



Record of IRCC Meeting 10-12 November 2008 Madrid, Spain

Location: Ministry of Housing, Paseo de la Castellana 112, 28071 Madrid, Spain

Time: 0900 – 1800, Monday 10 November to Wednesday 12 November
(IRCC Meeting)
0900 – 1300 Thursday, 13 November, Heritage Building Workshop

Present

Brian Meacham	USA	(BM)	Chair
Javier Serra	MH, Spain	(JS)	Host
Mike Stannard	DBH, NZ	(MS)	Secretariat
Olav Berge	NOBTH, Norway	(OB)	
Rainer Mikulits	OIB, Austria	(RM)	
Bill Dodds	SBSA, Scotland	(BD)	
Denis Bergeron	NRC, Canada	(DB)	
Brian Ashe	ABCB, Australia	(BA)	
Wataru Gojo	NILIM, Japan	(WG)	
Hiroki Sunohara	MLIT, Japan	(HS)	
Jon Traw	USA	(JT)	

Guests

IJsbrand van Straalen	TNO, The Netherlands	(IvS)
Jose Luis Posada	MH, Spain	(JLP)

Apologies

Suzanne Townsend	DBH, NZ	(ST)
Cheng Zhijun	CABR, China	(CZ)
Rick Okawa	ICC, USA	(RO)
Mike Balch	ABCB, Australia	(MB)

Also apologies received from invited guests, Dick Bukouski and David Smith.

Agenda Item 1 Welcome, Opening Remarks

JS welcomed meeting participants to Spain and the Ministry and outlined details for the meeting. BM then welcomed all the participants and thanked JS for organizing the meeting and the hospitality extended.

All participants introduced themselves and outlined their involvement in IRCC and benefits derived from their participation.

Agenda Item 2 Apologies

Apologies were received as detailed above.

Agenda Item 3 Record/Actions from Wellington meeting

The circulated draft minutes of the last meeting in Wellington in April 2008 were agreed as a true and accurate record of the meeting and approved for posting on the website.

ID	Action	Action
1	Members were invited to support financially the development of the next edition of the IRCC document "Performance Based Building Regulation". Financial contributors would form the editorial group.	Agenda Item 5
2	Some members yet to contribute to the review of IRCC document by providing 250 words on each of the nine issues in 2c and 1000 words on Section 3, the story of the member organization – a simple description of why they are where they are.	Agenda Item 5
3	BM and RM to finalise the Fire Performance Workshop report	Complete
4	Provide any guidance, documentation to DB for use as protocol for adding new objective for the Canadian Code	All
5	Dick Bukowski to be invited to Madrid meeting particularly for emergency egress using lifts	Invited – apology received
6	Feedback invited on IRCC website	Agenda Item

Agenda Item 4 Country Updates

Australia

BA reported that, the Inter Governmental Agreement, IGA, review of the activities of the ABCB will report next February. Issues that may be addressed include Code coverage (plumbing, electrical and telecommunications), funding and regulation philosophy. There is a movement to provide the Building Code of Australia, BCA, free.

There is to be a National Construction Code, focusing on building and plumbing by 2010. Electrical and telecommunications could follow.

The principles and philosophy of building regulation are being considered.

BA also reported on the Sustainable Building SB08 conference and the IRCC and ABCB involvement. Existing buildings will have an important part to play. The ABCB held a workshop to consider how best to contribute to the national goal of reducing greenhouse gas emissions by 60% by 2050. Is an increased stringency of building regulations necessary or is it sufficient to rely on the emission trading scheme is being established? The report will be circulated to IRCC members shortly. (**Action Item 1**)

The ABCB is seeking the assistance of members on the following:

- Regulating the use of software. The ABCB have a protocol for the use of energy efficiency software and have a voluntary protocol for structural. Is it necessary to regulate for the use of software? Japan has a system for approving certain structural

software and this provides benefits to users but it is not the only way to demonstrate compliance. Providing a common basis for energy efficiency calculations may be appropriate in order to get a fair comparison with the precise values required. Regulating the use of other software could be difficult. An ASTM Standard exists for evaluating fire models. However this does not take into account the qualification of users. It was also suggested that most issues relate to incorrect input. ABCB would send out their protocols, Japan would share information on their approval system and JT would provide a link to the Californian energy efficiency requirements. **Action Item 2**

- Ionisation and photoelectric smoke alarms. The use of ionisation smoke alarms has been called into question. No countries had banned their use and NIST had reported that, although there were different response times between the two for smouldering or flaming fires, either one would provide adequate levels of safety. JT spoke of the need to replace smoke alarms every 10 years. There was a significant decrease in the number of fire deaths when smoke alarms became mandatory but statistics are climbing again. Post fire analyses are showing that older alarms are not always responding.

Austria

RM advised that the harmonisation of building regulation in Austria is progressing and the amended law and OIB guidelines are in place in four (Tirol, Vorarlberg, Burgenland and Vienna) of the nine provinces and the others will follow in 2009.

The EU Directive on the Energy Performance of Buildings (EPBD) has now been implemented in six of the provinces and the others will follow on 1 January 2009.

Austria has recently set up a system for the management of enquiries relating to the OIB guidelines. An expert committee has been established consisting of experts from each of the provinces plus some independent experts, including academics and research institute personnel. With 2500 communities who carry out building control functions in Austria, the provinces have a large pool expertise to draw from. The committee duties include the interpretation of OIB Guidelines, drafting of frequently asked questions, FAQs, and the amendment of OIB Guidelines. There are six subcommittees, one for each of the six guidelines. The committees will meet twice per month to answer questions submitted and develop FAQs for those of general interest. Resolution is by majority vote for each of the nine provinces.

The OIB website is to be renewed to make it more interactive and to provide a restricted area for the expert committee. Currently the website www.oib.or.at is in German with English to be provided next year. It contains the full text of the OIB Guidelines, explanatory documents to the Guidelines, the software tool for the calculation of energy coefficients for energy certificates, FAQs and illustrations.

Canada

DB spoke of the model Codes developed by the National Research Council, NRC. The National Building, Plumbing and Fire Codes were issued in 2005. There is a public review of proposed changes for the 2010 edition (refer www.nationalcodes.ca) It includes 600+ proposed changes including such issues as secondary suites, residential care, spatial separation, stairs, structural design, building envelope, radon, water pipe sizing, and leak detection. It is proposed to add new objectives to the Code for water-use efficiency and for energy efficiency in houses. A task group is developing a protocol on the process necessary and the criteria to be considered before adding any new objective. The task force is aiming to provide recommendations to the Commission in February 2009.

One of the branches of the NRC Codes and Evaluation is the Canadian Construction Materials Centre (CCMC). This provides opinions on the compliance of innovative products, evaluated against the 2005 National Building Code. The reports are done on a fee for service basis and involve from one to three years developing assessment criteria and testing the product against the Code objectives, functional statements and intents. Testing is undertaken by the manufacturer using accredited laboratories. Whilst the evaluations are not binding, they have gained a high degree of credibility and acceptance. The CCMC is not a certification body so surveillance tests of the product are not carried out. There are several hundred products currently on the register and approximately 12 new are added each year. The service has been going for 20 years and a business review is being undertaken.

An Indoor Air Initiative has been established at NRC. It is a substantial research project supporting the Federal Government Clean Air Agenda. Improved energy efficiency requirements mean that houses are better sealed to the detriment of indoor air environment. A test house has been constructed to look at the various pollutants and evaluate ventilation technologies. There is to be a field study of 100 families with asthmatic children. A national committee in indoor air quality has been established.

Further research has been undertaken on fire performance of houses. It is looking at the impact of innovative products and systems such as engineered wood floor systems on the safety of occupants. A full-scale test house that represents a typical two-storey detached single-family dwelling unit with a basement was used. Tests have been completed and a report is to be published end of 2008. DB to send to members when available. **Action Item 4**

The NRC-IFCI (Institute for Fuel Cell Innovation) and the NRC-IRC (Institute for Research in Construction) are jointly considering fuel cell applications for buildings and the barriers to their integration in buildings. A workshop is to be held in December 2008 in Vancouver with the fuel cell and hydrogen industry, utilities, the building industry, Federal, provincial, territorial and municipal governments and Codes and standards organizations to identify gaps, barriers and opportunities and make recommendations.

Japan

HS provided update on activities in Japan. The Aneha scandal with falsified structural calculations that first became known in November 2005 has prompted amendments to the Building Standard Law, BSL, and the Kenchikusi Law. About 100 buildings had insufficient structural capacity, building owners have not been compensated and some builders are bankrupt.

The BSL now requires a third party review of the structural calculations for larger buildings. A guideline has been developed for the building control process, confirmation (consenting) and inspections. Once the new requirements took effect, there was an initial substantial decrease in the number of housing starts. This was probably mainly due to designers and examiners being unfamiliar with the new requirements. There has been a considerable effort to correct this poor understanding by actions at national level (Q&A on the websites, telephone consultation center, responses to complaints on the websites, leaflets) and at the local level (seminars, inquiry counters, support centers that advise on the preparation of documents for structural calculations). This has resulted in building starts recovering. The single most important activity to assist has been the provision of information.

Two new classes of Kenchikusi have been created in an amendment to the Kenchikushi Law: Structural design 1st Class Kenchikusi and Equipment design 1st Class Kenchikusi. People holding these new classes will be required to check conformity for complex buildings from May 2009. A Kenchikusi qualifies by having a four year degree, at least two years

experience followed by an exam. A 1st Class Kenchikusi needs to have an additional five years experience and successfully complete a training course.

Elevators and amusement rides are regulated under Building Standard Law in Japan. A fatal accident occurred to a high school student in 2006 who was getting out of the car when it moved upwards with both doors open. As a result there has been a special inspection of elevators. In excess of 6000 elevator inspections have been undertaken and 2% have been unsatisfactory. A girl was killed on roller coaster and special inspections of more than 2000 installations showed about 4% were unsatisfactory. A sub-committee on countermeasures for accidents and disasters has been meeting regularly and making recommendations. MLIT have amended the BSL enforcement order to require the mandatory installation of safety devices in elevators to prevent cages from moving while the doors are open and have strengthened the inspection and reporting processes.

Other countries have experienced accidents such as masonry falling. The UK has a confidential reporting system, CROSS, to try and raise issues early. It was suggested that the monitoring of buildings to prevent future failures or accidents would be a good topic for discussion in Scotland. **Action Item 5**

Spain

JLP and JS advised of the main developments since the approval of the new Technical Building Code in March 2006.

- **Accessibility**

The Building Act (1999) established the basic requirements to be applied in the design, construction, maintenance and use of buildings. Accessibility was not included. A new Act on “Equal Opportunities, Non discrimination and Universal Accessibility for disabled people” (2003) commits the Central Government to approve a nationwide basic regulation on minimum requirements of accessibility in buildings. In April 2007 a Royal Decree approved the basic conditions of accessibility in the Code, including:

 - Access to buildings
 - Information and signs
 - Movement in the same level and between levels
 - Safety in use
 - Safety for disabled people in case of fire

This is to take effect at the beginning of 2010. All buildings must be made accessible by 2018 – same requirements for all buildings – new and existing.
- **Protection against noise**

Approval of the Basic Document “Protection against noise” occurred in October 2007. This was later than the original Technical Code approval because of the amount of work needed for numerous in-situ and laboratory tests. A “Catalogue of Building Elements” gives the necessary guidance and support. This catalogue has been developed by the “Torroja Institute” as a non regulatory tool to give assistance in choosing building materials, elements and systems.
- **Accredited non-regulatory documents**

From June 2008 the Code clarifies the legal status of supporting documents with a register covering:

 - Accredited (non regulatory) documents
 - Quality labels (voluntary)
 - Quality certifications (voluntary)
 - Bodies authorised by the public administrations
 - Bodies accredited by the public administrations

The core of Code, Part 1, is 17 pages and for each Code provision there are approved documents. These basic documents (11 in total), Part 2, are regulatory instruments.

The performance nature of the Code also allows engineering analysis. For this there is now a section on guidance, tools, etc – “recognized documents”

- Code revisions

As a result of the experience in implementing the new Code the first revision to it were approved in October 2007. After discussion with stakeholders, a new set of modifications and improvements will be approved in the short term

- Publication of an interactive CD

Members were given a presentation on and a copy of a very user friendly CD that covers all code, clauses, providing examples of calculations, details, etc. It cost Euro 300,000 to produce and 10 months of work by numerous people. It is an especially valuable tool for engineers and architects new to the profession.

New Zealand

MS provided brief update on activities in New Zealand. The Building Quality Branch of the Department has recently restructured. Additional management positions including a Chief Engineer and Chief Architect have been created. This will allow a more strategic focus.

A new government has just been elected which is emphasising the streamlining of the building control system and cutting red tape. A review of the planning law, the Resource Management Act, has been signalled.

The higher thermal insulation requirements for New Zealand houses have now come into effect throughout the country. This has been progressively implemented over the past 12 months with the new requirements coming into effect in the north of the North Island on 30 September 2008.

Regulations have now passed to exempt back country huts from certain Building Code requirements that are inappropriate for their intended use, including ramps for people with disabilities, smoke alarms, drinking water and emergency lighting. These provide basic facilities for users of the conservation estate, and are a traditional part of the New Zealand outdoors. The Director General of Conservation will decide on a case by case basis which huts are in genuinely remote locations and therefore qualify for the exemptions. A Compliance Document is currently out for public consultation.

The draft Compliance Document for Simple Homes, signalled at the Wellington meeting, has been out for public consultation. It aims to make it easier to build smaller simple stand-alone houses by addressing all building code requirements for a single building type. It focuses on simplicity, size and standardisation to encourage more affordable homes. Many comments have been received which will result in a better and more robust document. Final publication has been delayed until the New Year as a design competition is being run based on the document and useful ideas will be incorporated. To date there has been an extremely encouraging response to the competition with more than 300 entries. It is intended that the winning design will be built.

The New Zealand Fire Service have now completed the investigation into the Tamahere cool store fire that occurred in April, report available www.fire.org.nz. An explosion occurred and killed one of the fire fighters and injured others. The building was unsprinklered, with sandwich panel construction originally designed for fruit storage and then converted to storing cheese with a significantly higher fire load. The refrigerant gas, propane, leaked and ignited causing the explosion. This has highlighted the need for better identification and awareness of hazardous substances; better warning signs, adding smell to the gas, and ensuring that the Fire Service is aware that hazardous substances are on site. Change of use issues also need to be reviewed, both changing the refrigerant from non inflammable CFCs to inflammable propane, and the changed fire load of product stored.

A Department wide project is considering ways that can assist in promoting quality urban design in New Zealand for intensified living. This applies particularly in New Zealand's biggest city, Auckland, but also applies in other cities. An industry task force has been set up following a Ministerial forum with industry. One of the outputs is likely to be a Compliance Document or guidance for the construction of medium density housing. Medium density developments featured strongly in the weathertightness problems experienced by New Zealand. This and other problems such as access and noise have given medium density development a poor name. The new guidance would aim to provide robust solutions to improve confidence in this type of development.

Norway

OB updated the meeting on activities in Norway, particularly focusing on living with risk.

- Alesund accident – man-made disaster
A large block of flats collapsed from a land slide. The toe of the embankment was excavated to build the in-situ concrete block and the slope failed, with the rock slide collapsing on the building. The six storeys were reduced to four, five people were killed and 500 residents had to be evacuated for more than a week. Two adjacent blocks remain uninhabitable. The whole building moved 6 metres, landing on a gas tank which caught fire and took one week to extinguish. An investigation is underway to consider the geological conditions leading up to the disaster, the building structure, the planning and control process. It will not consider liability issues. The investigation will make recommendations on changes to the planning and building act, regulations and guidelines and the application and approval systems, report on societal safety undertaking a risk and vulnerability analysis, and consider contingencies for the handling of gas.
Man-made natural disasters are not covered in Building Law. Geological investigations are also not well covered. This will result in many changes to the Building Act and Code.
- Major rock falls anticipated
There is a high risk of major rock falls into the fjord area of Norway, some falls likely to contain up to 70 million cubic metres. This will cause tsunamis up to 70m high and flood communities. Two dozen communities will be devastated in the next 100 years. Building activity will not stop in the area and the focus is on human safety rather than material safety. There is continuous surveillance of the slides (20cm movement per year) with one week notice of failure anticipated. This will enable sufficient time for evacuation.
- Compliance with the Building Code
The building owner is only responsible for hiring competent professionals. Liability is with the builders and designers. There has been concern that some consulting engineers, particularly the larger ones, are not complying with the Building Code. This seems to be as a result of aggressive expansion, with larger firms taking over smaller ones to increase revenue and not applying the quality systems to the firms taken over. These large firms, driven by growth, are taking on jobs that don't pay for level of work required. Major surveillance of five of the largest firms revealed that the quality systems were not working throughout all the firms. Issues include compliance with regulations on:
 - avoiding the spread of fire between buildings to ensure the safety of people and that fire shall not cause unreasonably large economical or societal losses or injuries
 - ensuring that rescue personnel and fire fighters and their equipment have access
 - materials and surfaces do not add to the spread of fire. There have been schools built with combustible facades.
- New planning and building act before parliament

Major issue is building control, moving away from reliance on firm quality systems to third party control. Industry has been opposed as it will cost more. Other changes include:

- Universal access and design
 - Egress for the disabled
 - Energy requirements (European Product Directive). The concept of low energy/passive house design has not been defined and design in Norway is not comparable with other Nordic countries. There are 28 ways to calculate requirements in Europe.
- How to make the code clearer without the need for mediation?
When the performance-based Code was introduced 10-12 years ago, the old prescriptive codes were turned into guidelines. They weren't "approved basic document" such as Spain and other jurisdictions and their legal basis is now being questioned. Local authorities rely on them for approvals, so the legal basis is needed. The legal status of guidelines and reference to standards are big issues for the Norwegian Code.
Questions are being posed on how to set minimum requirement without suitable metrics and quantification (energy, universal design, etc). How can evidence-based criteria be developed? Level of comfort difficult to quantify, safety issues are easier although climate change may affect the reliability of any statistical risk analysis. Discussion occurred on the limits to a performance approach, particularly when considering issues such as minimum ramp slope, stair riser/tread and room height.

Scotland

BD provided the update for Scotland.

- The Building Standards Division (BSD) has now reintegrated into core government as part of the wider Directorate for the Built Environment.
 - The existing SBSA website will migrate to the main Scottish Government website. Essential services such as the Certification register will be maintained. Q&As providing non-binding views on technical interpretations are provided on the website.
 - Building construction considerably down – target was 35000 but housing starts down to 12000
 - Consultation has occurred on several technical revisions of the standards. The intention is to introduce these revised building standards in 2010. They include:
 - 0,3,4 Sustainability issues – Flooding, ground contamination, biomass boilers, security
 - 2 Fire –means of escape
 - 5 Noise – 20 years since last revision
 - 6 Energy
- For the future
- Compliance
 - Structure – disproportionate collapse, Eurocodes
- Unintended consequences – better energy efficiency (tighter buildings) are resulting in an increase in mold and related issues (indoor air quality not as good as before)
 - It is now intended to introduce the removal of Crown immunity in May 2009.
 - A proposed "zero fee" incentive providing a 100% discounted fee for a building warrant application, where the proposed new building meets or exceeds a higher level of energy conservation than required, is being re-evaluated because of the current economic climate.
 - The Energy Performance of Buildings (Scotland) come into force on 4 January 2009. This completes Scotland's implementation of the European directive (EPBD) and requires the production of energy performance certificates for existing buildings for sale and rent and also the display of certificates in public buildings.

USA

JT and BM provided the update for the US.

- Status of model code adoption in USA
The ICC model code has now been adopted by California, the last State to do so. It is still prescriptively based but with equivalence provisions. There is little effort in advocating for performance-based codes. Major code development activities include considering the NIST WTC recommendations, mandatory sprinklers in one and two family dwellings, and a new approach for fire compartmentation with limits on heights and areas that consider the ability on the fire service to respond (5 storey, <75 feet).
- Greening of regulation
 - Voluntary (LEED (barrier \$40k-50k), USGBC, ICC/NAHB), or
 - Mandatory (Local legislation, 30% reduction in energy, encouraging green building at local level)
- Wildland fire / urban interface issues
- There have been 27 fires in California which has sometimes overwhelmed the capacity of brigades. Wildland fires are different to structural fires with fast rise in temperature but for short duration. The embers precede the fire front. Most houses burn inside out from embers getting through ventilation grills and eaves, or from embers on timber decks or combustible sidings. Items being regulated include open space around structures, roofs, exterior walls, wall opening, eaves and vents.
- Innovative materials acceptance
Where Standards don't exist, the ICC have been holding public hearings on acceptance criteria (www.icc-es.org)
- WTC outcomes – code updates
There are a large number of requirements for tall buildings (<420ft high) now incorporated in the model code (3rd exit way, use of elevators for occupant evacuation in fires, harden enclosures, stairways and lift shafts against explosion, photo-luminescent signage). A risk assessment (Department of Homeland security methodology, or Department of Defence - includes wind, seismic, deliberate events, fire, etc) is now required or alternatively the ICC performance-based code can be used. The NIST investigation determined that the failure of the 45 storey WTC 7 was primarily as a result of fire and not due to an extreme event. The transfer girder of building 7 had a higher consequence of failure.

The Netherlands

IvS provided the meeting with an update on activities in the Netherlands.

- Housing and Building Act and Building Decree in 1991
This saw the introduction of performance-based regulations on a national basis. The first revision in 2003 tabulated performance requirements and calculation and testing methods. The next revision is projected for 2010 (draft published in July 2008). It foresees a reduction in the number of functional uses of a building, a reduction in the number of requirements, performance requirements for all functional requirements, and a further tightening of energy performance.
- Permit of use from local authority
Building owners were required to get a permit of use from the local authority, mainly to review fire safety based on local fire brigade regulations. From November 2008, only 20% of buildings will require such a permit.
- Review of Building and Construction Sector
A report on a fundamental government review of the building and construction sector recommended in May 2008 the following:
 - local authorities should no longer examine a building plan. Alternatives routes to prove that building plans fulfill the requirements to be piloted.
 - limit the differences between local authorities as much as possible

- guarantee the feasibility of new legislation
- promote simplified zoning
- new methods of collaboration between public and private bodies to develop new regions
- further professionalize of the sector.
- **Enforcement of Regulations**
The investigation found that enforcement of building regulations, the responsibility of local and provincial authorities, needs improvement. They recommend that regional offices with expertise in all relevant fields be set up to support the more than 500 authorities.
- **Fire Safety**
As a result of the fire in the detention centre at Schiphol-East, during which eleven foreigners lost their lives in 2005, the Government started a National Action Programme. Cabinet supports the use of risk analyses, formulation of fire scenarios, the quantification of targets to be met and lessons to be learned from fires. The vision will be presented to the Parliament in January 2009, and will likely start with high rise buildings. . This is in line with the IRCC-Vienna workshop on fire safety last year.
- **Energy reduction**
Industry and the Government have agreed an energy saving target for new buildings of 25% for January 2011, 50% for 2015 and energy neutral for 2020. A similar agreement has been signed for existing buildings in October 2008. The main target is a saving of 24 PJ during the period 2008-2020, which means a reduction of approximately 20%.
- **Sustainability**
By 2011 long term targets are to be developed for water and climate adaptation, sustainable energy, bio-fuels and development of prosperity, CO2 storage, bio diversity, food, and sustainable building. During the period 2008-2011 the Government wants to harmonize existing methods. The Dutch Green Building Council and public authorities will be involved.
- **Eurocodes**
The Eurocodes will be implemented in the Dutch building regulations from 1 January 2010. Currently the National Determined Parameters and Non Conflicting Complementary Items for 25 Eurocodes related to building structures are published, while the National Annex for bridges is under preparation.

Agenda Item 5 – Review of IRCC Document “Performance-Based Building Regulation”

In a discussion facilitated by BM on the draft document that has been developed, the meeting agreed:

- The document basically reflects the outline as described by Paul Stollard and agreed by IRCC in Vienna – should “stop work” on document, fix current gaps, and look to future documents to advance concepts
- the section on setting up the document in chapter 1 (introduction) should link to the 1998 document
- the document should include a table of contents and executive summary
- Chap 1 should discuss better “critical issues” with performance regulations – what should be regulated in performance system, what not, and what challenges others might face (some of this also in beginning of Ch 2)

- Chap 2 country specific material could go to appendices for readability – keep only general and comparative information in body of report
 - Need to include information on European system and essential requirements and commonality to reduce duplication – one page – BD will develop summary for European countries
- Compare essential requirements with objectives in other countries – e.g., safety in use, fire, etc – reflect by different approaches – perhaps set in matrix format
- Definitions – should remain to help the reader – issue again is readability (level of detail) - maybe include in appendices
- Chap 3 – keep as is
- Chap 4 can be revised to reflect issues of concern to be addressed going forward – becomes almost IRCC strategy so both IRCC and others can see direction – value of IRCC. Focus on outlining issues, not on how work will be undertaken or level of effort required – keep at high level
- Need to get feedback by end of Dec
 - Comments on total document by IRCC members
 - Updates-revisions to country-specific material
- Updated draft with new format, new input from countries, and related revisions – to Editorial committee and IRCC by Jan 31
 - Includes new material from new countries and revised text (Ch 2 and 3)
 - Includes revised focus of Ch 1, 2 and 4
 - Includes introduction, executive summary, TOC, appendices, etc
- Comments from IRCC on revised document by Feb 28 (**Action 6**)
- “Final” document to Editorial advisory committee by Mar 31 for final acceptance
- Final “publication” (electronic document) for May IRCC meeting
 - Need to have at least an electronic (pdf) version for posting when we “launch” in May 09
 - Important to have a hard-copy version for promotion and political impact – quotes on timing and publication from interested countries by Dec 31 (including text format, restrictions, copyright issues, etc).
 - Each Member also will have full rights to publish hardcopy versions and electronic versions in local languages and such (non-exclusive, not for sale – used as Members see fit)
- Strategy for “missing” countries – need to have by Dec 31 or drop from document
 - China (BA to help)
 - England and Wales (BD to help)
 - Norway (OB to provide)
- Title: Performance-Based Building Regulatory Systems: Principles and Experiences (working title)

Agenda Item 6 IRCC Interaction with other groups

The question of whether IRCC should have formal affiliations with other groups such as UNEP and SBCI was discussed. Discussion confirmed previous agreements (e.g. Gold Coast meeting September 2005) that the IRCC should be primarily to serve the interests of members and therefore any interaction with other groups should be on an ad-hoc basis. .

Agenda Item 7 - Website

There was a vote of thanks to the ABCB for hosting the IRCC website for the last 10 years. This has been much appreciated by members. The issue of making the website easy to keep up to date was discussed. Website development is now much easier than previously. It was felt that improved ease of use and responsiveness could be achieved outside of government agencies who have much greater security issues and procedures that need to be followed. DB offered NRC support to set up a new domain website where members and secretariat could upload new documents more easily. The meeting agreed to this offer. **(Action 7)**

Agenda Item 8/9 - Future IRCC workshops, Parking Lot

The reports on the Wellington carbon workshop and the Madrid heritage buildings workshop are to be finalized. **(Action 8)**

The next meeting in Scotland in May 2009 is to overlap with the CEBC meeting and a joint workshop on “Performance regulations and issues for enforcement” is being organized.

The following meeting in Canada in September 2009 will overlap with the WFTAO meeting. A Joint IRCC-WFTAO Workshop is planned on Product Evaluation in a Performance based Regulatory Framework: Presentations from both IRCC (morning) and WFTAO (afternoon).

Other suggestions included:

- Eurocodes
- Harmonising European Building Regulations
- Product Acceptance (European technical approval system, US innovative products)
- Egress by lifts (re-circulate RB paper)
- Affordability issue – better regulation. Need to better link issues such as energy cost / zero carbon / universal demand, etc.

Other ideas previously suggested include: existing buildings, beyond heritage; climate change; regulation versus standards; calculation software; and how we regulate.

Agenda Item 10 - New members

Sweden’s application for membership was discussed. They attended the Wellington meeting as a guest and have confirmed participation for Scotland meeting. Their application was approved subject to receipt of the supporting information per the IRCC charter requirements. MS is to confirm this with Sweden. **(Action 9)**

There has not yet been an application for membership from the Netherlands.

Agenda Item 11 - Correspondence

Nil

Agenda Item 12 – General Business

Nil

Agenda Item 13 - Future meetings

- Scotland (Edinburgh) 9-15 May 2009 (part jointly with CEBC. Three day IRCC meeting to include Friday 15 May. Joint IRCC/CABR conference on Tuesday 12 May)
- Canada (Canmore) 28 September to 2 October 2009 (part jointly with WFTAO)
- Japan April/May 2010
- USA October 2010

Actions from IRCC Madrid Meeting

ID	Action	Action By
1	Circulate the report on the ABCB workshop on carbon emissions when available.	BA
2	ABCB would send out their protocols on the use of software, Japan would share information on their approval system and JT would provide a link to the Californian energy efficiency requirements.	BA, WG, JT
3	When available DB to send to members the research report on fire performance of houses using engineered wood floor systems.	DB
4	Other countries have experienced accidents such as masonry falling. The UK has a confidential reporting system, CROSS, to try and raise issues early. Monitoring of buildings to prevent future failures or accidents to be a topic for discussion in Scotland.	BD
5	Provide feedback on draft IRCC guideline document	All
6	DB to work with Chair and secretariat to provide new IRCC web domain.	DB, MS
7	Finalise reports on Carbon workshop and heritage buildings workshop	MS, JS
8	MS to write to Sweden accepting their membership subject to their providing supporting information	MS