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NRC-CNRC

Towards an Improved Code Development System for Canada



*Final Report of the
Joint CCBFC/PTCBS
Task Group on the Code Review and
Development Process*

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EXECUTIVE SUMMARY

TOWARDS AN IMPROVED CODE DEVELOPMENT SYSTEM FOR CANADA

A new and improved single, coordinated building, fire and plumbing code review and development system is being proposed that will meet the needs of the provinces and territories, and at the same time, retain the best features of the present systems.

As a result, Canada's construction industry will have better, more uniform codes resulting from a system featuring more widespread participation by code users and a coordinated public consultation procedure. Differences among codes across Canada will be greatly reduced or eliminated and new code provisions will be developed and come into use in a shorter overall time frame.

Canada's economy, and the construction industry in particular, benefits where there is uniformity in the country's building, fire and plumbing code requirements. Uniform codes would:

- ◆ provide consistent levels of health and safety for all Canadians
- ◆ result in a larger domestic market with common requirements, facilitating the movement of goods and services within Canada
- ◆ foster the creation of cost-effective, technically progressive solutions, and sharing of innovative ideas and solutions across the country
- ◆ reduce design and compliance verification costs for those working in multiple jurisdictions
- ◆ improve efficiencies relating to the development, issuance and enforcement of building regulations
- ◆ lead to improved efficiency in the building industry
- ◆ provide credibility for Canadian technologies in international markets
- ◆ facilitate the harmonization of Canada's codes with international codes
- ◆ facilitate the mobility of code users across Canada

A joint task group consisting of individuals from the code-writing, regulatory, design and construction communities has been examining the code development process to suggest ways to meet these goals. Meetings have been held across Canada, with many presentations and briefs received from individuals, regulators and industry. The Task Group has completed this study and presented the results to the Canadian Commission on Building and Fire Codes (CCBFC) and the Provincial/Territorial Committee on Building Standards (PTCBS) for consideration.

Recommended changes to the present system include greater participation of provinces and territories throughout the process, better stakeholder consultation and the concept of "core codes." These changes will enhance ownership and accountability for all participants throughout the entire decision-making process in the development of the codes.

The Task Group has found strong support for the concept of "core codes" which would contain all necessary requirements for widely agreed-upon issues (e.g. health and safety) and which the provinces and territories ideally should not have to amend. Other issues which are less widely accepted, but whose development would benefit from using the national system, could be put in separate stand-alone (progeny) documents. Subject areas outside the core codes, and not considered appropriate as CCBFC-produced documents, would remain the responsibility of the provinces and territories.

A remarkable level of concurrence was achieved on the attributes of an ideal core code development system. These include:

- ◆ technical excellence
- ◆ an opportunity for all to participate and be heard
- ◆ consideration of the economic impact of requirements
- ◆ flexibility and clarity of code requirements
- ◆ timely response to proposed changes
- ◆ an open, transparent process
- ◆ elimination of duplication of effort, resulting in better use of resources
- ◆ clear accountability

In Canada, regulations pertaining to the health and safety of the public in buildings are the constitutional responsibility of the provinces and territories. Since 1948, the CCBFC (and its predecessors, the Associate Committees on the National Building and Fire Codes) has produced model building, fire and plumbing codes, which are offered as a basis for provincial, territorial and municipal regulation.

The existing system, which consists of the preparation of the model codes by the CCBFC followed by provincial/territorial adoption processes, can take as much as eight years from the time a change is proposed until it comes into effect. The new system should shorten this time period due to enhanced participation by the provinces and territories at every stage of the code development process, giving greater confidence in the results to the provinces and territories. Some steps of the adoption process could occur concurrently with the development process.

The Task Group recommends a single coordinated public review of proposed changes to the core codes, as well as provincial and territorial additions to the core codes, as a way of easing the burden on reviewers and leading to reduced local variations and the time required for adoption. Provinces and territories would be given the opportunity to provide their comments prior to changes being released, as well as after committees have reviewed stakeholder input.

An important recommendation is that an effort be initiated to examine, and attempt to resolve, the present technical differences among the national codes and provincial/territorial codes.

It is recommended that groups and individuals proposing changes to the core codes should have the choice of submitting these at the provincial/territorial level, or at the national level. All proposals received would be circulated to all the provinces and territories, giving the opportunity for them to raise their concerns and the concerns of provincial/territorial stakeholders at early stages in the process.

The Task Group has concluded that an independent decision-making body is needed to oversee the process and make the final decisions as to the contents of the core codes. This would be done with advice and guidance from provincial/territorial advisory committees (one for each the building, fire and plumbing codes), on scope, format, process and content issues. The Canadian Commission on Building and Fire Codes, appointed by NRC, is proposed to continue to act as this decision-making body. The provinces and territories would play a role in identifying membership candidates.

The Task Group agrees that the technical review of proposals by broad-based committees of experts is the most appropriate approach. It is critical that the committee makeup provides for balanced representation from all affected sectors and that the membership selection process ensures the most appropriate participation. The Task Group believes that the committee framework presently operating under the auspices of the CCBFC meets these criteria. However, it would be enhanced if the provinces and territories were to advise the CCBFC on the matrices, recruiting and selection process.

Any changes made to the existing process also must account for the transition to objective-based codes. It is recommended that the new development and review system be used for this transition.

It is recommended that this report be widely circulated to code users and stakeholders. It is hoped that elements of the new system could be applied to the technical updating for the next edition of the core codes, and some stages of the transition to objective-based codes.

1. THE PROPOSAL

A Joint Task Group of the Canadian Commission on Building and Fire Codes (CCBFC) and the Provincial/Territorial Committee on Building Standards (PTCBS) has been meeting to develop an improved code development system for Canada. The resulting proposal is a single, national, coordinated code development system that will meet the needs of the provinces and territories, and at the same time, retain the best features of the present systems.

As a result, Canada's construction industry will have:

- ◆ better codes
- ◆ more uniform codes
- ◆ a system featuring widespread participation by code users
- ◆ a single coordinated public consultation process
- ◆ differences among codes across Canada greatly reduced, or eliminated
- ◆ a shorter overall development and adoption process

The Task Group believes that such a system is achievable, provided industry and government make the commitment to support, encourage and advance these principles.

Changes to the present system would require greater participation of provinces and territories throughout the process, better stakeholder consultation and adoption of the concept of "core codes."

2. THE NEW SYSTEM

The process proposed by the Task Group for the development of the model core codes is summarized in the diagrams attached in Appendix A and described below. A glossary of terms is attached as Appendix B.

The key feature of the system is that the decision-making process involves the provinces

and territories and all stakeholders to resolve the issues throughout the whole code development system.

A) THE PRODUCTS

The Task Group has found strong support for the concept of "core codes" which would contain all necessary requirements for widely agreed-upon issues (e.g. health and safety) and which the provinces and territories ideally should not have to amend.

Issues considered appropriate for a national approach but which are outside the scope of the core codes, could be published in separate stand-alone (progeny) documents, such as the model national energy codes.

Issues in subject areas outside the core codes, and not considered appropriate as CCBFC-produced documents, would remain the responsibility of the provinces and territories.

Naturally, adopting authorities always have the right to make changes and additions, however, it is hoped that, because of greater involvement of these authorities throughout the process, the need for change would be minimized.

For example, in the Australian Building Code, Australian States include changes and additions to the core code in a set of appendices.

B) THE STRUCTURE

Decision-Making Body

The system would require a "Decision Making Body" that would have overall responsibility for scope, format, content and process of the core codes. It would decide upon all changes to the core codes as recommended by the technical review process and would establish priorities. It would be responsible for the matrix/membership of any technical committees. It is expected that a single body would be sufficient to deal with all the core codes.

The straw models developed by the Task Group covered numerous options for the final stage in

the development of the core codes before they are presented to the provinces and territories for adoption. Options ranged from a decision-making body composed completely of representatives of the adopting authorities, to a broad-based consensus type committee, to a system that would require all proposals to be ratified by a committee of regulatory authorities.

Because of the importance of ensuring independence of the process, seeking wide participation by code users and maintaining a technical focus, the Task Group concluded that the “Decision Making Body” should be made up of members from regulatory bodies, industry and general interest according to a broad-based, balanced matrix similar to the CCBFC. It agreed that NRC was the logical organization to support the selection and operation of this overseeing body.

The Task Group agreed that it seemed logical to continue to use the “Canadian Commission on Building and Fire Codes” (CCBFC) as the name of the “Decision-Making Body.”

It was recognized that arriving at an appropriate matrix, and choosing appropriate members while maintaining geographic and sector balance is a difficult task requiring a considerable degree of independence.

It was duly noted that the existing process for appointment to the CCBFC was through NRC’s governing council (not NRC staff) on the recommendation of the CCBFC Chair. The CCBFC Policies and Procedures provide for a Chair’s Selection Committee, which includes a representative of a provincial/territorial authority.

However, it was agreed that there would be value in enhancing the role of the provinces and territories in the process. Having the provinces and territories take a role in identifying potential members for the CCBFC, would increase the pool of candidates, and create a greater provincial/territorial presence in the new process.

The Task Group discussed the notion that the provinces and territories would have greater confidence in the selection process if they had the opportunity to comment to the Chair’s Selection Committee on the matrix and the

proposed membership of the CCBFC prior to submission to NRC. However, the Task Group wished to ensure the independent nature and image of the CCBFC and determined that since all code users currently may comment on all aspects of the code process, including matrices and membership there should be sufficient opportunities for the provinces and territories to provide feedback.

Provincial/Territorial Advisory Committees

A mechanism will be needed to ensure the CCBFC can obtain advice from provincial and territorial authorities in a formal way on policy matters as well as on major proposed changes to the core codes. There will also be a need to obtain advice on the position of provincial and territorial governments on matters that are considered to have considerable economic or policy implications. The mechanism should provide information on the acceptability of proposals on an individual provincial/territorial basis, and CCBFC would be expected to make final decisions on the core codes, taking such information into account.

A provincial/territorial advisory committee could perform this role and would act at a policy advisory level rather than focus on technical matters. As such, membership should be able to present the provincial/territorial position on which issues should be addressed by regulation and be able to discuss the impact of codes on industry and the regulatory community in their jurisdiction.

The Task Group came to the conclusion that the level of representation on such an advisory committee would have to be at the discretion of individual provinces and territories according to local priorities and capabilities.

A single body that could perform this advisory role would be the most desirable arrangement. However, differences in departmental organization and responsibilities at the provincial/territorial level suggest that the only practical arrangement at the outset would be to create three separate advisory committees for each of the building, fire and plumbing codes.

Secretariat

NRC has provided a Secretariat for the code development system since work was begun in the 1930's on the first NBC, published in 1941. This includes administrative support such as arranging committee meetings, distributing meeting notices, agenda and supporting papers, preparing formal minutes and handling committee correspondence. (NRC's traditional role in supporting the code development process is described in Appendix G.) Similar support will be needed for the proposed system, however, some changes are suggested to ensure greater provincial/territorial involvement.

A complete and user friendly tracking and information system, using the world-wide web for example, would enhance openness and comfort among code users. It would also increase involvement and awareness of the status of code development. The system should allow proponents to track the progress of the proposal throughout the provinces, possibly via the Internet. Responses to questions from stakeholders regarding the process would be handled by the Secretariat.

The Secretariat would be empowered to explain the core codes, but not legally interpret them since interpretation remains the purview of the adopting authority. It would also assist the provincial and territorial authorities in interpreting the core codes. The Secretariat could have some education and training responsibilities on the subject of the core codes.

It was agreed that as a result of history, performance, national presence, reputation and availability of resources to recommend that NRC, through the Canadian Codes Centre, continue to act as the "Secretariat."

Technical Committees

As a result of feedback received from code users, the Task Group agrees that a technical review of proposals by broad-based balanced technical committees of experts is the most appropriate approach. Committee matrices should ensure appropriate representation from affected stakeholder groups. The CCBFC

framework of standing committees is seen to be one that meets these criteria.

It is important that the membership appointment process is seen to be fair and equitable by all stakeholders and that the false impression that it is a closed shop controlled by NRC be dispelled. The existing process for appointment to a CCBFC Standing Committee is through the CCBFC Nominating Committee (not NRC staff) on the recommendation of the Standing Committee Chair. The Nominating Committee consists of CCBFC members. Final approval is by the CCBFC Chair.

However, it was agreed that there would be value in enhancing the role of the provinces and territories in the process by having the provinces and territories assist in soliciting members for the technical committees. The pool of candidates would increase and a greater provincial/territorial presence in the new process would be established.

The provinces and territories would probably have greater confidence in the selection process if they had the opportunity to comment on the matrices and the memberships of the technical committees proposed by the nominating committee prior to submission to the CCBFC for consideration.

The level of participation by provincial/territorial adopting authorities on each technical committee needs further examination. A key is to build confidence among provincial/territorial stakeholder groups that they are fully engaged in the process. It is important, however to ensure technical focus. Policy issues are best dealt with at the provincial/territorial level. Some provinces and territories may set up their own technical advisory process to feed local concerns into the system.

Improvement in communication of the process and procedures to stakeholders is seen as critical since many are unaware of even the existing system for membership appointments, matrices and decision-making. Under the proposed co-ordinated system, the provinces and territories would play a role in such communication.

It was recognized that such a system of technical committees requires technical and research support to ensure decisions are made with full knowledge of the technical and economic implications. This role has traditionally been provided by NRC's Institute for Research in Construction. The Task Group believes that as a result of performance, national presence, reputation and availability of resources, there is no reason to recommend any significant changes to NRC's role in the process. The Task Group recommends that NRC continue to provide technical support to the "Technical Review Process." (NRC's role in supporting the code technical development process is described in Appendix G.)

Technical Advisory Committee

Under the present system, the recommendations from standing committees after public review and comment are submitted only to the Canadian Commission on Building and Fire Codes for approval. The Task Group believes there would be value in giving provinces and territories the opportunity to review and discuss these recommendations prior to approval by the CCBFC.

To assist in this process a "Technical Advisory Committee" made up of technical committee chairs and provincial/territorial "technical" officials would be created. Provincial/territorial participants may differ for each code because of jurisdictional differences.

It would also give the provinces/territories an opportunity to have access to Standing Committees via the Chairs. Participation by provinces and territories would be optional.

C) THE PROCESS

Stages in the Process

During the course of the review and the development of the various straw models, it became evident that the code review and development process could be characterized as having four major stages.

Point of Entry – How do proposals come into the system and how are decisions made to proceed with them or not?

Technical Review – How is the technical adequacy of a proposed change assessed and who does the review?

Stakeholder Review – How does the system ensure that all groups and individuals affected by a proposed revision have a opportunity to review, comment and influence decisions on such proposals?

Decision – Who makes the final decisions on the format, process, scope and contents of the model codes; and how are the concerns of adopting authorities taken into account?

The following describes how the new system addresses each of the stages.

Point of Entry

Presentations and submissions received indicated that there is a perception in some parts of Canada that local stakeholders have little influence on the system. A true coordinated process needs to reinforce the sense of ownership by provinces and territories of their building regulations and the process by which they are prepared. It is also necessary to ensure a critical understanding among stakeholders that the processes is driven at the provincial/territorial level and that the building, fire and plumbing regulations are the responsibility of the provinces and territories.

The Task Group, therefore, recommends that those proposing changes to the core codes should have the choice of submitting these at the provincial/territorial level or at the national level. The provinces and territories would forward changes to the "core codes" directly to a national secretariat. Strict agreed-upon criteria for change submission format and contents would be necessary to assure consistency. All core-code related proposals would be forwarded and could not be unilaterally cut off at the entry point.

Regionally specific changes (non-core code issues such as septic tank requirements in Ontario and relocateable buildings in Alberta)

would be handled provincially/territorially and not be forwarded.

As an option, individual provinces and territories may wish to review proposals technically and economically, and forward them to the national system with comments.

The secretariat would evaluate proposals based on guidelines prepared by the CCBFC, in consultation with the Provincial/Territorial Committee(s), and refer all significant, controversial, scope and policy issues to the CCBFC.

The secretariat would circulate all proposals received, regardless of source to all the provinces and territories, giving the opportunity for them to raise their concerns and the concerns of provincial/territorial stakeholders at early stages in the process. Where there is provincial/territorial objection to any proposal on policy, scope or procedural grounds, it would be referred to the CCBFC.

Advantages of multiple points of entry to the process include easier access at a regional level to the system and an opportunity for all to be aware of what is happening in other jurisdictions. It would also ensure an opportunity to flag potential policy, scope or procedural issues before a proposal goes for further development.

Proposals for change which pass the above tests, would be forwarded by the secretariat to the appropriate technical standing committee.

Technical Review Process

Technical standing committees would be responsible to the Commission for detailed technical assessments of matters relative to their specific areas of the core codes and associated documents; and for advising the CCBFC on necessary amendments to the codes.

To do so the standing committees would be required to:

- ◆ keep the core codes, related documents and reference standards continually under review to ensure that they are in accord with appropriate and safe practice,

- ◆ consider new developments in building use, design and technology and advise the Commission on how best they can be reflected in the core codes,
- ◆ recommend to the CCBFC revisions that are required for inclusion in the core,
- ◆ prepare clear and concise reasons for proposed revisions in a form suitable for stakeholder review,
- ◆ keep under review national standards and federal, provincial and territorial regulations which relate to their areas of responsibility, and
- ◆ take into account any economic impact of proposed revisions.

Technical Committees should be able to revisit the initial assessment applied by the Secretariat, and refer matters directly to the CCBFC if there is belief that proposals represent significant scope or policy issues. Issues judged to have major economic impacts would also be referred to the CCBFC for consideration prior to expending resources on their further development.

Stakeholder comments from the coordinated public consultation (described below) would be referred back to the technical committees for resolution. As a result of comments received, proposals could be recommended for approval by the CCBFC, withdrawn, altered or retained for further study.

All standing committee actions following public consultation would be circulated to the provinces and territories, with any changes resulting from public comment clearly marked.

The Technical Advisory Committee would convene to discuss issues raised by the provinces and territories. Only provinces and territories interested in this review would participate.

The Technical Advisory Committee would not be a decision-making committee, but could assist provinces and territories to more fully understand the reasoning behind some committee actions and thus possibly help resolve any concerns. The CCBFC and the appropriate Provincial/Territorial Advisory

Committee would be advised of unresolved issues regarding decisions of the standing committees.

Co-ordinated Public Consultation

It became clear from stakeholder input that a coordinated public review and comment process for code changes would be advantageous, and contribute towards uniformity, and more technically correct documents.

The coordinated public review process would continue to be the responsibility of the secretariat. Some provinces and territories, however, will want to manage the process and request and receive public comments in their jurisdictions. Comments would be reviewed and forwarded to the Secretariat with provincial/territorial comment and/or recommendations for resolution.

Some provinces have a need to obtain “permission to consult” from government before releasing proposed changes for public consultation. Therefore, all proposals from standing committees would be circulated to all provinces and territories prior to wide release.

Such permission would normally be only needed for significant issues, and not on the specific wording of all or part of a change package. This activity, therefore, could occur likely concurrently with committee, editing and translation work, thus reducing any delays. However, a six month window should be built into the process to allow for provinces and territories to carry out this activity. Concerns raised by provinces and/or the inability of an individual province to receive such permission to consult, will be referred to the CCBFC to deal with in consultation with the appropriate provincial/territorial committee.

Public consultation could occur on a more frequent basis resulting in smaller packages, which are more likely to be examined than the large collections of proposals circulated in the past. Publishing of changes could also be according to a more frequent cycle. Smaller packages would likely improve the level and quality of review. However, advantages of continuous or more frequent review have to be balanced against the costs of change (training,

rewriting support publications, design updating).

In order for this to be a coordinated process, provincial/territorial non-core changes would be included in public review packages. Those requesting change packages would receive only such changes for their individual province/territory unless all are specified.

Stakeholder comments from the coordinated public consultation would be referred back to the Technical Review Process for resolution.

Such coordinated consultation activities should occur according to an agreed-upon schedule, possibly every three years.

It is acknowledged that a coordinated public review could introduce additional steps into the process which could be seen as delaying production of the core codes. However, these steps would have to occur during the present provincial and territorial adoption process anyway. The overall time frame from initiation to adoption should be shorter.

Decision on the Core Codes

Final decisions on the core codes, including attempts to resolve issues raised by the provinces and territories, would be the responsibility of the CCBFC. It is expected that the CCBFC would make such decisions in consultation with, and with the participation of, the appropriate provincial/territorial committee.

Decisions would be required at several stages throughout the process on:

- ◆ change proposals directed by the secretariat where initial review shows that these proposals are considered to be significant, controversial, or deal with a scope and policy issue
- ◆ change proposals initially received where there is provincial/territorial objection to any proposal
- ◆ proposals for change referred to it by technical committees disagreeing with the initial assessment applied by the secretariat

- ◆ concerns raised by provinces and/or the inability of an individual province to receive permission to consult on proposals that standing committees wish to release for public comment
- ◆ issues raised by the provinces and territories on the actions of technical committees after public consultation
- ◆ recommendations received from technical committees for code changes after public consultation

Guidelines and procedures would be needed as to how the CCBFC should deal with concerns raised, and under what circumstances they should be brought forth. Mechanisms could include returning the proposal to the technical committee for further development, making alterations to the proposal, withdrawing the proposal or deciding to go ahead for public consultation. There is a possibility that a proposal could be released with a statement that one or more provinces do not support the proposal.

Provinces and territories naturally have the final say as to whether to accept the CCBFC decisions within their regulatory system.

3. BACKGROUND

A joint task group of the Canadian Commission on Building and Fire Codes (CCBFC) and the Provincial/Territorial Committee on Building Standards (PTCBS) was formed in 1997. The role of this Task Group was to recommend an improved and coordinated code review and development process that would better accommodate the needs of the provinces/territories, as well as industry and the public.

This study was begun because of the widespread desire to eliminate differences that were occurring among the model codes and codes being adopted in the provinces and territories; to reduce the time it was taking before the latest model codes were being used or adopted; and to reduce duplication. There was also a recognition that greater participation of

stakeholders in the process would result in better and more acceptable codes.

The Strategic Plan of the CCBFC recognizes that much can be done to improve the model code development and review process to better reflect the needs of provincial/territorial authorities and code users. Benefits are foreseen if resources could be pooled and the efforts made at provincial/territorial levels could be incorporated into a national process leading to greater uniformity of adoption.

Canada's economy, and the construction industry in particular, benefits where there is uniformity in the country's building, fire and plumbing code requirements. Uniform codes would:

- ◆ provide consistent levels of health and safety for all Canadians
- ◆ result in a larger domestic market with common requirements, facilitating the movement of goods and services within Canada
- ◆ foster the creation of cost-effective, technically progressive solutions, and sharing of innovative ideas and solutions across the country
- ◆ reduce design and compliance verification costs for those working in multiple jurisdictions
- ◆ improve efficiencies relating to the development, issuance and enforcement of building regulations
- ◆ lead to improved efficiency in the building industry
- ◆ provide credibility for Canadian technologies in international markets as a result of acknowledgement in a national code system
- ◆ facilitate the harmonization of Canada's codes with international codes
- ◆ facilitate the mobility of code users across Canada

The National Building, Plumbing and Fire Codes were created with such benefits in mind, and to a great extent have been successful in achieving them.

Most jurisdictions review the model code provisions to some degree before adoption to ensure provincial/territorial objectives have been met such as improving the need to meet provincial/territorial accountability for the contents of the codes; differing provincial/territorial policy objectives (e.g. energy conservation); recognition of variable consolidation of other building requirements (e.g. plumbing) and responding to urgent requirements for code changes (e.g. care occupancies). Some must consult on all proposed regulations. Therefore, some have established their own comprehensive review processes to satisfy the needs of their stakeholders and address these issues.

4. TASK GROUP MODE OF OPERATION

Task Group Members (membership list attached as Appendix C) were drawn from provincial and municipal building and fire regulatory authorities, the design community and the construction industry. The Chair is Mr. Bruce Clemmensen.

Although initially focussed on the National Building Code, the Task Group expanded its work to include the fire and plumbing codes.

Nine meetings were held (Montreal, Winnipeg, Vancouver, Halifax, Toronto, Edmonton and Regina). All meetings were open to visitors.

Existing code development and review processes at national, provincial and municipal levels were examined, identifying strengths and weaknesses of each, and of the total system. Models in the US and Australia, and those used by Canadian Standards Development Organizations (SDO's) were also considered.

The Task Group's philosophy was to have an open mind and not be fettered by having to justify maintaining the status quo. All suggestions were considered, and all positions challenged. Beginning with a "blank slate," a series of over a dozen "straw" models evolved, testing various arrangements and sequences of code development.

There was wide publicity of the Task Group's work. Attempts were made to notify stakeholders at each meeting location and to encourage them to participate. A series of questions were developed which were intended to provoke participation and comment. Presentations and written submissions were welcomed at all meetings. All suggestions were discussed and the Task Group reaction was included in subsequent meeting reports.

Communications included a Web Page on the Internet which posted meeting reports, membership lists, meeting schedules, presentations and discussion papers.

5. EXISTING SYSTEM

In Canada, regulations pertaining to the health and safety of the public in buildings are the constitutional responsibility of the provinces and territories. Since 1948, the CCBFC (and its predecessors, the Associate Committees on the National Building and Fire Codes) has produced model building and fire codes, which are offered as a basis for provincial, territorial and municipal regulation.

The contents of the model codes are the responsibility of the CCBFC and its many technical committees, which are made up of volunteer representatives from all aspects of the building construction and regulatory communities. NRC's role is to provide technical and administrative support to these committees.

A description of the CCBFC, the support of IRC and the National Code development process is included in Appendix D.

Provinces and territories and some municipalities have also evolved their own code development processes, all of which use the national model codes as the starting points. Prior to adoption of new editions of the national model codes, most provinces review the new requirements in relation to provincial/territorial objectives. They also consider the concerns and views of stakeholders regarding these new requirements. Additional matters are also often added to integrate regulations or address

provincial/territorial issues. Some of these systems are quite comprehensive, consisting of a technical committee framework and comprehensive stakeholder review. Tables showing features of processes for code review used in the provinces and territories, as well as information on which ministries and agencies in the provinces and territories have responsibility for enforcing the various codes, is provided in Appendix E.

A Memorandum of Understanding (MOU) exists between NRC and the provincial and territorial departments responsible for building standards. Among other things it established the Provincial/Territorial Committee on Building Standards, which on behalf of the provinces and territories, has provided policy advice to the Canadian Commission on Building and Fire Codes on scope, content, format and process of the National Building Code. The MOU and a description of the role of the PTCBS is attached as Appendix F.

The Task Group reviewed the existing systems with a view to identifying the strengths and weaknesses of each.

CCBFC PROCESS

Strengths:

- ◆ NRC acting as an entry point allows for early technical evaluation
- ◆ Standing Committees have strong technical capabilities with a reputation for being thorough and credible
- ◆ Highly consultative with code users
- ◆ Overall system can work very effectively
- ◆ Strong staff support from IRC to facilitate development including research input.
- ◆ Public review process rigorous and open
- ◆ Strong technical focus
- ◆ CCBFC in a position to integrate NBC/NFC/NPC

Weaknesses:

- ◆ Input only at National level
- ◆ Provincial/territorial not fully involved in review of changes until after decisions are made
- ◆ Process may be too focused on technical issues and not give enough consideration to implementation issues.
- ◆ Reliance on committee volunteers (difficulty of getting time of key people)
- ◆ NRC staff, having responsibility for decision to refer a matter to Technical Committees or to the CCBFC/PTCBS is perceived as possibly having too much control
- ◆ NRC staff support perceived as being under-funded
- ◆ Public review not regionally oriented
- ◆ Code cycle results in large volume for public review
- ◆ Many are not aware of process
- ◆ Some stakeholders ignore the national process in favour of provincial focus
- ◆ No “political accountability” at early stages
- ◆ Each decision causes incremental change – need better overview perspective & direction setting

PROVINCIAL/TERRITORIAL SYSTEMS

Strengths:

- ◆ Responsive to urgent issues
- ◆ Able to tailor process to local needs
- ◆ Easier acceptance of the results by decision makers
- ◆ Regional stakeholders can participate at the front line
- ◆ Clear accountability by provinces and territories for content of codes
- ◆ Provides an opportunity for broader harmonization of all construction

regulations, not just those included in the National Codes

- ◆ Takes advantage of strong local resource pockets on specific issues.

Weaknesses:

- ◆ Shortage of resources to deal with technical issues
- ◆ Hasty response to urgent issues may lead to poor decisions
- ◆ Different departments responsible for building, plumbing and fire codes
- ◆ Regional input only, lack of access to broader perspective
- ◆ Municipalities may not be part of the process, resulting in municipally-initiated variations (not in all provinces)
- ◆ Does not always reflect national consensus
- ◆ Political priorities may outweigh technical focus

OVERALL SYSTEM

Strengths:

- ◆ High degree of uniformity of codes
- ◆ Recognition that it is a “national” system as opposed to a federal/provincial initiative.
- ◆ Long history of success
- ◆ International recognition

Weaknesses:

- ◆ Delays in adoption of latest editions
- ◆ Little integration and coordination of actions and resources between the CCBFC and provincial and territorial processes
- ◆ Lack of widespread understanding of the value of the existing system
- ◆ Lack of commitment by all authorities to participate

The Task Group took all these aspects into account in discussing possible improvements to the overall process.

6. WHAT’S MISSING IN THE SYSTEM NOW?

STAKEHOLDER INVOLVEMENT

Not all provincial/territorial stakeholders want to rely on the review that takes place at the national level and have not, therefore, urged the provinces and territories to participate in a national code development process. How the system deals with controversial issues is of particular concern to the stakeholders.

Some provincial/territorial decision-makers need to be convinced that the present system meets their needs with respect to technical soundness, accountability, economic impact analysis, stakeholder acceptance and decision-making.

Proponents of changes also find it difficult to ascertain the steps in the code development process and how their proposal is working its way through the system.

There is a lack of awareness, and thus comfort, of all code users including the public with respect to the CCBFC and provincial/territorial code processes.

PROVINCIAL/TERRITORIAL PARTICIPATION

The existing system tends to be a linear one, with provincial and territorial involvement beginning only after the model codes are issued, and the adoption process begins. Provinces and territories and their stakeholders are not exposed to all information on code changes until the end of the process.

Some of the resources currently directed at the provincial territorial level could be used to participate in the national process, if the opportunity were available.

Lack of formal participation also means there may be no sense of ownership and confidence in the system on the part of the provinces and territories.

STAKEHOLDER CONSULTATION

All technical changes recommended by standing committees for the national model codes are required to be issued for public review and comment.

Some jurisdictions also perform similar processes, often repeating the proposals issued in the national process. This activity is done in order to satisfy their regulatory environment, address the needs of their stakeholders and to address regional issues.

In many cases this results in provincial stakeholders choosing to only participate in the provincial process rather than in the national process. This diverts valuable input from the CCBFC process.

A recurring message is that the large collections of proposed changes released for public comment in the past are so daunting that many code users don't have the time to thoroughly review them. As a result, assumed agreement with proposed changes may be unfounded.

Significant changes have been rushed in the past due to time pressures introduced by the code cycle.

SCOPE OF THE CODES

Many provinces and territories have added subject areas beyond those in the national model codes to their building, fire and plumbing regulations. Examples include septic systems and energy conservation in Ontario; relocatable industrial buildings in Alberta; combining the building and plumbing codes in some provinces; and special foundation requirements for soil conditions in Manitoba.

Including some of these subject areas in the national model codes could jeopardize their adoption in some provinces and territories where these issues are dealt with by ministries or agencies other than those responsible for building or fire regulation.

7. INPUT FROM CODE USERS

PRESENTATIONS, BRIEFS AND RECOMMENDATIONS

The Task Group received a number of high quality presentations and submissions from various sources and this input was invaluable to the Task Group in completing its work. A list of groups and individuals making submissions or presentations to the Task Group is included in Appendix G.

There seemed to be broad agreement over many of the attributes of a good code development system, and where opportunities for improvement exist. The following summarizes these views.

There was considerable support for the concept of a "core code" which would apply in all jurisdictions and would address widely supported issues. Separate stand-alone (progeny) documents would be developed under the auspices of the CCBFC to deal with other issues. Local issues would remain local. The National Building, Fire and Plumbing Codes would be adopted by all Canadian jurisdictions as the core code for each province and territory. Some believe the core codes content should be restricted to fire and life safety, public health, and structural sufficiency issues.

There seemed to be universal support for one public consultation on code changes rather than separate national and provincial consultation processes. The opportunity for stakeholders to make their views known to their provincial governments on matters of health, safety and structural sufficiency should occur through the same process used by the CCBFC and its committees. Many believe this should occur more frequently than at present. The consultation document resulting from the work of the Standing Committees should separate "core" and "non-core" matters. Provinces should review and comment on the consultation document prior to its issuance. Separate provincial sections may be required.

Several suggested that the national model codes should concentrate on technical issues, leaving

political or economic choices to be made at the provincial, territorial or municipal level. It was stated that many disputes could be avoided if the codes took into account local political, social and economic choices.

It was widely believed that there is a need to establish a mechanism to ensure provincial/territorial involvement throughout the process so that policy issues are introduced early. It was suggested that the provincial level could act as the entry point to the code development process, although some believe that the point of entry for proposed changes to the model codes should be through the CCBFC, or that proponents should have the option of entering the process through either or both routes. On the other hand, some cautioned that the model code development process needs to be at arms length with a technical focus. Provincial code adoption should remain distinct from the national code development process, however provinces and territories should have the option of reviewing proposals before forwarding them to the CCBFC for review after dealing with matters of policy with provincial representatives.

There appeared to be strong support for a technical review process that would not be drastically different from the existing CCBFC Committee process. This process relies on consensus of volunteers, representing all interests in building construction and selected for their knowledge, experience and expertise. However, greater participation on the technical committees by representatives of the various Code users, including municipalities, is needed. Committee matrices need to ensure better balance of interests, in particular better representation from building owners. The Code development process must also be open and transparent to assure provincial governments that due process has been followed and that the concerns of stakeholders are addressed.

Many commentators suggested that the CCBFC, which embodies the principle of broad-based consensus, should remain responsible for the National Model Codes; however, a minority were of the view that the provincial/territorial authorities might be in the best position to perform this role. Others felt that it should be sufficient that provinces should have the

opportunity to comment on the changes recommended by the Standing Committees prior to their consideration by the CCBFC and that no additional level of decision-making should be required.

Virtually all supported the principle of taking cost implications into account for all new or revised model code requirements.

Some suggested that the Canadian Codes Centre should be designated as the official body responsible for interpretation of the core codes. Others saw this suggestion as problematic due to provincial/territorial legal responsibilities to officially interpret legislation.

There was a plea that provincial governments should revise their codes in response to changes to the National Model Code promptly and within an agreed time frame. There should be an official statement of intent by the provinces to do so.

Other comments included:

- ◆ Any resources used in the past to develop unique codes for individual jurisdictions should be re-routed to the core code development process.
- ◆ Emphasis on greater consistency or greater clarity of the text, with special emphasis on the French version.
- ◆ Existing buildings need to be better accounted for in the model codes.
- ◆ Improved communications between the development process and provincial and territorial authorities and stakeholders will be a key to the success of the new system .
- ◆ Implementation of any new core code development process must account for and coincide with the introduction of objective-based codes.
- ◆ Future agreements and processes should vigorously encourage provincial authorities to adopt the national model codes.
- ◆ The review and development process should also facilitate uniformity within each province.
- ◆ Authorities should be obliged to base their interpretation on nationally recognized code

commentaries and to consider the rigorous technical analysis that has been part of the national model code development process.

- ◆ National and provincial authorities should more actively support, encourage and advance the principle of uniformity.
- ◆ Where proposed changes affect the scope and objectives of the code, those changes too should be subject to the national review process.
- ◆ While the goal is uniformity, the process should allow for technically justifiable differences.
- ◆ The process needs to be conscious of adding costs, but at the same time must be conscious of affecting quality in a negative way.
- ◆ There is a need to keep up with advances in technology.
- ◆ Smaller players/markets must be able to participate, all should be equal at the table.

8. RESOURCES, REVENUES AND FUNDING

The Task Group held an initial discussion of the impact of the new process on resources and revenues.

It was noted that NRC makes a considerable contribution by funding the CCBFC and its committees, the Canadian Codes Centre and technical research in support of codes.

It also discussed the present situation as to how most provinces and territories make contributions to the CCBFC process to help offset a portion of these costs:

- ◆ through sales of the national codes in their jurisdiction,
- ◆ by having NRC publish provincial codes,
- ◆ by making a direct contribution to NRC on the basis of sales of provincial codes, or
- ◆ by taking the lead in the technical development of significant new or revised code provisions.

No formal assessment has been made regarding cost and revenue implications of the proposed process, nor is one possible. There was agreement to examine ways of sharing resources to service the new system. Since there are presently 13 centres acting independently responsible for code development and/or adoption (NRC plus 12 provinces and territories) it is believed that by pooling resources, and working towards the collective good, the proposed overall process will be more timely, effective and efficient. The Task Group believes, therefore, that there should not be a need for additional resources for the overall system.

The Task Group agreed to recommend that all provinces and territories and NRC endorse the principle of fair and equitable cost sharing for the codes development and distribution system. Further discussions among provinces and territories, and NRC will be necessary to elaborate this principle.

9. OBJECTIVE-BASED CODES

It became apparent early on that it was critical to co-ordinate the work of this Task Group with that of the Task Group on Implementation of Objective-Based Codes. The progress of the transition to objective-based codes was kept in mind during development of the model systems.

Present plans are for each code to be produced as a single document consisting of Part A containing objectives and functional requirements and a Part B containing quantitative performance criteria and acceptable solutions. Part B for the next codes would be essentially the 1995 documents, with normal technical upgrades.

In the future, code development would, therefore, be focussed on three major areas:

- ◆ changes to the Objective structure (Part A) (which should be rare),
- ◆ updating Part B (i.e. updating outmoded or incorrect requirements of the 95 Codes), and

- ◆ reviewing new nationally-recognized acceptable solutions that are intended to be incorporated into Part B.

The Task Group agreed that the processes being developed would be generally applicable to all three, although there may be some minor variations. There also might be differences in the approach of public consultation for some types of code changes.

Regarding timing, the objective-based codes development work may cause the completion date for the next code to be as late as 2003.

The hope is for elements of the new system being developed by this Task Group to be used in some of the objective-based codes review and development, namely:

- ◆ public consultation on root objectives/scope of the core codes,
- ◆ public consultation on technical updating,
- ◆ public consultation on the new code format, and
- ◆ final approval of the next codes.

10. CODE CYCLE

There is no obvious consensus nationally over an ideal code cycle. Benefits of a shorter cycle include responsiveness to innovation, as well as fewer revisions to absorb and be retrained to use. Liabilities include reluctance to initiate more frequent legislative changes and industry concerns over instability and frequent retraining needs.

A “continuous” process whereby new editions are published and revisions are released as they are completed, presents problems to adopting authorities in establishing legislative agendas. This situation could also result in legal difficulties in the future should there be disputes over which requirements applied to older buildings.

Codes, however, should be more stable if all agree with the concept of core codes. As well, objective-based codes offer opportunities so that legislative revisions could be reduced in favour

of some other mechanism to recognize new acceptable solutions. It is clear, however, that there will be a need for the foreseeable future to continually improve the existing (1995) set of requirements which will form the bulk of the first set of acceptable solutions (Part B).

It is concluded that code technical development should continue in a continuous mode, but a timed cycle would be necessary for public consultation and adoption.

Given the uncertainties created by the move to objective-based codes, the Task Group agreed that it would be inappropriate at this time to recommend any particular code cycle be used in the long term. Given that new model codes are due in about 2003, and that technical updating of the present requirements will be necessary between now and then, it was agreed that a time line for review and development be prepared, using the procedures set out in the “final” recommended co-ordinated model, between now and an anticipated adoption date of 2003. This would allow the CCBFC and its committees to schedule technical development and public review, and allow provincial and territorial governments to plan their regulatory and consultative agendas.

Recommendations regarding a more permanent cycle, if necessary, will have to wait until the impact of objective-based codes is clearer; however, given the steps contained in the proposed system, a three-year cycle seems to be the most manageable.

As with the existing national and provincial/territorial code development processes, there is a need for the new system to include a mechanism to quickly deal with urgent issues, such as health or safety issues, and unreasonable restrictions placed on industry by existing code requirements. Such processes usually by-pass, or lessen the level of, public consultation. The Task Group was concerned by the suggestion that there would be no public consultation on such matters. In fact some provinces and territories would not permit such a process to take place.

The Task Group agreed that the four stages on the process should be applied for all code changes, even those on the fast track. Timing,

duration and extent of the public consultation may need to be tailored to fit the situation.

11. TECHNICAL DIFFERENCES AMONG CODES

While the proposed system addresses revisions to the core codes, there presently exist many technical differences among the core code issues in the national codes and provincial codes. In order to achieve a true core code acceptable to all, some effort will have to be made to resolve these differences. Additional provincial/territorial provisions not included in the national codes are considered to be non-core issues, and need not be addressed at this time.

It is expected that some of these differences may be eliminated in the context of objective-based codes.

The Task Group is of the belief that an opportunity now exists to make some commitment to eliminating these differences. It is recognized that resource limitations and differences in approach may make it difficult to completely achieve this goal in time for the next codes, however, this does not mean it should not be tried. It is anticipated that industry, and other national organizations, would see the value of this goal and may contribute towards its achievement.

12. PARTICIPATION OF FRENCH-SPEAKING STAKEHOLDERS

An often repeated comment from code users in Quebec is that the existing system makes it difficult for French-speaking stakeholders to participate in code development. Although reports and public comment packages are issued in both languages, technical committee meetings are normally held in English. Simultaneous translation is provided for the CCBFC meetings, however, experiments with technical committee discussions have not been entirely successful because of the specialized nature of the discussions.

There have also been concerns raised with regards to the quality of the French versions of the documents. The Task Group noted that the CCBFC process provides for a French Technical Verification Committee which is responsible on a permanent basis for the verification of the technical content of all French Code documents. This involves the review of all French text to ensure that it accurately reflects the intent of the originating committee and that it is enforceable within the typical legislative framework of the provinces and territories. It also involves the maintenance of editorial accuracy and consistency within French documents. This Committee consists of members who are selected for their technical expertise, broad knowledge of code documents and linguistic competence in both languages.

The Task Group acknowledged that these are real issues that the CCBFC and the provinces and territories should address.

However, it is expected that participation by Québec in the co-ordinated public review process would stimulate the earlier participation of Québec stakeholders. Problems of translation could be noted and dealt with prior to final publication of the codes.

There will also be a general benefit to all francophone code users across Canada in having improved French language editions of the documents.

13. COST EFFECTIVENESS AND CLARITY

The Task Group noted that many submitters suggested that cost effectiveness be a critical factor in considering code revisions. It was noted that it is already CCBFC policy, as well as in the provinces and territories, that cost implications be included with all proposals for change. In applying this principle, however, most agreed that a degree of flexibility and judgement in application is necessary, given that not all proposals required a detailed cost analysis and that some proponents are not in a position to have one prepared.

Regarding improved clarity, the Task Group noted that this was one of the guiding principles in the transition to objective-based codes.

14. EXISTING BUILDINGS

Although not strictly within its mandate, the Task Group was told often by code user groups that the issue of existing buildings is not adequately dealt with in the model codes. The CCBFC has been advised in the past by the PTCBS that a national model renovation code for existing buildings was not the preferred approach, and that guidelines for the application of the National Building Code to existing buildings gave the needed flexibility.

The CCBFC has produced such guidelines, however some provinces and municipalities have seen the need to create code documents. Renovators have also encountered difficulties in having regulators accept proposed renovation solutions.

In the case of the Fire Code, there are differing levels of provisions for mandatory retrofit of existing buildings, and this may be a factor in future discussions on the scope of the core National Fire Code. A Joint CCBFC and provincial/territorial task group will be looking into the retrofit provisions in the NFC.

The Task Group therefore suggests that the CCBFC and the provinces and territories revisit the issue of the need and practicality of a national model code for renovation of existing buildings.

15. CONFLICTING POLICY ADVICE

The CCBFC will often receive different messages from provincial and territorial agencies and committees regarding the policies to be followed in developing the model codes. In the past, recommendations have been made by various provincial agencies and committees in the areas such as energy conservation, resource conservation and housing. Often, it becomes known that consensus among agencies at the

provincial level has not been achieved, and that in some cases, provincial code authorities are not in agreement with positions offered by other ministries in the same government.

The Task Group believes that the new proposed system will adequately account for such issues through involvement of the provinces and territories throughout the process.

16. STANDARDS UPDATING

There are differences in approach among jurisdictions over how to deal with new standards proposed for referencing, and with updates to existing referenced standards. This results in differences as some provinces and territories recognize these and others do not.

New standards proposed for referencing should be treated as a technical change and be subject to the complete process as with any proposal for change. The CCBFC publishes a list of updates to reference standards annually after consultation with its technical committees. Not all provinces and territories formally adopt these updates.

The Task Group believes that a mechanism is necessary to address the issue of standards updating in the provinces and territories. The Provincial/Territorial Advisory Committees should undertake a study to address the issue.

18. RECOMMENDATIONS

The Task Group makes the following recommendations as steps toward creating an improved code development system for Canada:

1. That the CCBFC, NRC and the provinces and territories endorse the concept of “core building, fire and plumbing codes” which would contain all necessary requirements for widely agreed-upon issues (e.g. health and safety) and which the provinces and territories ideally should not have to amend. Issues considered appropriate for a national approach but which are outside the scope of

the core codes, could be published in separate stand-alone (progeny) documents, such as the model energy codes. Priorities in subject areas outside the core codes would remain the responsibility of the provinces and territories.

2. That a single coordinated public review of proposed changes to the core codes, as well as provincial and territorial additions to the core codes, be established to ease the burden on reviewers, minimize local variations and reduce the time required for adoption of the core codes.
3. That the provinces and territories participate at all critical stages of core code development, with the opportunity to raise their concerns and the concerns of provincial/territorial stakeholders.
4. That there be a Decision-Making Body to oversee the process and make the final decision as to the scope, format, process and content of the core codes and that the Canadian Commission on Building and Fire Codes, appointed by NRC, perform that role. The provinces and territories would assist in the recruiting of its members.
5. That a Provincial/Territorial Advisory Committee be created to provide the CCBFC with advice and guidance on scope, format, process and content of the core codes. Should it not be practical for one body to be created because of jurisdictional difficulties, initially there could be one committee for each of the building, fire and plumbing codes.
6. That a joint effort be initiated among code users to examine, and attempt to resolve, the present technical differences among the national and provincial/territorial codes.
7. That proponents recommending changes to the core codes have the choice of submitting these at the provincial/territorial level, or at the national level. All proposals received, regardless of source would be circulated to all the provinces and territories, giving the opportunity for them to raise their concerns and the concerns of provincial/territorial stakeholders at early stages in the process. Where concerns are raised, such proposals

will not be dealt with by technical committees until the issue is resolved by the CCBFC in consultation with the appropriate provincial/territorial committee.

8. That the technical review of proposals by broad-based committees of experts such as those presently operating under the auspices of the CCBFC, continue. Provinces and territories would play a role in assisting the CCBFC on the selection process for technical committee members.
9. That all proposed changes recommended by standing committees, before and after public review, be circulated to the appropriate provincial and territorial departments responsible for building, fire or plumbing regulations. Where there are provincial/territorial concerns, such proposals will not proceed until the issue is resolved by the CCBFC in consultation with the appropriate Provincial/Territorial Advisory Committee.
10. That the National Research Council provide technical and secretariat services to the provincial/territorial committees and the CCBFC through the Canadian Codes Centre of the Institute for Research in Construction. IRC would be empowered to explain the core codes, but not legally interpret them.
11. That the four stages of the proposed process would be able to deal with urgent issues, such as health or safety issues, and unreasonable restrictions placed on industry by existing code requirements. Timing, duration and extent of the public consultation may need to be tailored to fit the situation.
12. That all provinces and territories and NRC endorse the principle of equitable cost sharing for the codes development and distribution system.
13. That attention be given to the goal of ensuring appropriate participation of French speaking code users in the code development process.
14. That an open tracking system be created to allow proponents of code change to track

the progress of their proposal throughout the process, possibly via the Internet.

15. That a study be undertaken to address the issue of standards updating in the provinces and territories.
16. That decisions regarding a permanent cycle for publishing of the core codes, if necessary, be determined when the impact of objective-based codes is clearer.
17. That the CCBFC and the Provincial/Territorial Advisory Committees revisit the issue of the need for and practicality of a national model code for renovation of existing buildings.
18. That documents be created, for approval by the provinces and territories, the CCBFC and the National Research Council, detailing the new policies, operating procedures, roles and responsibilities of the provincial/territorial committees, the CCBFC and NRC.

19. THE NEXT STEPS

The recommendations in this final report of the Task Group, if considered acceptable to the CCBFC, NRC and the PTCBS, will be presented in November, 1998 to provincial/territorial deputy ministers responsible for building standards.

Similar opportunities will be sought in the case of fire and plumbing codes.

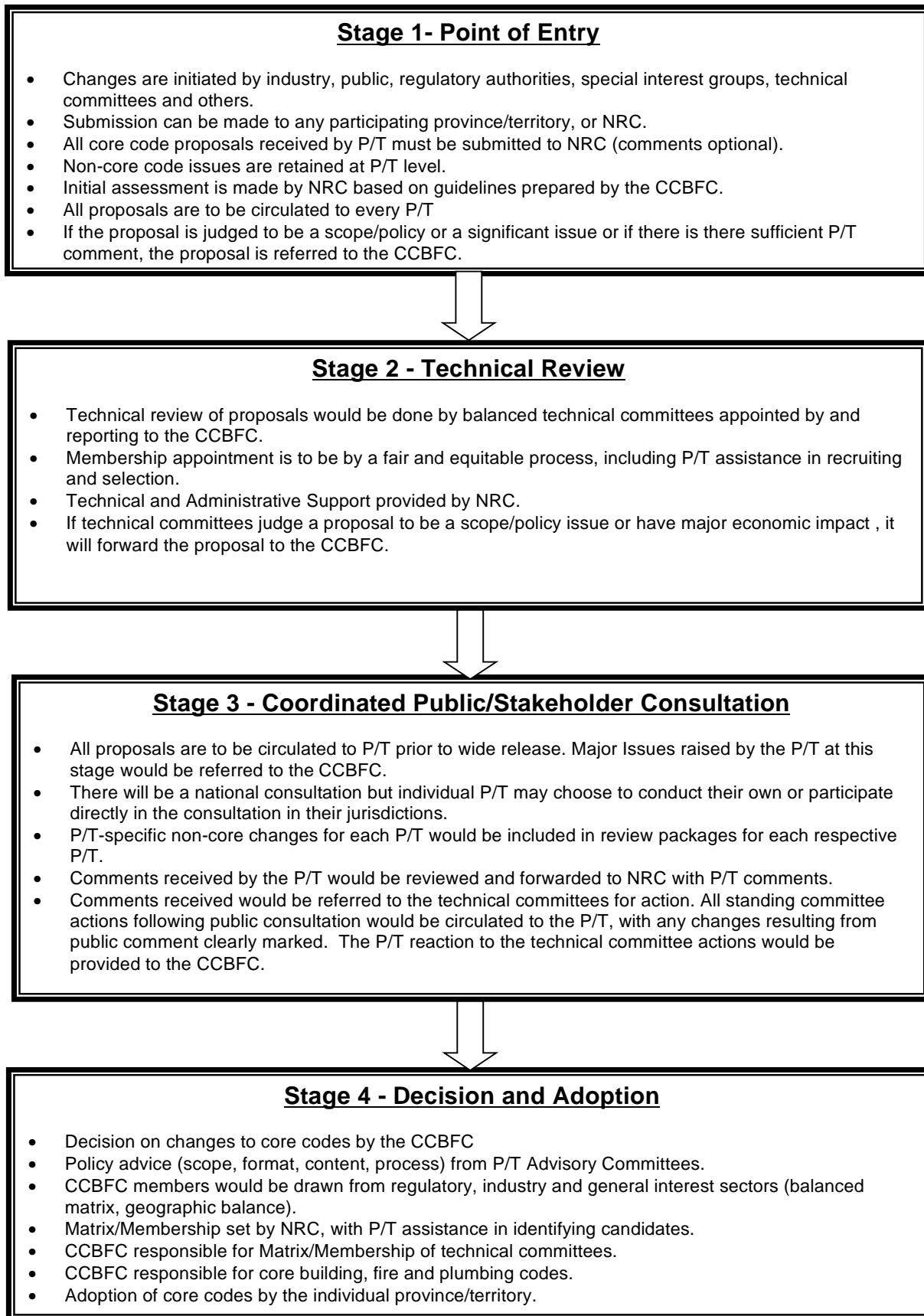
If the go-ahead is given, the report will be widely circulated to code users and stakeholders.

Implementation of the recommendations may result in new partnership agreements among the provinces and territories, NRC and the CCBFC.

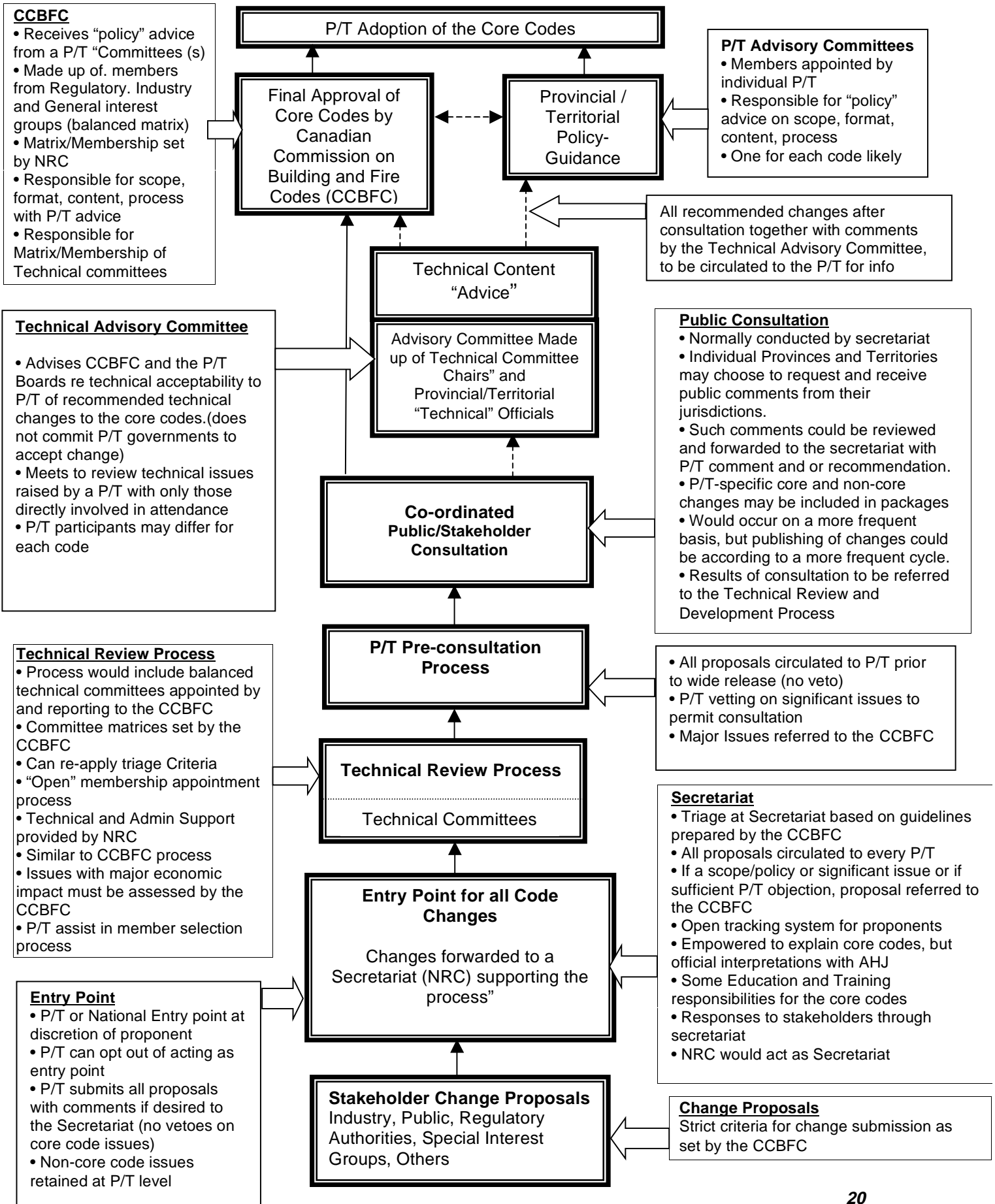
A new Joint Task Group should be struck to oversee preparations of detailed operating policies and procedures.

Elements of the new system should be applied to the technical updating for the next edition of the codes and elements of the transition to objective-based codes.

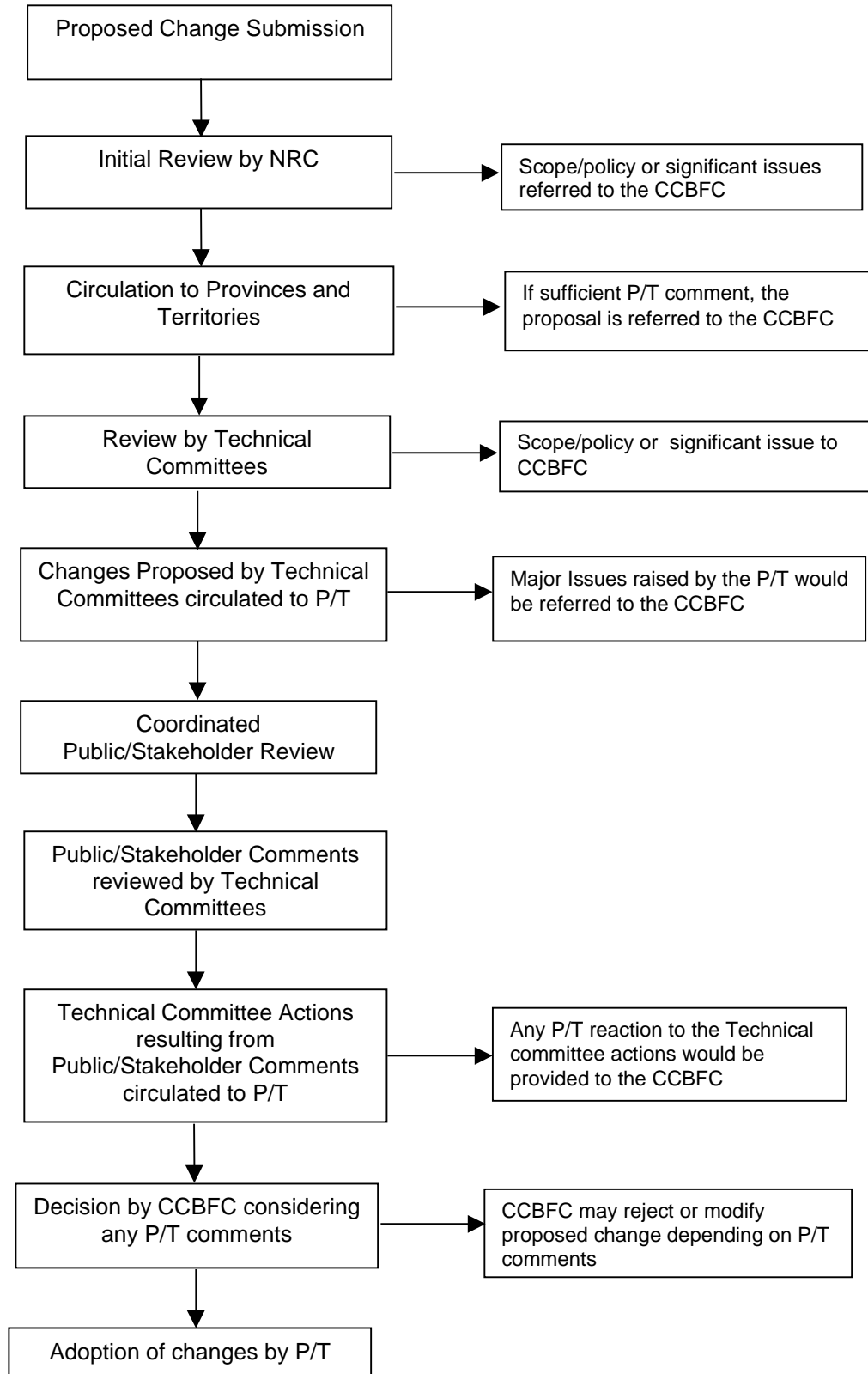
Proposed Code Development System Simplified Overview



Code Development and Review System Detailed Overview



Proposed Code Development System Flow Chart for a Typical Proposed Change



APPENDIX B – GLOSSARY OF TERMS

Model Codes

Model Codes are documents prepared and maintained by the Canadian Commission on Building and Fire Codes (CCBFC) and published by the National Research Council (NRC). They are recommended model codes which may be adopted by an appropriate authority. Although provinces and territories provide advice on scope, content, format and process, and may participate individually in the development process, the normal procedure is for each jurisdiction to conduct a separate review process subsequent to the model codes being published, followed by adoption, usually with modifications and/or additions.

Core Codes

Core Codes are similar to model codes except that provinces and territories participate collectively throughout the review and development process. Provinces and Territories, and CCBFC would agree in advance on scope and content. The “core codes” would contain common requirements for widely agreed-upon issues (e.g. health, safety) and which the provinces and territories ideally should not have to amend.

Provincial/Territorial Changes to the Core Code

Adopting authorities always have the right to make changes and additions, however, it is hoped that, because of greater involvement of these authorities throughout the process, the need for change would be minimized.

Provincial/Territorial Non-Core Code Issues

Many provinces and territories have added subject areas beyond those in the national model codes to their building and fire regulations. Examples include septic systems and existing buildings in Ontario; relocatable industrial buildings in Alberta; combining the building and plumbing codes in some provinces; and special foundation requirements for soil conditions in Manitoba. Such items would only be added to the core codes with the agreement of the Provinces and Territories.

Separate Stand-Alone (Progeny) Documents

Issues considered appropriate for a national document but that are outside the agreed-upon scope of the core codes, would be published in separate stand-alone (progeny) documents, such as the model national energy codes.

APPENDIX C – TASK GROUP MEMBERSHIP

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APPENDIX D – CCBFC SYSTEM

CANADIAN COMMISSION ON BUILDING AND FIRE CODES

1.1 The Canadian Commission on Building and Fire Codes (CCBFC) was established by the National Research Council (NRC) to encourage uniformity of building and fire regulations throughout Canada by developing and maintaining the National Code Documents (The National Building Code of Canada (NBC), the National Fire Code of Canada (NFC), the National Plumbing Code of Canada, the National Housing Code, the National Farm Building Code, The Model National Energy Codes for Buildings and for Houses) as up-to-date and progressive minimum requirements for health, fire protection, fire prevention and structural sufficiency with respect to the safety of the public.

1.2 The Commission is responsible to NRC for the contents of the Codes, its supplements and all associated documents and for any revisions which may be issued.

The Commission reports to the NRC through the IRC Advisory Board. The Commission shall prepare an annual report for presentation to the Executive Committee of Council through the Board.

1.3 The Commission is similar to the governing boards of Canadian organizations of like character. It is expected to give direction on all policy matters pertaining to its operation, and its members are expected to be broadly knowledgeable on Code-related matters.

1.4 The Commission has been recognized as an “Organization in Liaison” with the Standards Council of Canada (SCC).

1.5 The Commission receives guidelines on matters relating to the NBC from provincial and territorial code authorities through the Provincial Territorial Committee on Building Standards (PTCBS).

1.6 The CCBFC consists of not less than 27 voting members, including the Chair, appointed by NRC. These include the chairs of standing committees (see 1.16) who, subject to the approval of the Council, may be invited by the Commission to be ex-officio members of the Commission with full voting privileges.

1.7 The Deputy Chair of the Commission is the Head of the Canadian Codes Centre of the Institute for Research in Construction (IRC) and is appointed at pleasure by the Director General of IRC. The Deputy Chair is an ex-officio member without voting privileges.

1.8 The Deputy Chair is responsible for providing the necessary liaison between the Commission and NRC through the Director General of IRC and must be consulted on all matters affecting expenditures of the Commission funds and the deployment of staff resources. This includes the establishment of task groups and the scheduling of committee meetings.

1.9 The Secretary and Technical Advisor(s) to the Commission are from the staff of IRC and are appointed at pleasure by the Director General of IRC. They are ex-officio members without voting privileges.

1.10 The Chair of the PTCBS or a designated representative and the Chair of the Canadian Commission on Construction Materials Evaluation (CCCME) are ex-officio non-voting members of the Commission for liaison purposes.

1.11 The Chair of the Commission is appointed by NRC for a two-or three-year term and may be reappointed for further terms. A new chair should be designated by NRC to act as vice-chair at least 12 months before the Chair's retirement to provide continuity.

1.12 Prior to the appointment of a vice-chair, an alternate chair may be designated by the Chair of the Commission to act on behalf of the Chair in case of absence.

1.13 Members of the Commission are appointed by NRC (see 1.28) in accordance with an established matrix (see Appendix C). The term of appointment is normally two or three years and members may be reappointed for further terms subject to maintaining a reasonable degree of membership rotation (see 7.1 and 7.2).

Membership is selected keeping in mind the policy nature of the Commission's activities and the need for broad representation geographically from several sectors of the building industry, including design, construction, operation, manufacturing and enforcement.

Membership is to include individuals broadly knowledgeable in fire safety matters who can reflect the relevant interests of the fire service, industry, property management and legislation.

Members are chosen for their individual interests and abilities rather than as delegates of any particular association or group and are expected to exercise broad objective judgments.

Except for Standing Committee Chairs (see 2.10 and 2.11), voting members are not permitted to name alternates.

Persons employed by the NRC within the previous five years shall not be appointed as members of the Commission.

(Members of the Commission will be expected to adhere to a Conflict of Interest Code established by the NRC covering Council Advisory Boards.)

(A matrix is defined as the total intended membership of a committee organized in terms of broad interest categories (e.g. industry, regulatory authorities and general interest) and supplemented by subcategories identifying the specific interests that shall be reflected in the committee but not in terms of names or affiliations.)

1.14 The Commission shall hold at least one meeting each year.

1.15 The Commission shall formally approve all Code documents and technical revisions thereto prior to their publication.

1.16 To assist it in discharging its responsibilities, the Commission shall establish standing committees with assigned responsibilities for specific parts of the Codes and their associated documents (see Appendix B).

1.17 The Commission shall establish an appropriately balanced matrix for each standing committee.

IRC SUPPORT

INSTITUTE FOR RESEARCH IN CONSTRUCTION SUPPORT

The Institute for Research in Construction of NRC provides secretarial and technical support for the Commission and its related committee operations. The committees are encouraged to draw upon the latest technical information and expertise available within IRC. Correspondingly, many of the technical problems relating to Code requirements are referred by the committees to IRC for study and possible inclusion in its research program. This two-way flow of information has proven mutually beneficial.

Secretarial and technical supporting services for the Code committees are coordinated within IRC by the Canadian Codes Centre and comprise:

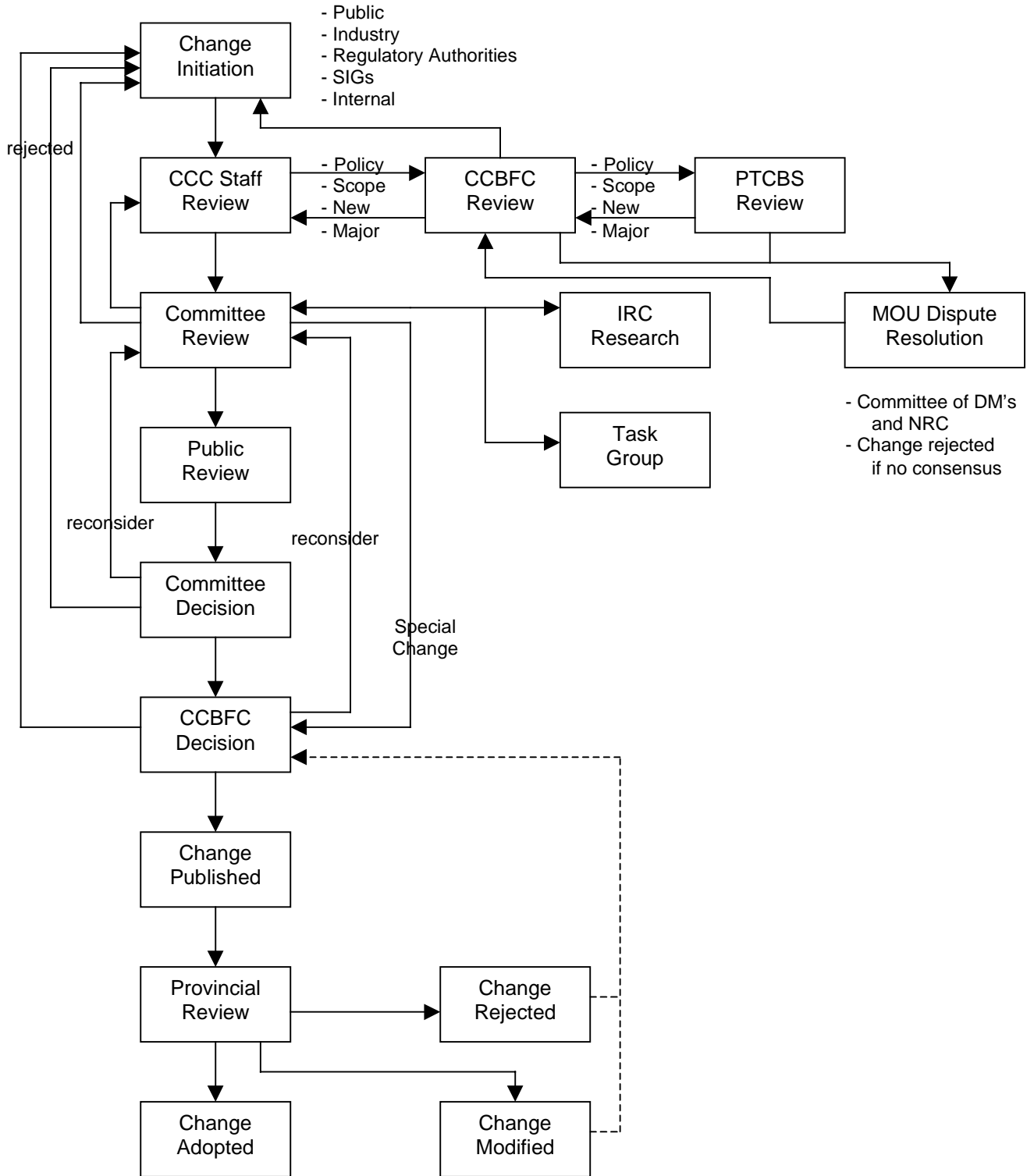
- ◆ Technical service, which coordinates IRC's technical contributions to the committees and also undertakes studies relating to the special needs of the Code,
- ◆ Secretariat service, which provides the necessary secretarial support to the committees, and
- ◆ The editorial, translation and office service units, which are responsible for the production of the code and its associated documents.

In addition to the usual administrative services in support of the code activity, the IRC Canadian Codes Centre provides the committees with a communication link to the specialist research laboratories of the Institute.

In fulfillment of its committee support role, the Institute for Research in Construction is responsible for:

- ◆ providing each committee with a secretary and technical advisor from the Canadian Codes Centre, and where appropriate, a research advisor from the specialist research laboratories within the Institute,
- ◆ arranging committee meetings in association with the chair, distributing meeting notices, agenda and supporting papers and preparing formal minutes,
- ◆ providing technical input to the committees through the preparation of short and concise statements containing an assessment of useful and relevant information on specific matters under study, prepared in the form of committee papers and circulated in advance of meetings in order to leave more time at meetings for discussion,
- ◆ assisting each committee with the development of necessary amendments to the Code by rendering committee decisions for new or revised requirements into appropriate form and language that will ensure uniformity of style, format and arrangement throughout all code documents,
- ◆ handling on behalf of the Commission all technical inquiries on the Code, including requests for interpretations,
- ◆ ensuring that the appropriate standing committees and the Commission are notified of all amended or updated standards referenced in the Code prior to recognizing them in the Code, and advising the Commission of the actions taken,
- ◆ bringing to the attention of the appropriate standing committees all matters which affect more than one part of the Code, and
- ◆ maintaining a watching brief on the availability of standards prepared in Canada in conformance with the policy established by the Commission to use Canadian rather than foreign standards whenever appropriate.

Existing CCBFC Code Development Process



APPENDIX E – PROVINCIAL/TERRITORIAL CODE SYSTEMS

Building, Fire and Plumbing Codes

Building Code

	NRC/ CCBFC	BC	Alta	Sask.	Man	Ont.	Que.	N.B.	NS	PEI	Nfld.	NWT	Yukon	Mont.	Vanc
1. Municipalities can change codes	N/A	Y+	N	Y+	N	N	Y*		Y+	N/A	Y	Y		Y	Y
2. Standards Updates (new editions, amendments) during code cycle	Y	Y	N	Y auto	N	Y	N		Y	N/A	N	Y		Y	Y
3. Basis for change, (new CCBFC Codes or last provincial, territorial or municipal codes)	N/A	NBC	NBC	NBC	NBC	OBC	NBC		NBC	N/A	NBC	NBC	NBC	NBC	BCBC
4. Existence of code review boards with or without statutory status	N/A	Y Non-statutory	Y statutory	N	Y statutory	Y Non statutory	Y Non statutory		Y statutory	N	N	Y FMAC	N	Y Non statutory	N
5.(a) Existence of a materials acceptance process	CCMC	N	N	N	N	Y	N		N	N	N	Y	N	N	N
5 (b) Recognition of CCMC	N/A	MOU	MOU	MOU	MOU	In Act	Informal		MOU	N	N	MOU	MOU	N	N
6. Single P/T ministry responsible for the building, fire and plumbing codes?	NA	Y	Y	N Plumb separate	Y	N Fire separate	N Fire separate		N Fire separate		N	Y		N/A	N/A
7. Decision makers (Cabinet, minister, council,	CCBFC	Minister	Cabinet	Cabinet	Cabinet	Cabinet	Cabinet		Minister	N/A	Minister	Minister		Council	Council
8(a) Conduct separate stakeholder review?	Y	Y	Y	Y	Y	Y	Y		Y	N	N	Y	N		
8(b) Nature of stakeholder review	Full	Informal.	Full.	Informal.	Full MBSB	Full	Full		Full.	N/A	N/A	Informal			
9. Special treatment for existing buildings in the building code?	N Guidelines	Heritage Bldgs.	N	N	N	Y	Y Sep. Legisl		Y	N/A	N	Y	N	Y	Y
10. Adoption of revisions during code cycle?	Y	Y	N	Y auto	N	Y	N		Y	N	N	Y	N	Y	Y

Notes:

N/A: Not applicable

Y: yes

N: no

+: Can change code to be more stringent

Full: Widespread public review of changes.

FMAC – Fire Marshall's Advisory Committee

Y*: Municipalities can change the building code in Québec only for certain small buildings

MOU: Prov/Terr. uses CCMC as per the Memorandum of Understanding with NRC

Legis.: Prov/Terr. references CCMC in Legislation

Informal: Comment accepted but not actively sought.

Auto- Automatic when released by CCBFC

Fire Code

	NRC/ CCBFC	BC	Alta	Sask.	Man	Ont.	Que.	N.B.	NS	PEI	Nfld.	NWT	Yukon	Mont.	Vanc
1. Municipalities can change codes	N/A	Y+	N	Y+	N	N	N/A		Y+ (N)	N/A	N	Y		Y	Y
2. Standards Updates (new editions, amendments) during code cycle	Y	N	N	Y	N	Y	N/A		Y	N/A	N	Y		Y	Y
3. Basis for change, (new CCBFC Codes or last provincial, territorial or municipal codes	N/A	NFC	NFC	NFC	NFC	OFC	N/A		NFC	N/A	NFC	NFC	NFC	NFC	NFC
4. Existence of code review boards with or without statutory status	N/A	Y Non- statutory	Y statutory	Y Informal	Y statutory	Y	N/A		N (Y)	N	N	Y FMAC	N		N
5. Single P/T ministry responsible for the building, fire and plumbing codes?	NA	Y	Y	N Plumb separate	Y	N Fire separate	N/A		N Fire separate		N	Y		N/A	N/A
6. Decision makers (Cabinet, minister, council,)	CCBFC	Cabinet	Cabinet	Cabinet	Cabinet	Minister	N/A		OFM/C Cabinet	N/A	OFM/C	Minister		Council	Council
7(a) Conduct separate stakeholder review?	Y	Y	Y	Y	Y	Y	N/A		N (Y)	N	N	Y	N		
7(b) Nature of stakeholder review	Full	Informal.	Full	Inforl.	Yes MBSB	Full	N/A		Formal	N/A		Informal			
8. Retrofit Requirements?	Y	Y	Y	Y	Y	Y	N/A		Y	N/A	Y	Y	Y		
9. Adoption of revisions during code cycle?	Y	Y	N	Y	N	Y	N/A		Y	N	N	Y	N		

Notes:

N/A: Not applicable
 Y: yes
 N: no
 +: Can change code to be more stringent
 Full: Widespread public review of changes.
 Nova Scotia – Bracketed items reflects proposed Fire Prevention Act

OFM/C: Office of the Fire Marshal/Commissioner
 Québec- Approximately 300 municipalities have adopted a Fire Code

Informal: Comment accepted but not actively sought.
 FMAC – Fire Marshal’s Advisory Committee

Plumbing Code

	NRC/ CCBFC	BC	Alta	Sask.	Man	Ont.	Que.	N.B.	NS	PEI	Nfld.	NWT	Yukon	Mont.	Vanc
1. Municipalities can change codes	N/A	Y+	N	Y+	N	(1)	Y*		Y+	N	Y**	Y		See Note (1)	Y
2. Standards Updates (new editions, amendments) during code cycle	Y	N	N	Y auto	N		N		Y	Y		Y			Y
3. Basis for change, (new CCBFC Codes or last provincial, territorial or municipal codes)	N/A	NPC	NPC	NPC	NPC		NPC	NPC	NPC	NPC	NPC	NPC	NPC		BCPC
4. Existence of code review boards with or without statutory status	N/A	Y Non-Statutory	Y statutory	Y Non-statutory	Y statutory		Y Non statutory		Y statutory	N		Y	N		N
5.(a) Existence of a materials acceptance process	CCMC	N	N	N (2)	N		Y	N	N	N		Y FMAC	N		N
5 (b) Recognition of CCMC	N/A	MOU	MOU	MOU	MOU		(2)I	MOU	MOU	Y		MOU	MOU		N
6. Single P/T ministry responsible for the building, fire and plumbing codes?	NA	Y	Y	N Plumb separate	Y	N Fire separate	N Fire separate		N Fire separate	Y		Y			N/A
7. Decision makers (Cabinet, minister, council,)	CCBFC	Minister	Cabinet	Cabinet	Cabinet		Cabinet		Minister	Cabinet	Council	Minister			Council
8(a) Conduct separate stakeholder review?	Y	Y	Y	Y	Y		Y	Y	Y	N		Y	N		
8(b) Nature of stakeholder review	Full	Informal.	Full.	Informal.	Full MBSB		Full		Full.	N/A		Informal			
9. Special treatment for existing buildings in the plumbing code?	N	Heritage Bldgs.	N	N	N		N	N	Y	Y		Y	N		Y
10. Adoption of revisions during code cycle?	Y	Y	N	Y auto	N		Y	N	Y	N		Y	N		Y

Notes:
 N/A: Not applicable
 Y: yes
 N: no
 +: Can change code to be more stringent
 Full: Widespread public review of changes.
 Auto- Automatic when released by CCBFC
 FMAC – Fire Marshall’s Advisory Committee

Y*: Municipalities can change the plumbing code in Québec for more stringent requirements
 MOU: Prov/Terr. uses CCMC as per the Memorandum of Understanding with NRC
 Y** Plumbing Code adopted at the municipal level.
 Informal: Comment accepted but not actively sought.
 (1) Plumbing requirements incorporated into Building Code
 (2) Informal acceptance process

**PROVINCIAL/TERRITORIAL DEPARTMENTS RESPONSIBLE FOR
BUILDING, PLUMBING AND FIRE CODES**

Province	Plumbing	Building	Fire
Saskatchewan	Health	Municipal Government	Municipal Government
B.C.	Municipal Affairs	Municipal Affairs	Municipal Affairs
Alberta	Labour	Labour	Labour
Manitoba	Labour	Labour	Labour
Ontario	Municipal Affairs & Housing	Municipal Affairs & Housing	Solicitor General- Correctional Services
Quebec	Régie du bâtiment du Québec	Régie du bâtiment du Québec	Direction de l'expertise en sécurité incendie et sinistre
PEI	Community Affairs & Attorney General	Community Affairs & Attorney General	Community Affairs & Attorney General
NB	Dept. of Advanced Education & Labour	Municipalities, Culture & Housing	Municipalities, Culture & Housing
NS	Housing & Municipal Affairs	Housing & Municipal Affairs	Labour
NFLD	(Municipal Responsibility)	Government Services & Lands	Municipal & Provincial Affairs
Yukon	Health & Social Services	Community & Transportation Services/Public Safety Branch	Community & Transportation Services/Public Safety Branch
NWT	None	Municipal & Community Affairs/Emergency Services Division	Municipal & Community Affairs/Emergency Services Division

APPENDIX F – MEMORANDUM OF UNDERSTANDING & PTCBS

BETWEEN THE NATIONAL RESEARCH COUNCIL AND THE PROVINCES AND TERRITORIES OF CANADA ON THE NATIONAL BUILDING CODE

I PURPOSE

Whereas it is desirable to have uniform regulations governing building construction across Canada, to enhance public health and safety, promote efficient construction and facilitate inter-provincial trade;

And, whereas it is recognized that the regulation of building construction is a matter of provincial and territorial jurisdiction;

And, whereas the National Research Council, through the Canadian Commission on Building and Fire Codes, has been carrying on the development of the National Building Code;

And, whereas it is desirable that the National Research Council continue to develop a model National Building Code with policy guidance from the provincial and territorial departments responsible for building standards through the Provincial/Territorial Committee on Building Standards;

And, whereas the parties hereto desire to formalize the relationship between the provinces and territories and the National Research Council to facilitate the adoption of the National Building Code.

II UNDERSTANDING

Therefore, the parties hereto agree:

1. That, the provinces and territories will enact the National Building Code as the core document for building regulations in each province and territory with as few amendments as possible;
2. That the Provincial/Territorial Committee on Building Standards, on behalf of the provincial and territorial departments responsible for building standards, shall provide policy guidance to the Canadian Committee on Building and Fire Codes on scope, content, format and process of the National Building Code;
3. That a member of the Provincial/Territorial Committee on Building Standards shall be an ex officio non-voting member of the Canadian Commission on Building and Fire Codes;
4. That the Deputy Chair of the Canadian Commission on Building and Fire Codes shall be an ex officio non-voting member of the Provincial/Territorial Committee on Building Standards;
5. That, where consensus on issues relating to the scope, content, format and process of the National Building Code cannot be reached between the Provincial/Territorial Committee on Building Standards and the Canadian Commission on Building and Fire Codes, the matter shall be referred to a Committee of Deputy Ministers responsible for building standards in the provinces and territories and the National Research Council for resolution;

6. That, where consensus on issues referred by the Provincial/Territorial Committee on Building Standards and the Canadian Commission on Building and Fire Codes on the National Building Code to the Committee of Deputy Ministers and the National Research Council, cannot be reached, such matters will not be published in the National Building Code.
7. That the National Research Council will provide secretariat services to the Provincial/Territorial Committee on Building Standards through the Institute for Research in Construction.
8. That a signatory to this agreement may terminate their participation in it upon 6 months written notice to the other participants of the agreement.

Provincial/Territorial Committee on Building Standards (PTCBS)

PTCBS consists of senior representatives responsible for building standards appointed by the Deputy Ministers Responsible for the Canadian Construction Industry from each of the ten provinces and two territories, the Deputy Chair of the Canadian Commission on Building and Fire Codes and the Deputy Chair of the Canadian Commission on Construction Materials Evaluation. PTCBS provides:

- ◆ policy guidance to the Canadian Commission on Building and Fire Codes in accordance with the Memorandum of Understanding between the provinces and territories and the National Research Council Canada,
- ◆ policy guidance to the Canadian Commission on Construction Materials Evaluation in accordance with the Memorandum of Understanding between the provinces and territories and the National Research Council Canada,
- ◆ policy guidance to the Standards Council of Canada and its accredited standards development and certification organizations,
- ◆ a forum for provincial and territorial authorities to discuss broad building regulatory issues and concerns,
- ◆ a forum for standards organizations, related regulatory bodies, and industry associations to make presentations and discuss issues of common concern and national interest.

APPENDIX G – LIST OF PRESENTERS AND COMMENTORS

Manitoba Building Standards Board
City of Montreal
Ordre des Ingénieurs du Québec
Ontario Building Officials Association/ Toronto Area Chief Building Officials Committee
Ontario Association of Architects
Ontario Home Builders' Association
Professional Engineers of Ontario
Robert Rush, Retired Vancouver Building Official
Canadian Home Builders Association
Nova Scotia Home Builders' Association
Dave Garret, Architect
Atlantic Home Warranty Program
Labour Canada
Peter Irwin, P.Eng.
Saskatchewan Home Builders Association
Canadian Council of Professional Engineers

Full copies of these submissions can be obtained from the Canadian Codes Centre, or, in most cases on the Task Group site on the World Wide Web at

http://www.ccbfc.org/ccbfc/tgs/review/index_E.shtml