

Inter- Jurisdictional Regulatory Collaboration Committee

Minutes of Meeting **Anaheim, CA 27-29 March 2002**

Present

Bob Bowen (BB)	Esther Carrion (EC) (for agenda item 4)
Wataru Gojo (WG)	Jon Traw (JT)
Kenya Itani (KI)	David Smith (DS)
Javier Serra (JS)	Brian Meacham (BM)
Brian Cashin (BC)	Sergio Barrueto (SB)
Keith Sanders (KS)	Rick Okawa (RO)
Olav Berge (OB)	Wayne Bretherton (WB)
Doug Beller (DB) (from afternoon 27/3)	

Apologies

Mike Balch	Tony Rackcliffe
Dick Bukowski	Beth Tubbs
Paul Everall	

Opening Remarks

BB opened meeting and welcomed members.

RO also welcomed everybody, made some general remarks, housekeeping and outlined documents included in the notebooks provided.

This was followed by general introductions from new members.

DS made some comments and advised that he was representing PE

OB asked for an explanation of RO and SB's organisation. **RO** proceeded to outline the role that ICBO/IES plays in the US and elsewhere.

JT made some comments on his new role and activities. **JT** also made comments on the future work that ICC will undertake in international fora.

BB asked for additional agenda items -

1. **RO** asked if the time for the discussing of the conference issue could be assigned so that EC could be in attendance. It was agreed that this be done Wednesday morning.
2. **BB** provided an overall outlined on the way the meeting takes place and discussion around the agenda
3. Other Business:
 - TG37 (BB)
 - Registry of Alternative Solutions (BB)
 - Update of WTC events (BB)
 - Utilisation of IRCC website (JT)

Agenda Item 1 - Record of IRCC 12 meeting

BB sought comments on minutes of last meeting

No matters arising from minutes of IRCC12

Agenda item 2 - Country Updates

(In addition to the notes below reference should also be made to the presentations provided by the country representatives)

Canada

BB circulated document about housing research and technology. It provides an update of what NRC has been undertaking.

Code Development

The need for training and education for the objectives based code is seen as extremely important and NRC is considering the development of a training package that could be handed over to the Provincial Governments for implementation.

BB outlined that the Objectives based code is about to go into the public consultation stage in October 2002. Consultation will run mid Oct 2002 to mid Jan. 2003. Consultation will be over the Internet.

Durability

Durability is the subject of a high level of discussions. Not a primary code objective in itself however, is being considered a primary objective when it supports other objectives. The issue of durability vs community expectations may mean that a term other than the 'durability' is necessary for use in building codes.

BM commented that the issues on expectations and durability will be something that we will all building codes will need to address.

OB explained that the EU has developed a concept on durability, which is quite well advanced for specific products. However, the issue of durability that the IRCC is concerned with is much wider.

OB suggested that the issue of durability vs social expectations be added to the parking lot.

General discussion took place on this issue.

BB requested that members consider this issue and come to the next meeting for further discussion

Action: All

Parking Lot Item:

Durability vs social expectations maybe another term is necessary for use in a building coded other than the word 'durability'.

Hot Water Safety

Hot water causing scalding is an issue being considered. There is movement to cause installers to set them at a lower temperature level.

Some general discussion took place and members outlined what generally happened in their individual countries.

Electronic Tracking System

BB outlined the progress of the electronic tracking system. The specifications have been written and should be ready to go out to tender for development shortly. **BB** then also outlined what the system will do.

JT queried if the web site areas were public access. **BB** explained that there was both a public area and a restricted area for members use.

Moisture Performance

Research project on moisture performance of exterior wall systems. **BB will send the Internet site for members' info.** Project went back to first principles. The study included developing a climate map for determining the level of moisture protection necessary and defining areas that are of higher risk than others. The research results may result in a code change.

Action: BB

United Kingdom

DS gave a presentation on proposals occurring in the UK.

Sound Insulation

Sound insulation provisions being increased. Includes requirements for on-site testing. Number of on-site testing likely to occur is around 10% of all new homes.

Energy Efficiency

Proposed energy provisions will be retrospective and apply to existing dwellings. Specifically being addressed by the replacement of windows and heating systems (when this occurs). This is where 47% of carbon saving will occur. Due for intro 1 April 2002.

Energy efficiency is a 6-stage process to be introduced by 2006. Currently introducing the 1st stage.

Air tightness controls to be introduced for commercial buildings. Air quality issue is also being addressed as part of these proposals. Air tightness controls not proposed for dwellings at this stage.

BRE work on climatic change in Europe has been the reason for the proposed changes.

General

There is also a new Approved Document P for electrical safety.

Training is also a big area of concern on new requirements especially for issues such as the installation of sound insulation.

Spain

JS provided presentation. Refer to power point for details.

Building Code Development

Discussion then took place about the consultation process available over the web.

JS advised that an English translation of the new Spanish Building Code should be available at the next IRCC meeting (Autumn 2002).

JT queried if there were any limitations on access to members area. **JS** advised that generally there is not but persons must register and they are assessed to make sure that their interests are relevant.

Documents have public access however they are not public domain. Comments from people outside Spain are welcome.

Proposals are to be presented to the Ministry next week (first week in April 2002).

General discussion took place about web-based code access, the pay-per-view concept and what should the public be able to access for free.

Norway

Norway introduced performance based code 4 years ago. Very little has occurred since then. It is noted that it is not being utilised to its full extent.

Guideline Development

New work is looking at how to apply performance-based codes. The code is not subject to any improvements at this point in time however; improvements are being made by updating and re-developing guideline documents on how to use performance. The aim is to develop a simple to use and concise guideline document. Norway is also using the web for consultation however, not to the same extent as some others.

Terminology used in guideline documents is also an area that is being worked on with an aim to reduce their overall size by 50%. Removal of examples from the previous version was one task. The fire authorities have undertaken this work as 50% of the guidelines are related to fire. The review recommended 3 types of analysis in the document – partial analysis, full analysis or comparison with acceptable solution.

Discussions are also being had about the provision of a hard copy of the code, as it is presently a web-based document only.

Another development was the removal of prescriptive deemed to comply solutions from guidelines as it was seen as an impediment to use of performance.

Fire Code Redevelopment

OB also explained that they are commencing a restructure of the Norwegian Fire Code to a performance-based code. The fire code applies post occupancy and will reference the performance-based building code for construction.

OB will make the report on this available in English and post it on web.

Action: OB

Electronic Lodgement System

Electronic lodgement of approval applications is up and running. Public access to all data base info is available to all. Includes planning maps, document lodgement, payment of fees, etc. Lodgement of documents on web means that all sorts of yes/no questions need to be answered. This means that a code needs to be very precise so that there is no confusion.

The software and data used for the electronic system is receiving a lot of interest from other government service providers.

EU Energy Directives

OB also outlined what is happening with the European energy directives and the energy models. Directions are now going require the assessment of existing buildings.

The re-fit of existing buildings so far has been based on voluntary approach.

General discussion then took place on various issues.

BB asked if we have seen a presentation on the electronic system being used. **OB to provide a presentation of the system at next meeting.**

Action: OB

Parking Lot Item:

Documentation of alternative solutions

Japan

WG provided some information about Japan's ISO activities on TC59. WG circulated the official report circulated to ISO Secretariat and outlined what has been developed.

Discussion took place in regards to the draft document that was circulated. A lot of discussion has been had in previous meetings about this committee.

KI provided an update of BSL developments. Article 38 will expire at end of May 2002. Acceptable solutions for light gauge steel and 2x4 construction have already been submitted.

Amendment to BSL for sick building syndrome has been submitted to Diet in March 2002. The amendment covers use of materials in habitable rooms and is expected to pass in May 2002.

Amendment to the Act for disabled and aged access to buildings was also placed before Diet in March 2002. Approval expected in May 2002. It is expected that the bill will be approved for wider range of mainly public use buildings and those buildings used by elderly.

Study of WTC being undertaken to explore the extent and mechanism of damage from man-made attacks. This is being undertaken in conjunction with NYU.

Further study concerning fire in multi-tenanted buildings to determine extent of compliance and to consider if amendments are necessary to the BSL.

Some discussion took place about the use of certain chemicals in buildings, their use and who is to be protected from exposure to chemicals.

See document circulated by KI for further information (attachment 1)

New Zealand

Refer notes in agenda documents.

Energy Efficiency Provisions

Energy efficiency provisions - NZ have adopted the Kyoto protocol and hence there have been a lot of discussions about a carbon tax. These issues are yet to focus on the building code although they are looking at increasing the levels of insulation in buildings.

Building Act Amendments

Amendment to Building Act – minimal comments on code itself. More related to application to existing buildings, administrative matters, etc. Recommendations have been drafted for cabinet consideration.

Provisions are in place for requiring compulsory maintenance however, in practise it is not operating as well as it could. A review is to be undertaken to consider how the provisions can be better applied.

Societal Goals and Standards

BC also discussed the NZ approach to societal goals and standards/reference documents. Standards need to be totally prescriptive and contain no performance.

Competency of Certifiers

Building certifiers (private) – BIA approves on basis of skills determined on an individual basis. This causes some concern, as there is not set skills or qualifications in NZ that a certifier must have

Use of Performance

Determinations on alternative solutions as approved by BIA provide some interesting insights. Refer to BIA website for details and examples.

Durability and liability

BC outlined that there is a liability cap of 10 years in place for civil action. This has created an issue, as a case on durability would not occur until at least 5-15 years post occupancy. The durability documents are currently

under review to determine if amendments are required to achieve the objectives of the NZBC.

The definition of what is durability is also being discussed.

Weather/Waterproofing

Leaky building syndrome is an issue in NZ at this point in time. **BC** provided a detailed overview of the construction methods used and the ingress of water into cavities causing the problem.

General discussion then took place on this issue and durability.

BM built on what **OB** said in the discussion about best achievable. You can only use what is available at that time however, as time goes by, you can move the level of performance required as the technology advances. This maybe another item for the parking lot.

BB agreed that this concept is worth discussing further. However, it is would be better if it can be achieved through better construction practises and methodologies. **BC** added that regular maintenance is also an important.

JS added to **BC**'s discussion on the role of standards and their use especially, in Spain, is difficult to incorporate their use in the Spanish building code.

General discussion took place regarding the acceptance of standards and their reference in the building code.

Parking Lot Item:

Use of 'best achievable' in the context of building codes.

United States of America

ICBO/ICC

RO requested **JT** to provide an update of the US activities.

Code Development

JT provided an overview of the single code effort and the activities of the ICC. The latest version of the performance based code for out info. This document is now being considered for adoption in some AHJ's. It is also being used by some as guidance on how to assess alternative solutions.

The document is very strong on procedural issues. The US philosophies on performance are different to others. This was especially evident at the recent SFPE conference in Melbourne.

Upcoming Issues

Discussions on durability have been piecemeal at this point in time and the issue is not yet ready to be discussed in earnest.

Energy efficiency is continuing however, this will not have a major impact unless existing buildings are addressed.

Some discussion took place on **Bush**'s view on the Kyoto Protocol and the issue of greenhouse gas emissions.

The merger between the ICBO, SBCCI and BOCA to form ICC is due 1 Jan 2003 and the three groups are working towards this.

WTC Response Activities

Major efforts have come from the American Society of Civil Engineers. There have also been various expert groups seeking Government funding for further research and it appears that NIST will undertake the majority of research, which is complimentary to the work undertaken initially by ASCE. The issue of risk levels is to be discussed in detail in this research. There will be some good results that come out of the research for how buildings are to be designed especially, for landmark structures. This may also see NIST re-assessing the use of elevators for evacuation.

CIB conference in London on tall buildings will be discussing the types of issues that are being raised arising from the WTC disaster.

BM added that ASCE and Federal Emergency Management Agency (FEMA) established a joint task force to write an initial report. This is due for release shortly. NIST has now put forward a proposal to congress for a new research program. The initial investigation would take 2 years with an additional 2 year research program after that. Information on this program should be available on the NIST website later this year.

BM made some additional comments on the work related to research workshops and the work that he has been undertaking as a result of the WTC attack especially security for federal government buildings, etc.

BB commented that people location and potential targets and where to locate them in a building is an issue. Some discussion took place on the various building types where this is likely to be an issue.

Fire Engineering Assessment Guide

ICC has let a contract for SFPE to develop a guidance document for AHJ's and how they are to assess fire engineered alternative solutions. Project is expected to be completed by end of 2002. JT suggested that a draft of the document be circulated at the next meeting for comment back to the drafting committee.

Action: JT to circulate

Bottom Up Analysis

Bottom up analysis is presently being undertaken similar to the exercise that NRC undertook as this is seen as an important part of determining if the DTS provisions really do meet the performance requirements.

BB advised that it took well over 2 years for NRC to undertake this review. JT believed that it would take even longer in the US.

Parking Lot Item:

Approaches and guidelines to code development – bottom up analysis.

Seismic Design Guidelines

FEMA has initiated a project for the development of performance based seismic design guidelines of which, JT has been appointed to as a member. Committee # ATC58.

NFPA

DB provided a presentation providing overview of the NFPA organisation and structure including standard development.

ROC meeting on Code comments is scheduled for late October 2001. All parts of the code are to achieve objectives. There will be a performance and prescriptive approach.

Refer to power point.

Australia

Access

the ABCB has been tasked by the federal government to review the BCA to enable it to be referenced as a disability standard under the Commonwealth Disability discrimination Act. Equity and dignity is the key to the federal legislation. Looking at the middle of 2003 to release a draft of proposed changes for public consultation.

Aged Care

Amendments to the Commonwealth Aged Care Act in 1997 encouraged such facilities to take into account the changes of occupants over time. The aim is to allow people to stay in one facility instead of being relocated as their needs change. Looking at the June 2002 amendment for incorporating the changes. The biggest issue is struggling with the link between policy and technical.

Energy Efficiency

Initially looking at a change to the housing provisions. The majority of changes are planned for introduction 1 January 2003. Regulation Document and Regulatory Impact Statement on proposals for dwellings will be released shortly.

Education

Released a multi-media CD aimed at building practitioners to increase awareness of Accessibility issues in January 2002. Copy circulated to all members.

Series of fire risk assessment/cost education information seminars being provided in 2002.

Also starting to look at education needs for the introduction of energy efficiency provisions for housing.

Future Building Code

Future building code project is at the stage of releasing a proposed structure for the future building code.

Reference Document Guideline

The ABCB recognises that there may be other documents, beyond Standards Australia, that may be suitable for reference in the building code. A guideline is being prepared that outlines a process that an organisation may follow to produce a document for referencing in the building code. The purpose is to recognise other appropriate resources instead of having to go through the standards process. This will also allow for the adoption of standards written in other countries.

Web-based BCA

BCA is available online and can be viewed for short periods of time if that is all that is required. Specifications and details on the proposed on-line products and database will be available in April. **This information can be made available IRCC members who are interested. Contact WB to obtain.**

Note

Agenda Item 3 – International Conference

RO and **EC** provided a briefing on the paper included in the agenda paper.

EC commented that dates are an issue with hotels, which they are less flexible on in March. April is being suggested as a better option for the venues.

JT commented that we need to break this down further.

JT also added that he had spoken to Mike Balch when in Australia and reported back to the group that he (MB) believed that is necessary for a conference committee meeting to be held ASAP after the IRCC to sort out all issues.

Some discussion took place around the actually timing.

BB suggested that we need to re-assess who was committed to undertake what tasks and if they are able undertake. From there, we can then determine timing. **BM** suggested that based on his experience in organising conferences, a conference in 12 months is too short and the dates should be pushed back at least 6 months.

The clashing of the conference date with various countries holiday seasons was also discussed.

Discussion then turned to target audience, speaker format and subjects – invited Vs call for papers. **BB** suggested that we call for papers and also invite one key note speaker for each session. **JT** also agreed with this concept.

BM commented that there might be an increased level of awareness and interest in building regulatory policy due to the Sept 11 disaster. People may now want to know what building regulations meant do and cover? He sees this as a unique opportunity to explain to others what we know.

BM questioned what is the conference aim.

JT supported the concept of the smaller group, as it was more in keeping with the IRCC's approach.

BM commented that it may be possible to have a back-to-back type format that lasted 5 days consisting of 2 days conference sessions and 2 days workshops which could provide outcomes.

BB thought that the IRCC was looking initially at a more simplistic approach based on awareness. On a more ambitious front, the conference could seek to move forward knowledge. **BB** sought input from others around the table.

DS thought that the types of issues that are going to be covered is the type of information that the EU is looking for.

BB added that we need to be careful that we just don't concentrate on performance based codes but rather look at societal expectations as well. Clearly the policy component of an event like this is going to be even more important than before. **JT** commented that we need to ensure that we do not fall into a technical stream, as these types of conferences are commonplace. The conference should provide an interface between policy and performance based code development

OB added that whilst Sept 11 is one issue that affects how codes are developed, climate change is also a topic that could be covered especially, sustainability.

Some general discussion then took place.

BB sought comment from each member as to the conference aim, size, direction, etc and concluded that most people wanted a conference that reached outcomes. Some general discussion took place about conference length and title.

BB summarised the overall discussion so far as:

Title – to be determined by the conference organising group.

Conference length – 3 days

Need a specific outcome – need to understand what that is. Maybe an option is to produce a white paper as the genesis for discussion. From this a report on conference outcomes can be developed followed up by a new version of the IRCC document which includes the outcomes of the conference.

BB commented that this does not mean that the current document be updated at this point in time but rather after the conference where we can use the conference outcomes as the basis.

BM suggested that a second conference be held a year later.

Discussion then took place on this issue.

Need to call for papers – mixture of invited and call for papers.

Target – need to target the trend state

Timing – **BB** asked EC for input. **EC** believed that a better deal could be worked out with the hotels if we move the date. The hotel suggestion was to move the conference into April 2003. The group generally discussed timing.

There is definitely a need for a conference workshop ASAP to discuss all organisational issues associated with the conference.

Note

Discussion looked at conference and IRCC meeting times. Conference could be held in October/November 2003. IRCC meeting planned for conference in April 2003 could now to be considered for London.

The working group and organising committee memberships were discussed as agreed at Gold Coast meeting in 2001. **It was agreed that the initial working group should meet to commence organisation.**

The working group members are:

Doug Beller

Jon Traw

Bob Bowen

Paul Everall

Mike Balch

JT also suggested that **BM** be a member of this group.

Organising committee members are:

Bob Bowen

Brian Meacham

Beth Tubbs

Olav Berge

Doug Beller

Wayne Bretherton

Kenya Itani

Paul Everall

Finances need to be considered. **BM** commented that it may mean that all IRCC group member organisations need to provide some funding for the conference.

Issues outstanding – timing, initial group membership, commitment of members, initial working group meeting

Action: BB to arrange meeting ASAP

BB revisited the timing issue as some members thought that a 12 month time frame was too short. It was generally agreed to move the conference timing to an 18 month time frame. The group needs to determine exact date for conference ASAP.

Other meeting dates will see that the conference being held no earlier than late October/early November 2003.

Need to also consider the next IRCC meeting needs to be considered. Meeting locations for next 12 months are as follows:

21-25 October 2002 Madrid, Spain (with TG37 24/25 Oct)

April 2003 London

Need to confirm with Paul Everall & TG37. Also need to advise TG37 of conference timing change

Late Editorial Note: Locating this meeting in London may cause some concern for southern hemisphere members as it means that the next 2 meetings will be in Europe. MB/WB would like to put forward an option for this meeting to be held in Tokyo.

September-November 2003 Conference

May 2-7 2004 Toronto, CIB World Congress

Members to get all dates of other meetings/conferences/activities for the September-November 2003 period to WB by April 14 so that exact date can be determined by the working group.

Action: All

Refer to Attachment 2 for dates

Joint IRCC/TG37 at conference may mean that the length of the joint meeting needs to be reconsidered.

Timing for meeting of working group needs a co-ordinated approach. **BB to send out a general email to working group regarding possible date for a conference call. RO to co-ordinate.**

**Action:
BB/RO**

BM added that it is important that input from other members of the group be provided about topics that need to be considered for conference. **Members to forward to WB by 14 April for working group consideration**

Action: All

RO suggested that there is a possibility to hold the conference workshop at the ICC code hearings (expected attendance 2000) in Nashville 2003 instead of Clarke County. **BB** asked the group for comment – should the conference be kept distinctly separate or should it be associated with the ICC meeting?

BB commented that he did not have a problem with the association as it offered some convenience in an organisational sense. **Members to also provide some comment on this to WB by the 14 April date.**

Action: All

Agenda Item 5 – Fire Safety Engineering Guidelines

JT led discussion. Tenders have been received by the ABCB and interviews held ICBO, ABCB and NRC with the short-listed consultants in Melbourne. **JT** commented from a US perspective that they are still committed to the project.

DS commented that usually his organisation (RICS) is consulted on these types of developments in the UK. He would be interested in exploring opportunities for UK involvement in this project.

BC commented that NZ have also developed such a document

WB commented that he had circulated copies of the current Australian Fire Safety Engineering Guidelines to **OB** and **JS** to consider for use within Norway and Spain.

JS commented that he is also interested in considering the international document for use in Spain and will talk to ABCB regarding future use of document.

OB added that we should also monitor the development of the Eurocode on fire engineering. Some general group discussion took place.

JS commented that there is a meeting in EU on fire engineering shortly. **Will forward details and dates, etc to WB**

Action: JS

BB commented that their committees would be involved in the development of Part 0. **BB** intends to involve his committees including their ability to assist with the promotion of the document.

WB commented that the document is due for release April/May 2003

JT explained the reason the IRCC are involved and referred to Section 2.2 of the IRCC document. **BM** also clarified that this is not an IRCC document *per se*. However, IRCC forum has provided organisations with the opportunity to progress the development of this product.

DS provided some feedback on the activities occurring in Europe in this area. **DS to provide WB with information.** **DS** also commented that both RICS and DETLR see the development of such guidelines as important as there are no such guidelines in the UK.

Action: DS

Agenda Item 6 – IRCC Document Developments

BB commented on the country code structure paper on the web. Countries need to make sure that these are as up to date as possible and requested that each member check their specific country details on the web and update as necessary. **BB** suggested that it maybe a good idea to also add the organisation structure for code development.

JT suggested that we now need to start thinking about the new version of the document.

BB queried if the document was going to be a series of individual papers or a single compendium. At the ABCB conference it was interesting to see that the individual chapters were very popular even though people had seen the documents before (as a whole) when we separated. **JT** believed that we should have a compendium as well as individual papers.

The general group discussion confirmed that the document is not to be updated until after the conference. Although, **JT** commented that if the date of the conference is moved then there may be an opportunity to put together a new document incorporating all the papers that have been put on the web site.

BM commented that there are many topics that the group has discussed that really need to be fleshed out. Many of these have not been written about and it would be good if we could do this. The driving force behind the development of the first document was deadlines as this provided motivation. The IRCC should use the feedback and discussion from the conference to start the development of the new document. This also enables a deadline to be established for the production of the next generation document. **BM** advocates for a commitment to produce the next document in three years time frame.

BC always felt that the document was for people who were thinking about adopting a performance-based framework. He advocates for a suite of papers. However, he would like more clarity of who the document is aimed at before committing to the development of a new document.

OB commented that he thought the document is still incredibly useful and is the only one of its type. There are many topics that we could put in the new document. He advocates the single document format.

JS wondered if it was possible for a translation into Spanish. It maybe useful for not only Spain but also for other Spanish speaking countries. **WB to investigate.** **JS** agreed with **OB** that it is a very valuable document and has been a great assistance in assisting the transition to performance based codes in Spain.

Action: WB

BB summarised the group discussions.

The group identified that there is 2 distinct thoughts on the document

1. New topics which we have not addressed
2. Existing document as a compilation of issues associated with performance based codes.

The group could develop a plan to

1. Develop new papers on issues identified
2. Focus on which chapters of the existing document need updating prior to the conference. However, also undertaking a review of the entire document some time after the conference.

The workshop working group to consider the new topic items and put them back to the group for comment/consideration

BB/WB to map out how the existing document is to be updated and include with the minutes

**Action:
BB/WB**

JT agreed with **BM** and suggested that the group should agree on an overall time frame for the new document. **The group agreed that the new document is to be developed 3 years from now.**

Note

BB highlighted there really needs to be a driver/co-ordinator of the development of the next document. **JT** commented that he had a passion for this role. **RO** added that he would also be happy to assist in the overall role. **RO also volunteered to assist BB/WB in the existing document review. DS also offered assistance.**

**Action:
BB/WB/RO/
DS**

There was some discussion that the whole premise of the IRCC was to make information freely available. It should be noted that there is no copyright on the document. **OB** commented that it may be appropriate to include a statement to encourage people to use the information freely. The group generally agreed with the need for this statement.

Note

KS added that we need to also ensure that the contributors also know about this.

Agenda Item 7 – Sprinklers for Life Safety

WB opened discussion and introduced topic. The point of discussion was to look at what type of research program could be developed to look at developing a specification for a sprinkler system with a life safety objective.

BC commented that **NZ** are in a similar situation to Australia. Standards **NZ** recently released a new draft which could be looked at.

BM queried how do we know what is the acceptable level. The issue for international participation may not necessarily be available, as the level of risk defined in each country will vary significantly.

JT agrees with **BC** and **BM**'s points about the matter of technical issues as well as proprietary issues.

OB commented that he thought it was a great initiative and something that they have been wanting to research for some time. Norway is currently looking at multi storey timber and homes for the aged. However, Norway is

obliged to use Eurocodes therefore, it would be good to have some of the data so it can we can input into the Eurocode development process.

JS commented that he would be very interested in being involved.

DS provided some comment from the UK perspective. They would like to also have some input as this would be on interest.

BB also provided an outline of NRC's perspective on this issue.

BM commented that generally, most of the fire losses in the US happen in older buildings and lower social economic housing.

Therefore, sprinkler installations in new buildings will not necessarily reduce fire losses in these buildings. **BB** agreed and thought that education and training is probably a better means of increase level of prevention rather than through regulation.

General discussion took place. Comments were made that a holistic approach needs to be taken to determine how sprinklers interact with other systems to produce a level of acceptable safety. The acceptable level of first needs to be determined. **BC** commented that statistics really won't provide the data necessary to enable this research to be undertaken.

BM would only be interested in understanding how we come to the conclusion and the decision made about the project.

WG interested in sprinkler system installations. Need for sprinkler system to assist in the evacuation of persons with disabilities and to expand the opportunity for alternatives from use in traditional construction methods.

JT would only be interested in observer status.

SB commented that in Latin America, there would be some interest in these types of buildings. They would also be interested in looking at how the installation of sprinklers relate to construction types, the level of reliability especially of water supply as well as maintenance.

WB commented that the ABCB would continue to look at this research project and update the group on developments. Would talk to members who were interested in more detail at a later date.

Agenda Item 8 – IRCC 12 - Action Outcomes

IRCC12 Agenda Item 3 – Conference

Master Calendar to go on IRCC website as relevant for international conference. Some discussion took place on what info should be put on calendar.

Members to email calendar details WB

Action: All

IRCC12 Agenda Item 5 – Document Developments

BM to email framework documents to **WB** for posting on members website. **BM** added that he is also writing some papers which reference IRCC work. This info is to be posted on members only.

BM to email WB all documents

Action: BM

OB queried if other papers like those prepared by CIB can also be placed on web site. **BB to investigate copyright implications for other documents**

Action: BB

DS requested access to members' area.

Action: WB

IRCC11 Agenda Item 6 – Action Outcomes

JT suggested that a members email alert be investigated for use so that anything that is posted on the site, an automatic email is sent out to notify members.

Action: WB

IRCC11 Agenda Item 3 – List of Research Projects for IRCC web site

Members to compile list and forward to WB

Action: All

IRCC Agenda Item 7 – IRCC 1-10 Action Items

WB advised that this has now been done.

Note

IRCC Agenda Item 8 – Other Business

WTC Collapse

RO reported that he has a draft report from WFTAO on insurance matters titled:

“How indemnification, liability and insurance are addressed by WFTAO members”

BB to make contact with NRC WFTAO representative to obtain current (final?) version of report for circulation to members

Action: BB

The group discussed the need for a public page about the WTC collapse. It was agreed that this was not considered to be necessary at this stage

BM offered to forward details of where information on WTC collapse can be obtained. **BM to provide to WB for inclusion in minutes/for forwarding to members.**

Action: BM

Agenda Item 8 –Other Business

SFPE Conference Melbourne

JT provided an outline of the proceedings of the conference. There was a strong regulatory contingent. Some interesting discussions were had about the impediments associated with the acceptance of performance based design and acceptable solutions.

Case studies were the most interesting and were the most valuable. They highlighted the differences in approaches and the underlying philosophies used by the various countries. Part of the studies included a cost analysis.

- Australian approach was to take a prescriptive building and see where you could cut costs in fire ratings, etc.

- Japanese used a very academic approach. They looked in detail without looking at the prescriptive using their own criteria, the relationship between the structure and the fire
- New Zealand looked at a little bit of structure, didn't look back at the prescriptive and did not do a cost analysis because they had nothing to compare it with
- Canada's approach was the best. It looked at a holistic approach in all aspects from structure and fire through to ecological sustainable design.
- The US approach most intriguing point was the design choice for the building. Set there building in the tropics and had open hallways.

Other discussions included qualitative and quantitative, linkages to standards and documentation of alternative solutions.

Alternative Solutions Registry

BB provided background for this item and led discussion. BB requested feedback from the group on the proposal.

JT sought clarification on term of alternative solution. He then provided comment on the issue that may exist on the willingness to share:

- From a code official perspective – fear of criticism.
- From a consultants perspective – commercial interests and criticism from their peers.

JT thought that overall, it was a great idea.

BB thought it was not presupposing that this concept be further explored unless the group thought it was achievable.

OB commented that he is having trouble defining what alternative solutions are especially when comparing products and a complete solution. **BB** added some further explanation of what the paper is trying to address but he does not have a good line to draw on where the traditional appraisals start and stops.

OB made some further comments in regards to the extent of an assessment of an alternative solution. It could equally apply to areas that extend further than the code requirements.

WB queried if BB saw the registry would be compulsory or voluntary. BB thought that it would be voluntary.

General discussion took place in regards to the context of alternative solution approvals – designs vs products vs systems.

BM commented that he thought what is really necessary is a process rather than a registry for alternative solutions.

BC agreed with OB where the vast majority of alternative solutions are for products rather than designs. Provided some examples on the acceptance of products. Raised some concerns with liability for the approver of the alternative solution and the organisation administering the register.

JS outlined that in Spain at this point in time, they do not see it as necessary to establish a register for alternative solutions.

WB commented on the issue that building certifiers may use previously accepted alternative solutions as the basis of another assessment on a similar building. A register could compound this.

WB added that in Australia some State and Territory Governments have appeals bodies which alternative solutions can be referred to. This for all intents provides registry of solutions.

JT generally agrees with **BM** and the issue is linked to an individual countries legal systems. He would be more in favour of work being carried out on the process attributes rather than a registry. If the group was going to do something that this is some work which maybe more beneficial than work on a registry.

WG commented that Japan has an exception system that is more centralised as the Minister approves an alternative solution. Evaluation Bodies as accepted under the Building Standard Law also need to keep a registry of the evaluation work that they undertake. Building Officials do not have a great deal of scope to assess alternative solutions.

BB summarised discussion and commented that they will continue to work on this issue where necessary.

OB added that in the discussion held at the last IRCC meeting on this issue is the European technical approval for products. This should also be looked at. **OB** also commented that Norway would look at the development of a national register if there was a desire.

Membership Charter

WB confirmed that this is the charter that was discussed at IRCC11 and that is currently on the web site

WG had 2 questions:-

1. Membership. There is only one type of membership at this stage. Could an associate membership be considered?
2. The need for co-ordination between IRCC and research organisations

Would request a membership change in Appendix A – National Institute of Land Infrastructure and Management (NILIM) instead of BRI. However, the new BRI would also like to join IRCC if possible at an observer status level.

JT made some comments that there are some participants of the IRCC, which do not meet the membership criteria. However, it was generally agreed that the members can actively seek membership from any body. **JT** has suggested that it may be possible for the new BRI to be involved on this basis.

BB questioned if we need to make reference to TG37

General group discussion on charter. Some editorial changes were agreed:

2nd para Add new sentence something like
“This work would include work with other international bodies having compatible interests with the IRCC, where necessary”

New sentence in meeting section Stating that a member can seek approval of the group for observers to attend meetings

Appendix A changes Include Spain:
Ministry of Public Works (Ministerio De Fomento)
Changes to UK title:
Dept of Transport, Local Govt and the Regions
Changes to BRI Japan:
National Institute for Land and Infrastructure Management (NILIM)

BM motioned that a permanent chair be appointed for a 2 year term.

JS nominated **BB** be appointed permanent chair. **OB** seconded.

JT asked if there were any objectors. None recorded. Group passed unanimously.

WB to amend charter to include provisions.

Action: WB

TG37 Relationship

JT opened discussion. IRCC/TG37 relationship and work programs were to include separate tasks; there is still a degree of overlap.

BB expectations coming out of the IRCC Edinburgh meeting would be that TG37 would look more take more of a research role and take some of our (IRCC) concepts and develop them further.

BB also commented on the CIB Thematic Network on Performance Based Building (PeBBu) and believes that this network will take it into a more broader field of performance. This is a different relationship that the relationship with TG37.

DB commented that the final report for TG37 is due in 2004.

JT commented that TG37 now have a case study, which they are considering to work on. Other issue they are looking at is the advancing of an agenda on what they perceived to be still existing gaps.

BM commented that we really need to be aiming at the policy issues where TG37 is related to the technical issues and hence, are really situated at a different level.

Website

- **JS** requested the link to be changed from the Ministry to the code page. See JS presentation for URL address
- **WG** request update to URL address

Action: WB

Funding Proposal for Research Centre

BM raised one last item – there is no real forum for building regulatory research forum. The group agreed that it would support such a centre being established.

JS would support such a concept.

DS added that a similar group is presently being established in the UK. Contact with PE would be an idea.

OB also thought it would be a good idea to establish a group and would be good to get together to consider how this can be progressed.

BB queried if the UN did any work in this area. Opportunities through the UN to explore such issues may also exist.

Some group discussion then took place.

BB wanted to know how this could be progressed. **BM** thought that he may be able to write a short discussion paper on the feasibility of the proposal for the group's consideration. BM to circulate to members.

DB also suggested he check the World Bank.

Agenda Item 12 – Next Meeting

Next meeting in *Madrid, Spain, 21-25 October 2002.*

Note: This is a joint meeting with CIB TG37

IRCC 21, 22, 23 (1/2 day)

CIB/IRCC 23 (1/2 day), 24, 25

JS also offered to arrange a site visit to the construction of the new airport. This is a significant innovative building in Spain. The group agreed that they would be interested.

IRCC13: COUNTRY UPDATE: JAPAN

March 26, 2002 (revised)

1. Measures regarding the approvals and certifications under the former Building Standard Law (BSL)

The approvals and certifications of new or innovative materials and construction methods under article 38 of the former BSL will expire in May. The Ministry of Land, Infrastructure and Transport (MLIT) continues to develop technical documents to extend the application coverage.

2. The partial amendment of BSL in order to introduce regulations to counter "sick building issues" (indoor chemical substance issues)

The bill of BSL amendment was brought to the Diet in March, it included two regulations for habitable rooms:

- 1) The prohibition of use of building materials that may emit chlorpyrifos (used as an anti-termite agent under the ground floor of wood houses, etc).
- 2) The restriction of use of building materials that may emit formaldehyde, and the requiring of installation of ventilation equipment, except in traditional wood construction houses that have lower air tightness.

(The bill also included amendment regarding zoning/planning regulations. See Reference 1.)

3. The partial amendment of the Act on Buildings Accessible and Usable for the Elderly and Physically Disabled

The bill to amend the Act on Buildings Accessible and Usable for the Elderly and Physically Disabled was also brought to the Diet in March. The bill included i) extension of building types subject to the standards, ii) mandatory requirements to comply with the standards for specific buildings, and iii) additional supportive measures for said buildings. (See Reference 2.)

4. Other topics

1) Study on WTC

A Japanese study-team, consisting of members from universities and research institutes began to study the damage-spread process and the restoration phases, in cooperation with New York University and other institutes in US.

2) Report of the Committee for Counter-measures against Fire in a Multi-tenant Building

The committee indicated 2 points:

- To strengthen measures for ensuring observance of the laws
- To study and review regulations for evacuation

MLIT started to review counter-measures in accordance with the report.

3) Revision of the Housing Performance Indication Standards to expand their coverage to existing houses (See Reference 3.)

(Reference 1)
Bill to partially amend the Building Standard Law

Objectives

This amendment is to take measures to introduce new town planning proposal system, to rationalize building shape control, to revise system for district planning, to introduce regulations regarding counter-measures against sick building issues, etc., in order to rationally and promptly control building and city planning, and thereby to improve the living environment and promote proper land utilization, etc.

Outline

1. Introduction of town planning proposal system.

In order to promote voluntary town planning by residents and to revitalize regions, land owners, boards of town planning, NPOs of town planning are allowed to propose city planning for an area of more than a certain size, with consent of more than two thirds of land owners, etc.

2. More options for total floor area ratio in land-use districts

More options are provided for allowable total floor area ratio, allowable building coverage ratio, shadow restrictions, etc., in order to properly solve various issues regarding town planning in each region.

3. Introduction of a system to promptly ease allowable total floor area ratio, etc.

1) To introduce a system to promptly ease the restrictions in the building confirmation procedure, by standardizing evaluation procedures of the system for integral design.

(1) Allowable total floor area is eased up to 1.5 times according to the ratio of residential buildings.

(2) Slant plane restrictions are not applied to buildings that achieve light provision equivalent to those required according to slant plane restrictions.

2) Procedures of the system for integral design and of the system for group approval are combined into one, in order to achieve smooth and prompt project development of more than one building.

4. Revision of system for district planning.

Through rationalization of the current system for district planning, the system is to be made simple and easy to apply, so that a single district planning can ease or tighten land-use restrictions, allowable total floor area ratio, etc. based on conditions specific to a district.

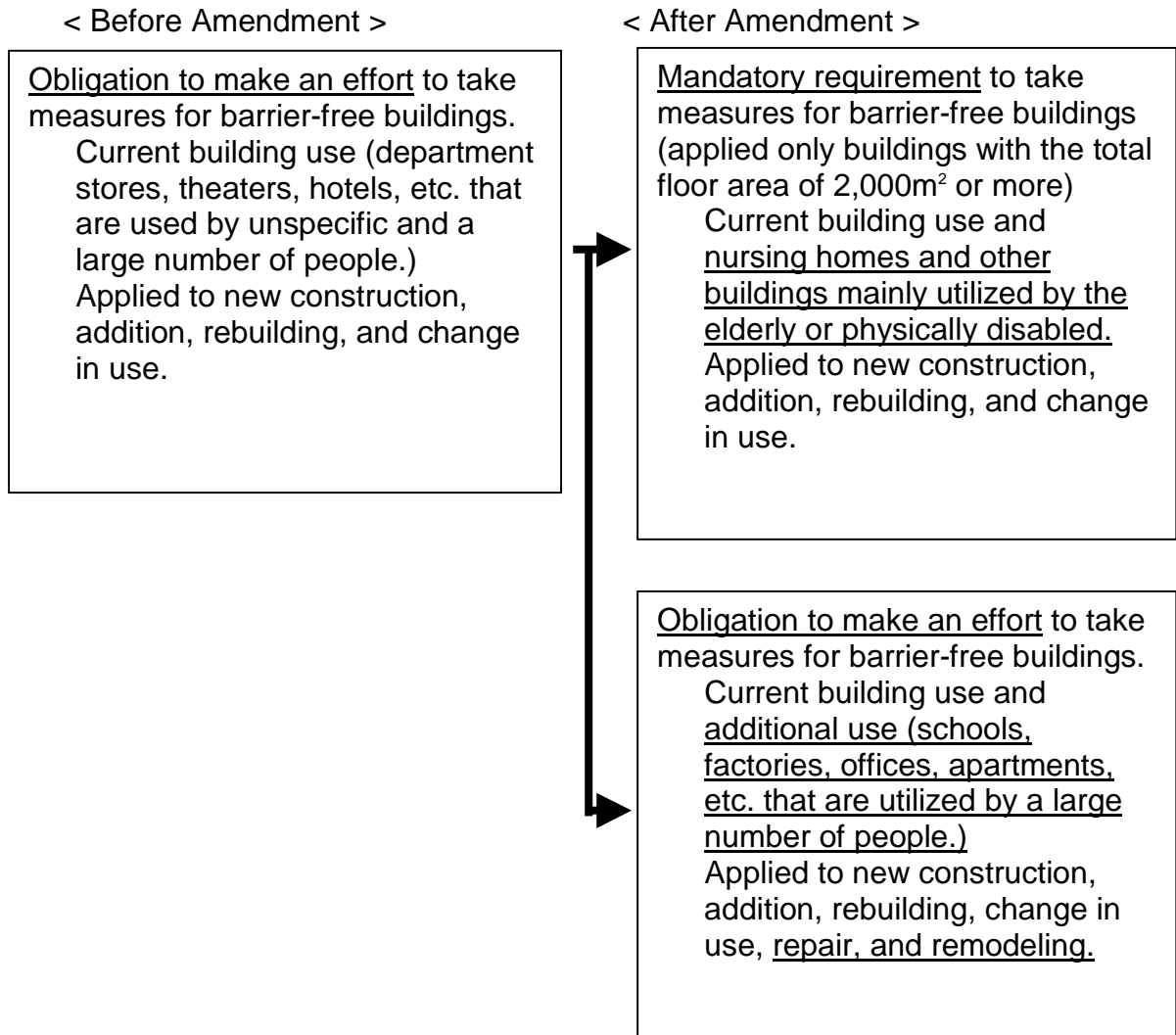
5. Introduction of regulations for counter-measures against sick building issues.

To introduce the following regulations for habitable rooms as counter-measures against sick building issues.

- 1) To prohibit use of building materials that may emit chlorpyrifos.
- 2) To restrict use of building materials that may emit formaldehyde, and to require installation of ventilation equipment, except traditional wood-construction houses that have lower air tightness.

(Reference 2)
**Bill to partially amend the Act on Buildings Accessible and Usable for
the Elderly and Physically Disabled**

1. Introduction of mandatory requirement to take measures for barrier-free buildings in relation to corridor, stairs, elevators, etc. and wider application of obligation to make an effort.



Basic standard for smooth utilization:

Standard to remove barriers against utilization by elderly people, etc., that is equivalent to the current basic standard. (e.g. 80cm wide entrance, 120cm wide corridor.)

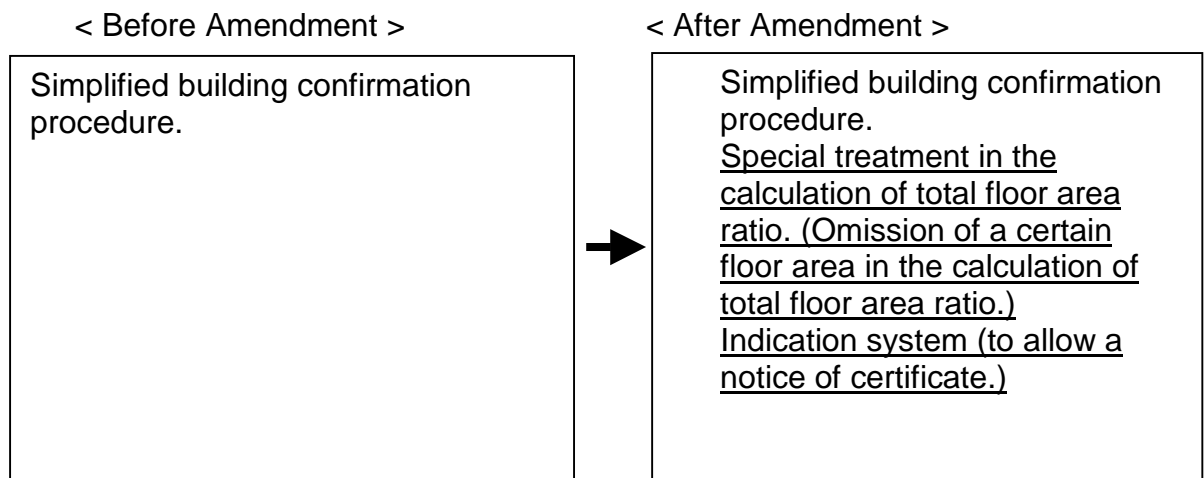
Recommendable standard to promote smooth utilization:

Standard to provide smooth utilization by elderly people, etc., that is equivalent to the current standard to promote such utilization. (e.g. 90cm wide entrance, 180cm wide corridor.)

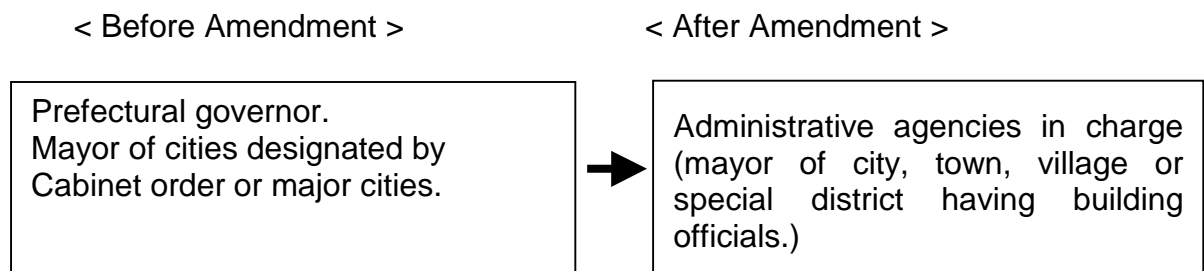
Repair: Repair of studded paving blocks, corridor finishes, etc.

Remodeling: Change in specifications of toilet and elevator, etc..

2. Wider supportive measures for designated buildings that are certified to take measures for barrier-free buildings (comply to recommendable standard to promote smooth utilization.)



3. Transfer of authority regarding the enforcement of this law.



(Reference) Other supportive measures

Additional special treatment for income tax, corporate tax (additional depreciation) and business tax.

Additional loans by Development Bank of Japan, and NTT-C-type loans (no interest loan.)

(Reference 3)

Revision of the Housing Performance Indication Standards to expand their coverage to existing houses

1. Background

- The current Housing Performance Indication Standards cover only newly-built houses.
- In Japan, the size of secondhand housing market is much smaller compared to many other countries (the number of sold secondhand houses is only about one tenth of the number of housing starts).
- Promoting utilization of existing housing stock can lead to improvement of housing conditions in Japan.

2. Purpose

- To promote distribution of secondhand houses through providing parties in the housing market with reliable information on quality of used houses
- To provide the residents with information on quality of their houses so that they can maintain their houses properly

3. Outline of the Draft Standards under Development

3-1 New standards for inspection of existing houses:

- To judge by appearances if there are signs of deterioration which call for detailed investigation or repair.
- The parts to be checked and criteria of judgement are to be stipulated.

3-2 Amendment of standards for new houses:

- Performance items for existing houses are to be selected from the ones for new houses.
- Evaluation standards are to be developed based on the standards for new houses.

3-3 Additional Information to be Indicated

- The history of the houses is to be stated by the applicants and indicated.

4. Schedule

March 2002: Development of 1st draft will be finished.

May 2002: The draft standards will be open to the public for comment.

June 2002: Authorization of the final Draft

July 2002: New standards will be issued as Minister's Notification.

Critical Dates for Members

Country	Dates
Canada	<ul style="list-style-type: none"> ◆ Sept 3/4 2003 is our Codes Commissions Executive committee ◆ Sept 28/29 is our Codes Commission meeting . This will be the meeting to make all final decision on our objective based code. Anticipate some intense work immediately after the meeting. <p>As a result for us, the further the meeting is from our Commission the better. Later in October or November would work fine and enable me to bring possibly our Chairman and a number of senior staff.</p>
Australia	<ul style="list-style-type: none"> ◆ Sept 15-18 is our ABCB conference. However, we will be very busy in the week before and after the conference <p>Late October or November would suit us.</p>
UK	
Norway	
New Zealand	
Japan	
Spain	
USA	