

Exploratory Meeting on Open Building

An exploratory meeting was held on 1st and 2nd November 1996, at the Building Center of Japan in Tokyo, at the invitation of CIB Vice-President Dr. Okamoto. The purpose was to investigate the merits of a CIB Working Commission or Task Group on Open Building. More than 30 people from Europe, North America and the Far East attended the two day meeting.

The two leaders and eventual Coordinators for a CIB Group were Professor Stephen Kendall, Marymount University, Arlington VA, USA and Mr. Karel Dekker, TNO, The Netherlands.

Both judged the exploratory meeting to have been successful.

A work programme was drawn up and the following items were identified as justifying high priority for action.

1. International Status Report on Open Building Activity by Country

(to be prepared by Dr. Stephen Kendall)

This will include articles, reports, and case studies on the status of Open Building activity by country. Each entry will include background on the following points:

- the legal environment for Open Building
- the building construction type(s) involved and the "level(s)" included
- special conditions or opportunities and relevant precedents in the country

2. Communication Infrastructure

(to be prepared by Karel Dekker)

A recommendation for a communication infrastructure for this Working Commission is being prepared. It will include proposals for, among other things:

- a Web Site on Open Building for posting notices, articles and reports, and for hosting international symposia and discussions via a subscriber based "under-net" server
- national or regional information centers

3. Capacity Analysis: State-of-the-Art Report

(to be prepared by Ype Cuperus, OBOM, Delft, Netherlands)

This Report will document capacity analysis or "test-fit" methods in both residential and non-residential buildings. Capacity Analysis is used to study the potential of a base building to "hold" a variety of "fit-out" plans. It is used in designing new buildings and when an organization or occupant plans to move to another building and wishes to determine which of a number of candidate spaces is best matched to its preferences and requirements.

4. Open Building: Report on Availability of Experts and Technical Needs (to be prepared by Nils Larrson, CANMET, Natural Resources, Canada)

This Report will propose a method for organizing and disseminating information on the technical needs of organizations requiring Open Building information and strategies for solving their problems. It will propose methods for information dissemination regarding the availability of expertise for problem solving related to Open Building Principles & Practices.

5. Long Term Strategy of the Open Building Group (To be prepared by Dr. Seiji Sawada, Shimizu Corporation, Tokyo)

This activity will develop a proposal for the next meeting, in regard to a long term plan for the development of this Group within CIB. It will propose and suggest outlines of additional Action Items, meeting plans, demonstration projects, and building membership in the building industry in many countries.

Professor Kendall has recently circulated all the participants in Tokyo with a series of explicit and helpful pointers to developing their own Status Report on Open Building.

The precise form which this activity will take in CIB is still under consideration. If such a group is set up it will very probably be a Task Group rather than a Working Commission.

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Adds Professor Fukao:

Professor Seiichi Fukao from the Department of Architecture, Faculty of Engineering at Metropolitan University has been kind enough to send us an illustrated account of the Meetings in Tokyo.

The W24 Meeting was held at the University of Tokyo on 28th October 1996 and at the Center for Better Living on 31st October 1996.

He noted especially the joint industrial visits arranged for 29th and 30th October. Sekisui Chemical with its 3D prefabricated detached houses.

On the first day several presentations were made describing projects related to new trends in industrialisation. On the second day, Japanese researchers reported on automatisations of construction pursued by the largest Japanese General Contractors. There was also information given concerning the increasing tendency towards production of building components for the open market.

He reports that on 29th October there was also a visit to a factory of Taisei Prefab Construction Ltd. and the Research Institute of the Housing and Urban Development Corporation (HUDC). The Taisei Prefab Factory is fully automated for production of large precast concrete panels for apartment building construction. It can produce one panel every 3 minutes on the production line, flexibly responding to orders from the in-house architects. At the Laboratory of HUDC, several interesting research studies and developments were seen. One of them was the effort to reduce the costs of construction of apartments by dividing the building process into two phases: the skeleton and the infill. In that case, the design and installation of some parts of the infill work was left to the occupants of the dwelling units.

The model house in the factory Sekisui Chemical makes use of fully automated production lines. More than 80% of construction work is done in the factory by robots.

As well as Sekisui Chemical Co. Ltd. the 30th October included a visit to the showroom of Matsushita Electric Works. Matsushita Electric Works is one of the largest suppliers of building components. They make use of "virtual reality" technology for selling kitchen equipment.

The factory for prefabricated 3D units for detached houses "Sekisui heim" was the subject of a visit on 30th October. More than 30.000 houses a year are produced.

On 3rd November about ten members of both CIB groups visited Osaka to see the Experimental Housing Project "Next 21" sponsored by Osaka Gas Co. Professor Yositika Utida, Professor Emeritus of the University of Tokyo, explained the project. Professor Utida is an authority in the field of open industrialisation and open building and was Chairman of the Commission for the Next 21 project.

Says Professor Fukao: The excursions were rewarding, allowing everyone to experience the high level of technological development and new activities in many areas of Japanese construction.

The exploratory meeting for a possible Group on "Open Building" took place at the Building Centre of Japan just after the W24 Meeting.