the World Health Organization (WHO) on the topic of healthy buildings. When CIB was challenged by Dr Michal Krzyzanowski from the WHO European Centre for Environment and Health (Bonn Office) TG77 was already aware of a number of key issues in the field of housing and health, notably related to climate and thermal comfort, indoor environment and

contamination, design and home safety, accessibility issues in developed and ageing societies and the problem of solid fuel combustion and indoor pollution in developing countries.

Task Group Meetings

During the CIB World Congress in Salford two meetings with the Task Group TG77 World Wide Healthy Buildings regarding the WHO challenge were organized.

Lively presentations by Matthias Braubach (WHO), Helena Järnström (VTT) and Peter Heijmen (TNO) showcased some surprising and thought-provoking facts and views on the topic of world wide healthy buildings. Did you know, for instance, that 50% of the total pollution "load" of a typical western European building consists of emissions associated with the building materials used in its construction?

On a more conceptual note, Peter Heijmen used the analogy of the building as a third human skin (actual skin – clothing – built environment) to argue in favour of design strategies aimed at creating enabling (built) environments which allow the people using them to realize their full health potential.



The steering committee of TG77 recognizes that implementing the healthy buildings approach on a world-wide scale presents an enormous challenge, not least because of the differences in climate, financial situation, user

backgrounds, construction traditions and cultural preferences that need to be addressed. To rise to this challenge, broad international commitment and participation will be essential. The steering committee is, therefore, very pleased to note that a large number of institutes and companies have shown interest in the subject and have indicated a willingness to participate in the project in a proactive way.

Response to the WHO Challenge

In response to the WHO challenge, CIB defined a first common project between CIB Task Group (TG77) World Wide Healthy Buildings and WHO. The planned development of WHO guidelines on healthy buildings will be supported by TG77 and potentially reflected by a CIB-produced publication or manual describing adequate technical construction processes that enable the implementation of the WHO Guidelines on healthy buildings.

The immediate challenge for the CIB world wide healthy buildings Task Group is to establish an action-oriented group able to achieve real and lasting impact. Efforts are currently underway to form a working body that will proceed along two complementary lines of approach: one using a holistic action driven plan to generate new research; the other looking at possibilities to utilize and adapt existing guidelines and standards. The results should clarify the effects of key issues in design and construction on health risks. Hopefully, the results can also be used as a basis for code of ethics or code of conduct within CIB.

The next milestone for the project is the conference planned for the 21st of September at VTT's offices in Espoo. During this conference the Task Group will be defining its expected results and products. We will also make a start on drawing up a roadmap that will lead us to real and lasting impact in the field of world-wide healthy buildings.

It can be seen that the CIB response has been a strong and sustained one, consisting of three consecutive stages.

- The timely establishment of TG77 in response to growing recognition of the importance of healthy buildings
- The commencement of constructive collaboration with WHO well before the CIB World Congress so that the essential issues could be incorporated in a well-articulated challenge at the Congress
- Ongoing collaboration with WHO in responding to the challenge in the next phases of the work.

Invitation Next Meeting

A next meeting of TG77 will take place on September 21st, 2010, in Espoo, Finland, in conjunction with the SB10 Conference in Espoo.

The TG meeting will include presentations, responses and discussion about:

- Healthy indoor climate
- Safe, adaptable and accessible buildings.

Detailed information on the meeting programme and on its administrative and logistical aspects can be downloaded [here](#).

For detailed information on SB10 Espoo see [here](#).

Additional Information

For more information and to become a member of TG77 contact Marinus Verweij marinus.verweij@tno.nl and TG77 Secretary Roberto Traversari roberto.traversari@tno.nl.



You can find more information on the activities of CIB TG77 at www.cibworld.nl -Databases-select "Go to Database" – in the shown search engine: type TG77 in the field "Commission number".