



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.

December 2008

Around the Task Groups and Working Commissions

TG75 - Engineering Studies on Traditional Constructions

Introducing a new Task Group

The CIB Board established a new Task Group: TG75 on Engineering Studies on Traditional Constructions, with Professor Dr. Kenji Okazaki of the Architectural Institute of Japan (AIJ) as its Coordinator. A short description of the Task Group and a brief introduction of the Coordinator follows.

Background

Reduction of earthquake disasters is one of the keenest issues common in earthquake prone areas in the world. In recent years, our societies have been severely damaged by Sichuan Earthquake 2008 in China, Pisco Earthquake 2007 in Peru, Central Java Earthquake 2006 in Indonesia, and Northern Pakistan Earthquake 2005. Japan also suffered severe damages from 1995 Hanshin-Awaji Earthquake. In most of deaths caused by earthquakes, people are killed by their own houses. Most of the world's population lives in vernacular houses that are built of adobe, brick, stone, and wood, and are non-engineered and thus vulnerable to earthquakes. Because earthquakes cannot be predicted precisely even by applying the most advanced science and technology, it is essential to make these buildings safer in order to reduce the number of victims and the amount of severe damage caused by future earthquakes.

"It remains something of a paradox that the failures of non-engineered buildings that kill most people in earthquakes attract the least attention from the engineering profession." The statement above by UNISDR (United Nations International Strategy for Disaster Reduction: Living with risk 2004 version) clearly describes the exact situation concerning the necessity of technical intervention to these non-engineered structures. With this background, it was decided to establish a new Task Group, aiming to attract more attention of researchers and practitioners, encourage them to focus their work on non-engineered structures, and identify possible working programs for the next step activities.

Scope and Objective

A large part of the world's population lives in vernacular or traditional houses that are built of adobe, brick, earth, stone and wood, that are non-engineered and that are extra vulnerable to earthquakes. This also applies to most historical constructions. Against this background the Task Groups aims to enhance the insight of the world's engineering community in the design and construction principles involved, to focus more of the attention of the world's practitioners and researchers on this area and to stimulate an international coordinated approach in research and technology development.

The Objectives of the Task Group are:

- to collect reports, data and information on the non-engineered structures in the world, including historical buildings, to grasp actual designs, materials, construction practices and labor forces, and the past achievements concerning non-engineered structures and to share them among members of the TG.
- to discuss and identify crucial issues to be explored by the researchers and practitioners
- to encourage the researchers and practitioners in all the relevant fields and countries/areas to focus on the non-engineered structures
- to propose working programs for the next step activities to the researchers and practitioners communities
- to organize forums such as workshops, video conferences and web site, for exchange of information, knowledge and views.

The Task Group covers a wide scope, including:

- structure types: masonry structures of brick, stone, concrete block etc., confined masonry structures, earthen construction, wood structures, historical constructions, any other structures which have no/little technical intervention

- countries/areas: any country/area where the non-engineered structures are commonly seen and there is a need for further research and development (Japanese wood frame structure will be one of the target type)
- expertise fields: structure engineering, earthquake engineering materials engineering, construction/production engineering, social studies on construction workers, social science on dissemination of technologies both formal approach (technical guidelines, building codes etc) and informal approach (community based activities etc)

Outputs

- 2008:** Report on Preliminary Activities
2009: Proceedings of Kick-off Meeting
2010: Tentative Proposal on Activities Programs
2011: Final Task Group Report

External Relations

The Task Group will collaborate with CIB Working Commission W114 (Earthquake Engineering and Buildings) as earthquake safety is the one of key issues. The Task Group will establish links with international organizations such as UN Habitat, UNCRD (UN Centre for Regional Development), and ADRC (Asian Disaster Reduction Center).

Additional Information

For additional information about the CIB TG75 meetings please contact the Coordinators: Kenji Okazaki okazakik@grips.ac.jp.

You can find more information on the activities of CIB TG75 at www.cibworld.nl/website - section "Databases" - database "Commissions" - type TG75 in the search field "Commission number".

Introducing the Coordinator

Prof. Kenji Okazaki



Current Position

- 2005-Present Professor, National Graduate Institute for Policy Studies (GRIPS)
 2003-2004 Visiting Professor of Kobe University

Past Position

- 2002-2005 Disaster Management Coordinator, United Nations Centre for Regional Development (UNCRD), Kobe
 2001-2002 Director, Building Disaster Prevention Office, Japanese Ministry of Land, Infrastructure, and Transport (MLIT), Tokyo
 2000-2001 Director, International Codes and Standards, Ministry of Construction (MOC), Tokyo
 1996-1999 RADIUS Manager, IDNDR Secretariat, United Nations, Geneva, Switzerland
 1993-1995 Director, Housing Division, Fukuoka Prefecture, Fukuoka, Japan
 1991-1993 Deputy-Director, Urban Development Division, National Land Agency, Tokyo
- DEGREE: Doctor (engineering), 2004 Kyoto University
 EDUCATION: Bachelor of Architecture, 1976 Kyoto University
 AWARDS: Earthquake Disaster Prevention Association Award 1999, Japan