

CCBFC/PTCBS

Joint Task Group on the Model Codes Review and Development Process

Report of the Third Meeting
8, 9 December 1997
Montréal, Québec

Members present:

Chair: Bruce Clemmensen

Ann Borooah

Mike Dwyer

Chris Fillingham

Serge Goulet

Tom Makey

Rick McCullough

Dick Miller

Fred Nicholson

Ross Rettie

Jack Robertson

Ted Ross

Chris Tye

IRC Staff:

John Berndt

Richard Desserud

Visitors:

Laurent Ricard- City of Montréal

Antoine Tabet- Ordre des Ingénieurs du
Québec

Christian Leblanc - Ordre des
technologues
professionnels du
Québec

Jean-Yves Marois - Ordre des
technologues
professionnels du

Laurent G. Jetté - Ordre des Architectes
du Québec,

REPORT OF THE 2nd MEETING

The report of the second meeting was approved with some amendments. (The corrected version is now posted on the Task Group Web Site in both French and English).

PRESENTATIONS BY VISITORS

Two presentations were made to the Task Group

City of Montreal- Laurent Ricard (The full text of the presentation is attached as Appendix A)

Antoine Tabet on behalf of the Ordre des Ingénieurs du Québec (The full text of the presentation is attached as Appendix B)

Comments and recommendations made in these presentations will be discussed fully at the next meeting of the Task Group.

COMMUNIQUÉ

It was reported that to distribute the Communiqué under joint CCBFC/PTCBS letterhead has proven to be problematic. It was agreed, therefore, that it will be mailed out under CCBFC letterhead.

CODE DEVELOPMENT AND REVIEW COMPARISON TABLES

The Task Group reviewed comparison tables describing the differences among various code development systems used by the provinces, territories and CCBFC for building, fire and plumbing codes.

It was agreed to add processes used in Montreal and Vancouver since these were governed by their own charter and need not follow provincial codes. It was also agreed to add information on the ability/policy of provinces and territories to adopt interim revisions during the code cycle, whether the fire codes retrofit requirements, and whether there was formal recognition of CCMC.

The tables were completed to the extent possible, however attempts will be made to fill in the unknowns before the next meeting.

The semi-completed Tables are shown in Appendix C

POSSIBLE OPTIONS AND OPPORTUNITIES

The Task Group discussed how to tackle the issue of identifying and evaluating possible models and options for a new code development system.

A paper prepared by Chris Tye (included in Appendix D) formed the starting point for the discussion. The following points represent ideas and concepts that might warrant future development. They are not recommendations, and none are endorsed in any way.

- As an element of the development process, provinces and territories could act as the point of entry to the system. This could help to eliminate the perception that the process is “top-down,” and reinforce the sense of “ownership” by provinces and Territories.
- P/T could act as a mailbox for changes to “core model codes” and forward these directly to the national system. Regionally specific changes could be handled locally and not be forwarded.

- As an option, where possible, the P/T could review the proposal technically and economically and forward it to the national system with recommendation for acceptance, rejection or modification.
- There will be a need for stakeholders to be part of and be comfortable with the review that takes place at the national level. There is a belief that some provincial/territorial politicians would prefer to refer code technical issues to a third party, provided they are confident that the system meets their needs with respect to technical soundness, accountability, economic impact analysis, stakeholder buy-in and decision-making. How the system deals with controversial issues will be of particular interest to stakeholders.
- Provinces and territories need to be part of the final decision-making process. The Australian Building Codes Committee system which places the regulatory authorities in control, was touted as a possible model. Involving the PTCBS, or a restructured PTCBS, is also a possibility.
- There could be benefit in considering CSA's system which uses regulatory committees as part of the Electrical and Gas Code committees and requires all changes to be approved by those committees in addition to the technical groups.
- The national process could deal only with agreed-upon "core codes," which should be rarely changed. However, there could be provision for adopting authorities to make changes and additions. For example in the Australian Building Code, Australian States include changes and additions to the core code in a set of appendixes.
- There could be a more continuous and coordinated public review and updating process as opposed to one or two large and intimidating public consultation packages. Significant changes have been rushed in the past due to time pressures introduced by the code cycle. Smaller packages would likely improve the level and quality of review. However, advantages of continuous review have to be balanced against the costs of change. Timing of adoption of the results of such a continuous process, however, might still have to be in accordance with a time cycle, as decided by an adopting authority.
- The national system would likely not deal with "administrative," political or policy-type issues (e.g. degree of accessibility). A separate process to deal with such issues on a national basis, may be desirable.
- Cost sharing needs further exploration.
- The system needs to ensure opportunity for full participation in both official languages.
- The system needs to ensure compatibility with objective-based codes (i.e. the emphasis on identifying acceptable solutions).

It was agreed that IRC would draft up a few "Strawman" development models for the next meeting.

TIMING AND SCHEDULE

A meeting of the Deputy Ministers responsible for building regulations is proposed for November 1998. The recommendations of this Task Group will be one of two main agenda topics (the other is Objective-Based Codes). Since this Task Group has scheduled its last meeting for September, getting CCBFC and PTCBS buy-in for the recommendations prior to the DM meeting is problematic.

PTCBS next meeting is May 1998. The one following will be immediately before the DM meeting.

The next CCBFC Meeting is in March, 1998.

A possibility could be a joint CCBFC/PTCBS meeting slightly before the DM meeting. The PTCBS and CCBFC will be asked to consider this.

The notion of also including the DMs responsible for the fire services was viewed as not desirable because it might cause loss of focus and lead to the agenda being expanded.

The issue of timing will be further discussed at the next Task Group meeting.

FUTURE MEETINGS

The next meeting is scheduled for February 1 and 2 in Toronto. Future locations are detailed in the Communiqué. If possible meetings are to be on Sunday and Monday and will normally end at 3 p.m. the second day.

Appendix A

City of Montreal

Permits and Inspections Service

303 Notre-Dame East
Montreal, H2Y 3Y8

COMMENTS BY THE PERMITS AND INSPECTIONS SERVICE

SUBMITTED TO THE CCBFC TASK GROUP ON
THE DEVELOPMENT AND REVIEW PROCESS FOR
THE BUILDING AND FIRE CODES

December 8, 1997

Comments by the Permits and Inspections Service
SUBMITTED TO THE CCBFC TASK GROUP ON
THE DEVELOPMENT AND REVIEW PROCESS FOR
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1 - Introduction

It was only a few years ago that the City of Montreal adopted the National Building Code (January 1, 1994) and the Fire Code (June 27, 1994) as the basis for its building construction and safety by-laws. More recently still (November 25, 1996), it also adopted the National Plumbing Code as the basis for its by-laws. The reasons why it had different regulations are based on a number of factors, including the special nature of its architectural heritage, its internal expertise, and the lack of other regulatory and standards organizations at the time they were first passed.

In view of the emergence of nationally recognized regulatory and standards authorities, the need to adjust its building and fire prevention regulations to the new products and standards, and the desire to facilitate the design and co-ordination work of professionals involved in construction, the City of Montreal decided to change its by-laws to adopt the national standards as far as possible.

The Permits and Inspections Service of the City of Montreal is the main representative for recommendations to adopt or amend the building by-laws (1990 NBC, as amended by by-law B-1) and the plumbing by-laws (NPC 1990, as amended by by-law P-4.1), whereas the Fire Prevention Service recommends adoption or amendments to the fire prevention by-laws (NFC 1990, as amended by by-law P-5.1). Those two services agree on the content of the amendments they plan to propose to the municipal government.

2 - Adaptations required on both sides

Adoption by the City of Montreal of the National Building, Plumbing and Fire Codes as regulatory basis required major changes in attitudes and reconsideration of previously enforced construction methods and safety and health requirements. Nevertheless, **certain peculiarities of the Montreal area are decisive factors**, and the building and fire safety standards adopted by the City must continue to recognize that fact. The special characteristics of the Montreal area are the following:

- the territory is nearly all built up already (more than 90 per cent of the permits issued are for alterations), and almost all of it was built to comply with a single specific by-law, by-law 1900;
- it is a high-density area, built up on relatively small lots; this dictates special requirements to prevent the spread of fire, easing relaxation of some requirements as to the optimum use of space;
- it has heritage characteristics whose value must be recognized and that must be constantly promoted;
- a very large proportion of the buildings are relatively low (not over three storeys) and are built of combustible materials;
- there are well equipped firemen who are remarkably available and effective in the area.

3 - Observations concerning the adoption of the 1990 NBC

The content of the NBC (1990 edition with its first four amendments), even with amendments as adopted by the Government of Quebec (Order 1440-93), required adjustments to the Montreal situation as we have just outlined it. Here are the most important changes made to the Code:

- introduction of a Part 10 (existing buildings) to allow for alterations to existing buildings and bringing very tall buildings up to the standards;
- introduction of a number of additional concerns:
 - fire safety in buildings over 18 m high (sprinklers)
 - masonry walls at lot boundaries
 - sloping roofs on public roads
 - storage of household waste
 - barrier-free design
 - flood-risk areas
 - compulsory heating systems
 - natural lighting and sanitation standards in housing units and rooming houses
 - garage ramp slopes
- relaxation of some requirements:
 - combustible exposed elements
 - spiral staircases permitted inside low-risk premises
 - patio doors permitted as exits in certain cases
 - direction of door opening in low-occupancy premises
 - construction of outbuildings and shacks

If it had not been for its private charter (provincial law) which grants it special powers in relation to other Quebec municipalities, such as the relaxation of certain regulatory requirements, the City of Montreal would have had difficulty adopting the 1990 NBC (as amended by provincial Order 1440-93).

4 - Comments relating to the participation by the City of Montreal in the provincial building code committee (with a view to adopting the 1995 NBC)

In the spring of 1996, the City of Montreal was invited to participate in a number of task group sessions of a provincial building code committee formed with a view to the province's adopting the 1995 NBC. This task group, set up by the Régie du bâtiment du Québec, brought together the main players (21 organizations were represented) responsible for administering building codes in Quebec.

The exercise showed that, despite the enormous amount of work done by the various committees tasked with drafting the 1995 NBC, much greater adjustments than expected at the outset would have to be made to allow adequately for the concerns of those who must administer the Codes. These concerns are not merely technical. They are also political, economic, social and territorial (and speaking of territorial peculiarities, we must bear in mind the tremendous difference in means and concerns between municipalities of different sizes). The authorities that must impose standards on their citizens or organizations obviously do not have the same concerns or interests as the industry that is actually called upon to develop them.

5 - Comments on the questions submitted by the task group

Below, in the order of the questions formulated by the task group in its paper of October 29, 1997, are the comments by the Permits and Inspections Service of the City of Montreal, based on its experience of adopting the NBC.

5.1 - How to introduce a uniform code development and technical review process

Among the avenues suggested, **prior review by the territories and provinces** before the public review seems essential to us because of the political and economic choices involved.

We also support, from the outset, the suggestion that the provincial and territorial authorities become entry points for the code development process: we consider that approach fundamental in taking local peculiarities into account and avoiding a situation of constantly reacting to national proposals. In that context, the national level would not invest in amendments without some form of endorsement from the users.

Public review (or possibly semi-public review), **on a permanent basis**, also seems to us to guarantee more suitable standards, because it often takes a period of use before we consider a standard to be appropriate or inappropriate; whereas a public review of the entire code over a short period generates such a heavy workload that it leaves little room for comments.

5.2 - How to achieve genuine direct national participation in the process

We consider that true participation in the code development process includes the decision-making process. In that connection it seems important that the municipalities and other local authorities responsible for enforcing the codes be involved not only during the consultation process but also at the development and ratification stages for proposed standards.

We also consider that any form of direct communication (via the Internet, for example) can only encourage participation.

5.3 - How to take contradictory technical policies and suggestions into account; and 5.4 - Should the codes be reduced to the basic requirements?

Our experiences in the task groups on adoption by Quebec of the 1995 NBC have shown us that the organizations responsible for adoption and administration of the codes were largely in agreement on technical considerations, but that many disputes could be avoided if the codes left more room for local political, social and economic choices.

Thus it would be advantageous for the production of national model codes to concentrate on products and techniques, for which there is broad consensus, and on the admissibility of foreign standards (NFPA, for example) in a context of globalization, a sector in which the local governments have almost no resources. An example is the installation of sprinklers. Imposing sprinklers in some buildings is a political and economic choice (which may be strongly influenced by the firefighting capability of the local services), whereas the installation method and the required characteristics for the equipment making up the systems (once the political choice to require them has been made) should be standardized.

In this context, the codes should contain enough information to allow the political or economic choices to be made in an enlightened manner. Thus in the example of installing sprinklers, the choice of requiring or not requiring them should automatically trigger the obligation to enforce or exemption from enforcing some other by-law. This would not yet be a “code of performance”, because we feel that only the largest organizations and companies will feel comfortable with those, but rather a code that would guarantee technical standardization and a minimum of safety and at the same time leave more room for local peculiarities. Although the provinces and territories are unquestionably legal authorities, we think that they are too large to accommodate the diversity of

regulatory needs (or even “non-needs”) of their local communities solely on the basis of the NBC as it is now produced.

We agree with all the statements in item 4 of the discussion paper, and we would also suggest that, no matter how “minimal” the basic requirements may be, they must also be supported by the communities involved and the authorities responsible for enforcing them.

6 - Conclusion

Times have changed: few organizations now have the resources to strictly monitor the frequent updating of the codes and their enforcement; and we are being increasingly called upon to think globally. In this context, the need for expertise and standardization in regulations is concerned more with acceptability criteria for materials and systems than with social, political and economic choices.

At present, a major link seems to be missing in the code development process: the presence of the local organizations that are concretely responsible not only for adopting the codes, but also for enforcing them. Here the City of Montreal would be prepared to assist by taking part in the committees as an organization responsible for enforcing the codes. It might appear simpler to the CCBFC and more in accordance with official protocol to have the provinces impose a single Code on all their municipalities, with the “fewest possible amendments” in relation to a national standard. However, experience shows that this approach, with codes that impose uniformity that may be too strict, involves many pitfalls which the provinces and territories have difficulty dealing with, and which originate mainly from local disparities.

With interests that are too divergent, consensus becomes almost impossible. Adoption of the codes is suffering from this problem. We believe that the future model codes should leave room for recognition of the disparities (which will not fail to surface if we include the organizations responsible for enforcing the codes in the code development process), while imposing certain sets of requirements resulting from the choices made by the local authorities. We feel that there is very little room to manoeuvre, because while a highly developed single code imposed by the provincial and territorial governments might not meet highly divergent local requirements, at the same time a code that is too broad (and here we are obviously thinking of the “code of performance”) would leave designers and promoters uncertain, and would leave governments that do not have adequate technical support with no standards at all.

END OF COMMENTS

Appendix B

*Address by Antoine Tabet, P. Eng., to the Task Group studying the development and review process of the
Building and Fire Codes*

December 8, 1997

Page 1

To begin with, I must tell you that I am in favour of:

- q enforcing a uniform Code across Canada;
- q greater participation by Code users.

I am therefore in favour of the objectives of the Task Group, and I hope that the recommendations they make will permit achievement of those objectives.

I am telling you this at the outset, in case my address leads you to the opposite conclusion.

However, I am giving my support under the following conditions:

- (a) the process of developing and drafting the Code must be respectful of the users;
- (b) it must be respected by all those involved, and it will be respected by them if it succeeds in achieving consensus by permitting greater participation by the persons concerned in the Code development process.

Also, before making recommendations, I would like to pass on the criticisms most often made of the Code and the development process. These comments are based on my experience, my knowledge of the Code, and the fact that I work regularly with various stakeholders, both the authorities having jurisdiction in this area and professional architects and engineers.

1. With each new version, the Code becomes more and more cumbersome. The attempts to make it more precise have made it more daunting to use, even in the English version. I do not want to go into details here, but I would invite the Committee members to read NBC 95 Article 3.2.2.18. as an example.
2. The French text has deteriorated significantly in the latest version of the Code. Some articles have become simply incomprehensible without reference to earlier versions of the Code. The CCBFC has not yet received much criticism, because NBC 95 has not yet been adopted in Quebec, and not many people have read it or had to enforce it. I shudder at the thought of the discussions that will be held with inspectors who want to enforce some articles as written.

And yet Quebec is the only major Canadian province that adopts the NBC almost as is, and it is therefore one of the main users of the Code in the version published by NRCC.

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3. There are still many contradictions between the different Code requirements. The Code requirements relating to sprinkler protection have been greatly increased, but some requirements remain in the Code even though they are no longer justified, and elsewhere similar requirements have been eased.

4. Some requirements are difficult to enforce or insufficiently developed, leaving room for all sorts of interpretations to be made by professional designers. An example is Article 6.2.1.3. on supports for ventilation equipment and their effect on movement relative to the building structure.¹
5. Many people who would like to propose amendments are discouraged by the length of the process, or because their previous requests have been rejected by the Committee without valid reason, at least in their view. This unfortunately happens sometimes when the proponent, or a person who is conscious of the problem being raised, is not present when the matter is discussed to defend his viewpoint. The problem of mezzanines has been raised since 1985, and it has still not been satisfactorily resolved; the approach adopted in NFPA standard 101 is much more realistic.

For the reasons given above, and for others such as lack of time, and the fact that the meetings are held only in English, there is little participation by the construction industry and municipalities in Quebec. They seem to endure the Code passively, criticizing it rather than becoming actively involved in its development.

However, the structure of the NBC is excellent, and we could easily improve the text and eliminate the contradictions if there were greater participation by Code users.

On the basis of these observations, I would suggest the following:

1. Form committees at the provincial level (or by groups of provinces) for each part of the Code, with participation by a technical representative of the NRCC Codes Section and designation of the provincial authorities as the entry point for the Code development process.
 2. Have greater participation by representatives of the various Code users on the provincial committees (professionals, owners, builders and municipalities).
 3. Incorporate the recommendations of the provincial committees into the model Code, after analysis by the national committee, consisting of representatives of the provincial committees and interest groups.
 4. Limit amendments to the Code to those aimed at greater consistency or greater clarity of the text, or to cover new materials or construction systems.
 5. Amendments introduced should take into account the effect on construction costs.
- Page 3*
6. The French version should be completely revised by persons who are well versed in English and French and in the technical expressions and requirements for the Code. I do not believe that qualified translators who are not familiar with the Code's technical expressions and requirements are the persons in the best position to do this work alone.

Thank you for your attention and for your patience.

[Initialed]

Antoine Tabet, P. Eng.

Representative of the Ordre des ingénieurs du Québec

¹ This is a literal translation: the 1990 Code (to which the number appears to refer) speaks of designing and installing mechanical equipment so as to accommodate the movement of the building structure - Tr.

Appendix C

Comparison Tables Building, Fire and Plumbing Codes

Appendix D

Building and Fire Safety
Technical Services and Safety Services
Alberta Labour

COMMITTEE DISCUSSION PAPER

ON

Provincial/Territorial Point of Entry - A "One Window" Approach

prepared for the

The Joint Canadian Commission on Building and Fire Codes and
Provincial/Territorial Committee on Building Standards
Task Group on the Code Development and Review Process

by

C. M. Tye

December 5, 1997

This document is a working paper prepared for consideration by committees dealing with
the National Building Code of Canada.

The views expressed are those of the author and do not necessarily represent those of
Alberta Labour.

CCBFC TASK GROUP ON THE CODE DEVELOPMENT AND REVIEW PROCESS
Provincial/Territorial Point of Entry - A "One Window" Approach

POSSIBLE STRATEGIES

Provincial/Territorial Point of Entry - A "One Window" Approach

Note - This strategy would likely be of interest only to those provinces who currently administer a provincial code development and review program. Other provinces and territories would likely wish to continue using the national "window" at the Canadian Codes. Centre.

PROPOSAL:

Where the facility exists, the provincial and territorial government, or other legislated or delegated body, serves as the point of entry ("window") into the codes system for development and review activities.

BENEFITS:

1. Meets government (both levels) goal for Harmonization and elimination of duplication.
2. Acknowledges and strengthens the role of provincial and territorial government over the regulation of construction.
3. Meets goals and Strategies contain, in the CCBFC Strategic Plan.
4. Creates an opportunity for a meaningful partnership involving the provinces and territories and the National Research Council of Canada (NRC).
5. Will lead to: greater and more meaningful stakeholder participation in the code development and review process.
6. Allows for: the 'channeling' of issues into either the provincial and territorial or national arena.
7. Provides opportunity for the establishment of truly national model codes. Core documents developed and administered by Canadian Commission on Building and Fire Codes (CCBFC) with the provinces and territories agreeing on their scope and content. Provinces and territories would develop and administer their own "Parts" or "Appendices" based on geographic, industry or economic needs.
 8. A harmonized process will likely lead to greater uniformity (less provincial or territorial change).

REQUIREMENT:

A formal partnership agreement or memorandum of understanding between each participating province and territory and the NRC. Some considerations include:

1. Timing - A coordinated national/provincial/territorial development and review process will require a commitment by each partner to a set timetable. Is this possible for provincial governments?
2. Resources - Operating the provincial "window" on behalf of both partners will require agreement on the commitment of effort and resources on an equitable basis. Shared tasks, shared resources.
3. Process Uniformity - Partners will need to agree on a common development and review process, one that will accommodate the "channeling" of change proposals to either the CCBFC or the province.

SUPPORTING/CONSEQUENTIAL STRATEGIES:

1. Development of formal partnership agreements between the various parties to work cooperatively on code development and review. Eliminate existing parallel processes.
2. Agreement on core model codes that are not changed by the provinces or territories.
3. Use a single publishing source for the core model codes used by all provinces and territories; and, ideally for the provincial additions also. Australian model?