



Australian Government
Productivity Commission

Reform of Building Regulation

Productivity Commission Draft Research Report

This is a draft research report prepared for further public consultation and input.

The Commission will finalise its report after these processes have taken place.



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The Productivity Commission

The Productivity Commission, an independent agency, is the Australian Government's principal review and advisory body on microeconomic policy and regulation. It conducts public inquiries and research into a broad range of economic and social issues affecting the welfare of Australians.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

Information on the Productivity Commission, its publications and its current work program can be found on the World Wide Web at www.pc.gov.au or by contacting Media and Publications on (03) 9653 2244.

Opportunity for further comment

You are invited to examine this draft report and to provide written comments to the Productivity Commission.

Written comments should reach the Commission by **Friday 8 October 2004**. If possible, please provide a copy of your comments by email or on a computer disk. After comments have been received and some roundtable discussions with interested parties have been held, a final report will be prepared.

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Terms of reference

The Productivity Commission is requested to undertake a research study examining the contribution that national building regulatory reform under the auspices of the Australian Building Codes Board (ABCB) has made to the productivity of the building and construction industry and its impact on economic efficiency in Australia as well as the potential that such reform has to make further gains.

The Commission is to:

1. Investigate progress in building regulatory reform in the building and construction sector since 1994 and the need and scope for further regulatory reform post-2005, including:
 - a) whether the Inter Government Agreement on building regulation reform of 1994, as revised, is achieving its objectives;
 - b) whether the Inter Government Agreement is producing gains for the industry and maximising net benefits for the Australian economy;
 - c) whether the Inter Government Agreement is providing efficiency and cost effectiveness in meeting community expectations for health, safety and amenity in the design, construction and use of buildings through nationally consistent building codes, standards and regulatory systems;
 - d) the need for on-going national co-ordination of the Building Code and related reforms; and
 - e) the effectiveness of the Australian Government's current role in building regulatory reform.
2. If it is found that further work in this area is appropriate post-2005, report on:
 - a) the Australian Government's role in future building regulatory reform;
 - b) whether the objectives of the Inter Government Agreement adequately address the need for future reform; and
 - c) whether the ABCB or alternative models would be more efficient and effective in delivering the reforms.
3. Make recommendations based on the findings.

In undertaking the study, the Commission is to consult widely with interested parties comprising the Australian Government, State and Territory agencies, relevant industry bodies and practitioners including:

- Australian Building Codes Board
- Australian Government - Department of Finance and Administration
- Australian Government - Department of Prime Minister and Cabinet
- Housing Industry Association
- Master Builders Association
- Australian Construction Industry Forum
- Australian Council of Sustainable Energy
- Alternative Technology Association
- Australia and New Zealand Solar Energy Society
- Urban Ecology Australia
- Royal Australian Institute of Architects
- Institute of Engineers Australia
- Australian Institute of Building
- Australian Institute of Building Surveyors
- Building Designers Association of Australia
- Property Council Australia

The Commission is required to report within 9 months of receipt of this reference.

(signed)

ROSS CAMERON

17 FEB 2004

Contents

Opportunity for further comment	III
Terms of reference	IV
Contents	VII
Abbreviations and explanations	XII
Key points	XVIII
Overview	XIX
Draft findings and recommendations	XXXVII
1 Introduction	1
1.1 Scope of the study	1
1.2 Conduct of the study	4
1.3 Previous reviews	6
1.4 Problems and issues	7
1.5 Structure of the report	10
2 Legal framework, the ABCB and BCA	11
2.1 Regulation of the building process	11
2.2 Role of State and Territory Governments	16
2.3 Role of Local Governments	17
2.4 Role of the Australian Government	18
2.5 ABCB	20
2.6 BCA	23
3 Assessment criteria	29
3.1 Background	29
3.2 Rationale for government intervention	30
3.3 Effectiveness	32
3.4 Efficiency	33

3.5	National consistency	34
3.6	Good regulation and regulatory governance	36
4	Impact of reforms	41
4.1	State of the industry	41
4.2	Building industry productivity	43
4.3	Sources of productivity change	50
4.4	Impact on economic efficiency	64
5	Building Code of Australia	69
5.1	IGA Objectives pursued through the BCA	69
5.2	Are these objectives appropriate?	70
5.3	Assessing the ABCB's performance in meeting IGA objectives	93
6	Code content and coverage	111
6.1	Non-BCA mandatory requirements impacting on building	112
6.2	Coverage expansion	115
6.3	Disabled access	117
6.4	Plumbing and gas installation	121
6.5	Electrical installation and telecommunications	125
6.6	Occupational health and safety	126
6.7	Sustainability	128
6.8	Energy efficiency	135
6.9	Asset protection	140
6.10	Local Government requirements on building	146
7	Regulatory systems: compliance and delivering outcomes	155
7.1	Administrative systems — history and compliance issues	156
7.2	Practitioner licensing, accreditation and audit	159
7.3	Building approvals/permits, inspections and occupancy approvals	166
7.4	Enforcement and dispute resolution	177
7.5	Maintenance	184
7.6	Other mechanisms for achieving outcomes	186
7.7	Regulatory systems – national consistency?	198
7.8	Looking to the future	203

8	Code making processes and access	205
8.1	Regulation making: the Code and standards	205
8.2	Accessing the Code	237
9	Other activities of the Board	249
9.1	Research	249
9.2	Raising awareness	252
9.3	Use of guidelines	257
9.4	National product certification	258
9.5	International liaison	262
10	Governance issues	265
10.1	Issues raised	265
10.2	Involvement of the Australian Government	268
10.3	Composition of the ABCB and committees	273
10.4	ABCB funding	280
10.5	Commitment to uniformity	282
10.6	Authority of the decision-making body	284
10.7	Independence of the decision-making body and the secretariat	286
11	Assessment and new IGA	297
11.1	Past performance	297
11.2	New mission statement	304
11.3	Revised objectives	305
11.4	Future work agenda	306
11.5	Support functions	310
11.6	New IGA	312
A	Submissions and meetings	315
B	Inter Government Agreement	321
C	ABCB Membership	337
D	BCA Objectives	339
E	Building industry	345
F	State & Territory regulatory systems for building	357
	References	405

BOXES

1.1	Objectives of the ABCB	3
1.2	Classes of buildings as defined by the BCA	5
3.1	Checklist for assessing regulatory quality	37
3.2	Aspects of good regulatory governance	39
4.1	What is productivity?	44
4.2	KPMG impact assessment	60
5.1	The performance-based Code in practice	78
5.2	Social norms, community expectations and building performance	84
6.1	Energy-efficiency measures adopted in certain jurisdictions	138
6.2	Local Government building regulations	147
7.1	Considerations for enforcement options	179
7.2	Building Contracts	181
7.3	Training packages in the building sector	188
7.4	Insurance and incentives	197
8.1	Regulation Impact Statement (RIS) requirements	207
8.2	Protocol for Referenced Documents	217
8.3	Trans-Tasman Building Regulatory Reform Council	225
8.4	OECD best practice principles for consultation	232
8.5	BCA pricing	238
8.6	BCA MiniCode Generator	239
8.7	Master Builders National Survey — Access to BCA	240
8.8	Cost recovery guidelines	243
9.1	Key elements of ABCB education and awareness strategies	253
9.2	ABCB International liaison activities	262
10.1	Technical Validation Panel	279
10.2	Executive Agencies	294
E.1	International comparisons – research findings	356

FIGURES

2.1	Regulation of the building process	12
2.2	ABCB structure	22
2.3	BCA Structure	26
4.1	Labour productivity for the Construction sector	46

4.2	Multifactor productivity for the Construction sector	47
4.3	ICT capital services for the Construction sector	61
7.1	An example of an enforcement pyramid	178
E.1	Contribution of building work done, 1982-83 to 2002-03	346
E.2	Value of building work done by quarter, Australia 1983-2003	347
E.3	Share of residential and non-residential building by jurisdiction, 2002-03	348
E.4	Value of building work done, by State and Territory, 2002-03	348
E.5	Building work done by quarter, selected States (New South Wales, Victoria, Queensland and Western Australia)	349
E.6	Building employment as a share of total employed persons, 1994 - 2003	350

TABLES

4.1	Construction and market sector productivity growth	48
4.2	Adoption dates of the performance-based BCA and private certification	49
6.1	Examples of non-BCA mandatory requirements affecting building	113
6.2	Adoption of BCA energy codes by jurisdictions (at February 2004)	137
10.1	Key characteristics of alternative governance models	269
10.2	Alternative governance arrangements for ABCB Office	290
C.1	ABCB Membership	337
D.1	Coverage of Volume One	339
D.2	Coverage of Volume Two	342
E.1	Trade in building manufactures, 1989-90 – 2001-02	352
F.1	Planning approval	358
F.2	Approval to commence building	364
F.3	Inspections of building work	370
F.4	Enforcement of building notices/orders etc	375
F.5	Occupancy approval	380
F.6	Essential services maintenance	384
F.7	Practitioner licensing	387
F.8	Accreditation and audit of certifiers	392
F.9	Insurance (home building warranty, professional indemnity etc)	395
F.10	Dispute resolution	399

Abbreviations and explanations

Abbreviations

ABCB	Australian Building Codes Board
ABRB	Australian Building Regulation Board
ABS	Australian Bureau of Statistics
ACA	Active Cooperation Agreement
ACCI	Australian Chamber of Commerce and Industry
ACIF	Australian Construction Industry Forum
ACTU	Australian Council of Trade Unions
AFAC	Australasian Fire Authorities Council
AEA	Australian Elevator Association
AECA	Association of Consulting Engineers Australia
AGO	Australian Greenhouse Office
AIBS	Australian Institute of Building Surveyors
ALGA	Australian Local Government Association
AMCA	Airconditioning and Mechanical Contractors Association
AMUBC	Australian Model Uniform Building Code
ANTA	Australian National Training Authority
ANZFRMC	Australia New Zealand Food Regulation Ministerial Council
ANZSES	Australian and New Zealand Solar Energy Society
ANZSIC	Australian New Zealand Standard Industrial Classification
APS	Australian Public Service
ATC	Australian Transport Commission
AUBRCC	Australian Uniform Building Regulations Coordinating Council
BASIX	Building Sustainability Index
BCA	Building Code of Australia
BCC	Building Codes Committee
BIA	Building Industry Authority

BPIC	Building Products Innovation Council
BPS	Basic Product Set
BRAC	Building Regulation Advisory Committee
BRBWA	Builders' Registration Board of Western Australia
BRRT	Building Regulation Review Taskforce
CEO	Chief Executive Officer
CER	Australian New Zealand Closer Economic Relations Trade Agreement
CoA	Commonwealth of Australia
COAG	Council of Australian Governments
CIB	International Council for Building Research and Documentation
CRC	Cooperative Research Centre
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CTA	Construction Training Australia
DAF	Development Assessment Forum
DDA	<i>Disability Discrimination Act 1992</i>
DEWR	Department of Employment and Workplace Relations
DOFA	Department of Finance and Administration
DTS	Deemed-to-Satisfy
FHOS	First Home Owner Scheme
FPA	Fire Protection Association
FMA Act	<i>Financial Management and Accountability Act 1997</i>
FSANZ	Food Standards Australia New Zealand
GBC	Green Building Council of Australia
GDP	Gross Domestic Product
GTAP	Global Trade Analysis Project
GST	Goods and Services Tax
HBWI	Home Builders Warranty Insurance
HIA	Housing Industry Association
HREOC	Human Rights and Equal Opportunity Commission
ICA	Insurance Council of Australia
ICT	Information and Communications Technology
IGA	Inter Government Agreement

ISO	International Organisation for Standardisation
IT	Information Technology
ITAB	Industry Training Advisory Body
ITR	Industry Tourism and Resources
JAS-ANZ	Joint Accreditation System of Australia and New Zealand
MBA	Master Builders Australia
MBAWA	Master Builders Association of Western Australia
MFP	Multi-Factor Productivity
MOU	Memorandum of Understanding
MRA	Mutual Recognition Agreement
NatBACC	National Building and Construction Committee
NCP	National Competition Policy
NCVER	National Centre for Vocational Education Research Ltd
NECA	National Electrical and Communications Association
NFIA	National Fire Industry Association
NGV	National Gallery of Victoria
NOHSC	National Occupational Health and Safety Commission
NRTC	National Road Transport Commission
NTC	National Transport Commission
OCA	Olympic Coordination Authority
OECD	Organisation for Economic Cooperation and Development
OH&S	Occupational Health and Safety
ORR	Office of Regulation Review
PC	Productivity Commission
PCA	Plumbing Code of Australia
PCA	Property Council of Australia
PIA	Preliminary Impact Analysis
PPP	Purchasing Power Parity
PWC	PricewaterhouseCoopers
QDC	Queensland Development Code
RD	Regulation Document
R&D	Research and Development
RIS	Regulation Impact Statement

RPB	Registered Building Practitioners
SAI	Standards Australia International
TBT	Technical Barriers to Trade
TTMRA	Trans-Tasman Mutual Recognition Agreement
TVP	Technical Validation Panel
VET	vocational education and training
WTO	World Trade Organization

Explanations

Billion	The convention used for a billion is a thousand million (10 ⁹).
Findings	<i>Findings in the body of the report are paragraphs highlighted using italics, as this is.</i>
Recommendations	<i>Recommendations in the body of the report are highlighted using bold italics with an outside border, as this is.</i>
Requests for further information	<i>Information requests are paragraphs highlighted using italics, as this is.</i>

OVERVIEW

Key points

- The building sector is subject to a diverse range of regulations by all levels of government.
 - These regulations, in particular, seek to protect the health, safety and amenity of those affected, by imposing mandatory building standards.
- There has been work over many years to bring a national approach to building regulation. Progress has been made, particularly in:
 - reducing regulatory differences across jurisdictions and
 - changing the Building Code of Australia (BCA) to performance-based requirements, rather than prescriptive requirements.
- However, this reform work is far from complete and recent developments are undermining a national and soundly based system of building regulation. The future agenda for building regulation reform should include:
 - further reducing variations across jurisdictions
 - better articulating the performance-based requirements
 - examining ways to enhance compliance and enforcement systems
 - increasing the BCA's focus on asset protection for most types of buildings, thereby matching the requirements applied by fire protection authorities
 - examining ways to reduce the erosion of a national approach to building regulation by actions of local governments using planning powers
 - examining ways to constrain, and bring rigour to, proposals for incorporating environmental objectives (including energy efficiency) in the BCA.
- The Australian Government, as well as the State and Territory Governments, should continue to be actively involved in (including funding) building regulation reform.
- A new Intergovernmental Agreement (IGA) should be negotiated by all nine governments, so as to:
 - replace the Australian Building Codes Board (ABCB) with the Australian Building Regulation Board (ABRB)
 - clarify the objectives of building regulation reform
 - agree to shared and increased funding and removal of charges for the BCA
 - strengthen the commitment to national consistency
 - emphasise the importance of the ABRB giving priority to its core business
 - strengthen the use of regulatory impact statements
 - outline the future work agenda, drawing on recommendations from this study.

Overview

The Commission has been asked to assess the contribution that reform of building regulation has made and could further make to the productivity of the building and construction industry. The Australian Building Codes Board (ABCB) was established in 1994 via an Inter Government Agreement (IGA) to coordinate this reform work. It has government and industry representation. While it is the ABCB that makes decisions on changes to the Building Code of Australia (BCA), without reporting to a Ministerial Council, actual implementation of the mandatory requirements is by the State and Territory Governments.

The terms of reference request assessment of the progress of reform of building regulation against a number of criteria:

- effectiveness in achieving objectives
- improving productivity of the industry
- maximising net benefits for the economy
- efficiency in meeting community expectations for health, safety and amenity.

They also request an assessment of whether further reform should be undertaken after 2005 — when the current funding arrangements for the ABCB are due to cease — and whether this requires coordination at the national level with continued Australian Government involvement. If so, the Commission has been asked to advise whether the objectives of the IGA should be amended and what institutional structure should be used for delivering reforms in the future.

The study has found that reform of building regulation has delivered greater certainty and efficiency to the building industry, as well as benefits to the broader community. The Board has successfully reduced many regulatory differences across jurisdictions, especially with regard to the core elements of the Code, and established the framework for a performance-based regulatory regime. Reforms in building regulation appear to have increased the scope for productivity improvements for the sector, through encouraging skill developments and innovation and reducing compliance costs.

The Board overall has established sound processes and criteria for assessing and developing the mandatory requirements that are contained in the Building Code of

Australia (the Code) and has undertaken activities to support its regulatory reform agenda, including increasing awareness of the Code, training and research.

The ABCB provides an effective vehicle for governments to collaborate and work for the benefit of the community and industry to deliver the reforms. The Commission considers that leadership by, and support of, the Australian Government is critical to the continuing success of reform of building regulation.

There is widespread recognition that the reform work is far from complete and there is considerable support for the Board to continue in some form. However, there are also several concerns, including that the Board's focus has tended to be diverted from its core activity of better articulating the performance-based requirements of the Code. In addition, recent developments, such as the introduction of energy-efficiency standards, are undermining a national and soundly based system of building regulation.

A range of suggestions have been made to improve the IGA and the Board's operations. The Commission proposes changes to: the institutional arrangements; the objectives (contained in the IGA) to be pursued by the Board; priorities for the work program; and the processes and criteria applied to a number of its functions, especially the development and assessment of standards. These changes have the common goal of generating net benefits for the Australian economy in the future.

Why regulate?

Buildings impact significantly on our economy, the environment and the physical setting in which most of us live and work. There are some broad characteristics of the building industry that may justify regulatory intervention, namely:

- costly and asymmetric information — buyers and users of buildings find it difficult to ascertain some of the qualities of buildings;
- positive externalities (or spillover effects) — derived, for example, from spreading benefits of research, positive aesthetics, and providing access and egress to public buildings for the disabled and the aged;
- negative externalities (or spillover effects) — arising, for example, from deficiencies in building safety, adverse environmental impacts, construction noise, inadequate ventilation, poor aesthetics, poor drainage, fire; and
- widespread community expectations that all buildings will provide at least a minimum level of performance.

Information asymmetry is a particular challenge for many purchasers of buildings, especially buyers of single residences, since many of them will be infrequent buyers

without occasion to build up experience of the market. They are not easily able to ensure that the building in fact meets the qualities they think they are paying for. Information asymmetry is also relevant for users of buildings (such as tenants, workers and students) who are not in a position to assess fully building performance.

Aspects of buildings which are subject to information gaps with potentially significant adverse impacts, include:

- structural soundness;
- effectiveness of the protection provided against fire;
- use of materials, such as asbestos, that could cause painful and life-shortening diseases; and
- ability to withstand the impacts of earthquakes or cyclones in areas prone to either.

Other (non life-threatening) matters include the quality of service the building provides — for example sound-proofing and weather-proofing.

Even where buyers and owners have full knowledge of a building's characteristics, it is likely that they would under-provide for some aspects. For example, many in society would want to ensure that all citizens are guaranteed certain minimum levels of access to many public buildings. However, owners who provide for this will not normally be rewarded via the market for the full social value of providing disabled access. Hence, without some form of intervention, access for the aged and the disabled will be less than socially optimal.

Similarly, research, for example, into new building technologies and materials may not recoup its real value because once it is publicly available, those who use it do not have to pay for it (unless the research is protected by patents). And, if it is not made publicly available, then it does not provide as big a benefit as it potentially could. Without some form of intervention there is a risk that research undertaken will be less than would be socially optimal. This is potentially a severe problem for building because most businesses in the industry are very small and do not have the resources to conduct research. In fact, via the deemed-to-satisfy standards, the Code provides the results of research in the form of technical information and requirements embodied in the standards.

A number of characteristics of buildings can mean that builders, owners or occupants can impose costs on others rather than bearing these themselves. Examples include: adverse environmental impacts from energy use where the price does not reflect effects of greenhouse gas emissions or other pollution; the effects of

noise on neighbours; the costs imposed on owners of adjacent buildings when little has been done to contain fire to the building in which it occurs; aesthetics that offend the neighbours; and emission of toxic or saline substances into public drains.

There are ways other than government regulation to address market failure. For example, with respect to knowledge imbalances, governments can undertake education campaigns or facilitate access to relevant information. Consumers can engage an architect or a building inspector to act on their behalf to provide the level of expertise and quality control to help bridge the knowledge gap. They can also research a builder's reputation before hiring, or they may be able to take out insurance against poor building outcomes. Contracts and appeals through the courts also provide for financial and legal redress, albeit possibly costly and uncertain, when consumers experience adverse outcomes.

Similarly, with positive externalities, direct government subsidisation of the target characteristic can be far more efficient and effective than regulation and, for negative externalities, taxation can often produce better results.

However, some characteristics are not easily taxed or subsidised and at times governments have other reasons for not choosing these 'fiscal' instruments or similar schemes such as emission permit trading.

In these cases, policy makers might look to regulation. Regulation is particularly needed where: information programs will not reach some individuals; many individuals are unable to absorb or act on information provided; a significant number will 'not know what they don't know'. Most people currently believe that the regulatory and enforcement systems provide some guarantees as to quality, safety and health impacts of buildings.

The policy challenge for building regulation is to get the combination of instruments in balance so that buildings can be constructed using innovative technology and be well adapted to consumers' needs, while at the same time addressing weaknesses in the market due to positive and negative externalities, and information gaps. The risk of excessive regulation clearly exists.

Soundly based regulatory assessment processes and criteria should be used to assess the net benefits of changes. Policy makers should clearly identify the nature and size of the problem, assess how their proposal will solve it relative to alternatives, and take account of side-effects. It is also important to identify why individuals, communities and companies operating in a free market will not be able to get the outcomes they are prepared to pay for. The consequences of not adopting mandatory solutions should be made explicit.

Revised mission statement: address market failure and seek efficiency

Currently the Board's mission statement, as contained in the IGA, is:

To provide for efficiency and cost effectiveness in meeting community expectations for health, safety and amenity in the design, construction and use of buildings through the creation of nationally consistent building codes, standards, regulatory building requirements and regulatory systems.

This mission statement is somewhat ambiguous in providing guidance to the Board.

A key aspect of the mission statement is ensuring that buildings meet **community expectations** of health, safety and amenity.

The term 'community expectations' currently guides the identification of the levels of building performance that are to be embodied in the Code. However, the concept of 'community expectations' is operationally ambiguous. Where regulation addresses information difficulties, expectations may be poorly formed. Community expectations at a local level may be in tension with the goal of national consistency. In addition, what the community expects may not be closely related to what it is prepared to pay for, or, from an economic perspective, the solution that generates net benefits to the community. Further, in any particular case, the level of building performance implied by either concept — community expectations versus what will maximise net benefits — is hard to measure with precision.

The mission statement also refers to **health, safety and amenity**, as the objectives for regulation. In large part, it was judged that these are the areas where significant market failure might arise. While health and safety are relatively straight forward terms, amenity is less easily defined and may not offer significant guidance as to what areas of building performance should be regulated. The Board has treated amenity as being of secondary importance to health and safety concerns. The Commission considers that amenity should continue in the list of qualities being pursued through the Code as a fall back to cover significant market failures unrelated to health, safety (or environment), such as sound abatement and access for the disabled.

More recently, **environmental externalities** have been addressed by the Board, even though they are not included in its mission statement. This has its origins in the Australian Government's objective to reduce greenhouse gas emissions. The Government has, for the time being, decided not to use taxation or tradeable emission permits to reduce emissions, although some State Governments are considering this approach. Rather, other instruments, including setting energy-efficiency standards, have been used. While such an approach could result in regulation that is not justified by a cost-benefit test, a number of jurisdictions have

implemented energy-efficiency requirements for some categories of buildings. A national approach and a rigorous assessment system need to be applied to this momentum for energy-efficient buildings, and more generally in relation to environmental objectives.

While there are advantages in the consolidation of technical requirements for buildings into the BCA, much work remains to be done to establish whether there is a case for intervention, and determining which elements of ‘sustainability’, if any, should be incorporated within the Code.

The Board uses the term ‘sustainability’ to refer to environmental issues. This potentially introduces some uncertainty: sustainability is hard to define and is harder to relate to market failures than is the concept of adverse environmental impacts.

In sum, the Commission considers that health, safety, amenity and environment are the areas which are most likely to present market failures that may need to be addressed, including via regulation, such as the BCA. It is important that the assessment process, as progressed via Regulation Impact Statement (RIS) requirements, is rigorous in determining whether a significant problem exists, that no better alternative is available and, if regulation is chosen, that it is the minimum effective to address the issue.

While **national consistency** is the most significant national reform objective, it is not universally appropriate: the Code provides scope for variations by regions with different characteristics, such as cyclone risks. In addition, the pursuit of a national compliance system may not be warranted at this stage.

Any regulation that is **efficient** is also **cost-effective**. Hence, also including cost-effective in the mission statement is redundant.

The Commission considers the Board’s mission statement should be amended to:

In addressing issues relating to health, safety, amenity and the environment, to provide for efficiency in the design, construction and use of buildings through the creation of nationally consistent building codes and standards and effective regulatory systems.

Current objectives

Currently the Board has 10 objectives, also specified in the IGA, that require the Code to be: efficient, cost-effective, representative of minimum, least-cost solutions, representative of modern solutions, and targeted at safety, health and amenity. These terms suffer from over-determination, overlap and inconsistency.

The objectives also direct the Board to undertake research, consult with industry, and promote awareness of regulatory reform, amongst others. This points to a significant lack of clarity and to confusion between means and ends.

Mandatory requirements contained in the Code prescribe levels of performance that apply to all buildings of a particular category, regardless of individual preferences. It is impossible to regulate in such a way as to ensure each individual gets the quality of building he or she prefers and is willing to pay for.

Hence, determining the level of building performance to be achieved through regulation is an important part of specifying regulatory objectives. The challenge is to identify a level of building performance that will address market failures in a way that generates significant net benefits.

The ABCB sets requirements that it judges to be the minimum acceptable to the community. The primary rationale, behind **minimum acceptable standards**, is to minimise mandated costs, increase the level of flexibility for building practitioners and, in principle, increase the level of choice over building performance for consumers. By adopting minimum acceptable requirements, the aim is to ensure that all buildings provide for minimum levels of health, safety, amenity and environmental protection with the expectation that, beyond this, the level of building performance may be tailored to best meet the circumstances of the consumer, albeit at higher cost to the consumer.

However, ‘minimum requirements acceptable to the community’ will not provide the most efficient policy outcomes, when the community does not have a full range of relevant information, has unreasonable expectations and/or has an unrealistic evaluation of the relevant risks, costs and benefits.

The pursuit of efficiency should be the prime objective of the standards adopted by the Board. In determining whether regulation is justified and whether the level is appropriate, the Board should take into account:

1. the risks, costs and benefits if a mandatory standard is not established;
2. that individuals can pursue higher standards than those set by the mandatory standard, although that would involve higher expense to them;
3. that the Code is not the only instrument available to individuals to pursue better building outcomes, as they have access to designers, architects, insurance, private building inspectors and dispute resolution measures; and
4. that governments may have other policy instruments available to achieve the desired outcome.

In order to provide transparency and arrive at the best instrument, as elements of the Code are revised or additions made, the ABCB (or its replacement) should clearly state the nature of the market failure and give reasons for choosing a particular level as the one that it has determined to be the minimum necessary to address the market failure effectively, taking into account existing regulatory and non-regulatory mechanisms ('minimum effective regulation').

Revised objectives

The Commission proposes the following new objectives (under the umbrella of the revised mission statement with its emphasis on pursuing efficiency):

Proposed Objectives for the Board

Proposed Objective 1

Establish building codes and standards that are the minimum necessary to address efficiently relevant health, safety, amenity and environmental concerns.

In determining the area of regulation and the level of the requirements, the Board should ensure that:

- there is a rigorously tested rationale for the regulation;
- the regulation would generate benefits to the community greater than the costs (ie net benefits);
- there is no regulatory or non-regulatory alternative (whether available to the Board or not) that would generate higher net benefits.

Proposed Objective 2

Ensure that, to the extent practicable, mandatory requirements are:

- consistent across the States and Territories
- performance based
- based on international standards
- expressed in plain language.

Proposed Objective 3

- Identify and seek implementation of improvements to compliance and enforcement systems for building regulation.

Proposed Objective 4

Identify and seek to implement ways to reduce reliance on regulation by exploring alternative mechanisms for delivering outcomes, including:

- non-mandatory guidelines
- training to increase skill levels of building practitioners and certifiers.

Currently, many activities undertaken by the Board, such as consultation and research, are contained in the objectives. Instead, the Commission proposes that these not be included in the objectives, but still be covered by the revised IGA.

Core agenda

The core elements of the regulatory reform strategy to date have been to:

- develop and update the BCA;
- achieve consistent adoption of the BCA by all States and Territories;
- introduce performance-based standards;
- seek consolidation of other mandatory requirements impacting on building into the BCA; and
- achieve a rationalisation of the administration of building regulation.

These same elements should remain central to the work of the Board or its replacement in the future.

Updating of the Code

While performance-based regulation and alternative solutions have led to significant cost savings and more modern and innovative designs, the prescriptive deemed-to-satisfy solutions are used by most builders most of the time.

The BCA is often described as a ‘living document’. It needs regular updating to reflect ongoing innovation in building technologies and practices. However, it appears that the Board has given insufficient attention to: maintenance and updating of the Code, especially to revising deemed-to-satisfy solutions to ensure they embody up-to-date building practices; improving the clarity of certain performance standards; and the relationship between some deemed-to-satisfy solutions and performance requirements. Work on these areas has been given lower priority to date in order to focus on the development of provisions for disabled access and

energy efficiency. Given the considerable investment made in and use made of the Code, the ABCB (or its replacement), as a high priority, should continue to work towards maintaining and updating the core technical requirements in the Code.

Consistency

The driving force behind the establishment of a national body for building regulation, and the development of a national code, was to promote consistency in building regulations across the States and Territories.

Many submissions strongly endorsed the ABCB's efforts to have a nationally consistent BCA. National consistency is desirable for a number of reasons. Builders and designers, especially those that operate across jurisdictional borders, can use and apply a single set of mandatory requirements, rather than having to be familiar with multiple codes. Further, building designs that comply in one jurisdiction do not have to be reworked or altered to comply in other jurisdictions. This is especially useful for owners or users of buildings, such as wholesalers and retailers, who wish to use the same design for multiple buildings across jurisdictions. Manufacturers of building products strongly support a national scheme, as this allows them to manufacture a single product to meet demand across all jurisdictions, rather than having to develop different products for each jurisdiction. Tradespeople benefit from consistent building designs as they can apply their skills in any jurisdiction, without having to retrain or apply for additional qualifications before crossing jurisdictional borders. The development of a national code is likely also to be significantly more cost effective for government than developing eight separate State and Territory based codes.

Nevertheless, adopting a national code can potentially pose some difficulties. Primarily, it can make it more difficult to tailor requirements to the needs of specific communities or geographic areas, especially as building conditions and needs vary across Australia. However, the BCA already applies different requirements according to the needs of particular zones. For instance, the Code applies specific requirements for protection against storms in areas likely to be subject to cyclones. Varying the BCA according to geographic zones (based on an objective assessment of needs) gives the code sufficient flexibility, without the need to resort to variation according to jurisdictional borders. A national code, with climatic zones, is superior to State codes that have uniformity *within* each State.

Overall, the ABCB has been successful in significantly reducing the number of variations to the Code while still catering for legitimate regional variation. More still needs to be done, especially as recent amendments to the Code, such as energy efficiency, have increased inconsistencies.

Performance-based

One of the primary objectives pursued was a conversion from a prescriptive to a performance-based code (albeit with prescriptive deemed-to-satisfy solutions included as one way to meet the performance requirements). Performance-based regulations have several advantages compared with prescriptive regulation, including allowing much greater flexibility in satisfying regulatory objectives, and enabling practitioners to innovate and to choose the cheapest option to achieve desired outcomes.

However, the majority of the ‘performance’ requirements actually in the Code do not give readily measurable outcomes that must be achieved. The standards are more accurately described as ‘principle’ based, specifying broad, but not measurable, targets or objectives for buildings. For instance, for structural provisions, the Code does not specify precisely the loads that must be withstood by any building (such as wind-speed loads or dead loads) — rather it requires that the building must withstand ‘actions to which it may reasonably be subjected’. This means it is not possible to judge whether objectives have been met and gives little guidance to building practitioners.

Other weaknesses with the current version of performance-based regulation include:

- in some instances, the deemed-to-satisfy provisions are not devised to achieve the same level of performance as that required by its equivalent performance-based standard, distorting the choices of builders and designers, and creating competitive disadvantages and/or biases toward using one or the other solution;
- it allows costs to be shifted from the construction of a building to the maintenance phase, transferring savings in capital costs to maintenance costs, which could be an issue if the owner or occupier does not know about it. This may be a particular problem for multi-dwelling residential buildings where the developer can easily make savings by passing such costs on to the ultimate owners and occupiers of the building;
- more pressure is put on the expertise of certifiers to assess alternative solutions than is the case with deemed-to-satisfy solutions; and
- problems with insurers being unable to assess accurately the risks associated with alternative designs, resulting in higher premiums for alternative solutions.

The ‘performance’-based approach of the BCA is delivering significant benefits to the building industry and consumers. However, the above issues need to be addressed, as part of the future work program.

Consolidation

In addition to variations to the BCA, inconsistency in building regulations may also come about through the creation and implementation of other regulations that affect the construction of buildings. For instance, regulations covering food safety or dangerous goods may have requirements about the design or construction of certain buildings. The Board's efforts to incorporate other mandatory requirements for building into the Code as a strategy for reducing inconsistencies and progressing consolidation have had mixed success.

Work should continue with incorporating mandatory requirements affecting buildings into the BCA or, where this is not possible, the Board should work to remove conflicts in objectives and ensure that other mandatory requirements are easily accessible to the industry. One approach would be to require that all extra requirements be included in an appendix to the Code, as is already done by Tasmania, to improve transparency.

Administration and compliance

Good technical regulations are not sufficient to ensure good building outcomes. The quality of the regulatory systems also depends on: how the regulations are used, enforced and accessed by building practitioners; building contracts; consumer information systems; the planning process and certification systems; and the dispute management system for buildings.

The Code's ultimate value depends on the extent to which it is complied with and enforced efficiently by the States and Territories. While the Board has a mandate to improve regulatory systems, it has found it difficult to make progress in this area. The momentum behind initiatives to gain greater national consistency in administration of the Code and to contribute explicitly to achieving compliance, appears to have waned. Yet, there have been ongoing concerns about poor building outcomes due to non-compliance with the Code and to the operation of different administrative systems across jurisdictions.

Shortfalls that have been identified, particularly in relation to NSW, by the *Report upon the Quality of Buildings* (Campbell 2002), included:

- buildings that did not meet building codes, including those that had been certified as compliant by either council or private certifiers;
- builders and certifiers not operating in the interests of the property owner;
- dwellings that were not consistent with the approved design that had been certified for occupation; and

-
- the operation of unqualified builders.

Underlying causes of these problems have been attributed to:

- poor qualification and skill levels of some building practitioners, especially certifiers;
- a lack of transparency and consistency in dealing with the approval of alternative solutions;
- potential conflict of interest issues for certifiers;
- inconsistent administration of maintenance requirements; and
- difficulties in dispute resolution.

While the reforms of performance-based regulation, private certification and shared liability have brought significant benefits, there have also been some unintended side-effects. Most States and Territories are currently assessing at least some administrative aspects of building regulation.

It has become clear that reforms to the building sector require an integrated approach because each part of regulation is dependent on other parts. For example, introducing performance-based standards requires a higher level of competence of certifiers and, while this was addressed by introducing private certification, it has created further issues concerning the certifier's responsibilities to the builder and the buyer.

The ABCB has recently introduced national competency standards and an accreditation framework for certifiers. In New Zealand, regulation of inputs to the building process, including people, has been seen as the most effective way to increase the quality of building outcomes and improve compliance with performance-based standards, as well as overcome recent problems with weather tightness.

The Commission has proposed a separate IGA objective to improve the Board's focus on improving compliance and enforcement. There may be benefits from achieving greater administrative consistency and more effective enforcement. The focus of much of this activity is about allocating and enforcing responsibility, risk and liability for compliance with the Code. It is thus an essential complement to the technical regulations of the BCA.

The Commission considers there is a role for the ABCB in improving the administration of the Code and related matters:

- coordinating programs to improve compliance with the Code;

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- addressing the inter-related impacts of various reforms; and
 - exploring non-regulatory mechanisms for consumers to achieve their objectives.

If the ABCB (or its replacement) were to take on the issue of greater consistency in the regulatory framework for building, an achievable program might progress in the following order:

- agreement on consistent terminology;
- some streamlining or consolidation of the State and Territory bodies involved;
- agreement on national principles for building regulation;
- development of a revised Model Act on administration of the BCA; and
- agreement on consistent regulation regarding: approval processes; certifiers; enforcement; maintenance; licensing and accreditation for building practitioners; dispute resolution; and insurance.

As well as these core functions, some other matters require attention.

Disabled access

Following extensive public consultation, a draft RIS on ‘Proposals to formulate Disability Standards for Access to Premises and to amend the access provisions of the BCA’ was released for public comment in February 2004. Following an assessment of comments and any necessary revisions, a final proposal will be developed.

The ABCB (or its replacement) should continue to work on amending the BCA whereby the access provisions would be linked to the *Disability Discrimination Act 1992* (DDA) so that compliance with the Building Code would also ensure compliance with requirements of the DDA.

Plumbing and gas

As long as national consistency in plumbing requirements is achieved across jurisdictions through the draft Plumbing Code of Australia (PCA) and its contents are not in conflict with the BCA, the additional costs in attempting to incorporate plumbing requirements into the BCA may not be warranted. The ABCB (or its replacement) should continue to work with the eight plumbing associations to identify and resolve differences between the BCA and the PCA and on-site gas requirements.

Asset protection from fire

Requirements relating to fire safety make up the majority of technical provisions of the Code. They differ from State and Territory legislation for fire brigade services, because they do not aim to protect the building that is on fire to the same extent. The situation is further complicated by the claim that the deemed-to-satisfy requirements of the Code, largely derived from the old Code, do embody a degree of property protection, while the performance-based provisions do not.

Insurance companies also consider that the Code's performance-based fire safety solutions tend to be deficient in relation to property protection for commercial buildings. Some owners find that a BCA compliant and council approved building does not meet the requirements of some insurers.

The question of property protection and protection against business interruption needs to be addressed by the ABCB. The ABCB (or its replacement) should work, in consultation with interested parties (especially fire authorities) towards increasing the asset protection objective of the BCA in relation to building categories other than stand alone residential housing.

Local Government requirements on building

Increasingly, Local Governments have been imposing building requirements, via their planning approval processes, beyond the scope of the BCA, that impact on building. These relate to such matters as access for the disabled, and bushfire, water, waste management, energy efficiency and salinity issues. Local Governments often see themselves as generally more in tune with community values and able to respond rapidly to emerging issues, perceived community needs or local political agendas. However, this has created inconsistencies for building regulation across jurisdictions and undermines the gains from national consistency: reduced compliance costs; a national market; easier transferability of building designs and skills; and savings in development costs.

Local Governments usually do not conduct an adequate level of impact analysis of their regulations. New regulations may be introduced that contain extra requirements on business, with increased costs for uncertain benefit.

Given that local councils will continue to impact on building, some approaches that will improve outcomes should be put in place. Options include:

- subjecting changes to a suitably rigorous justification process involving impact analysis, via the originating State;

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- maintaining a register of State RISs undertaken for local government building regulations, to help inform Board discussions;
 - establishing national agreement over a delineation between regulation-making powers relating to planning and building; and
 - requiring any Local Government requirement that is inconsistent with the BCA to be approved by the responsible State Minister (similar to the Victorian approach, where local council changes to the planning scheme must be approved by the Minister for Planning under an over-arching State policy framework and strategic plan).

Funding and cost recovery

The Australian Government has approved funding for the ABCB to the end of 2004-05. If the Australian Government accepts the Commission's recommendation that funding of the ABCB should continue, then the question remains at what level.

The ABCB supplements its funding by charging for access to the Code. This charging is not consistent with the Australian Government's cost recovery guidelines. Also, the cost of the Code appears to impede significantly its greater access and use (uptake by subscribers as a proportion of potential users is around 30 per cent). Mandatory legal requirements should be transparent and accessible. This would also increase compliance. Hence, the ABCB should stop charging for access to the Code. This would require, in the absence of reducing activities, an increase in government funding.

Australian Building Regulation Board

Implementing the recommendations of this study would widen the mandate of the Board. Rather than solely being the 'keeper of the Code', the ABCB (or its replacement) would undertake wider involvement in regulatory quality. It would provide the framework in which the building market would be free to work well, supported by efficient and effective regulations, and efficient and effective compliance and administrative arrangements. In this light, the Board's name should be changed from the Australian Building Codes Board to the Australian Building Regulation Board (ABRB).

Several participants raised concerns about the independence of the Office, specifically that it is linked too closely to the Department of Industry, Tourism and Resources and the Australian Government. The need for greater independence could be addressed by a Memorandum of Understanding (MOU) between the Board and

the Department. Creating a statutory authority in place of the Board is not warranted. If a subsequent review found that the MOU had not been successful in achieving the necessary degree of autonomy, other options could be examined in some detail.

Given that the ABCB effectively has almost the authority of a Ministerial Council, for at least one meeting each year the government representatives should be of sufficient standing and authority such that the Board truly is a board of ‘decision makers’.

As the ABCB does not report to a Ministerial Council and is the final decision maker on Code amendments, it is essential that governments continue to have majority representation on the Board. This is crucial to ensuring that ABCB decisions serve the public interest and that jurisdictions have ‘ownership’ of outputs and therefore a level of commitment to their adoption.

In contrast with many intergovernmental standard-setting bodies, the ABCB has direct industry representation on the peak decision-making Board. While there is potential for conflicts of interest, industry representation contributes valuable expertise and helps to ensure acceptance by the building sector.

New Intergovernmental Agreement (IGA)

A new IGA agreed by the Australian, State and Territory Governments would be the mechanism for implementing the proposals in this study and to take forward the continuing process of building regulation reform. This IGA, drawing on the recommendations of this study, would cover such matters as:

- establishment of the Australian Building Regulation Board in place of the ABCB;
- the revised mission statement and objectives;
- agreement for shared and increased funding and removal of charges for the BCA;
- stronger commitment to national consistency;
- strengthening the use of regulation impact statements to enhance rigour for mandatory regulations; and
- an outline of the future work program.

Renewed commitment to consistency

The ABCB has made substantial progress towards national consistency in building regulations in Australia. However, significant unwarranted variations still exist across jurisdictions and some reforms to institutional arrangements could be more conducive to national consistency.

The current IGA includes a commitment to work towards national consistency. The new IGA could take this one step forward: by clearly stating the presumption of automatic adoption of the Code by all States and Territories, along with a requirement to give reasons to the Board if a jurisdiction diverges from an agreed regulation or other reform. This would provide transparency and clarity to the building industry and the community as a whole, as well as provide a discipline on introducing variations that are not justified on cost-benefit grounds. As well, the Board or its replacement should establish a process for regular monitoring and reporting on the progress with implementation of the Code and other agreed reforms, including reporting on any divergence from such reforms.

Draft findings and recommendations

Impact of reforms

DRAFT FINDING 4.1

The productivity performance of the construction industry as a whole (including engineering construction) has been lower than that of the market sector over the past 20 years. However, there was a notable turnaround in the 1990s, from negative to positive labour and multifactor productivity growth.

DRAFT FINDING 4.2

The influences on productivity in the building sector are varied, ranging from labour force skills, workplace relations, firm organisation, economies of scale, research and development, technology uptake and innovativeness to information technology. It is difficult to quantify the separate contribution each has made to industry performance and productivity growth.

DRAFT FINDING 4.3

The regulatory reforms implemented or overseen by the ABCB appear to have had a positive impact on industry productivity. Their impact appears to have been mainly through encouraging skill acquisition, reducing compliance costs and encouraging and enabling innovation. There is scope for further productivity gains from additional reforms.

Building Code of Australia

DRAFT FINDING 5.1

The majority of the ABCB's objectives pursued through the BCA are appropriate. However, some objectives are unclear and appear to overlap. In addition, some other objectives have the potential to be in conflict with one another.

DRAFT RECOMMENDATIONS 5.1

The objectives of the ABCB (or its replacement) should be clarified in order to remove unnecessary conflict, overlap and imprecision.

DRAFT FINDING 5.2

The ABCB has reduced the number of jurisdictional variations in the BCA. However, there are still significant inconsistencies, particularly in relation to energy efficiency regulations, which have only recently been added to the BCA.

DRAFT FINDING 5.3

The ABCB has introduced a framework for performance requirements for all areas of building covered by the BCA. However, actual requirements still follow a ‘principle-based’ approach, broadly outlining what is required, but not offering readily measurable or verifiable requirements, even though it was intended to revise and convert them to measurable ‘performance-based’ standards. In some areas of building performance regulated by BCA, the deemed-to-satisfy solutions prescribe a level of performance that is not aligned with the performance requirement.

DRAFT RECOMMENDATION 5.2

The ABCB (or its replacement) should enhance efforts to make the performance-based requirements in the BCA more effective. This should include providing measurable criteria to aid in judging compliance and clarifying the assessment process to be used. This should be given a high priority.

DRAFT RECOMMENDATION 5.3

The ABCB (or its replacement) should enhance efforts to ensure that all deemed-to-satisfy provisions in the BCA offer an equivalent level of building performance to that required by the performance requirements.

DRAFT RECOMMENDATION 5.4

The BCA and related regulations should require that buildings continue to meet the health and safety requirements of the BCA throughout their life, irrespective of whether they were constructed using alternative solutions or deemed-to-satisfy provisions.

Where a building solution imposes maintenance requirements throughout the life of a building, these should be required by regulation to be documented and prospective owners and occupiers should be informed of these requirements.

The ABCB has implemented a number of strategies aimed at improving the clarity and accessibility of the BCA. However, it appears that the BCA may still be difficult for some users, in particular builders and tradespeople, to access and understand.

The ABCB (or its replacement) should continue to examine ways for the BCA to be expressed more clearly and simply, to articulate building requirements better and to enable access by all levels of building practitioners.

Code content and coverage

There are various mandatory requirements impacting on building that have not been incorporated into the BCA.

The ABCB (or its replacement) should continue to work on incorporating into the BCA, as far as practicable, all mandatory requirements affecting building (ie current objective 7).

The ABCB (or its replacement) should continue its work on amending the BCA whereby the disabled access provisions would be linked to the Disability Discrimination Act 1992 so that compliance with the BCA would also ensure compliance with obligations under the Act.

Incorporating the Plumbing Code of Australia (PCA) into the BCA would not seem to be warranted at this stage.

DRAFT RECOMMENDATION 6.3

The ABCB (or its replacement) should continue to work with the eight plumbing associations to identify and resolve differences between the BCA and the PCA and on-site gas requirements.

DRAFT RECOMMENDATION 6.4

The ABCB (or its replacement) should continue its work to identify and resolve differences between the BCA and on-site electrical installation and telecommunications requirements.

DRAFT RECOMMENDATION 6.5

The ABCB (or its replacement) should continue its work on removing inconsistencies between occupational health and safety (OH&S) legislation and the BCA and incorporating relevant OH&S requirements that impact on building into the BCA.

DRAFT RECOMMENDATION 6.6

The ABCB (or its replacement) should set up a rigorous framework to assess whether it is appropriate to include any additional mandatory requirements in relation to environmental objectives in the BCA.

DRAFT FINDING 6.3

A number of jurisdictions are implementing minimum energy performance requirements for buildings. These are leading to substantial divergences across jurisdictions, thereby eroding the national approach for building regulation.

DRAFT RECOMMENDATION 6.7

The ABCB (or its replacement) should put in place a system for assessing mandatory standards for buildings for energy efficiency to ensure they are soundly based (with benefits greater than costs) and that they are applied consistently across jurisdictions.

DRAFT FINDING 6.4

The degree of asset protection for fire in the objectives of the BCA is below that generally applied by fire authorities (and some insurance companies) in relation to building requirements, particularly in relation to commercial buildings.

It appears unlikely that increasing the asset protection objective of the BCA for stand alone residential buildings would be cost effective.

The ABCB (or its replacement) should pursue, in consultation with interested parties (especially fire authorities), increasing the asset protection objective of the BCA in relation to building categories other than stand alone residential housing, to align with the requirements generally imposed by fire authorities and favoured by insurance companies .

Local governments, through their planning approval processes, are imposing regulations on building, thereby generating inconsistencies across Australia.

The future work agenda for the ABCB (or its replacement) should include an examination of ways to reduce the scope for the national consistency objective of building regulation to be eroded inappropriately by Local Governments through their planning approval processes. Avenues for this include:

- the possibility of Local Governments being required to seek prior approval from the relevant State Government to apply building requirements that are inconsistent with the BCA;***
- these requirements should be assessed as to whether net benefits would accrue.***

To assist the design of such a system, the ABCB (or its replacement), in consultation with key stakeholders, should examine the possibility of defining a clear delineation between those issues to be addressed by planning regulation and those issues to be addressed by building regulation.

Regulatory systems: compliance and delivering outcomes

There are concerns that the current compliance and enforcement systems for building regulation may be deficient, to varying degrees across jurisdictions.

DRAFT FINDING 7.2

The compliance system for building regulation could be improved by establishing more soundly based requirements for licensing, accreditation and audit of building practitioners. The ABCB (or its replacement) could provide a national forum for this.

DRAFT FINDING 7.3

While there may be benefits from some alignment across jurisdictions of administrative procedures relating to approval, inspection and certification processes, it is not clear that net benefits would arise from the harmonisation of all aspects of these processes.

DRAFT FINDING 7.4

Conflict of interest concerns relating to private certifiers may be reduced with greater use of guidelines, agreed by jurisdictions and issued nationally. Guidelines for the use of self-certification could be useful.

DRAFT RECOMMENDATION 7.1

The ABCB (or its replacement) should work to facilitate a national template for home building contracts.

DRAFT RECOMMENDATION 7.2

The ABCB (or its replacement) should work towards reaching agreement across jurisdictions as to the most appropriate and efficient administrative provisions for maintenance requirements.

DRAFT FINDING 7.5

There is some support for an increased level of consistency in the administration of building regulations across States and Territories.

DRAFT RECOMMENDATION 7.3

The ABCB (or its replacement) should work at identifying and communicating best practices that improve compliance and enforcement of the BCA. The development of a best practice model, for use by States and Territories, is one option for achieving this.

Code-making processes and access

DRAFT FINDING 8.1

The ABCB has a relatively good record of compliance with Regulation Impact Statement requirements, but there is scope for further improvement. It is important for good regulatory systems that the requirements are rigorously applied for BCA amendments.

DRAFT RECOMMENDATION 8.1

The ABCB (or its replacement) should continue to pursue improvement in its use of Regulation Impact Analysis, drawing on the advice of the Office of Regulation Review.

DRAFT RECOMMENDATION 8.2

The Australian Government should examine the appropriateness of a private company (Standards Australia International) being the sole Australian representative in international standards forums and consider the merits of having the ABCB (or its replacement) also perform this role for building and construction matters, perhaps in conjunction with SAI.

DRAFT RECOMMENDATION 8.3

The Memorandum of Understanding between Standards Australia International (SAI) and the ABCB and the Referenced Documents Protocol should be re-negotiated to provide for a clear requirement for RIS-type analysis to be undertaken by SAI (perhaps in conjunction with ABCB, or its replacement) at an early stage in the development of standards that are expected to be referenced in the BCA, and are likely to have non-minor effects.

DRAFT FINDING 8.2

Delays in reaching agreement and implementing BCA reforms are providing some incentive for unilateral action at the State and Territory or Local Government level. This trend is contrary to the goal of a national and uniform building code. However, to some extent delays are an inevitable consequence of the need to achieve agreement between nine jurisdictions; and the need for rigorous and transparent consultation and impact assessment processes.

DRAFT RECOMMENDATION 8.4

The ABCB (or its replacement) should continue its efforts to expedite BCA reforms. Governments could consider incorporating into a revised IGA explicit target timeframes for different stages of the consultation and decision-making

process. However, any such timeframes must appropriately reflect the need for comprehensive consultation and rigorous impact analysis.

DRAFT RECOMMENDATION 8.5

The ABCB (or its replacement), as a high priority, should continue to work towards maintaining and updating the core technical requirements in the BCA.

DRAFT FINDING 8.3

The number of BCA subscribers is low relative to the number of potential users. This has implications for awareness and compliance. The cost of the BCA appears to be a significant barrier to improving access, awareness and usage. The ABCB's cost recovery arrangements are inconsistent with the Australian Government's cost recovery guidelines.

DRAFT RECOMMENDATION 8.6

The ABCB's cost recovery arrangements should be amended to be made consistent with the Australian Government's cost recovery guidelines. The revised IGA, when presenting future funding for building regulation reform, should be structured so as to provide sufficient funding for the reform agenda and to enable a minimum level of access to the BCA, free of charge.

Other activities of the Board

DRAFT FINDING 9.1

Overall, the ABCB's research program has been effective and it is important that it continue. It would be sensible for the research priorities to be guided by the future work program of the ABCB (or its replacement).

DRAFT FINDING 9.2

While the ABCB has already made substantial progress toward improving awareness of the BCA objectives and requirements, more needs to be done, particularly in relation to reaching smaller builders, tradespeople and consumers.

DRAFT RECOMMENDATION 9.1

The ABCB (or its replacement) should enhance its BCA awareness campaign, including investigating opportunities for further partnerships with industry in the provision of training.

Greater use by the ABCB (or its replacement) of guidance/advisory documents could be a cost-effective mechanism for improving the performance of buildings.

Governance issues

The involvement and support of the Australian Government is critical to the continuing success of building regulation reform.

Overall, the composition of the ABCB membership has been appropriate for the role of the ABCB to date. As the Board's priority should be the public interest, broadly defined, it is appropriate that government representatives are in the majority.

There should be a recommitment by governments, in a revised IGA, to the objective of consistency across jurisdictions for building regulation. State and Territory Governments should ensure that BCA amendments determined by the ABCB (or its replacement) are automatically referenced in State and Territory legislation and that jurisdictional variations and additions are minimised.

An annual meeting of Ministers (with appropriate whole of government backing) may be a useful mechanism to demonstrate ongoing commitment to a nationally consistent approach to reform of building regulation. Ministers could also determine funding and set broad strategic direction and priorities. Administrative arrangements, such as who would chair such a forum, would need to be determined.

The ABCB Chairman should be an additional Board member, rather than being chosen from amongst the Government and industry members. The appointment should be independent from sectional interests and based on a demonstrated capacity to advance the work of the Board.

DRAFT FINDING 10.4

Overall, current institutional arrangements for pursuing building regulation reform have been reasonably effective. However, there is scope for some refinements to structures and processes to further improve effectiveness and efficiency.

Assessment and the New IGA

DRAFT FINDING 11.1

The ABCB has made considerable but varied progress against the 10 objectives with which it was tasked by the IGA. In general, the Board has prioritised well and made reasonable progress. However, there have been some shortfalls and performance can be improved.

DRAFT RECOMMENDATION 11.1

The mission statement for the ABCB (or its replacement) should be amended to:

In addressing issues relating to health, safety, amenity and the environment, to provide for efficiency in the design, construction and use of buildings through the creation of nationally consistent building codes and standards and effective regulatory systems.

DRAFT RECOMMENDATION 11.2

The objectives of the ABCB (or its replacement) should be amended to:

Proposed Objective 1

Establish building codes and standards that are the minimum necessary to address efficiently relevant health, safety, amenity and environmental concerns.

In determining the area of regulation and the level of the requirements, the Board should ensure that:

- there is a rigorously tested rationale for the regulation;***
- the regulation would generate benefits to the community greater than the costs (ie net benefits);***
- there is no regulatory or non-regulatory alternative (whether available to the Board or not) that would generate higher net benefits.***

Proposed Objective 2

Ensure that, to the extent practicable, mandatory requirements are:

-
- *consistent across the States and Territories*
 - *performance based*
 - *based on international standards*
 - *expressed in plain language.*

Proposed Objective 3

Identify and seek implementation of improvements to compliance and enforcement systems for building regulation.

Proposed Objective 4

Identify and seek to implement ways to reduce reliance on regulation by exploring alternative mechanisms for delivering outcomes, including:

- *non-mandatory guidelines*
- *training to increase skill levels of building practitioners and certifiers.*

DRAFT FINDING 11.2

Achieving the objectives by the ABCB would be assisted by the Board (or its replacement):

- *providing useful technical information to building practitioners*
- *consulting and liaising with all interested parties to achieve transparency in the reform process*
- *conducting economic analysis of impacts, which thoroughly identifies all significant effects of proposed changes, to determine the best regulatory solution*
- *coordinating and promoting research*
- *addressing the training requirements of the industry and administrators of building regulation, to ensure building practitioners and certifiers have adequate knowledge of the Code and the capacities necessary to implement and assess performance-based solutions*
- *promoting awareness and increased use of the Code and related materials and services.*

DRAFT RECOMMENDATION 11.3

The ABCB's name should be changed to the Australian Building Regulation Board (ABRB), to better reflect its proposed wider responsibilities and future work agenda.

A new Intergovernmental Agreement should be negotiated by all nine governments, so as to implement many of this study's recommendations:

- establish the Australian Building Regulation Board (ABRB) in place of the ABCB*
- clarify the ABRB's mission statement and objectives*
- agree to shared funding and removal of charges for the BCA*
- re-confirm the commitment to national consistency*
- strengthen the use of regulatory impact statements to enhance rigour for mandatory regulations*
- outline the future work program, as proposed.*

1 Introduction

The Australian building and construction industry is an important component of the national economy. The value of work done in the building and construction sector (excluding engineering construction) accounted for around 6.3 per cent of GDP and 7.7 per cent of all employed persons in Australia in 2002-03.¹ The output of the building and construction industry can be an end product (say, a residential dwelling) or an input into the production of other goods and services (for example, a factory or office block). The quality and quantity of activity carried out by the building and construction industry can affect many other sectors of the economy and the wellbeing of society.

In order to ensure a minimum standard of building, governments have regulated the activities of the building and construction industry. Such regulation has traditionally been the domain of the State and Territory Governments, although cooperation and consistency at a national level has been increasing since the mid 1960s. At the national level, the main regulatory instrument is the Building Code of Australia (BCA).

The Australian Building Codes Board (ABCB) was formed via an Inter Government Agreement (the IGA) in 1994 and was charged with progressing national reform initiatives. It has representation from all levels of government, as well as industry. Under the IGA, the Board is responsible for producing, maintaining and amending the BCA and is the lead player in the pursuit of nationally consistent building codes, requirements and regulatory systems.

1.1 Scope of the study

The Productivity Commission has been requested to undertake a research study examining the contribution that national building regulatory reform under the auspices of the ABCB has made to the productivity of the building and construction industry and economic efficiency in Australia. The Commission has also been asked to comment on the potential for further gains from reform. As Australian Government funding for the ABCB is due to cease in 2005, the results of this study

¹ ABS (*Building Activity, Australia*, Cat. no. 8752.0, *Australian System of National Accounts*, Cat. no. 5204.0, *Labour Force, Australia, Detailed*, Cat. no. 6291.0.55.001).

may form input into decisions about future funding arrangements and the future role of the Australian Government in building regulatory matters.

Terms of reference

At the broadest level, the terms of reference require the Commission to assess whether the IGA has been a success. A key question is the extent to which reform under the ABCB, guided by the objectives of the IGA, has resulted in net benefits for the Australian economy, via improvements in productivity and efficiency. These improvements may have occurred not only in the building and construction industry, but also in the wider economy, for example, in sectors where buildings are an important input into production processes.

In assessing the IGA, it is necessary to assess the effectiveness of the ABCB in achieving the objectives set for it in the IGA. These objectives are listed in box 1.1 below. As part of this assessment, the ABCB's institutional arrangements and the role of the Australian Government in delivering national coordination and building regulatory reform also need to be examined.

The Commission has also been asked to report on whether the current objectives of the IGA adequately address the need for future reform and what model would be most efficient and effective in delivering these reforms. Judging the extent to which the Australian Government's current involvement is central to the achievement of the IGA objectives will help to inform future decisions on the most appropriate model for building regulation.

Spheres of regulation

The range of potential 'spheres' of regulation that are relevant to this study is quite wide. The BCA, a key element of building regulation, relates predominantly to technical specifications. However, building regulation, broadly defined, may also encompass or be affected by: building approval processes; planning approval processes (to the extent they impact on building requirements); standard setting and accreditation of products, people and processes; environmental regulation; some social regulation; some economic and financial regulation (such as insurance); and occupational health and safety (OH&S) regulation.

Box 1.1 Objectives of the ABCB

The original Inter Government Agreement between the Commonwealth Government and the States and Territories to establish the ABCB contained nine objectives to which the proceedings and operations of the Board were to be directed. The tenth objective was added in 2001. The ten objectives are:

1. Establish codes, standards and regulatory systems that are, as far as practicable:
 - consistent between States and Territories;
 - cost-effective;
 - performance based; and
 - based on modern and efficient building practices.
2. Base building requirements on minimum, least-cost solutions which address the regulatory objectives of health, safety and amenity.
3. Investigate and promote opportunities for deregulation.
4. Undertake and promote research which offers innovative and cost-efficient solutions.
5. Consult and liaise with industry to achieve transparency in the reform process.
6. Simplify the wording of building requirements to achieve user friendliness and plain language style.
7. Coordinate and integrate reform activities with those of other agencies to ensure consistency of approach and to encourage consolidation into the BCA of all mandatory requirements affecting buildings.
8. Create an efficient regulatory environment to encourage an internationally competitive building industry.
9. Matters ancillary to its objectives: consulting, training, Action Agenda, conferences and meetings.
10. Undertake education and marketing activities to promote the work of the Board, to increase awareness of building regulatory reform and to increase use of Board publications and products.

Source: IGA, as amended 2001. See <http://www.abcb.gov.au/index.cfm?fuseaction=DocumentView&DocumentID=139> (accessed 7 April 2004).

Industry scope

The building and construction industry, broadly defined, covers residential and non-residential building and engineering construction, as well as construction trade services. However, as the Commission's terms of reference mainly focus on the BCA, for the purposes of this study, the Commission has defined the industry more narrowly, with the primary focus on those classes of building defined in the BCA

(see box 1.2). The BCA applies to new buildings, certain renovation work in existing buildings, and existing buildings that are to be used for a different purpose from that for which they were originally designed (ABCB 2003a, pp. 4–5).

This study also encompasses the full range of activities, people and skills involved in the BCA building sectors. The process of building can require the coordination of a large number of stages, from the initiation of a project, through design, planning approval, building approval, construction and inspections, occupancy approval and operation and maintenance. Important players, therefore, include developers, project designers, architects, engineers, surveyors and certifiers, project managers, builders, subcontractors, labourers and specialist trades and sub-trades. These people may be employed in a range of firms, from family owned enterprises through to major national and multinational companies.

Further, each sector is supported by a number of other industry segments, such as suppliers and producers of building products and materials; machinery and equipment sectors providing such items as construction equipment and commercial heating and cooling equipment; and client services such as commercial property operators, developers and financiers. These supporting sectors are also considered in the context of the study.

1.2 Conduct of the study

On receipt of the terms of reference, the Commission informed interested parties of the study by a circular and advertisements in major newspapers. The Commission released an issues paper in mid-March, seeking written submissions.

The Commission has met with a wide range of organisations with an interest in the reform of building regulation, including business entities, industry organisations, professional groups and representatives of the Australian, State and Territory and Local Governments. The Commission received 52 submissions prior to the release of this draft report. The Commission thanks interested parties for their participation in meetings and for their submissions in response to the issues paper.

Feedback from interested parties, including further submissions, specifically responding to the draft would be welcome. In addition, to assist the preparation of the final report, the Commission intends to hold round table discussions with interested parties. Arrangements for these discussions will be announced shortly.

Box 1.2 **Classes of buildings as defined by the BCA**

- Class 1a:** a single dwelling being: a detached house; or one or more attached dwellings, each being a building, separated by a fire-resisting wall, including a row house, terrace house, town house or villa unit.
- Class 1b:** a boarding house, guest house, hostel or the like with a total floor area not exceeding 300 m² and in which not more than 12 persons would ordinarily be resident, which is not located above or below another dwelling or another Class of building other than a private garage.
- Class 2:** a building containing two or more sole-occupancy units each being a separate dwelling.
- Class 3:** a residential building, other than a building of Class 1 or 2, which is a common place of long term or transient living for a number of unrelated persons, including: a boarding-house, guest house, a residential part of a hotel or motel, a residential part of a school, a residential part of a health-care building which accommodates members of staff, or a residential part of a detention centre.
- Class 4:** a dwelling in a building that is Class 5, 6, 7, 8 or 9 if it is the only dwelling in the building.
- Class 5:** an office building used for professional or commercial purposes, excluding buildings of Class 6, 7, 8 or 9.
- Class 6:** a shop or other building for the sale of goods by retail or the supply of services direct to the public, including: a cafe, restaurant, bar, a hairdresser's or barber's shop, public laundry, market or sale room, showroom, or service station.
- Class 7a:** a car park.
- Class 7b:** a building for storage, or display of goods or produce for sale by wholesale.
- Class 8:** a laboratory, or a building in which a handicraft or process for the production, assembling, altering, repairing, packing, finishing, or cleaning of goods or produce is carried on for trade, sale, or gain.
- Class 9a:** a public health-care building; including those parts of the building set aside as a laboratory; or
- Class 9b:** a public assembly building, including a trade workshop, laboratory or the like in a primary or secondary school, but excluding any other parts of the building that are of another Class; or
- Class 9c:** a public aged care building.
- Class 10a:** a non-habitable building being a private garage, carport, shed, or the like; or
- Class 10b:** a non-habitable structure being a fence, mast, antenna, retaining or free-standing wall, swimming pool, or the like.

Source: BCA 2004.

1.3 Previous reviews

Building regulation matters have been the subject of a number of reviews over the past 15 years. In 1989, in response to a Special Premiers' Conference, the Building Regulation Review Taskforce (BRRT) was established to 'review technical regulations, codes, standards and other requirements affecting the construction and operation of buildings, including residential dwellings, with the objective of streamlining such requirements and lowering the overall costs of building' (BRRT 1991, p. vi). The Taskforce's report highlighted problems within the building industry, including marginal profitability, an inability to compete with foreign competitors, reduced efficiency and competitiveness in the delivery of major projects, and a high cost structure for the infrastructure used by all industries (BRRT 1991, p. 14). Pointing to regulation, it noted:

The existing regulatory system, taken as a whole, greatly inhibits the ability of the industry to efficiently and effectively deliver the products required by industry and consumers. (BRRT 1991, p. 15)

In setting the agenda for reform, the Taskforce stated 'it is essential to overcome the regulatory differences that needlessly inhibit building and construction activity and impose cost penalties on all States and Territories' (BRRT 1991, p. 17). It considered a national approach would bring greater scale, increased innovation and efficiency, and a greater level of transferability of skills and expertise to the building industry (BRRT 1991, pp. 26–27). In this vein, the Taskforce recommended the formation of a body responsible for the national management of building regulation. As well, the Taskforce recommended a national legislative framework, reform of the technical basis of building regulation to include performance-based regulations, and a simplified system for housing (BRRT 2001, pp. 4–5).

More recently, reviews have focused on the activities of the ABCB, as the body charged with progressing national reform initiatives. In 1999, a technical review of the ABCB was conducted by three overseas experts. The review team looked at the performance of the ABCB in meeting the objectives and outputs of its work program. It also reviewed whether the ABCB's functions were appropriate in the context of the IGA and sought feedback from stakeholders on past and future reforms. The review concluded that the ABCB was providing a significant return on investment to the governments involved (Meacham et al 1999, p. i). It also identified opportunities where further progress could be made, including the structure and presentation of the Code, consistency in the administration of the Code, and further funding of research (Meacham et al 1999, pp. ii–iii).

In 2000, in accordance with the requirements of the IGA, a further assessment (the Laver Review) was conducted. This called for a review of the operation of the ABCB and the administration of the IGA within five years of its commencement. It concluded that the ABCB was ‘performing a valuable role in developing nationally consistent performance-based codes and its work should continue’ (Laver, Butterfield and Huxley 2000, p. 1). The review made 17 recommendations, including some change in focus in order to expand the use of the BCA and extend its coverage to emerging issues such as energy efficiency. Some administrative changes were also suggested. The joint Commonwealth, State and Territory Ministerial response to the Laver Review supported the major policy priorities and proposed action be taken in a number of areas, including development of a model administrative framework, redesign of the product certification scheme, development of a national plumbing code and the development of mandatory energy-efficiency provisions (sub. 4, p. 9).

The Laver Review also drew on an impact assessment report by KPMG, which used a case study approach to look at the impacts of five major initiatives progressed by the ABCB — the performance-based BCA96, the economic evaluation system for building regulatory proposals, private certification, liability reform and national product certification. The assessment concluded that the ABCB’s achievements had received wide approval and that the body was important for national coordination. It was suggested that further work was needed in reducing State and Territory exceptions in the Code, formalising maintenance requirements and responsibilities, moving closer to a national administration system, encouraging education amongst building professionals and reviewing the risk and liability landscape to ensure the regulatory framework was appropriate (KPMG 2000, pp. 5–6).

1.4 Problems and issues

The key issues and/or problems that have been identified during this study in relation to reform of building regulation are addressed in the following chapters. These include:

Consistency

- Despite the substantial progress made towards national consistency of building regulation, significant variations remain. These inconsistencies generate inefficiencies, including unnecessary administration and compliance costs.
- Many mandatory, sometimes inconsistent or overlapping, requirements outside the Code, made by all levels of government, are impacting on the construction of buildings. Particular concerns relate to:

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- the use by Local Governments of their planning approvals role to move into regulatory areas that traditionally come within the scope of the BCA; and
 - fire solutions that satisfy BCA requirements (which have the objective of protecting life) that can fail to meet the requirements of fire authorities (which are required under their governing legislation to protect property as well) and the demands of insurers.
- There appear to be many recent examples (particularly in relation to environmental issues) of jurisdictions acting unilaterally and introducing their own building requirements covering matters that could be better addressed on a nationally consistent basis. Delays in reaching agreement and implementing national reforms through the BCA have contributed in part to this trend.

Coverage of the Code

- There have been calls for the coverage of the Code to be expanded in order to consolidate certain existing mandatory requirements outside the Code (for example, requirements relating to plumbing, electrical and occupational, health and safety) or as a mechanism for regulating in emerging areas. For example, a number of participants consider that sustainability objectives need to be explicitly incorporated into the BCA.

Performance requirements

- The performance requirements in the Code currently only broadly outline what is necessary and do not give readily measurable or verifiable requirements. This has led to some confusion about what is required to meet the performance requirements.

Access and awareness

- Access, awareness and usage of the Code should be higher. There are complaints that:
 - the Code is not user friendly;
 - the cost of acquiring the Code is too high; and
 - the Board's education and training initiatives are not adequately targeting certain user groups, particularly smaller builders, tradesmen and consumers.

Regulatory system more broadly

- There have been ongoing concerns about poor building outcomes due to non-compliance with the Code and the operation of different administrative systems across jurisdictions. Particular problems include:
 - poor qualification and skill levels of some building practitioners, especially certifiers;
 - a lack of transparency and consistency in dealing with the approval of alternative solutions;
 - potential conflicts of interest for certifiers;
 - inconsistent administration of maintenance requirements; and
 - difficulties in dispute resolution.

Process and governance issues

- Notwithstanding that the Board's processes for developing and amending the Code generally have a high degree of transparency (characterised by wide consultation and relatively rigorous impact analysis), concerns have been raised, including:
 - Regulatory Impact Statements not being prepared early enough, particularly in relation to standards referenced in the Code; and
 - partly as a consequence of this, there are examples of referenced standards being set at inappropriate levels and/or not adequately reflecting international standards.
- Because of the considerable focus in recent years on emerging issues such as disabled access and energy efficiency, some consider that the Board has given insufficient attention to maintenance and updating of the Code.
- Particular issues relating to institutional arrangements include:
 - the independence of the ABCB office from the Australian Government;
 - concerns about the composition of the Board and the process for appointing members;
 - a need for a stronger commitment by jurisdictions to uniformity in national building regulation; and
 - the possible benefits of a formal role for a Ministerial Council.

1.5 Structure of the report

The remainder of the report is structured as follows:

- Chapter 2 describes the legal framework and government structures for the regulation of building. It also describes the role and structure of the ABCB and the main regulatory instrument — the BCA;
- Chapter 3 sets out the Commission’s criteria for assessing the effectiveness of the ABCB;
- Chapter 4 assesses the impact of reforms to building regulation on the productivity and performance of the industry;
- Chapter 5 assesses the BCA, the appropriateness of objectives pursued through the BCA and the extent to which the ABCB has achieved these objectives;
- Chapter 6 considers consolidation of non-BCA mandatory requirements impacting on building, expanding the coverage of the Code (including the desirability of including new areas such as sustainability into the Code), and Local Government requirements on building;
- Chapter 7 focuses on the supporting regulatory systems and assesses their effectiveness in ensuring compliance with building regulation;
- Chapter 8 discusses code-making processes of the ABCB and issues relating to the Code’s accessibility and use;
- Chapter 9 assesses other activities of the ABCB, including research, education and international liaison;
- Chapter 10 considers governance issues, with a view to identifying ways to increase the effectiveness of delivering the reform agenda; and
- Chapter 11 concludes with an overall assessment of the ABCB’s performance and the proposal of a revised IGA to take the agenda forward.

2 Legal framework, the ABCB and BCA

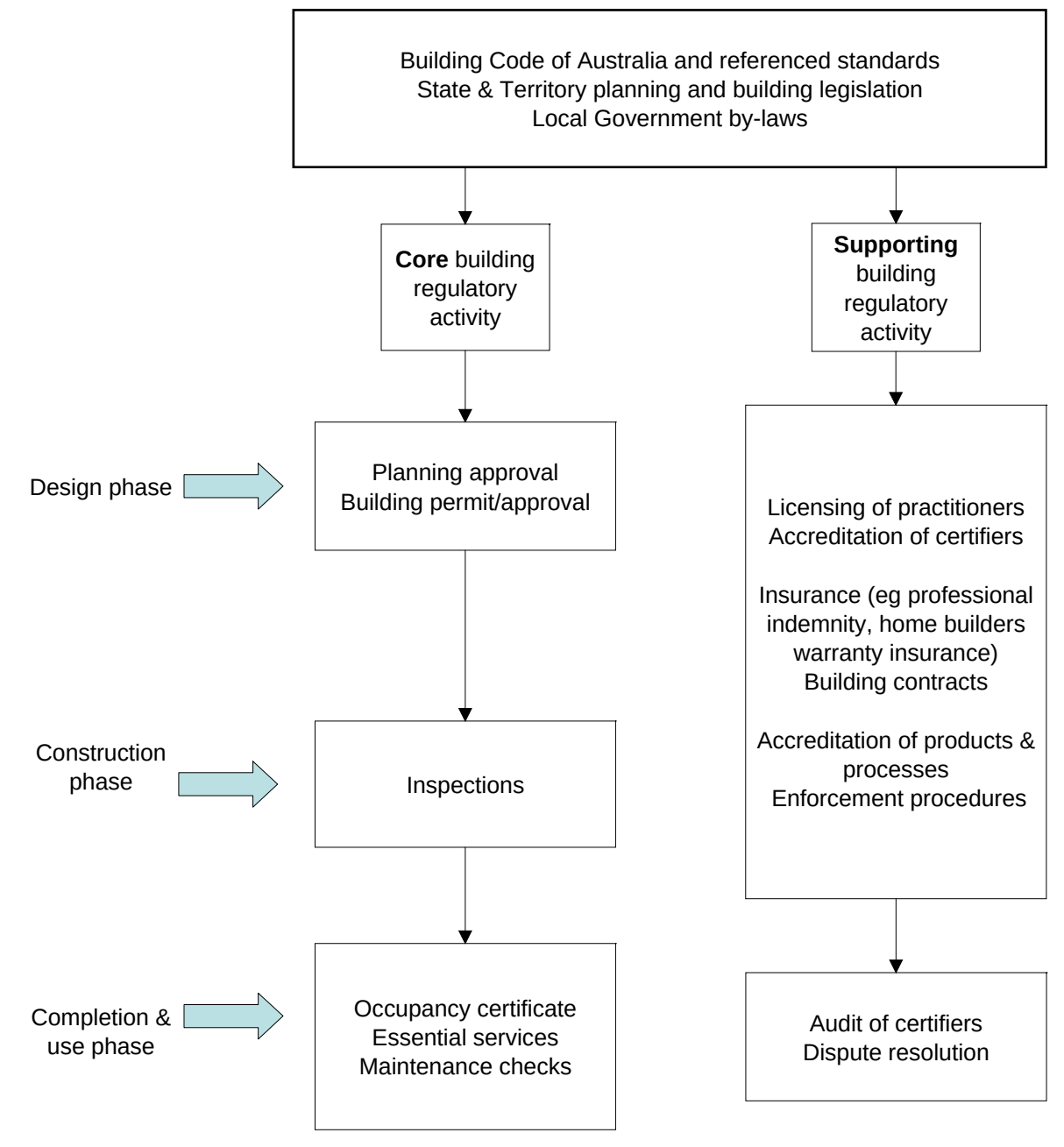
This chapter describes the legal and jurisdictional framework for building regulation in Australia, the structure of the ABCB and the composition of the BCA. Section 2.1 outlines the role of regulation in the building process. Sections 2.2, 2.3 and 2.4 examine the roles of the State and Territory, Local and Australian Governments respectively. Section 2.5 examines the structure of the ABCB, while section 2.6 looks at the BCA.

2.1 Regulation of the building process

Regulation specifically relating to the building process is embodied in three main instruments: the BCA; other State and Territory legislation and regulations; and local council by-laws. A number of players contribute to these regulations, both government policy makers and private bodies such as Standards Australia International. The implementation of these regulations is through a variety of bodies, both private and public, and at various levels of government.

As shown in figure 2.1 the phases of building process — from the choice of building site and design of the building through to the completion, use and even demolition of the building — are regulated in Australia (design, construction and completion and use). For each phase the regulatory activities can be thought of as ‘core’ or ‘supporting’. **Core** regulatory activities refer to those steps necessary for a building to comply with regulations at each stage of the project – these primarily include approvals and inspections. **Supporting** regulatory activities are those making core activities more efficient or ensuring that they are conducted properly, and regulating other participants in the building process. The description below necessarily generalises the practices and requirements which vary somewhat across jurisdictions.

Figure 2.1 Regulation of the building process



Initiation and design phase

As a first step, the initial design ideas for the proposed building may have to comply with several regulations or standards. Issues in the design of a building can include health, safety, amenity, energy efficiency, sustainability, disabled access, fire safety concerns and characteristics of the building such as appearance or height of ceilings.

These design considerations are regulated by the core requirements of planning and building approvals.

Planning (or development) approval will usually be required where a new building or structure is erected, the use of a building is changed, or the boundaries or other property rights attaching to the land in question are altered. If planning approval is required, it must usually be granted before building approval can be issued.

The central focus of planning approval is the use of the land as it impacts on the surrounding community. In addition to zoning requirements, this includes other issues external to the construction of the building, such as considerations relating to the environment (including water use and waste disposal), heritage, parking, access, effects on existing property rights and design considerations (including the shading provided and distances from surrounding property and public areas such as roads and footpaths).

Local councils commonly administer their own planning systems, but in some cases planning can be governed by regional or State or Territory-wide policies. As some areas of planning approval can overlap with areas affecting building approvals, this can lead to local council by-laws effectively contradicting the BCA.

In general, building approval (a building permit), necessary for all but the most minor building work, relates to matters specific to the proposed building – namely the safety (particularly structural integrity) of the building and the processes involved. It also involves checking initial compliance with any requirements stemming from the planning approval process. Building approval is provided by private certifiers and by local council certifiers in most jurisdictions.¹ The regulatory requirements for building approval are usually made at State and Territory Government level.

In addition to planning and building approvals, regulation impacts on other aspects of the initiation phase of the building process. As mentioned in chapter 1, the construction of a building involves the work of several professions and trades. These building practitioners, including certifiers, are often licensed in an effort to ensure a minimum standard of practice in the jurisdiction (by requiring qualifications, audits and insurance), and to signal certain information to the users of building services. Insurance requirements aim to ensure that, in the case of a dispute or non-completion of a building contract, the financial interests of both parties are protected.

¹ Both the Australian Capital Territory and the Northern Territory use only private certifiers.

Another consideration before building is commenced is the building contract. This governs the transaction between the builder and the owner of the proposed building, and contains some important controls on the way in which the building process takes place. Building contracts are the key means by which consumers can specify levels of quality and workmanship, over and above the minimum standards contained in the BCA. These contracts are regulated in some jurisdictions, usually on a consumer protection basis.

Once the relevant building practitioners have been engaged, and building (and usually) planning approvals have been obtained, construction can begin.

Construction phase

During the actual construction process, some jurisdictions require regular inspections of the building work. As with the granting of building approval, these inspections are conducted by a council certifier, or in some cases a private certifier. The inspections are primarily focused on the structural integrity and general safety of the building. They may also look at other aspects of the building, such as energy efficiency, but importantly inspections are not aimed at ensuring any particular level of quality or workmanship. The role of these inspections is to make sure that the whole building process (and various steps along the way such as the foundations, frame and completed building) is conducted according to building regulations, including meeting the requirements of the BCA, not to assess the building against any building contract. It is open to the owner to regularly check for compliance with the contract, either directly or through the use of hired building consultants.

In order to assist the inspection process, jurisdictions provide accreditation for products, methods and systems used in building work. Essentially, this accreditation serves as proof that the product meets the requirements of the BCA. This means that the suitability of the product does not need be tested each time it is used in a building process, saving time for the certifier and encouraging the use of quality products in buildings. Currently, this accreditation is provided at both Australian and State and Territory levels, whereby some products are accredited nationwide, while some are only accredited in particular jurisdictions. (See chapter 10.)

To further assist the certifier, in some instances, a certificate issued by, for example, a structural engineer, may be used to ‘tick off’ compliance with an aspect of the regulation. This can also involve self certification, where the contractor can certify that their own work is compliant.

If a building fails an inspection, enforcement procedures are available to ensure that the building is brought up to compliance. In some cases, the certifier (either private

or council) can issue an order requiring the abandonment of the project, or that particular work be done to rectify the problem. Often local councils have the power to levy financial penalties for the contravention of building regulations, including the failure to rectify non-compliant work. Other enforcement measures available may include taking the offending practitioner before a registration board, to a tribunal or to a court (all of which are usually at a State or Territory, not local, level).

Completion and use phase

Before a building can be used, an occupancy certificate (or a certificate of final inspection in the case of renovations) is often needed. This certifies that, from a health and safety perspective, the building can be occupied. As such, an occupancy certificate may be granted, even though aspects of the project relating to the appearance and enjoyment of the building may not be completed. The occupancy certification may also signal compliance with the original building and planning approvals.

Once the building has been occupied, it is still subject to certain regulatory requirements. In the case of commercial buildings, essential services must be maintained. This relates mostly to emergency features of the building, such as exits, fire stairs, fire extinguishers, fire alarms and sprinklers. Typically, local councils enforce on-going building safety requirements through checks and essential services reports (completed by the building owner). In addition to general public liability for injury, landlords have a duty of care to provide safe premises for their tenants and may be subject to common law actions in negligence.

While disputes can arise at any stage during the building process, problems with a building will most often become apparent after the building is completed and once it has been used. Dispute resolution processes vary by jurisdiction and can include:

- complaints or appeals to council;
- State and Territory Government departments;
- professional registration boards;
- building-specific or multi-purpose tribunals (such as the Administrative Appeals Tribunal);
- other statutory bodies;
- a range of specialist or common law courts; and
- independent arbitration.

Each of these varies in power, formality and expense.

2.2 Role of State and Territory Governments

Constitutionally, the power to regulate the use of land resides with the States and Territories. As such, State and Territory Governments are responsible for the statutory framework for land use, planning, development and building regulation.

Although they are the source of legal power in building regulation, State and Territory Governments often delegate the power so that other levels of government can set, or enforce, rules relating to building regulation. This is done by either voluntarily adopting national initiatives (as is the case with the BCA), or, in relation to the State Governments, by delegating enforcement and some rule-making powers under legislation governing local councils. Nevertheless, the State and Territory Governments often retain large amounts of both rule-making and administrative capacity in the area of building regulation.

Rule-making capacity

Although the BCA is created and maintained at a national level by the ABCB, for it to have any legal force it must be adopted by each jurisdiction. The majority of jurisdictions adopt the BCA ‘as amended from time to time’, meaning that any changes to the BCA made by the ABCB or the jurisdiction itself are automatically included in their legislation. Nevertheless, some jurisdictions refer to a specific version of the BCA in their legislation, and dictate a method of changing that version — either by amendment to the law in question or by notification in the jurisdiction’s Gazette. Each jurisdiction can adopt the BCA to any extent they choose, in total or in part with their own variations.²

By adopting the BCA ‘as amended from time to time’, jurisdictions can ensure that they have in force the most up-to-date Code. This means that each jurisdiction adopts BCA amendments at the same time, helping to ensure that the Code represents a consistent national standard. Nevertheless they still have the right to amend or vary the code as they see fit.

In addition to their own variations relating directly to building, States and Territories also have the power to make other rules that would impact on the building process, for example rules relating to energy efficiency and fire safety

² All States and Territories except Western Australia maintain formal appendices in the BCA listing jurisdictional variations and additions to the technical regulations.

(discussed further in chapter 6). These rules can be contained in legislation that covers areas other than building, such as fire, health or the environment.

Administrative capacity

As they set up the legislative framework for building regulation, the States and Territories are also primarily responsible for the administration and enforcement of the regulations. While some powers (for example, building and planning approval) are commonly delegated to local councils, different jurisdictions retain varying levels of control over the administrative process. Despite the existence of model legislation governing the administration of building regulation, few jurisdictions have adopted it to any significant degree, most preferring to retain their own administrative frameworks (see chapter 7).

State and Territory Governments usually administer several of the supporting regulatory activities in the building process (described above), such as the licensing of practitioners, the regulation of building contracts and insurance, accreditation of products and systems and dispute resolution. As mentioned above, there is a variety of dispute resolution options available across the jurisdictions.

2.3 Role of Local Governments

Local Governments are established under State legislation and their structures, powers and functions are determined by that legislation (there is no local government tier in the two Territories). In all jurisdictions in the past 10-15 years, the relevant legislation creating and regulating Local Government has been reviewed and significantly amended or replaced with new legislation that gives councils greater general competence powers. Generally, these changes allow Local Governments to provide a range of services or to undertake functions to meet the needs of their local communities that may be beyond their statutory powers. As Local Governments also have a measure of choice over the range of non-statutory functions they get involved in, as well as the manner in which they interpret their statutory functions, there are differences in the activities of local councils both within and across jurisdictions.

In brief terms, Local Governments impact on building regulation through their administration of planning schemes. Local Governments exercise their statutory planning powers in two ways:

- through the creation of land-use plans and development controls; and

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- through the process of assessing applications for land use and development by granting approval, granting approval with conditions, or refusing an application, and through the enforcement of planning scheme provisions.

Local Governments also play a role in enforcing building regulations. Despite the introduction of private certification, councils in most jurisdictions are still heavily involved in the certification process that governs building approvals. Additionally, local councils enforce breaches of building regulation through work orders or fines.

Thus, through planning schemes and the operation of building certifiers, the role of Local Government in building regulation is primarily in the administration and enforcement of the regulations. However, depending on the level of control retained by the State or Territory that governs them, some Local Governments can make their own building or planning by-laws applicable only within the particular Local Government area. As noted above, given the overlap between planning and building regulation, these by-laws can effectively vary or add to requirements found in the BCA. An example of this are local council requirements to use a particular form of energy or water saving device, such as a dual flushing toilet or water-saving shower rose. This issue is discussed in chapter 6.

2.4 Role of the Australian Government

As mentioned above, in the allocation of power under the Australian Constitution, responsibility for building remained within the jurisdiction of the States (and later the Territories). However, since the time of federation, increased interstate cooperation has led to the Australian Government also taking on a coordination and reform role in building regulation.

History of national building regulation

In 1965, an Interstate Standing Committee on Uniform Building Regulations was established with the aim of creating greater consistency in building regulation (ABCB 2003a, p. 36). In the early 1970s, the Committee released the Australian Model Uniform Building Code (AMUBC), which contained proposals for both technical and administrative building matters.

However, further work was needed to produce a more nationally acceptable and harmonised set of rules. After a review in 1979, the Interstate Committee was restructured to form the Australian Uniform Building Regulations Coordinating Council (AUBRCC). In line with the new focus on consistency in building regulations, the Council removed all administrative provisions from the original

model code and renamed the resulting technical document the BCA. Editions of the BCA were released in 1988 and 1990, with increasing use of performance regulations. In 1990, in an effort to encourage national consistency, the Council also commissioned a project to develop model legislation for the administration of building regulations. However, to date adoption of the legislation has proven to be limited and piecemeal.

Meanwhile, following general concerns about the effectiveness of Australia's regulatory systems, the Special Premiers Conference in 1989 placed planning and building approval reform on the national microeconomic reform agenda. As a result, the Building Regulation Review Taskforce (BRRT) was established, with terms of reference to 'examine the scope for significant reforms of technical regulation of building' (BRRT 1991, p. 1). It recommended the establishment of an Australian Building Regulation Corporation, to replace the AUBRCC, which would be responsible for key reforms.

Based on the recommendations of the Taskforce, the ABCB was formed in 1994 via the Inter Governmental Agreement (IGA). In the IGA, the State, Territory and Australian Governments agreed to the formation of the ABCB as a representative Board to develop a nationally consistent regulatory framework and to maintain the BCA as a nationally consistent technical source of regulation.

Present role of the Australian Government

The primary role of the Australian Government in building regulation is one of coordination and reform through its representation on the ABCB.

Aside from its participation in the ABCB, the Australian Government can play an indirect role in building regulation through its actions in broader social, environmental and economic policy areas. Examples of where these actions overlap with building regulations include regulation aimed at disabled access and accreditation standards for aged care facilities.

Another area where the Australian Government can indirectly influence building regulation is through the processes and competition payments associated with reviews of State and Territory legislation under the National Competition Policy (NCP) Agreement.³ These reviews can encompass not only building legislation, but also legislation governing building practitioners, such as architects or surveyors.

³ The Productivity Commission is currently conducting a Review of National Competition Policy Arrangements. Details of this review can be found at: <http://www.pc.gov.au/inquiry/ncp/index.html>.

In areas of land over which it has constitutional power, the Australian Government can create and implement its own building-approval process. Examples of this include airports⁴ and areas of land under the control of the defence forces.⁵

2.5 ABCB

The ABCB was established through an IGA signed in 1994 by the Australian Government and the State and Territory Ministers responsible for building regulatory reform. Standing Orders were established in conjunction with the IGA to provide for administration of the Board and implementation of the Board's objectives. The Agreement was amended in 2001 following an independent review. The IGA, as amended, is included as appendix B.

The ABCB's mission is 'to provide for efficiency and cost effectiveness in meeting community expectations for health, safety and amenity in the design, construction and use of buildings through the creation of nationally consistent building codes, standards, regulatory building requirements and regulatory systems'.

The primary means by which the ABCB achieves its mission is through the development, upgrading and maintenance of the BCA. The Board's processes for developing Code reforms are based on extensive consultation and assessment of economic and social impacts (see chapter 8).

The Board has no legislated regulatory power. The technical requirements of the Code become mandatory legal requirements when they are referenced in State and Territory Building legislation.

The Board pursues a range of activities in support of its Code maintenance and development functions, including education, training, research and international liaison. The ABCB has also produced a number of non-regulatory guideline documents. These other activities are discussed in chapter 9.

In addition to influencing regulation through changes to the Code, the Board seeks more generally, through these other activities, to promote and be a catalyst for building regulatory reforms. Indeed, the ABCB Chairman (sub. 4, p. 6) considers that the mission statement 'does not adequately reflect the strong regulatory reform agenda of the ABCB ...'.

⁴ See *Airport Act 1996 (Cwlth)*.

⁵ See *Defence (Areas Control) Regulations 1989 (Cwlth)*.

Structure and membership

Figure 2.2 outlines the structure and composition of the ABCB and supporting committees.

Board membership comprises the Australian, State and Territory Governments' chief executives responsible for building regulatory matters, a Local Government representative (a nominee of the Australian Local Government Association) and four industry representatives. Board members are appointed by Ministers. The current membership of the ABCB is listed in appendix C.

The Chairman is appointed by the Australian Government Minister from amongst the Board members, following consultation with State and Territory colleagues. The present Chairman is an industry representative, but unlike the other industry members (who are appointed as a result of a nomination by the Australian Construction Industry Forum (ACIF)), he was selected by the Minister.

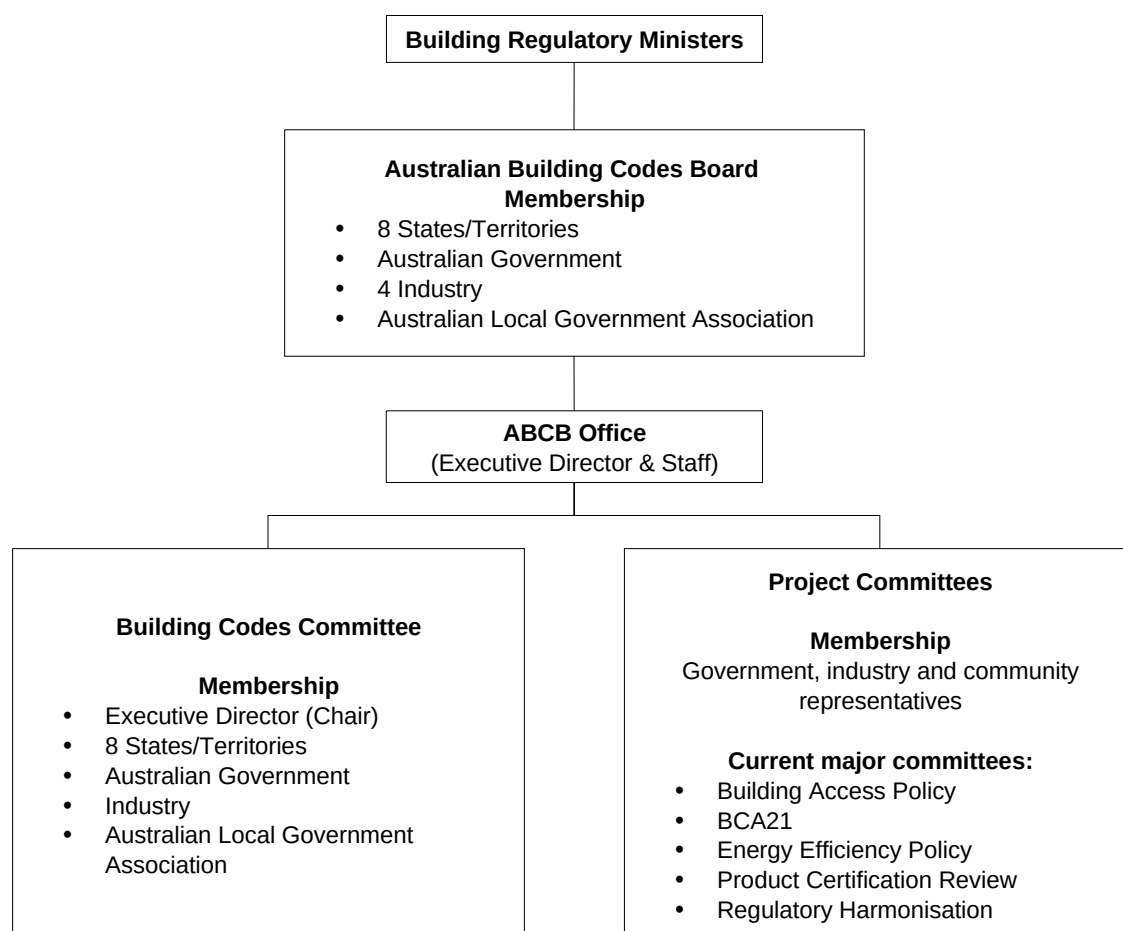
The Standing Orders require that the Board meets at least once in each calendar year. Each member of the Board is entitled to one vote. While the Standing Orders for the Board state that decisions shall be by a simple voting majority, the ABCB Chairman points out that in practice:

... there has never been voting at the Board level but the provision needs to be retained to avoid one or two members frustrating the will of a large majority. (sub. 4, p. 48)

The Board is supported by an Executive Director and staff that are employed by the Australian Public Service and located within the Australian Government Department of Industry, Tourism and Resources (ITR). The Office comprises around 35 professional, technical and administrative staff, who are responsible for coordinating, managing and implementing the work program under the direction of the Board. The Executive Director attends meetings of the Board.

The Building Codes Committee (BCC) is the peak technical body with responsibility for advice to the Board on reforming, maintaining and upgrading the Code and its standards. The ABCB Executive Director chairs the BCC. Other members of the Committee include representatives from the Australian, State and Territory Governments, the Australian Local Government Association and industry. In addition, representatives from Standards Australia International (SAI), CSIRO, the Australasian Fire Authorities Council (AFAC) and the New Zealand Building Industry Authority have observer status.

Figure 2.2 **ABCB structure**



Source: ABCB 2003a, p. 41.

As with decisions of the Board, the Standing Orders provide for simple majority voting by the BCC. While this mechanism is available to resolve irreconcilable positions, in practice most issues are resolved through consensus (sub. 36, p. 14). Further, standing orders require that decisions cannot be taken by the BCC that lead to a State or Territory variation to the BCA.

The BCC meets at least twice a year to consider and authorise amendments to the BCA and to agree on other matters of a technical nature. In addition, separate working groups of State and Territory BCC members meet, as required, to assist the ABCB in developing material for the BCC.

In addition, an Industry Liaison Committee and various project committees provide advice to the ABCB on its operations. Current committees (although not all are active) include:⁶

⁶ ABCB website (accessed 7 June 2004).

-
- BCA21 Committee (provides technical support and advice on the future scope and format for the BCA);
 - Building Access Policy Committee;
 - Building Product Evaluation for Export to Japan;
 - Energy Efficiency Steering Committee;
 - Flood Steering Committee;
 - Maintenance of Essential Safety Measures Committee;
 - National Administrative Framework (Regulatory Harmonisation) Committee; and
 - Product Certification Review Working Group.

The ABCB has recently trialled the establishment of a Technical Validation Panel (TVP). The purpose of the TVP is to undertake reviews of detailed technical matters, freeing up BCC resources to concentrate more on priority regulatory policy and administrative issues (see chapter 10).

The ABCB reports directly to each Minister responsible for building regulation matters in the jurisdictions (and not to a Ministerial Council).⁷ In practice, the Board is generally the final decision maker on proposals for changes to the Code. However, the IGA does not create legally binding or enforceable arrangements for the parties. As noted above, while most States and Territories automatically adopt changes to the Code ‘as amended’, all maintain the right to implement variations and additions to the Code.

2.6 BCA

Since the current BCA was first developed in 1996, it has been progressively refined. While all States and Territories have adopted the BCA, most have variations and additions⁸ to the Code.

⁷ When the IGA was signed in 1994 the relevant ministers met in a national council known as the Planning, Housing and Local Government Ministerial Council.

⁸ Variations of the code refer to instances where the jurisdictions have derogated from the BCA by either removing provisions or by replacing the provision of the BCA with jurisdiction specific regulations. Additions to the BCA refer to instances where the jurisdiction has included additional regulations (beyond the coverage of the BCA) in their building code.

Scope of the BCA

The Code articulates mandatory (minimum) requirements for building practices for most building types and for a variety of aspects of building performance.

The BCA covers all commercial and domestic buildings, but not ‘non-building’ or engineering constructions (such as roads and bridges). The BCA identifies 10 classes of buildings, each covering a particular type of building (see box 1.2). The Code has been divided into two volumes, each covering particular types of buildings.

In essence, volume one of the Code covers commercial buildings (such as factories, office blocks and warehouses), while volume two essentially concerns domestic housing.

Volume one of the BCA covers:

- all class 2 to 9 buildings;
- access requirements for people with disabilities in class 10 buildings; and
- certain class 10 structures.

Volume two covers:

- class 1 and 10 (other than access requirements for people with disabilities in class 10 buildings); and
- certain class 10 structures.

The style and structure of each volume is different, reflecting the different users at which they are pitched and the different classes of buildings they cover. Volume one is aimed at firms working on larger scale constructions and contains only the technical requirements of the Code. A separate companion manual, ‘Guide to the BCA’, provides ‘clarification, illustrations, or examples’ to aid interpretation of Volume one. Volume two of the Code — aimed at firms and individuals engaged in the design and construction of houses — includes, within the Code, interpretive material and additional information, such as diagrams, examples and explanations.

As outlined in appendix D, the BCA covers several aspects of *building performance* including: structural provisions, fire resistance, access and egress, health and amenity (including room sizes, light, sound transmission and ventilation) and services and equipment (including safety equipment and lifts).

The coverage of volumes one and two are different in several areas. In some cases this reflects the different nature of the buildings under reference, for example, volume one (commercial buildings) has regulations covering lift installations,

emergency lighting and special use buildings, which are not relevant for housing (volume two). Nevertheless, in some other areas the coverage appears to differ for other reasons. For instance, energy-efficiency measures have been included in volume two of the Code, but are still in the process of being included in volume one.

In addition to differences between the two volumes, a number of the requirements of the Code only apply to certain classes of buildings (within the one volume). This is usually because the area of building performance in question is only applicable to certain classes of buildings. For example, regulations relating to sound insulation in volume one of the BCA⁹ only apply to class 2, 3 and 9c buildings (certain residential buildings and aged care homes) and not other classes of commercial buildings such as factories or office buildings.

While different regulations for different buildings classes are necessary to target the Code properly, they do provide incentives for designers or owners to have their building classified to a particular class. For example, the developer of a hotel (class 3) may wish to have the building initially classed as class 2 (sole occupancy units) if the building requirements are lower for a class 2 building. This mis-classification of buildings, apart from inducing distortions in building decisions, may lead to unsafe outcomes if buildings do not meet the appropriate regulations for their ultimate intended use (Hook, B. Queensland Fire and Rescue Service, pers. comm., 11 May 2004).

BCA Structure

The structure of the BCA is outlined in figure 2.3. There are four broad levels of guidance and obligations contained in the Code.

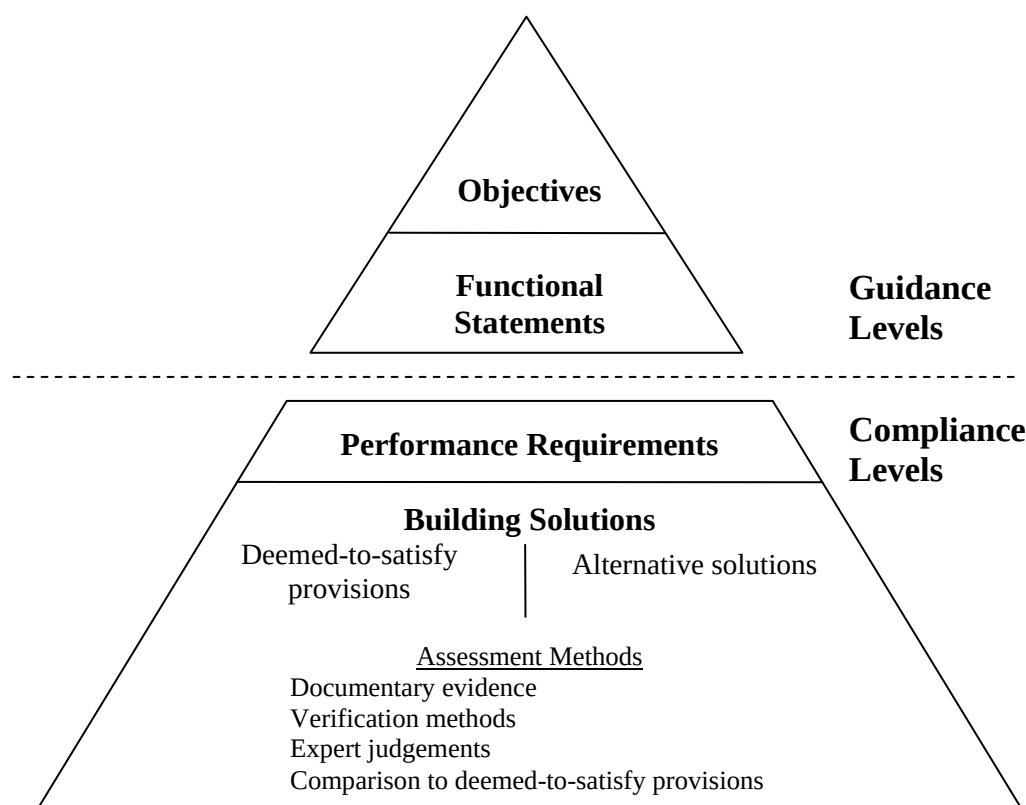
At the broadest level, *objectives* outline what the community expectation is in relation to a particular area of building performance. For example, in relation to the structure of a building, the Code has the objective of safeguarding people and other property from injury and loss of amenity from a structural failure or malfunction.

At the next level, the *functional statement* describes ‘how it is proposed that the building will be designed and constructed to meet those community expectations’ (Guide to the BCA 2004, p. A0.8). In relation to structural provisions, the functional statement states that a ‘building or structure is to withstand the combinations of loads and other actions to which it may be reasonably subjected’ (BCA 2004, vol. 1,

⁹ Volume two of the code has separate sound insulation requirements.

p. BP1.1). Both the objective level and functional statements are provided for information only and are not formal requirements for a building to meet the BCA.

Figure 2.3 **BCA Structure**



Source: BCA 2004, vol. 1, p. A0.4.

The third level of detail in the BCA are the *performance requirements*. The performance requirements form the backbone of the BCA and enunciate what level of performance is required for a building to meet the BCA. The purpose of these requirements is to meet the functional statements and objectives of the Code and outline the **minimum** standard that a building must meet. The performance requirement does not preclude builders or designers from achieving a higher standard if they (or the consumer) desire.

Continuing the previous example, the performance requirement for structural stability states that the building must, by resisting the actions to which it may reasonably be subjected:

- remain stable and not collapse;
- prevent progressive collapse;
- minimise local damage and loss of amenity through excessive deformation, vibration or degradation; and

-
- avoid causing damage to other properties, (BCA 2004).¹⁰

Performance-based regulations and requirements are discussed in more detail in chapter 5.

The most detailed level in the BCA hierarchy are the *building solutions*. The BCA offers a dual approach to complying with the performance requirements. Buildings can either be designed using ‘deemed-to-satisfy’ solutions or an alternative solution — provided the solution can be demonstrated to meet the performance criteria. The majority of houses are designed using the deemed-to-satisfy solutions, although commercial buildings are often built using alternative solutions (sub. 4, p. 11).

Four primary assessment methods can be used to demonstrate that an alternative solution meets the performance requirements:

- the use of evidence showing that the use of a material, form of construction or design meets with the relevant performance criteria;¹¹
- verification methods contained in the BCA¹² or acceptable to the authority judging compliance with the BCA (that is, the certifier);
- comparison with the deemed-to-satisfy provisions; and
- expert judgement.

The deemed-to-satisfy solutions form the bulk of the BCA and offer prescriptive solutions that are deemed-to-comply with the performance requirement. (In the BCA96, many of these deemed-to-satisfy solutions were adopted from the previous prescriptive code — sub. 19, p. 5). In many cases the deemed-to-satisfy solutions make use of standards to define construction methods and levels of performance of building products. The majority of these are Australian standards (largely developed by SAI), though other sources, such as the CSIRO and American Society for Testing and Materials, are used in some cases. The development of standards is discussed in chapter 8.

¹⁰ In addition, the performance requirement lists a number of actions that are to be considered, including: dead loads; loads arising from occupancy and use; wind action; earthquake action; and ground movement. The section also has a requirement to determine the structural resistance of materials used in the building.

¹¹ Evidence may include: a report issued by a registered testing authority; a current certificate of conformity or a certificate of accreditation; certification from a professional engineer or other appropriately qualified body; a certificate issued by a product certification body; and/or a current product listing data sheet and listing entry in the register of fire protection equipment (see <http://www.abcb.gov.au/index.cfm?fuseaction=DocumentView&DocumentID=86>).

¹² Some performance requirements in the BCA have associated verification methods that provide details on how compliance with the performance requirement can be verified.

3 Assessment criteria

3.1 Background

The terms of reference request assessment of the past performance of reform of building regulation against a number of criteria:

- effectiveness in achieving objectives;
- improving productivity of the industry; and
- maximising net benefits for the economy.

They also request an assessment of whether further reform should be undertaken after 2005 and the form that this should take, especially in terms of reform objectives. The issue of the appropriate institutional arrangements to deliver future reform, including the role of the Australian Government, also arises.

As reform of building regulation is relevant to all levels of government, jurisdictional sovereignty issues arise. The approach taken in this study is to apply the assessment criteria from the perspective of the wellbeing of Australia as a whole, while noting differences in the impacts on, and the preferences and interests of, jurisdictions.

A particularly challenging aspect of this study is to assess the different functions of the Building Code of Australia (BCA). The Code is, at one and the same time:

- a technical document providing information to building practitioners about what has been demonstrated to work by experts;
- a ‘regulatory’ document by which to specify and judge compliance;
- the mechanism by which uniformity and compatibility is achieved; and
- a social document specifying what is judged to be society’s minimum standards for health, safety and amenity, with recent or expected extensions to other social objectives, including accessibility and sustainability.

A fundamental question for this study is whether it is feasible and appropriate for the Code to serve all these functions well?

3.2 Rationale for government intervention

Any intervention must have a sound rationale. Ultimately, government initiatives will be judged by whether they are addressing significant problems and pursuing worthwhile objectives and the extent to which these are met at least cost.

A first step for assessing the objectives of building regulation is to establish that there are problems of a nature that justify government intervention; and that the remedy is preferred to inaction. Many problems can be solved by individuals and communities operating in the market-place without resort to government funding or rule-making. At issue is whether the building sector faces problems that cannot be best solved by the industry or by those using building services. If not, then what is the best form of government response?

Buildings and the services they provide are diverse and multi-faceted. A building, whether it is primarily for accommodation or for other uses, provides many services, comprises a range of materials, is constructed by practitioners with greatly varying skills and expertise, and is an area where numerous social objectives converge, many of which overlap and some of which conflict. All of these aspects potentially provide fertile ground for regulation.

There are some broad characteristics of the building industry, that may justify government involvement, namely:

- costly and asymmetric information;
- positive externalities (or spillover effects) — derived from research, providing access and egress to public buildings for the disabled and the aged, etc;
- negative externalities (or spillover effects) — arising from construction noise, inadequate ventilation, poor aesthetics, poor drainage, fire and adverse environmental impacts; and
- accommodation is an aspect of living standards for which many people consider a certain minimum standard should be guaranteed to all citizens in our society.

On the **first** characteristic, concerning information, while consumers have an incentive to seek out goods and services with the price-quality combination they want, this is difficult for consumers where the supplier has much more knowledge than the consumer about their own capacities and the likely quality of the product. This information asymmetry is most important for purchasers of buildings, especially buyers of single residences, since many of them will be infrequent buyers and so most would not build up experience of the market.

The owner and/or the occupier of a building are not easily able to ensure that the building in fact meets the qualities they think they are paying for. Without addressing this information imbalance between building practitioners and prospective purchasers and occupiers, people may unwittingly contract for, buy or rent buildings that do not meet with the approved design. Sooner or later these display defects that present risks to health or safety, disappoint in terms of quality of finish, and/or fail to meet expectations for sound proofing, thermal and waterproofing standards and other aspects of amenity. (In addition, the law makes it hard to pursue the original builder.)

Government intervention is not necessarily required to address knowledge imbalances. For example, individuals wishing to be assured of the quality of a building can hire people with appropriate professional qualifications and experience, such as an architect or a building inspector, to act on their behalf to provide the level of expertise and quality control required to bridge the knowledge gap. Alternatively, they can research a builder's reputation before signing a contract, or they may be able to take out insurance against poor building outcomes. Insurance premiums can become a signal to consumers as to the reputation of a particular building practitioner. Contracts and appeals through the courts also provide for financial and legal, albeit possibly costly and uncertain, redress when consumers experience adverse outcomes.

A pivotal question in this study is whether the BCA is an efficient and effective mechanism to address the consequences of this knowledge imbalance. Are buyers and users of buildings confident that the BCA and its enforcement address the risks that arise from the knowledge gap, or have they increasingly lost trust in the system and are instead seeking alternative means to address the problem? Even if the BCA does deliver, is it worth the cost?

For the **second** characteristic, namely positive externalities, the returns to research (in part because of the difficulty in preventing other suppliers from copying new techniques) are often too low in a free market to ensure an efficient amount is conducted, unless it is subsidised or given other forms of support. Building is an industry facing significant technical changes, with the potential to reap benefits, both from applying existing research well and conducting further research into areas such as fire safety and sustainability.

Via Standards Australia International (SAI) and other funded research, the Board attempts to address this incentive gap by supporting research, by providing research results collectively and by embodying an agreed set of standards for buildings and building materials in the BCA. It is intended that the deemed-to-satisfy provisions of the BCA provide technical knowledge as to what will work for many building practitioners and the performance-based clauses give freedom for others to explore

innovative approaches where returns justify it. Alternative strategies might include tax subsidies to research and development; and providing patents.

With respect to the **third** characteristic, the process of building and the finished product itself can have negative impacts (so-called negative externalities) on inhabitants of buildings and the surrounding community, through such things as excessive construction noise, inadequate ventilation or poor drainage.

Fourthly, many people in our society want to ensure that disadvantaged members of the community, including those with disabilities, are guaranteed some minimum standard of accommodation and access to buildings. At question is determining the best way to achieve this minimum standard of accommodation and access for all. Alternatives, to the increased use of regulatory standards, include funding the disabled (or other disadvantaged groups) directly or subsidising buildings with specified characteristics.

In sum, the characteristics of the building sector (the knowledge gap between builder and buyer; difficulties in getting those who gain from research to pay for it; the potential for buildings to have adverse impacts on the surrounding community; and its contribution to achieving social objectives) mean that there are sound reasons for accepting that efficient and well-targeted government intervention can improve market outcomes in some areas.

Hence, the concomitant objectives to address these problems (that is to provide reassurance to buyers that buildings at least meet a minimum standard; to ensure that the level and direction of research is optimum; to curb adverse impacts on the community; and to provide nationally consistent building regulation) are also valid. At issue is whether the BCA is the best regulatory mechanism to achieve these objectives.

3.3 Effectiveness

Effectiveness is about outcomes. There are two aspects relevant to this study: how well the Board achieves its objectives and how well the BCA, and the regulatory systems in which it is embedded, deliver real improvements in buildings. For the future, the question revolves around whether there is scope to change the design of the scheme in ways that improve its effectiveness and thus the benefit it provides.

To judge effectiveness, it is important to assess the contribution that the ABCB makes to meeting each of its objectives — beyond what would have occurred without it. This is the ‘additionality’ criterion. As pointed out above, without regulatory intervention, individuals and companies would resort to other means by

which to address the shortcomings in the market, such as employ their own experts and seek insurance. At issue, for this study, is whether regulation of building adds to efficiency beyond the alternative mechanisms provided in the market.

There is also the question of whether the costs of compliance can be reduced while still correcting the market imperfection and achieving objectives to the level originally intended. The calls for national uniformity and performance-based standards can both be seen as attempts to lower compliance costs to do this. Otherwise, without such reforms, there is the question of the relationship between compliance efforts and outcomes and the trade-offs that must be made between higher levels of outcome at higher cost.

Effectiveness will also depend on whether there are sufficient resources and whether they have been applied well to enforce the regulations. Compliance is an important part of good regulation.

In general, there is the question of whether changes to the design of the regulation could improve effectiveness in meeting objectives.

3.4 Efficiency

At the broadest level, efficiency concerns whether resources and economic enterprise have been allocated in a manner that maximises national welfare. Hence, a regulatory intervention is efficient if it achieves the maximum net benefit (benefits net of costs).

The judgment as to whether this has been achieved rests on establishing: (1) whether the building sector has characteristics that would result in resource misallocation and inefficiencies in an unregulated market; (2) whether the Board's objectives are directed at addressing market imperfections; and, if so, (3) whether the interventions made to correct these 'market imperfections' are the best available, effectively achieving objectives, while minimising costs and adverse side-effects — thereby maximising net benefits. The first issue is one of 'rationale' for intervention and is addressed above in section 3.2 and the third issue is discussed in section 3.3 also above.

The second issue concerns whether the Board has been pursuing the right objectives. In general, efficiency will be improved where regulation addresses market distortions. So this is really a question of whether the Board's ten objectives address the underlying problems of the building industry. If not, it is important to ask whether a different or clearer set would make the industry more efficient.

Efficiency, at a practical level, also involves some idea of proportionality: what is the nature and size of the potential costs borne by individuals and the community when adverse outcomes occur in the building sector? Some aspects, such as structural soundness, involve risk to life and limb, others concern the risks involved if a building fails to provide basic levels of amenity, such as being waterproof. So, an important question is whether regulatory requirements and enforcement activities, which are costly to the community, are proportionate to the risk? In some cases, it may be that the risk does not justify the compliance costs and regulatory resources allocated to it.

3.5 National consistency

A principal objective of the IGA is to increase consistency in regulation across Australian jurisdictions. Indeed, some consider achievement of greater consistency to be the most significant imperative of the ABCB, because it is considered fundamental to achieving economies of scale and reducing the costs of compliance. Business and industry expressed frustration with operating in the multiple regulatory environments of the States and Territories, which limit interstate and international trade, and result in lower growth.

Possible gains from greater consistency include:

- economies from industry supplying to a national building market;
- increased competitiveness ;
- lower prices to consumers through greater competition and increased productivity; and
- decreased costs to industry.

Chapter 4 explores some of these impacts.

COAG's *Principles and Guidelines for Standard Setting and Regulatory Action by Ministerial Councils and National Standard-Setting Bodies* seeks nationally *compatible* regulations and standards. Many consider that government, especially the Australian Government, must play a role in achieving this consistency due to the risk of free riding and non-compliance without government coercion when many players are involved.

Sovereignty concerns the power to make decisions and take actions. Other things being equal, these are best made by the affected community collectively. The size of the affected community varies with the nature of the decision. Hence, there are government decision and implementation machinery built around different-sized

communities: local councils, state governments and national governments. And beyond the nation state there are international decision-making bodies.

While this review is mostly concerned with the decisions exercised by local councils and by the State and Territory Governments, it is worth asking: what is the optimal decision-making unit with respect to building regulation? We would expect the optimum size and constituency of decision-making units to vary according to the issue, ranging, for example, over: climate; consistency of building appearance; impacts on catchment areas; exposure to bushfire risk; earthquake-prone geographic zones; cyclones.

In looking at this issue, one question is, if the BCA establishes the minimum acceptable to all communities across Australia and for zones with particular features, such as cyclones, should individual communities then be free to establish a higher standard for their particular community? Strongly held views exist for and against this notion, particularly in relation to planning issues. Relevant questions are whether planning requirements sometimes encroach into building requirements, and whether councils should control some aspects of building regulation where they impact on social objectives such as disabled access and environment.

Clearly, consumers can also exercise their sovereignty by having buildings constructed to the higher than mandatory standard if they are prepared to pay for this.

If it were accepted that the BCA should set minimum standards, then how should individuals and communities deal with the information gap to ensure they get the product they believe they are paying for? Firstly, they need to be reassured that regulatory enforcement is delivering the minimum as specified in the BCA. Secondly, to move beyond the minimum, they need to be able to access: mechanisms that help them communicate effectively what they want from a building; inspection services that confirm whether their requests have been satisfied; and, finally, efficient means of redress if they have not. Whether buyers seek to go beyond the minimum will be determined by their capacity to pay and risk-cost tradeoffs.

When variations to the BCA are introduced, we need to ask whether they are justified. Sometimes, differences are intrinsic to a locality and require particular, tailor-made regulations or they reflect the aspirations of the inhabitants of a community. In almost all cases, where a particular jurisdiction wants to set a different standard from the national one, the case for the variation should be put under scrutiny. Important questions to ask include what is the difference worth and how much would it cost to maintain it (for example, in terms of greater costs of compliance and decreased competition)?

3.6 Good regulation and regulatory governance

Also of critical importance to this review is the assessment of the ways by which standards and other requirements are developed and delivered — regulatory governance.

The design, implementation and enforcement of regulation are instrumental to ensuring it is effective, efficient, achieves an appropriate balance between sovereignty and consistency, and overall provides the greatest net benefit to the community (Argy and Johnson 2003). While it is often difficult to measure empirically how well a regulatory regime has been designed, implemented and enforced, there is broad agreement on the characteristics of good regulation and the processes and principles of regulatory governance which are likely to engender good regulation with efficient and effective outcomes. Almost all OECD countries have adopted explicit regulatory review and reform programs, encompassing a range of mutually supportive tools and institutions and member countries agree on a number of broad best practice strategies for achieving better quality regulations. These strategies cover both the flow of new regulations and the stock of existing regulations.

The Australian Office of Regulation Review (ORR) has consolidated the best practice regulatory design standards and guiding principles that have been identified by various Australian and international bodies involved in regulatory management and reform. This checklist (see box 3.1) provides criteria by which to assess the quality of regulation. These are the criteria by which the BCA is assessed in chapter 5.

Regulation which satisfies these criteria will also generally target significant problems, usually market failure, while minimising the scope for ‘government failure’.

In addition to assessing the quality of the BCA, this review also assesses the processes and institutions by which the ABCB develops regulation. A well designed institutional framework for managing and coordinating regulatory reform is a key component of regulatory governance. This is because the institutions and processes are pivotal to delivering good quality regulation. Based on the OECD’s *Guidelines for Improving Regulatory Quality*, box 3.2 identifies aspects of the processes and institutions that are key to good regulatory outcomes.

Box 3.1 Checklist for assessing regulatory quality

Regulations that conform to best practice design standards are characterised by the following seven principles and features:

- Minimum necessary to achieve objectives
 - Overall benefits to the community justify costs
 - Kept simple to avoid unnecessary restrictions
 - Targeted at the problem to achieve the objectives
 - Not imposing an unnecessary burden on those affected
 - Does not restrict competition, unless demonstrated net benefit
- Not unduly prescriptive
 - Performance and outcomes focused
 - General rather than overly specific
- Accessible, transparent and accountable
 - Readily available to the public
 - Easy to understand
 - Fairly and consistently enforced
 - Flexible enough to deal with special circumstances
 - Open to appeal and review
- Integrated and consistent with other laws
 - Addresses a problem not addressed by other regulations
 - Recognises existing regulations and international obligations
- Communicated effectively
 - Written in ‘plain language’
 - Clear and concise
- Mindful of the compliance burden imposed
 - Proportionate to the problem
 - Set at a level that avoids unnecessary costs
- Enforceable
 - Provides the minimum incentives needed for reasonable compliance
 - Able to be monitored and policed effectively.

Source: Argy and Johnson (2003) derived from OECD (1995); Office of Regulation Reform (Vic) (1996); COAG (1997 – since amended 2004); ORR (1998); and Cabinet Office (UK) (2000).

These criteria have been used in chapters 8 and 10 to assess the past performance of the ABCB and to make proposals for changes.

Regulation Impact Analysis

Amongst this arsenal of instruments of regulatory governance, the use, in Australia, of Regulation Impact Statements (RISs) is one of the most important. According to the OECD (2002, p. 48), there is widespread agreement that regulatory impact analysis, when done well, ‘improves the cost-effectiveness of regulatory decisions and reduces the number of low-quality and unnecessary regulations’. All State and Territory Governments (except Western Australia) conduct formal regulation impact analysis (see chapter 8).

The RIS process provides a framework for the consistent, systematic and transparent identification of the problems being addressed and assessment of alternative approaches to solve them. RISs should enhance regulators’ ability to identify solutions that will meet government objectives in the most effective and efficient manner. The RIS process embodies a number of other regulatory quality tools, for example: the establishment of standards for regulatory quality; consultation; and red tape reduction.

Argy and Johnson (2003) have analysed information from OECD publications and experiences of the ORR to identify criteria for evaluating regulatory impact analysis programs. These underlie the evaluation of the use of RISs by the ABCB in chapter 8 of this review.

Box 3.2 **Aspects of good regulatory governance**

- adopt an explicit regulatory reform policy at the highest political levels
- devise explicit standards for regulatory quality (as outlined in box 3.1) and principles of regulatory decision making and fully integrate into policy-development processes
- systematically consider regulatory and non-regulatory alternatives
- implement administrative simplification and reduce compliance costs
- create effective mechanisms for managing and coordinating regulation and its reform
- direct regulatory resources optimally so as to bring the greatest net benefit, such as incorporating risk management to determine this
- make impacts transparent when devising regulation — use regulatory impact analysis
- avoid capture by specific interest groups
- ensure regulations are adopted and enforced to the optimum degree, with sufficient resources to achieve optimum compliance
- ensure regulations and regulatory processes are transparent, non-discriminatory and efficiently applied:
 - clearly articulate reform goals and strategies to the public;
 - institute systematic public consultation procedures;
 - ensure domestic and foreign businesses can easily identify all regulatory requirements applicable to them; and
 - ensure that procedures for applying regulations are transparent, non-discriminatory, contain an appeals process and do not unduly delay business decisions.
- review and update existing regulations systematically:
 - to ensure that they continue to meet their intended objectives efficiently and effectively and that these objectives are still relevant;
 - integrate regulation impact analysis into the review;
 - target regulations where change is likely to yield the highest net benefits, particularly regulations restricting competition and trade; and
 - use automatic review methods, such as sun-setting.
- evaluate results of regulatory programs.

Source: See OECD 1997a, 1997b, 2002.

4 Impact of reforms

In accordance with the Commission's terms of reference for this study, this chapter seeks to shed light on the contribution that reform of building regulation under the auspices of the ABCB has made to the productivity of the building and construction industry and its impact on economic efficiency in Australia.

Section 4.1 discusses the state of the industry, with some historical information on output, employment and trade. Section 4.2 analyses the productivity performance of the building industry, section 4.3 attempts to identify the contribution of regulatory reform, and section 4.4 focuses on the issue of economic efficiency.

4.1 State of the industry

As noted in chapter 1, this study focuses on residential and non-residential buildings, in line with the ABCB's involvement with the industry. Additionally, discussion of the industry can include its inputs — namely building materials (such as cement, timber and steel) and associated professional services (such as architects, surveyors and engineers). Discussion of these inputs is included where it is relevant to the analysis in this chapter. A more detailed discussion of the state of the industry is contained in appendix E.

Output

In 2002-03, building work done — including both residential and non-residential buildings — totalled \$47.1 billion (in current prices), or 6.3 per cent of Gross Domestic Product (GDP). Given the cyclical nature of the industry, its share of GDP varies significantly — over the last 20 years it has ranged from a high of 7.9 per cent (during 1989-90) to a low of 5 per cent (in 2000-01).

Of the sub-sectors in the industry, residential building dominates non-residential, accounting for approximately two thirds (67.9 per cent) of work done (by value). Geographically, the industry is concentrated in the more populous states, with New South Wales, Victoria and Queensland accounting for 82 per cent of building work done in Australia in 2002-03.

Employment

Employment in the building industry is mildly cyclical and displays a time lag in comparison to output, varying from 6.1 per cent of total employed persons in 1997 to a high of 7.7 per cent at the end of 2003. Contracting and sub-contracting is a notable feature of the industry. Associated with this form of organisation, small firms dominate the building industry to such an extent that, for the building and construction industry (including residential, non-residential and engineering construction), an average of 3.9 people are employed per firm.¹

International trade in building

In addition to servicing the domestic market, the building industry is engaged in international trade. This trade encompasses both the manufactured goods associated with buildings (inputs such as steel and heating systems) and the services required to build them (for example, contractors, architects and engineers).

Trade in goods

Australia's trade in building-related goods is centred around exports of raw materials such as steel and imports of finished products such as heating and cooling systems. In 2001-02, exports of building-related goods totalled \$3.0 billion, up from \$1.7 billion in 1989-90. This represented 2.5 per cent of total merchandise exports in 2001-02 and 3.4 per cent in 1989-90. Of the total figure, building materials (raw materials such as steel and cement) dominated exports at \$1.5 billion in 2001-02. Exports of building products (altered raw materials such as wood structures and pre-fabricated metal buildings) were at \$1.2 billion in 2001-02, while exports of building systems (finished goods such as heating and cooling systems) were at \$0.3 billion.

Imports of building-related goods consistently increased over the 1990s and into 2001-02, going from \$5.7 billion in 1989-90 to \$11.1 billion in 2001-02. Building products recorded the largest level of imports in 2001-02 (nearly \$5.0 billion), while building systems recorded the lowest (almost \$1.7 billion).

Trade in services

Total exports of building and construction services (a combination of construction, architectural, engineering and other technical services) generally grew over the

¹ ABS (*Private Sector Construction Industry, 1996-97: Australia*, Cat. no. 8772.0).

1990s, increasing from \$336 million in 1991-92, to a high of \$723 million in 1999-2000, before slowing and stabilising over the last three years, with exports at \$667 million in 2002-03. These exports accounted for 2 per cent of total services exports in 2002-03.²

In 2002-03, construction services exports (which includes residential and non-residential building construction) made up 12.7 per cent of total building and construction services exports, up from a low of 4 per cent in 1998-99.³ This represented 0.3 per cent of total services exports in 2002-03 and less than 0.1 per cent in 1998-99. Construction services exports are not only small, but volatile, reaching a high of \$105 million in 1994-95 before falling to \$18 million in 1998-99 and recovering to be at \$85 million in 2002-03. This volatility is affected by both international and domestic conditions:

This volatility reflects the extent to which exports are effected by the cycles of domestic and international construction activity, the 'Asian Crisis' and the fact that there is still a significant extent to which exports are seen as a marginal activity which is indulged only when there is excess capacity/low demand in the domestic market. (CSES 2000, p. 47)

As with exports, imports of building and construction services increased over the 1990s, going from \$235 million in 1991-92 to a high of \$559 million in 1999-00, before slowing to be at \$334 million in 2002-03.⁴ There were no recorded imports for construction services from 1991-92 to the present.

4.2 Building industry productivity

Productivity measures the efficiency of, and value-added from, resource use. At a national level, it is the major determinant of long-term growth in the average incomes and material living standards of Australians, while at an industry level, it is an indicator of the industry's contribution to national income growth (see box 4.1).

Broad determinants of productivity include:

- human capital, evidenced by workers' skills and the ways in which they work;
- firm organisation and dynamics — the scale and scope of firms' operations, adoption of 'best practice', managerial practices and entry, exit and growth of firms;

²ABS (*Balance of Payments and International Investment Position, Australia*, Cat. no. 5302.0).

³ABS (*Balance of Payments and International Investment Position, Australia*, Cat. no. 5302.0).

⁴ABS (*Balance of Payments and International Investment Position, Australia*, Cat. no. 5302.0).

- adoption of technology and related innovation in products, processes and organisational structure;
- the nature of the market and the incentives it provides for organisational and technical change; and
- the actions of government, including the conduciveness of the general operating environment to organisational and technical change, industry-specific incentives for change and the regulatory and administrative environment.

Box 4.1 What is productivity?

Productivity is a measure of the capacity of individuals, firms, industries or entire economies to transform inputs into outputs.

More precisely, productivity is a measure of the rate at which outputs (of goods and services) are produced from given amounts of inputs (skills, effort, land, raw materials, machinery, management and so on). Higher productivity means more goods and services can be produced for the same commitment of resources and effort.

At its simplest, the level of productivity is measured as the ratio of output to one or more inputs; for example, the number of cars produced per employee or the number of tonnes of wheat produced per hectare. Productivity growth measures the growth in output per unit of input over time. Improvements in productivity can come through the development and adoption of better techniques of production or by committing inputs to more productive uses.

Productivity growth cannot be directly observed and measured. Rather, it is calculated as a residual — the amount of output growth that remains after allowance is made for the contribution of growth in inputs.

A *partial productivity* measure allows for the growth in one input. For example, the growth in *labour productivity* would be calculated as the growth in output over a period less the growth in labour inputs over the same period. Similarly, the growth in *capital productivity* would be calculated as the growth in output less the growth in capital inputs.

A *multifactor productivity* measure allows for growth in more than one input. Usually, as is the case in this study, it involves the two inputs labour and capital. The growth in multifactor productivity can be calculated as the growth in output less the growth in a combined index of labour and capital inputs.

Source: Industry Commission (1997) pp. 3, 19.

To inform its analysis of changes in building industry productivity, the Commission has drawn on submissions from interested parties and past research studies on the building industry. It is important to recognise that productivity changes over time cannot necessarily be attributed to regulatory reform. There are many factors affecting productivity. Formally attributing productivity performance to the various

influences, via an econometric study, was not practicable because of both the relative recency of some of the reforms and the difficulties in establishing a robust measure of regulation reform in order to separate out the effects of reform from other — often inter-related — impacts on productivity. Consequently, the information provided is indicative only of some of the influences on productivity.

To provide further information on the productivity performance of the industry, the Commission is undertaking a survey of industry participants. This will seek information on changes in the costs of building and the influence of various factors including regulatory reform. It is intended that the results of this survey will be presented in the final report, to be completed in November 2004.

Productivity — the industry's performance

Currently, separate information is not available on the productivity growth of the residential and non-residential building sectors (including construction trade services) that are the focus of the Commission's terms of reference. Data are being sought that will allow the calculation of productivity measures for this industry grouping. In the interim, productivity measures have been calculated for the construction industry as a whole.⁵

Labour productivity in the construction industry increased ahead of general improvements in productivity from the mid 1970s to the early 1980s (see figure 4.1). Since then labour productivity has generally increased at a slower rate than growth for other market sector activities, with the level of market sector labour productivity overtaking the construction industry in the early 1990s.⁶ Multifactor productivity growth in the construction sector has also been slower than in the market sector since the early 1980s, and has only recently attained a comparable level of productivity to the market sector (see figure 4.2).

Looking at the trends displayed in the figures, the construction data appear to correspond to three periods — relatively strong productivity growth in the late

⁵ The building industry covered by the terms of reference is captured within Division E (Construction) of the Australian and New Zealand Standard Industrial Classification (ANZSIC). This includes engineering construction activity (Non-Building Construction) as well as Building Construction (house, residential and non-residential building construction) and Construction Trade Services.

⁶ The market sector is defined by the ABS as all industries less: Property and Business Services; Government Administration and Defence; Education; Health and Community Services; and Personal and Other Services. These are excluded because their outputs are not marketed and/or because their outputs are derived either wholly or primarily by using either deflated input cost data or hours worked as indicators of output (ABS 5206.0, December 2003).

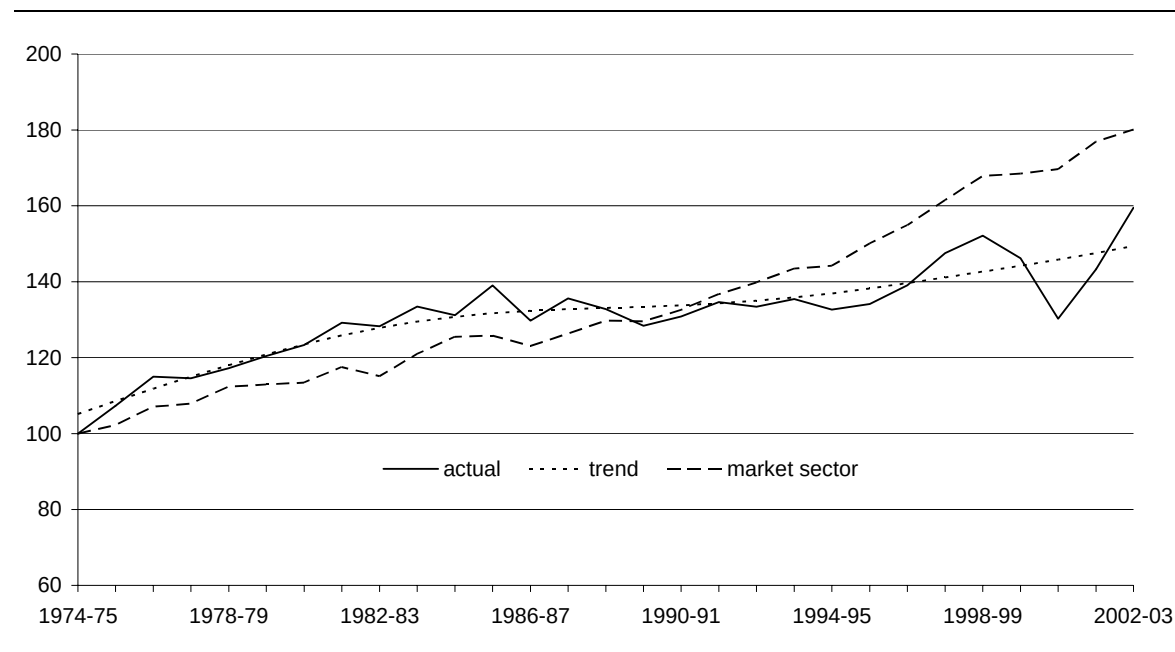
1970s and again in the late 1990s, with a period of stagnation and decline over the 1980s and early 1990s.

Another notable feature of the data is the ‘kick’ at the end of the time series. While the 2002-03 endpoint should be treated with caution, as these figures can be subject to significant revision, the data show a strong downward then upward movement in both labour and multifactor productivity. Such sudden shifts are likely to reflect the operation of particular, time-specific circumstances, such as the introduction of the GST and the impact of the Olympics. Crowley explained the sharp fall in labour productivity in 2000-01 as an unusual and temporary downturn:

In the lead up to the introduction of the GST there was a bunching of projects. After the Sydney Olympics there was a downturn in construction activity. At the same time, the level of employment in the sector did not decline. This resulted in a sharp fall in measured labour productivity. (2002, p. 2)

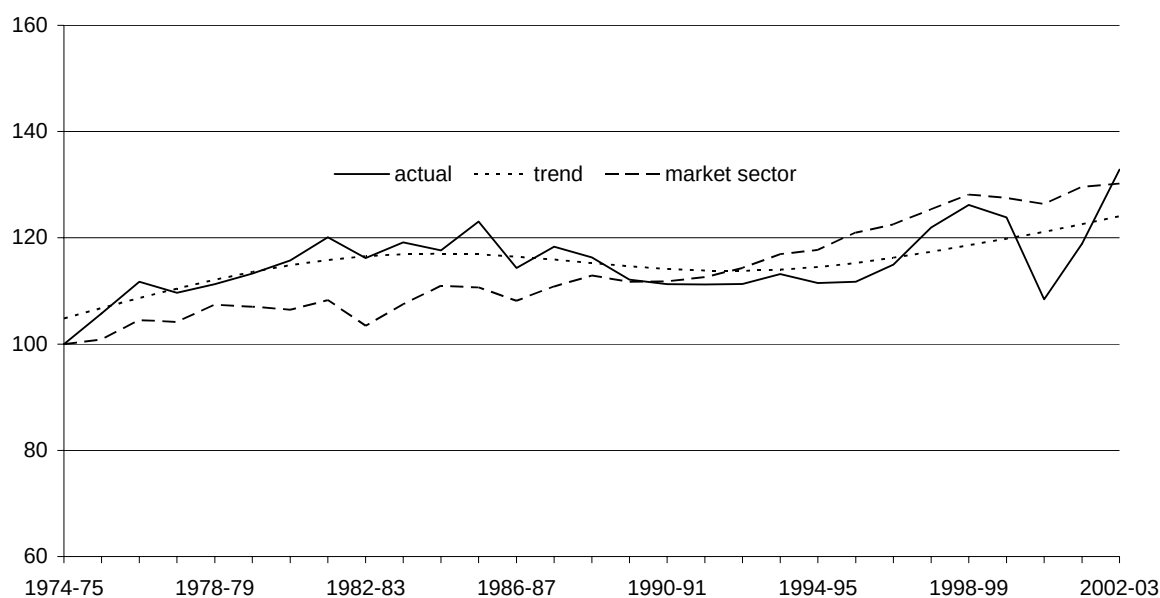
Figure 4.1 Labour productivity for the Construction sector

Index 1974-75 = 100



Source: Productivity Commission (2004d).

Figure 4.2 Multifactor productivity for the Construction sector
Index 1974-75 = 100



Source: Productivity Commission (2004d).

Comparing productivity growth to that of the market sector over peak-to-peak productivity cycles (see table 4.1) confirms that, for the majority of the productivity cycles, construction lagged behind the market sector. In fact, in three periods where the market sector had low but positive multifactor productivity (MFP) growth, construction displayed negative MFP growth.

However, both labour and multifactor productivity had a big turnaround from 1993-94 — an acceleration of 1.8 percentage points for labour productivity growth and 2.3 percentage points for multifactor productivity growth over the previous productivity cycle. The MFP growth outweighed the deceleration in capital deepening (-0.5 percentage points).

Table 4.1 Construction and market sector productivity growth

Comparison over peak-to-peak productivity cycles (% per year)

	<i>Labour productivity growth</i>		<i>MFP growth</i>		<i>Capital deepening</i>	
	Market	Const.	Market	Const.	Market	Const.
1973-74 to 1981-82 ^a	2.4	3.7	1.1	2.5	1.4	1.2
1981-82 to 1984-85	2.2	0.4	0.8	-0.5	1.4	0.9
1984-85 to 1988-89	0.8	0.2	0.4	-0.2	0.4	0.4
1988-89 to 1993-94	2.0	0.3	0.7	-0.4	1.3	0.7
1993-94 to 1998-99	3.2	2.1	1.8	1.9	1.3	0.2
1998-99 to 2002-03 ^b	1.8	1.0	0.4	1.1	1.4	-0.1

^a Construction data for 1974-75 to 1981-82 ^b Incomplete productivity cycle.

Sources: ABS (*Australian System of National Accounts*, Cat. No. 5204.0) and Productivity Commission (2004d).

Overall, the productivity measures for the construction industry contain two key features: a lower-than-market sector productivity performance in most productivity cycles since the early 1970s; and a sharp turnaround in productivity in the 1990s — from negative productivity growth to positive productivity growth. This turnaround in construction industry productivity was stronger than in the market sector, and persisted longer than in the market sector.

DRAFT FINDING 4.1

The productivity performance of the construction industry as a whole (including engineering construction) has been lower than that of the market sector over the past 20 years. However, there was a notable turnaround in the 1990s, from negative to positive labour and multifactor productivity growth.

Regulatory reforms

This study is interested in identifying the particular effects of regulatory reform in the building industry, under the auspices of the ABCB, on productivity in the building industry. These regulatory reforms may act on building industry productivity through:

- direct effects on compliance costs and efficiency. For example, greater consistency in technical regulations across jurisdictions may reduce education and training costs for firms and allow consolidation into a head office in one state; and
- indirect/dynamic effects on efficiency via competition, incentives for knowledge and skill acquisition and incentives to innovate. For example, performance-based

standards may give greater design freedom, allowing builders to use new and cheaper building ‘solutions’.

The regulatory changes undertaken by the ABCB may also have an influence on other industries that supply the building industry, with potential flow-on effects to the building industry. In particular, parts of the manufacturing and professional services sectors may take advantage of building regulatory reform to provide cheaper, higher quality or new products and services to the building industry. For example, greater consistency in building regulations may allow manufacturing firms to reduce design variations during manufacture. This may have significant flow-on benefits to the construction industry through lower costs or higher quality, as manufacturers take advantage of economies of scale and become more proficient in their specialised product.

There have been a number of reform activities since the early 1990s in relation to the Code and its administration, but the performance-based Building Code of Australia (BCA) and the introduction of private certification have perhaps been the most widely adopted. Table 4.2 below lists the adoption dates of these two regulatory changes in each State and Territory.

Table 4.2 Adoption dates of the performance-based BCA and private certification

<i>Jurisdiction</i>	<i>Performance-based BCA</i>	<i>Private certification</i>
New South Wales	1997	1998
Victoria	1997	1993
Queensland	1997	1998
Western Australia	1997	Not yet
South Australia	1998	1993
Tasmania	1997	2004
ACT	1997	1999
Northern Territory	1998	1993

Sources: BCA 2004 Volume 1, p. 739; sub. 4, p. 40.

Other major regulatory changes include the national product certification scheme (taken over by the ABCB in 1995 and recently closed), changes to liability rules (adopted at different times and to a different extent in each jurisdiction), reductions in variations in technical building standards across jurisdictions and improvements to the ‘user-friendliness’ of the BCA. The ABCB’s economic evaluation system, used to assess regulatory proposals for their benefits and costs (see chapter 8), may also have been a potential influence on industry performance, as it aims to reject those regulations that impose a net cost on the economy. The ABCB began preparing regulatory impact statements using this system in early 1998. The ABCB

also runs a research program, with projects to date including aged care facilities, energy efficiency and some fire issues (see chapter 9).

While the effects of some regulatory changes may have manifested themselves in industry performance relatively quickly, others take time to be absorbed, acted upon and reflected in performance. Given this, some of the assessment of the effects of regulatory reform will be forward-looking — looking at where productivity gains could be made and speculating about the potential contribution the reforms already in place could make to achieving these gains.

4.3 Sources of productivity change

This section draws together the qualitative and quantitative evidence garnered from submissions to date and previous research reports on the industry. Evidence is presented using the framework of key influences on productivity — labour force skills, firm organisation and technology. For each of these we can ask:

- What has been the contribution to the productivity performance of the building sector?
- How has regulatory change affected this contribution to date?
- What impact are the existing regulatory changes likely to have in the future?

Labour force skills

The Royal Commission into the Building and Construction Industry noted that an important aspect of productivity in the building industry is the skill level of the workforce and how that level is maintained and enhanced over time as the needs of the industry change (2002b, p. 58). A number of reports regarding skills and training in the building sector have been completed in recent years, with particular concerns arising over skill levels, the number of skilled workers in the industry, the structure of training and the amount of training taking place. (Some of these issues are discussed further in chapter 7.) No consensus has emerged, however, as to the severity of the problems or the way forward.

There are also questions about the licensing and other professional arrangements for building practitioners. The National Building and Construction Committee (NatBACC) 1999 report to Government suggested that while worthwhile improvements had been made to building regulations through the BCA, it was not clear that the regulatory environment for some professions and trades was enhancing the productivity and performance of the building industry (p. 11). Consistency of regulations appeared to be a key concern, with NatBACC supporting

the Government's ongoing work to limit the cost, time and resource burdens resulting from conflicting regulatory regimes across and within jurisdictions. (This is discussed further in chapter 7.)

The National Skills Initiative Working Group for the building and construction industry reported that while around 48 per cent of the building and construction trades workforce hold a post-school qualification (higher than the Australian workforce average), a further 45 per cent have no formal qualifications at all (2001, p. 54). The Working Group suggested that the existing workforce may not be able to meet contemporary industry needs for high level technical skills. Croce et al. (1999) found project managers expressing concerns that skill limitations within the workforce were sufficient to affect design considerations, with some aspects of design having to be changed because the relevant building skills were not available (p. 150). Construction Training Australia (CTA) also noted that the literacy and numeracy skills of the construction workforce are cause for concern, with younger members of the workforce displaying poorer numeracy skills than older workers (2003, p. 26).

However, the Working Group concluded that the combination of commencements in new apprenticeship training and the large number of non-apprenticeship training pathways have been sufficient to keep up with overall employment levels in the industry (2001, p. 71). This contrasts with the view of CTA, which believed training levels were lagging behind building and construction activity and that this would lead to a skills shortage (2003, p. 48).

On training, the Working Group suggested greater flexibility was needed to allow specialised occupational outcomes to form part of nationally recognised qualifications (2001, p. 20). NatBACC also raised concerns that the education infrastructure lacked the flexibility to meet the skill demands of the industry (1999, p. 19). But the Senate Employment, Workplace Relations and Education References Committee disagreed with this, saying:

... the committee majority are clear on this point: that the long-term interests of the industry are best served by broadly-based training, and that it is the role of the state to maintain high standards in the national interest, rather than to pay undue attention to the needs of individual enterprises in an industry ... (2004, para. 7.11)

The Working Group also found the industry spent less on structured training than did other industries and suggested the benefits of training needed to be marketed to the industry (2001, pp. 21–2). The size of firms in the construction industry appears to have a large bearing on the amount of training taking place. Between 1990 and 1995, the construction industry had the largest increase in the proportion of workplaces providing formal training programs — from 44 per cent to 73 per cent (PC 1999c, p. 185; Morehead et al. 1997, p. 444). However, this only included

workplaces with 20 or more employees. Overall, only 29 per cent of employers in the industry provided structured training in 1997, below the all-industry average of 35 per cent (CTA 2003, p. 38).

The Royal Commission noted that a lack of accurate data on training makes it difficult to measure training's contribution to productivity and growth in the industry (2002b, p. 60). However, it appears that there may be some scope for improving the skills and training situation in the building industry. The generally low skill levels in the industry may have been a factor in generating labour productivity growth that has been lower than that of the market sector. In case studies undertaken by Croce et al. (1999), participants regarded inadequate training of workers to be damaging to productivity, as it slowed the pace of work, required increased supervision of workers, more explanations and instruction and often resulted in rework being undertaken (p. 25). Croce et al. also commented that declining skills would impose costs one way or another:

... without sufficient investment to maintain industry skill levels, ... current clients of the construction industry are receiving a significant benefit at the expense of future clients, who will pay either through a lower-skilled, lower-productivity industry in the future or through having to fund all of the capital costs of re-building lost skill levels in the future. (1999, p. 152)

The regulatory reforms undertaken to date, such as the performance-based Code, certainly reinforce the need for a high level of skills and competency (including, as discussed in chapter 9, an enhanced understanding of the regulations contained in the Code). They may also provide an incentive for some members of the workforce to increase their skill levels, in order to enter the private certification market or to provide clients with high quality innovative building solutions. For example, the Western Australian Department of Housing and Works noted that the introduction of contestable certification services has significantly lifted the professional status of building surveyors and their collective knowledge and skill base (sub. 14, p. 8). Increased licensing and insurance requirements, initiated through liability reforms, may also have increased the incentive (or necessity) to gain further skills. Consistency in technical and administrative building regulations across jurisdictions should help to lower the costs of education, training and professional registration for building practitioners, especially for those operating across borders.

Workplace relations

Workplace relations have been a contentious issue in the building sector. Reports have generally been consistent in suggesting that reforms to work arrangements would help to lift the productivity and competitiveness of the industry. The Housing

Industry Association (HIA) suggested general industrial relations reforms had contributed to productivity growth in the building sector (sub. 6, p. 13).

The Productivity Commission's 1999 report into work arrangements on large capital-city building projects found that industrial action and inclement weather stoppages were a major source of inefficiency on building sites in the late 1980s (1999b, p. xxiv). While some changes were made in the 1990s, the Commission suggested there was scope for further improvements in areas such as enterprise level negotiations by subcontractors, restrictions on performance-related payments and limits on self-employed subcontractors, casual and labour hire workers (pp. 138–9).

Several other studies have suggested workplace reform would improve industry performance. NatBACC's 1999 report to Government asserted that changes in workplace relations were required in order to improve the efficiency and global competitiveness of the building industry. The report recommended Government develop further initiatives designed to simplify industrial awards, lessen industrial disputation, provide more effective remedies for employers in the event of disputation and reform unfair dismissal provisions (p. 18). (While the link between such changes and productivity have not been tested, Tasman Economics found that, over the period 1982-83 to 2000-01, there was a relatively poor correlation between the number of days lost to industrial disputes and changes in productivity (2002, p. 21).)

A 2003 report for the Department of Employment and Workplace Relations (DEWR) also asserted that there was significant scope to increase productivity in the building sector through initiatives such as workplace reform. That study suggested that differences between the costs of completing identical tasks (such as laying a concrete slab) in commercial building and domestic residential building was primarily due to lower labour productivity in the commercial sector and that this stemmed from restrictive work practices (Econtech 2003, p. 38). Closing the productivity gap between domestic residential and other construction activity was estimated to produce a gain in the level of real GDP of 1.1 per cent in the long term (about five years) (p. 31).

It appears that unduly restrictive work practices may have contributed to below average labour productivity growth in the building industry. However, given the nature of the reforms to building regulation that are the focus of this study, it is unlikely that they have had any impact on the way workplace relations operate in the building industry. As such, there is also little potential for these reforms to improve productivity in the future through their impact on work practices.

Firm organisation

The building industry in Australia, as in many other countries, is characterised by a large proportion of small firms and use of subcontracting. The increase in the number of firms and contractors over the 1990s may be due both to large construction firms keen to reduce risk and costs and to workers looking to access tax advantages and increase net income by moving to a self-employed status.

The increased fragmentation of the industry suggests that, for the majority of firms, the benefits of increased scale and scope will not be forthcoming. However, productivity gains from specialisation may be available, if workers are becoming increasingly proficient in their niche tasks.

The increasing use of subcontracting appears to be a contentious issue in the industry, with the effects on productivity uncertain. Croce et al. argued that while it may seem advantageous to cut costs by engaging labour on a subcontract basis, it can have the effect of lowering productivity in the longer term (1999, p. 17). They found that smaller firms spent less on training per worker, R&D and capital investment, and that cost pressures were additionally putting pressure on safety and job satisfaction. Interested parties also suggested that increased subcontracting had reduced levels of supervision on work sites, potentially contributing to lower productivity through an increase in the amount of rework required.

Good managerial practices are important for building industry productivity. In case studies undertaken by Croce et al., a realistic, well thought out and planned construction program was considered to be one of the factors that improved productivity, as it allows different trades to follow each other quickly onto a site, avoids delays due to rework, and helps create a safe working environment (1999, p. 23). In its 1999 report to Government, NatBACC also suggested a greater use of business alliances and supply chains would help the building industry to deliver more innovative, high quality, cost-efficient building outcomes (p. 13).

Regulatory reform initiatives under the ABCB are likely to have their biggest impact on firms through increased levels of flexibility and lower compliance costs. The Queensland Government stated that reform of building regulation had reduced industry compliance costs, thereby reducing capital construction costs and improving productivity (sub. 41, p. 4).

For larger firms, regulatory changes may allow greater scale and resultant gains from standardisation of processes and products. In particular, performance-based standards may enable managers to achieve a more efficient and effective work site, through the use of new materials or streamlined methods. Interested parties also

stressed the importance of nationally consistent regulation in achieving efficiencies in production. The HIA commented:

The principles underlying the production of buildings are similar to other forms of production, in that efficiencies may be derived from standardisation of process and minimising design variations during the manufacture of the product. The application of these principles is, in part, responsible for the current levels of efficiency inherent within the project home market. It will be near impossible for the industry to become more efficient and continue to maintain cost-effective built products while building regulation systems differ from State to State. (sub. 6, p. 10)

The MBA also supported the need for nationally consistent building codes, standards and regulatory systems, saying this approach had created significant economies of scale and benefits (sub. 24, p. 2). The Association of Consulting Engineers Australia (ACEA) commented that a lack of consistency had led to major inefficiencies for most ACEA firms, in terms of the time and costs required to apply different codes and standards to the design of buildings (sub. 46, p. 2).

Research and development

It appears that the amount of R&D taking place in the building sector is low. NatBACC raised concerns that only a small number of firms (excluding building materials and product manufacturers) were undertaking R&D within the building and construction industry (p. 7). NatBACC believed it was imperative to get a better industry interface with R&D providers such as CSIRO to increase innovation in the industry and recommended support for a marketing campaign that raised awareness of innovation and R&D programs (pp. 7–8). It also recommended support of initiatives that raised awareness of innovation as a driver of productivity (p. 8).

Following that report, a study gauging market awareness of R&D programs was undertaken, which found a lack of awareness and interest in R&D:

Generally industry is not receptive but there are pockets that are quite active. The industry is generally not aware of what R&D can do for their companies. Industry competes on price and to some extent quality — innovation and R&D is not on their agenda. (Andrews Marketing Group 2000, p. 14)

The study found that only half of the industry and professional associations surveyed were aware of R&D and innovation support programs, with no awareness on the part of construction companies or suppliers (2000, p. 1). The authors suggested industry associations were the best way to effectively reach industry members to spread knowledge of the available support programs.

However, the low level of R&D spending may not accurately reflect the innovativeness of the building industry. NatBACC suggested that the figures

understated the broader commitment to innovation within the industry, given the process and product innovations taking place in supplier industries such as manufacturing (1999, p. 7). Over the period 1986-87 to 1996-97, the level of R&D expenditure in the manufacturing sector more than doubled (PC 1999c, p. 175), and Building Products Innovation Council (BPIC) noted that its members spend up to \$2.2 billion annually on research (sub. 23, p. 76). In addition, a Pricewaterhouse-Coopers (PWC) report found that there was no correlation between the percentage of annual turnover spent on R&D and the 'innovativeness' of an organisation (2002, p. 29). New ideas can emerge from other sources and there may be no need to carry out R&D inhouse.

It is likely that the nature of firms in the building industry — generally small and dispersed — decreases the likelihood that individual firms can mount significant R&D campaigns or appropriate the full benefits of the R&D that they undertake. Left to firm initiatives, there is likely to be underperformance of R&D. As such, R&D is more likely to be successfully undertaken by industry associations or government bodies pooling funds, such as the ABCB's research program and the Cooperative Research Centre (CRC) for Construction Innovation⁷ (established in 2001).

Tax laws may also impact on decisions to invest in R&D. A 1998 report for the Australian Government Department of Industry, Science and Resources suggested the inability of the Fire Code Reform Centre to gain agreement with the Australian Tax Office that funding contributions from industry could be regarded as eligible expenditure to gain the R&D tax concession of 125 per cent significantly reduced the preparedness of industry to contribute (Technical Resources 1998, p. 13).

The ABCB related reforms have the potential to make a contribution in this area, particularly through its sponsored R&D projects and general awareness-raising efforts (the effectiveness of the ABCB's research activity is discussed further in chapter 9).

Also, the introduction of the performance-based Code may be expected to have encouraged more research into building products and systems, as part of developing new building solutions, and to have encouraged the uptake of new technology. To the extent R&D has contributed to the productivity performance of the building

⁷ The CRC for Construction Innovation is a national research, development and implementation centre focused on the needs of the property, design, construction and facility management sectors. It is developing key technologies, tools and management systems to improve the effectiveness of the construction industry. Over a seven-year period, funding for the project will include \$14 million from the Commonwealth Government and \$50 million in industry, research and other government funding. (See <http://www.buildingcommission.com.au/www/default.asp?casid=3811> (accessed 28 June 2004).)

industry, the ABCB-related reforms could have had a positive influence on growth. This effect may be expected to continue.

Technology uptake and innovativeness

The use of new technologies and innovations is seen as very important to the building industry's productivity. The HIA commented that modest technological advances are a likely contributor to productivity growth in the building sector (sub. 6, p. 13). Case studies undertaken by Croce et al (1999) found both managers and contractors believed new technology had a positive impact on productivity:

The use of prefabricated sections incorporating an insulating coat that yielded better insulation characteristics was cited as an example of leading edge technology producing better building materials and components. (p. 91)

They alluded to examples such as cordless tools that minimised accidents via a cleaner and tidier work site, prefabricated concrete sections that improved erection of walls etc, scissor lifts, which eliminate the construction of scaffolding for minor work at height. (p. 96)

However, a 2002 PWC report for the Australian Government Department of Industry, Tourism and Resources found that the Australian building and construction industry⁸ was slower to innovate than its overseas counterparts (p. 46). Based on a pilot survey, the research showed:

- Competitors, clients and suppliers were the most important drivers of innovation, leading the authors to conclude that 'the most important external driver of innovation in the Australian building and construction industry by any measure is sustainable demand for innovation' (p. 6);
- Perceived risk was the greatest inhibitor to innovation (p. 6);
- Government was seen as an important actor in the innovation process, through their actions as a major client (demanding innovation), regulator (encouraging or inhibiting innovation), educator (showcasing innovation) and custodian (creating a favourable business environment for innovation) (p. 7);
- Residential building, building materials and architectural services were the most innovative sectors, in terms of the average number of technological and process innovations commercialised in a year (p. 20);
- Innovations spanned a range of areas — products and services (for example, prefabrication), technology and processes (such as greater use of web enabled

⁸ The report used a broadened definition of the building and construction industry, including architectural services, consulting engineering services, professional business services and the property sector within its brief.

project management methods), and management strategies (for example, strategic alliances between clients and contractors) (p. 39).

The report found that non-uniformity of regulations within and across governments was a key issue affecting innovation in the industry (p. 38). This is a particularly important point when considering the costs and benefits of greater levels of uniformity of the technical and administrative regulation of building.

Following on from the PWC report, the CRC for Construction Innovation has been undertaking ‘The Brite Project’ — a series of case studies of industry innovation and a two-yearly full scale innovation survey expanding on the PWC pilot survey. Six case studies have been published and the results of the first survey are to be published in November 2004.⁹

The case studies clearly illustrate the cost savings and potential firm performance and productivity improvements associated with innovative solutions. For example, use of unprotected steel in the structure of the National Gallery of Victoria – Australian Art Building, reduced construction costs by 4–5 per cent.¹⁰ A steel alternative to the intended concrete and masonry design was desired and, to maintain cost estimates and project timing, unprotected steel (not covered with fire protective coating) was chosen. As an ‘alternative solution’ to the BCA requirements, the performance of the steel was demonstrated to meet requirements through the application of fire science and engineering. The solution saved approximately \$3 million in construction costs and several thousand dollars per year in ongoing maintenance costs. It also made the building site easier to access due to a lesser need for temporary structural supports (saving an additional \$1 million), enabled the use of smaller cranes and provided more effective use of space in the building itself.

On a smaller scale, a new method of manufacturing concrete planks and connecting them to supporting steel beams generated estimated savings of \$330 000 for the Suncorp Stadium project in Brisbane.¹¹ The performance of the planks had not been assessed by the ABCB or available research, so full-scale prototype testing was undertaken to verify the accuracy of the designs and the structural efficiency of the planks. Savings in steelwork and crack repairs generated the immediate monetary savings, but benefits were also identified in terms of: a less congested site; reduced

⁹ See <http://www.brite.crci.info/> (accessed 1 July 2004).

¹⁰ See http://www.brite.crci.info/case_studies/pdfs/brite_innovation_case_studies_2004.pdf pp. 21–24 (accessed 1 July 2004).

¹¹ See http://www.brite.crci.info/case_studies/pdfs/brite_innovation_case_studies_2004.pdf pp. 11–13 (accessed 1 July 2004).

use of on-site labour leading to a lower probability of industrial action taking place; better work flow; and easier quality control.

The Brite Project case studies accord with the findings of the 2000 KPMG impact assessment of ABCB reform activities (see box 4.2). KPMG found savings of 1–5 per cent of overall building costs flowed from performance-based design, through more efficient and flexible design and construction (2000, pp. 18–19). The KPMG report also suggested private certification and changes to liability arrangements had encouraged innovation by altering the costs and benefits to firms and certifiers of approving alternative solutions:

The ongoing involvement and interactive relationship between designers and certifiers has provided much greater design flexibility. When certification responsibility rested with councils, designers were loathe to seek variations unless absolutely necessary because of the timing implications of repeated passes through the approval system. (p. 22)

In the past councils, by virtue of their de facto liability, were inclined to be conservative which had the effect of discouraging innovative design. (p. 23)

Interested parties also pointed to the innovation benefits of some ABCB reforms. The National Fire Industry Association commented on the benefits of the performance-based BCA, saying it:

... provides opportunity for innovation and for competition to take place within performance based requirements. This approach does engender constant debate and discussion on the appropriateness of some solutions, and this adds to the sum of knowledge available to the community in Australia. (sub. 3, p. 2)

Overall, the results of studies into innovation in the building industry suggest that innovation has contributed positively to the building industry's productivity performance, but that there is scope for further improvement. In addition, the innovation channel to productivity may be one of the most important ways regulatory reform can contribute to building industry productivity, by increasing demand for alternative building solutions and creating greater certainty through nationally consistent technical and administrative regulatory requirements.

Box 4.2 **KPMG impact assessment**

As part of the review of the ABCB in 2000, KPMG undertook an impact assessment of five building initiatives: the performance-based Code (BCA96); the ABCB's economic evaluation system for regulatory proposals; private certification; liability reform; and national product certification. Fifteen case studies of important construction projects were used to assess impacts, including the Docklands Stadium in Melbourne, the Star City Casino in Sydney and the Brisbane Convention and Exhibition Centre. Of the five initiatives, the performance-based Code was seen to be the most significant, with cost savings of between 1–5 per cent of building costs.

The information gathered by KPMG suggests private certification has also had productivity enhancing effects. The KPMG report indicated that private certification had benefited the industry by accelerating the approval process (so saving on costs, including financing) (p. 21). Estimates of time savings differed, with some participants suggesting 3–4 month delays were avoided, although others believed time savings were not significant as elapsed time was previously used productively by 'juggling' other construction tasks (p. 21). Private certification also:

- reduced costly remedial action, as certifiers were able to work more closely with design teams and provide advice on their plans (p. 22); and
- increased the number of certifiers and their responsiveness to demand (p. 22).

Changes to liability arrangements may also have had productivity enhancing effects, by supporting innovative design.

National product certification was viewed as a potentially powerful tool, but its delivery mechanism was seen as problematic, stifling the potential benefits (p. 24).

Most participants in the KPMG study were unaware of the details or purpose of the ABCB's economic evaluation model (p. 3). Nevertheless, it may have positive productivity effects, if it succeeds in promoting the best regulatory solutions.

Source: KPMG (2000).

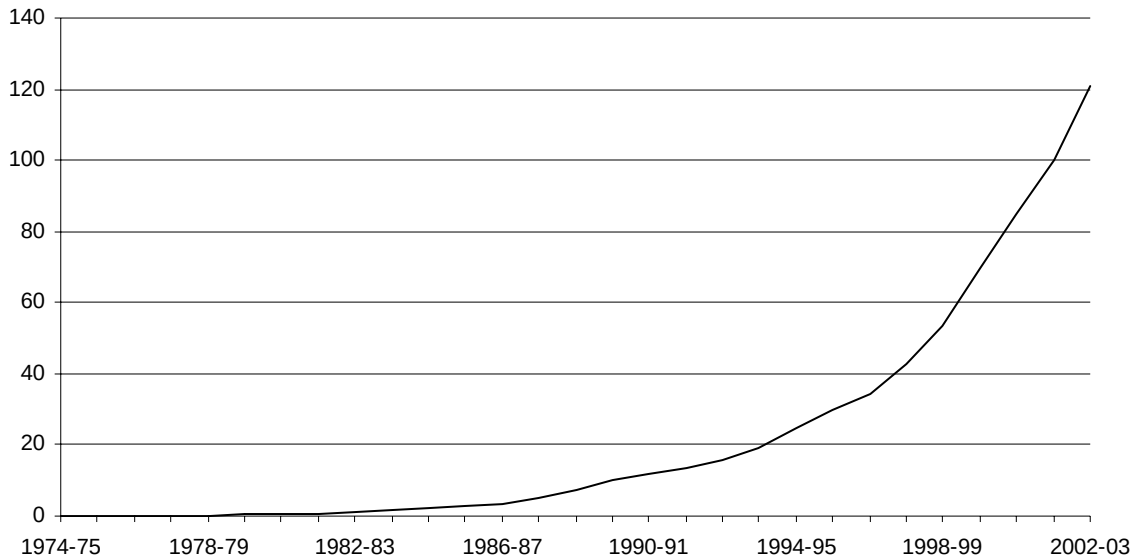
Information technology

Information and communications technology has been an important part of the productivity story in Australia in the 1990s. In the construction sector, IT capital deepening accounted for a quarter of labour productivity growth from 1993-94 to 1998-99, which was somewhat below the contribution of IT capital deepening to labour productivity in the market sector (a contribution of one third) (Gretton et al. 2003, table 4; PC 2004e, p. 53). The IT capital deepening in the construction sector offset slower growth in other forms of capital — positive IT capital deepening (0.6 percentage points) outweighed negative other-capital deepening (-0.5 percentage points) (Gretton et al. 2003, table 4).

Figure 4.3 below shows the strong take-off of ICT capital services in the construction sector, with particularly strong growth from the late 1990s.

Figure 4.3 ICT capital services for the Construction sector

Index 2001-02 = 100



Data source: Productivity Commission estimates based on ABS data.

There is a possible association between the uplift in ICT use and the MFP growth in the construction industry. Estimations found a potential contribution of ICTs to annual MFP growth of up to 0.25 percentage points (PC 2004e, p. 63). Computer use had a positive and statistically significant influence on labour productivity growth in the construction sector (Gretton et al. 2003).

NatBACC's 1999 report to Government suggested that emerging information technologies were vitally important to the building and construction industry, but that uptake was slow. The Committee believed under-utilisation of information technology resources was a major issue confronting the industry as the use of electronic tendering and procurement, e-commerce and virtual project teams increased (1999, p. 9).

Nevertheless, research undertaken for the Victorian Building Commission in 2003 found that 94 per cent of Registered Building Practitioners (RBPs) use computers in their business activities.¹² While the most common use of computers was for accounting, book-keeping and billing purposes, the use of information technology

12 See <http://www.buildingcommission.com.au/www/default.asp?casid=3812> (accessed 28 June 2004).

by RBPs was more widespread. Eighty-three per cent used email for communication purposes and 81 per cent accessed business-related information online. Other uses included project management (56 per cent), access to professional development information (54 per cent), procurement (42 per cent) and resource management (40 per cent). Computer use was highest among younger RBPs, but was consistently high across RBPs in all age categories up to and including 50 to 59 year olds. More than 70 per cent of 50 to 59 year olds used email and online information.

The Building Commission noted that these findings were consistent with data published by the ABS showing that the proportion of construction industry businesses with computers was up from 68 per cent in 2000 to 81 per cent in 2002. Internet access was up from 46 per cent to 63 per cent over the same period.

In a study of the characteristics of firms using computers, it was found that across industries (including construction), firm size (by employment), the level of educational qualification of the major decision maker, the average wage of employees (a measure of human capital), the propensity to use advanced business practices (such as budget forecasting) and firm restructuring were positively related to the use of computers and adoption of the internet (Gretton et al 2003).

It appears that ICT use is having a significant impact on the building industry and its productivity performance. This may be a partial explanation of the productivity turnaround in the 1990s. The ABCB-related reforms may have contributed to this by providing increased levels of flexibility that encourage firms to explore different forms of project management.

Regulatory reform — summing up

The analysis above suggests that regulatory reforms implemented or overseen by the ABCB have had their biggest impact on industry performance by encouraging skill acquisition, reducing compliance costs and encouraging and enabling innovation. While not able to be quantified, the evidence points to a positive productivity impact of regulatory reforms.

This is supported by comments from interested parties. For example, the Tasmanian Building Regulatory Advisory Committee believed that reform of building regulation had positively affected the transportability of materials, design, construction methods, building practitioners and skilled workers (sub. 29, p. 3). The Committee also suggested there had been a reduction in red tape, with a marked reduction in the number of references to the Building Appeal Board for a variation to the regulations (sub. 29, p. 3).

It is also consistent with the impact analysis prepared for the ABCB in 2000, which found that industry participants considered the ABCB to have made a substantial contribution to the construction sector, with significant economic benefits arising from the introduction of the performance-based Code in particular (KPMG 2000, p. 6). As well as cost savings, the performance-based Code was thought to have had a number of other productivity enhancing effects, including:

- more extensive collaboration between parties involved in the design and construction process, so more effectively utilising their skills to generate innovative solutions;
- accommodation of the evolution of more sophisticated materials and technologies; and
- reductions in the time and cost involved in obtaining performance-based certification, relative to the former procedures (pp. 19–20).

Regulatory reform in the building industry is likely to have facilitated productivity improvements in the industry, by allowing firms to take up and adapt new technologies at a faster rate than would have occurred without the flexibility, knowledge and support of reforms such as performance-based standards, private certification, liability reforms and ABCB research activities.

However, additional productivity gains could be made through further reforms or activities within the building industry. The following chapters provide discussion of a number of potential issues where the ABCB or a similar body could drive or guide regulatory changes within the industry. Some of the issues, a number of which also emerged in the 2000 KPMG report, include: further reductions in variations in building regulations across jurisdictions, improvements to the performance-based Code, such as more explicit measurable guidelines or objectives; and better certification systems, including cross-jurisdiction recognition of accreditation of certifiers, improved certifier education levels and consistent liability arrangements across jurisdictions.

DRAFT FINDING 4.2

The influences on productivity in the building sector are varied, ranging from labour force skills, workplace relations, firm organisation, economies of scale, research and development, technology uptake and innovativeness to information technology. It is difficult to quantify the separate contribution each has made to industry performance and productivity growth.

The regulatory reforms implemented or overseen by the ABCB appear to have had a positive impact on industry productivity. Their impact appears to have been mainly through encouraging skill acquisition, reducing compliance costs and encouraging and enabling innovation. There is scope for further productivity gains from additional reforms.

4.4 Impact on economic efficiency

The productivity and performance of the building industry has important flow-on effects to the rest of the economy. Buildings are a major input to economic activity — factories, office buildings, shopping malls and the like are the centres of production and supply and the quality and cost of these buildings will significantly influence the performance of firms operating within them.

Indeed, the HIA suggested that Australia's aggregate productivity performance has been positively influenced by the building sector:

Given the very significant share of the Australian economy accounted for by the building sector it is reasonable to assume that enhanced flexibility in the building sector brought about through building regulation reform was a contributor to Australia's relatively strong aggregate productivity performance. (sub. 6, p. 13)

The question for this section is whether the regulatory changes made under the auspices of the ABCB have had a positive effect on economic efficiency in Australia. In particular, this section looks at the building products sector, the professional services sector, the impacts on owners of buildings and the potential for future efficiency improvements.

Building products

One of the key industries linked to the building and construction sector is the building products manufacturing sector. Products including timber, steel, glass, windows, bricks, cement, plasterboard and insulation form major inputs into building processes and are also an important export earner (see appendix E).

Regulation in the building sector can have a big impact on the manufacturing sector, both in terms of the way in which current products are manufactured and in terms of the demand for new and innovative products. At the same time, better quality

products can create the potential for improvements in the performance of the building sector.

The performance-based Code has had a positive impact on the building product sector. KPMG found that the Code created greater flexibility to accommodate new building products and materials, which ‘drove value engineering down the supply chain by encouraging innovation within building supply companies’ (2000, p. 2). It also allowed the evolution of more sophisticated materials and technologies. However, KPMG’s case studies suggested there was scope for further improvement, as many suppliers were not responding quickly enough:

Many suppliers (eg: glass, plasterboard etc) fail to understand that product performance requirements increasingly deviate from historical standards and that there is a need for industry to become more responsive through innovation. As an example, a design may call for particle board with a nominated fire retardant index, yet the supplier may provide board to traditional ASA standards with the result that remediation may be required after installation to remedy the performance shortfall. Increased awareness among suppliers is vital to ensure that performance-based-building delivers to designers’ standards. (2000, p. 25)

Interested parties consider nationally consistent regulation is vital for building product manufacturing companies. BPIC stated that regulatory variations and uncertainties limit the size of the potential market, reduce hiring intentions, reduce willingness to invest in innovation and R&D and increase uncertainty over capital expenditure plans (sub. 23, p. 27). It concluded:

The consistency of national building regulations and the removal of State, Territory and municipal differences are essential to the Australian community and ongoing productivity, efficiency and effectiveness. (sub. 23, p. 28)

BPIC also believed the implementation of an effective national certification system was essential to reduce delays in obtaining recognition of new and innovative products (sub. 23, p. 32).

Professional services

There are a number of professional service providers that have close connections with the building industry and who are directly affected by the regulations applying to buildings. The activities of architects, engineers, designers, property managers and building maintenance providers are all guided, to some extent, by the requirements set out in the Code and the accompanying administrative rules.

Nationally consistent regulations have brought direct benefits to providers of professional services involved in the building industry. For example, architects need only become familiar with one set of technical regulations in order to produce

compliant designs for the whole country. This lowers training costs and improves the mobility of professionals within Australia. Head office functions may be able to be consolidated into one location and the payoff to innovative ideas may be larger as professionals take advantage of a larger market.

Private certification has enabled designers and architects to have greater interaction with the building team, leading to greater design flexibility and an improved understanding of the building requirements (KPMG 2000, p. 22).

Building owners

There is evidence that the performance-based Code has brought a number of benefits to building owners and end users. Case study information suggests that the use of alternative solutions under the Code can:

- better meet the requirements of building owners and users, provide improved building functionality and allow more efficient and effective use of the building space;
- increase the availability of useable or lettable space in a building;
- reduce recurrent maintenance and inspection costs; and
- retain desirable heritage aspects of buildings (KPMG 2000).

Safety may also have been improved through the introduction of performance-based standards. KPMG found the use of situation specific modelling under the Code could lead to a higher level of ‘life safety’ (2000, p. 18). For example, at the Sydney City Casino, computer modelling and on-site validation were used to upgrade the fire safety performance of the building:

... the original theatre design would have been approved under deemed to satisfy requirements of the BCA as it complied with the requirements specified therein. However the design did not meet the more stringent project’s performance based benchmark. Accordingly more fire resistant materials were engineered into the floor and walls until the project benchmark was met. (KPMG 2000, pp. 41–2).

Cost savings associated with the use of alternative solutions can be passed on to end users. Design enhancements at a new Westfield shopping mall saw leasing costs drop to retailers, with consumers potentially the ultimate beneficiaries (KPMG 2000, p. 44).

Arup Fire pointed to the benefits of national performance standards, including the ability to develop specific fire safety solutions to suit particular businesses, such as processing factories, and the ability for a company to roll out a single model for fire

safety nationwide, allowing savings in capital expenditure, maintenance and staff training (sub. 15, p. 6).

However, the Insurance Council of Australia suggested that, while the performance-based Code may be delivering productivity improvements via a decrease in construction costs, there may be increased costs and loss of productivity in other areas. The Council pointed to a number of areas where alternative solutions might increase maintenance requirements, including more regular testing and inspection of critical fire safety measures, more costly inspections of fire equipment due to access difficulties, and increased replacement rates of equipment (sub. 38, p. 7).

KPMG (2000) also noted that the performance-based BCA led to increased costs of building survey, engineering and design (as parties spent more time looking for creative solutions) and played a role in shifting costs from construction to maintenance (p. 20). KPMG also pointed to the increasing burden on surveyors, engineers and designers to be appropriately competent to assess the range of materials and technologies being used under the BCA (p. 20).

Overall, the regulatory reforms in the building sector have had positive effects on economic efficiency. While, in some cases, reforms may have simply ‘shifted’ cost burdens from one sector to another, in most cases they have had a net benefit.

5 Building Code of Australia

This chapter assesses the objectives in the IGA that are pursued by the ABCB through the Building Code of Australia (BCA). In essence, these objectives require that the Code should be:

- performance based
- consistent across States and Territories
- based on minimum solutions
- written in plain language
- meeting community expectations of health, safety and amenity
- efficient
- cost-effective
- representative of least-cost solutions
- representative of modern solutions.

This chapter examines and assesses these objectives. Section 5.1 outlines the objectives that the ABCB seeks to fulfil through the BCA. Section 5.2 examines the rationales underpinning these objectives and assesses whether or not the objectives are appropriate. Section 5.3 assesses the ABCB's success in achieving these objectives.

5.1 IGA Objectives pursued through the BCA

As the primary regulatory instrument, a number of the ABCB objectives are pursued through the BCA, in particular, objectives one, two and six:

- 1) Establish codes, standards and regulatory systems that are, as far as practicable:
 - consistent between states and territories;
 - cost-effective;
 - performance based; and
 - based on modern and efficient building practices.
- 2) Base building requirements on minimum, least-cost solutions which address the regulatory objectives of safety, health and amenity.

-
- 6) Simplify the wording of building requirements to achieve user friendliness and plain language style.

In addition, the mission statement of the ABCB (also contained in the IGA) gives some additional objectives to be pursued through the BCA:

To provide for efficiency and cost effectiveness in meeting community expectations for health, safety and amenity in the design, construction and use of buildings through the creation of nationally consistent building codes, standards, regulatory building requirements and regulatory systems.

The BCA itself also outlines its goals as being:

... to enable the achievement and maintenance of acceptable standards of structural safety (including from fire), health and amenity for the benefit of the community now and in the future.

These goals are applied so that the BCA extends no further than is necessary in the public interest, is cost effective, easily understood, and is not needlessly onerous in its application. (BCA, vol. 1, p. 29)

5.2 Are these objectives appropriate?

In order for the ABCB to deliver net benefits for Australia, it is important that the objectives pursued through the BCA are clear and appropriately focused.

This section aims to assess whether or not the above objectives are appropriate.

Nationally consistent

The driving force behind the establishment of a national body for building regulation, and the development of a national code, was to promote consistency in building regulations across States and Territories. As noted in chapter 2, moves to generate greater consistency have been underway since the mid 1960s, with an Australian Model Uniform Building Code released in the early 1970s, and technical codes released in 1988, 1990 and 1996.

Benefits of consistent building codes

In theory, the establishment of a nationally consistent building code could bring various benefits, including:

- **Reducing costs for builders and designers:** by having consistent codes in each jurisdiction, cross-border construction and design firms do not have to

understand and comply with a multitude of different standards. This should reduce the amount of resources spent learning the structure and content of the Code and what is necessary to comply with it. In addition, this may remove some barriers and allow building practitioners to operate in a number of jurisdictions, promoting economies of scale and more efficient building practices. The harmonisation of codes between jurisdictions may also reduce non-compliance with the Code associated with the misunderstanding of, or confusion between, different codes.

- **Larger market for building products:** in having one consistent code across Australia, manufacturers of building products would be able to sell the same product in each State and Territory. Thus, assuming the product complies with the building code, it can be marketed in each jurisdiction, rather than a firm having to manufacture different products to meet each different code. Having one national market for building products rather than disparate state markets allows costs savings through increased economies of scale in production and allows increased competition between manufacturers.
- **Transferability of building designs:** common building codes across States and Territories allows builders, designers and/or consumers to use the same design in different jurisdictions, rather than having to alter designs to meet different requirements in each jurisdiction. This may be of particular benefit to some inter-state producers and retailers who wish to have common store or warehouse designs across Australia.
- **Transferability of skills:** by having a single building code, a practitioner who operates in one state or territory should generally be automatically able to operate in another without additional training. Skills should be able to be transferred more easily, with attendant benefits in terms of allocation of resources and reduced retraining costs in the industry. In addition, jurisdictions should benefit from having a larger pool of skilled practitioners and access to a wider range of ideas.
- **Information dissemination:** having a common code across Australia should make it easier to disseminate information to designers, builders and consumers. This should help in making the regulations as open and transparent as possible.
- **Savings in development costs:** having a single code rather than separate codes in each State and Territory should lead to administrative savings for a number of reasons. First, costs will be reduced as only one code has to be developed. Development of this code may be more expensive as it would have to deal with a wider variety of buildings and environments than are applicable for a single state. Further some (perhaps considerable) amount of resources may be needed to achieve consensus across jurisdictions. Nevertheless, there are potential cost savings in developing a single code rather than eight separate state and territory

based codes. Second, there should be economies of scale in the production of advisory material such as pamphlets, websites and advertising to advise designers, builders and owners of their responsibilities under the Code. Third, disseminating or selling the Code to practitioners should be cheaper as these functions can be undertaken and organised centrally (by the ABCB), rather than on a state by state basis. Finally, there may be some additional cost advantages from adopting consistent administrative arrangements, as discussed in chapter 7.

Participants in this study identified considerable benefits from the adoption of consistent building regulations across Australia. For instance, the Western Australian Government Department of Housing and Works has noted that:

The ABCB and BCA have made a marked difference to the efficiency, maintenance and improvement of minimum technical standards, and regulatory approval turnaround times by establishing a national approach to minimum construction standards, instead of perpetuating a proliferation of jurisdictional, idiosyncratic regulatory arrangements.

The current national approach is considered to be very important as it has numerous benefits:

- It promotes interstate and international trade and business expansion;
- It ensures that resources harnessed in developing regulatory provisions are efficiently managed and duplication restricted;
- It promotes open dialogue across all jurisdictions thus generating a pool of regulatory solutions gleaned from the best sources within the nation;
- It is a practical option given that Australia is a relatively small nation, in international terms, consisting of approximately 20 million persons;
- It facilitates the training of industry practitioners without the need to tailor courses of study to meet individual jurisdictional idiosyncrasies;
- It facilitates the mobilisation of expertise throughout the nation such that all regions within the country have access to suitably qualified and experienced regulatory professionals. (sub. 14, p. 3)

Master Builders Australia (MBA) submitted that:

We strongly support the need for nationally consistent building codes, standards and regulatory systems. We believe that this approach has created significant economies of scale and benefits. It has provided certainty to the industry stakeholders ranging from manufacturing, builders, design professions, as well as professional services. For instance, a nationally consistent BCA has allowed for building products to be modularised, it has also allowed for prefabrication, and for these to be transported across state boundaries. For designers, it has provided nationally consistent design parameters. For builders it has meant that they can work easily across state boundaries and it has also assisted in the development of consistent practices in areas such as occupational health and safety and training. (sub. 24, p. 2)

The Building Products Innovation Council (BPIC) have stated that in the absence of consistency:

... more cost will be imposed on manufacturers as they attempt to address these variations by negotiation, attempt protracted efforts to amend laws, revise product to cater for the regional control or ultimately remove their product from that particular market. These costs will be passed on to the consumer. The spiralling costs in coping with a fragmented Australian system will reduce the consumers' capacity to acquire the latest and most efficient products leading to an erosion in health, safety and amenity. (sub. 23, p. 17)

Further, during the Commission's Inquiry on First Home Ownership, BPIC submitted that:

In a BPIC-HIA joint survey of Chief Executives of building product manufacturing companies, respondents identified their cost impact of complying with the State and Territory variations at any where between 1 per cent and 5 per cent of turnover. Even at a conservative 2 per cent cost impact this equates to some \$600m annually on building product manufacturers alone. (BPIC 2003b)

Similarly, the Housing Industry Association (HIA) submitted that:

It will be near impossible for the industry to become more efficient and continue to maintain cost-effective built products while building regulation systems differ from state to state. ... Inconsistency in building regulations has a significant cost impact and the community is forced to pay a premium to compensate for the inefficiencies that multiple regulatory regimes produce. (sub. 6, pp.10-11)

Submissions to this study conclude that the benefits of increased consistency in technical regulation across jurisdictions are significant and worth pursuing.

Disadvantages of pursuing a uniform national code

While a uniform national code brings significant benefits, there are situations where uniform building regulations may not adequately meet the needs of all communities. For example, bushfire prone communities may need special building regulations to protect property from the increased danger posed by fires. Similarly, inner-city areas may have different requirements from country areas, especially in relation to matters such as sound insulation, or protection from water runoff. As noted by the Master Builders Association of Western Australia, these differences may make achieving a national building code more difficult:

There are currently only a few Western Australian variations to the BCA, but adoption of national uniformity of building regulations is more difficult to implement in our large state (in geographical terms) with significant variation in soil types, construction methods, climate and so on. Local conditions always need to be taken into account. Failure to do so could lead to the BCA becoming an inflexible document, unrelated to

current building practices in certain regions. There are already instances where a BCA provision is out of step with current building practice. Greater uniformity of BCA provisions may be difficult to achieve in such a large country as Australia. (sub. 8, p. 2)

For this reason, imposing identical regulations on *all* areas of Australia is clearly sub-optimal and may impose costs upon the community. This may provide a prima-facie reason for allowing state and territory variations (in the hope that this will allow the BCA to be more accurately targeted at the needs of various communities). However, given the size and diversity of many states, a more accurate approach may be to vary the BCA based on more objective criteria¹, rather than (arbitrary) state boundaries. This approach was adopted in BCA96.

The current BCA attempts to account for a number of these differences by tailoring regulations to particular geographic areas. For example, in relation to energy efficiency, the BCA applies different regulations to various ‘climate zones’ across Australia. Warmer climate zones have more emphasis placed on their cooling efficiency, whereas cooler climates have a higher emphasis on heating efficiency. The BCA also has designated areas that require special provisions for buildings, for example, for cyclone and bushfire prone areas, as well as alpine areas. In addition, some performance requirements and deemed-to-satisfy building solutions have clauses that alter building requirements depending on the building environment. For example, the performance requirement for surface water dispersion depends upon the severity of storms in the area, and the deemed-to-satisfy solutions for masonry accessories (in volume 2) depend on wind conditions and proximity to the ocean.

Another difficulty posed by the adoption of a uniform national code is accounting for different expectations in different communities. As the ABCB Chairman notes, this may lead to pressure to vary the BCA:

A major driving force behind the establishment of a uniform national building code was that in its absence, local and State governments in responding to community pressures had taken it upon themselves to develop their own regulations. The chaotic regime that arose was neither efficient nor effective. However, the same community pressures are still present and unless the ABCB remains attuned there will be a risk of governments in different places again providing jurisdictional specific solutions. (sub. 4, p. 21)

To the extent that expectations vary, the adoption of a single national BCA may impose some costs, particularly upon communities where differences in expectations and preferences are greatest. Nevertheless, the BCA only prescribes a minimum standard and individuals within a community are free to construct buildings to a higher standard. To the extent that the community expectation is

¹ Objective criteria would be those that drive the need for variation in regulation and may include factors such as climatic variation, urban density and geological conditions.

reflected in the preferences of individuals, a community desire or expectation for a higher level of building performance will be addressed by individuals constructing higher performing buildings. However, this prevents the collective enforcement of a higher standard for a community.

One further, albeit possibly less important, disadvantage of uniform regulations across jurisdictions is that it reduces the ability of State and Territory Governments to innovate and develop potentially more efficient regulations. As the Australian Elevator Association (AEA) noted:

National consistency is a double edge sword. There can be circumstances when national non-uniformity (of regulations) between jurisdictions can provide the beginnings of a more effective and efficient result. This can occur when one jurisdiction produces a superior regulation in relation to its competitors. (sub. 44, p. 6)

While state based experimentation may uncover some more efficient regulations, it may equally result in less efficient regulations in some jurisdictions. In any case, the ABCB undertakes an extensive evaluation and impact analysis that is intended to identify the most efficient form of regulation. While this may not be a substitute for state based experimentation, it should help ensure that the regulations implemented by the ABCB are well based and have been rigorously assessed.

Summing up

There are a number of avenues through which a consistent national building code can bring benefits to Australia. Submissions to this study have suggested that these benefits are indeed significant and worth pursuing. While there are some possible disadvantages to implementing uniform regulations, these can be minimised by specifying various regional zones within the BCA and ensuring that it contains efficient and effective regulations — this is preferable to addressing the same needs with different requirements across jurisdictional boundaries.

Performance based

The Office of Regulation Review (1995, p. 13) has identified three main types of regulations:

- *prescriptive rules* [which] focus on the inputs and processes of an activity, specifying the technical means used in undertaking an activity (as in the mandatory installation of speed limiters or restrictions on vehicle engine capacity);
- *performance-based rules* [which] specify an outcome in precise terms (as in a speed limit); and

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- *principle-based standards* [which] outline the desired outcomes by specifying the spirit or broad intention of the regulation and require interpretation according to the circumstances (requiring drivers to travel at a speed ‘appropriate to the conditions’ or ‘not in a manner dangerous’).

Historically, the majority of building standards, in Australia and elsewhere, have been prescriptive in nature, codifying a particular way in which a building is to be designed and constructed. However, in the 1980s and 90s several countries began to adopt performance-based building codes in preference to prescriptive regulations.²

In Australia, a major review of building regulations was undertaken by the Building Regulatory Review Task Force in 1991. Following this report, the State, Territory and Australian Governments agreed to the formation of the ABCB with an objective of establishing codes that are ‘as far as practicable ... performance-based’.

Benefits of performance-based regulation

In theory, performance-based regulations have several advantages when compared with the use of prescriptive regulation³:

- **Flexibility** — by allowing builders and designers to use any solution that complies with the performance requirement(s), the BCA offers more flexibility than is embodied in prescriptive regulation. In addition, the use of deemed-to-satisfy provisions takes the ‘guess work’ out for those who want more certainty by giving the equivalent of prescriptive regulations.
- **Innovation** — the ability of builders and designers to innovate should be enhanced by the use of performance-based regulation. Rather than being constrained to a single prescriptive solution to comply with regulation, practitioners are at liberty to innovate and use any solution that meets the performance regulation.
- **Cost savings** — by allowing choice over which building solution can be used (and still meet regulations), practitioners can choose the cheapest option thereby reducing the cost of the building. In addition, by allowing the choice of building solution, practitioners can make use of the cheapest solution in any instance, rather than being limited to a single prescriptive solution which may be cost effective in some situations but not in all. By allowing the use of innovative solutions and the latest technology, performance-based regulations mitigate the

² Jurisdictions that have adopted performance-based codes include: England and Wales 1985, Scotland 1991, New Zealand 1992, The Netherlands 1992 and Sweden 1994.

³ Principle-based regulation offers similar benefits with even greater levels of flexibility and freedom, although it may be more difficult to administer.

need for innovative solutions to be approved for use and written into prescriptive regulation.

In practice, it appears that the ‘performance-based’⁴ approach has brought several benefits. Box 5.1 outlines a number of examples where performance-based regulations have enabled the construction of more innovative and cost-effective buildings. In addition, a number of participants have observed that performance-based regulations offer benefits for the industry and community. For instance, the ABCB Chairman notes that:

Cost savings to developers and the community are generated by:

- the use of alternative or innovative materials and forms of construction or design;
- allowing designs to be tailored to particular buildings;
- providing guidance in a clear manner on what the BCA is trying to achieve; and
- allowing designers flexibility. (sub. 4, p. 10)

Similarly, Arup Fire submitted that performance-based regulations have brought significant benefits in areas related to fire safety:

The ability for designers to have differing approaches to fire safety and integrate fire safety features in the construction of buildings has not only saved money, but also allowed more freedom in the design of buildings. ... Examples are:

- Allows the design and construction of efficient cost effective buildings that satisfy life safety objectives of the Code. ...
- Small and medium sized projects such as low rise office buildings, processing factories and warehouses having fire safety solutions developed specifically to address their business operations. These solutions may often be used in differing States to allow consistency in building construction and operating costs. ...
- Buildings designed under a performance based approach may often have detailed fire brigade intervention assessments carried out, an aspect that is not required to be addressed in detail for a building designed to the prescriptive requirements. A detailed assessment of fire brigade intervention will always provide improvements for access and facilities for fire fighters over one designed to the prescriptive requirements. (sub. 15, p. 6)

⁴ Implementation of performance-based regulations was the intention of the IGA. However, as discussed in section 5.3, the present BCA actually represents more of a ‘principle-based’ approach. The two approaches have similar benefits (with ‘principle-based’ regulations offering greater levels of flexibility), however principle-based regulations may be associated with some additional difficulties.

Box 5.1 **The performance-based Code in practice.**

The performance-based building Code and the use of alternative solutions, offers designers and builders greater flexibility and the potential to produce innovative and cost saving designs.

A KPMG report into the impact of the performance-based Code (BCA96), included a number of case studies of particular commercial construction projects. These studies indicated that the performance-based approach had encouraged the use of modern and efficient building practices and significantly reduced constructions costs.

Federation Square

Federation Square is an arts centre in central Melbourne comprising a number of theatre, gallery, retail and production spaces. The building stands five stories high and has a structural deck spanning the Jolimont Railway Yards. KPMG found that the building could not have been constructed using deemed-to-satisfy provisions and that performance-based evaluation had allowed the construction of a final deck design that was:

... more flexible than it would have otherwise have been. For example the owners could, if they wished, add a mezzanine floor with relatively little additional re-enforcement. Similarly the size of the supporting members is smaller and the required positioning more flexible, relative to the initial proposition, with the result that there is greater flexibility in terms of internal design and a greater amount of useable space. (2000, p. 47)

Further, the cost of the design was estimated to be around \$18 million cheaper to construct than an earlier design. Overall the building 'significantly benefited in both design flexibility and cost efficiencies by the effective use of the performance requirements of the BCA' (KPMG 2000, p. 46-47).

State Library of Victoria

The redevelopment of the State Library of Victoria was undertaken over eight years and a number of building codes. The renovation was completed under the BCA96 and performance-based solutions were used in many areas as compliance with deemed-to-satisfy provisions would not have provided the level of functionality sought by the end users.

A key desire of the project was to preserve heritage aspects of the building while still maintaining adequate levels of public safety. The alternative solution allowed a reduction in the number of fire stairs and the level of fire compartmentalisation but maintained 'much of the old materials such as glass, frameworks and balustrades'. Overall, a performance-based assessment showed:

It was possible to conform with heritage requirements ... [as] the fire strategy report showed that the use of early detection systems and carefully placed sprinklers gave the necessary protection. (KPMG 2000, p. 38)

Further, the use of alternative materials and the preservation of existing structures resulted in estimated cost savings of around \$2 to \$3 million.

Box 5.1 continued

Westfield Hornsby Shopping Centre

Westfield's Hornsby Shopping Centre is typical of large suburban malls which comprise large retail areas, cinemas and parking spaces. During the design phase Westfield undertook 'purpose specific modelling studies' to confirm egress times and optimise designs. The use of modelling and performance-based designs has allowed cost savings in a number of areas:

- Fire ratings for floor slabs were reduced from three hours to two;
- Fire ratings for parking spaces were reduced from four hours (under deemed-to-satisfy provisions) to one and a half hours; and
- The number of fire stairs and emergency exits required was reduced significantly.

The KPMG study reported that:

Because of these design simplifications, savings to the overall structure (excluding services) approximate 0.75% to 1% according to calculations by Westfield. In addition, services savings of approximately half a percent have been achieved and leaseable retail space has been increased by 1,000 square metres. In overall terms, Westfield assess the saving to be in the range of 3-4 percent of overall project costs. (KPMG 2000, p. 44)

In addition, Westfield believed that the alternative solutions had also resulted in some savings in maintenance costs. And the KPMG study reported that stakeholders believed that the performance-based approach had brought benefits:

According to respondents, all stakeholders benefit from design enhancements and cost production leasing costs drop with resultant savings to retailers and ultimately to consumers. Fire safety is enhanced (in their opinion) by purpose specific modelling. (KPMG 2000, p. 44)

Source: KPMG 2000.

A KPMG (2000) study of 15 large scale construction projects found that 'performance-based' regulations had led to cost savings in the order of one to five per cent. And, as discussed in chapter 4, the regulatory reforms overseen by the ABCB (principally the introduction of the BCA96) have been associated with increased productivity, reduced costs and increasing innovation, some of which may be a result of the performance-based approach of the Code. Overall, the 'performance-based' approach appears to have offered significant benefits to the construction industry.

Disadvantages of performance-based codes

While performance-based regulations can bring significant benefits, there are some disadvantages associated with their implementation and use including:

- increased difficulties in assessing compliance with the regulations

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- the possibility of increased maintenance and lifecycle costs.

Assessing compliance with performance-based regulations

One disadvantage of using performance-based regulations is that judging compliance is more difficult and may require specialist skills and expertise. Judging compliance with prescriptive regulations (and the deemed-to-satisfy solutions), is relatively straight-forward and requires certification that the building is built to strict and clear-cut criteria (which can be assessed in a ‘tick box’ fashion). However, assessment against performance requirements is more demanding and necessitates assessing how a building and its various features will perform and whether this level of performance meets the criteria. As noted by submissions to this study, this level of assessment is likely to require specialist skills and expertise on the part of designers and certifiers. For example, the Western Australian Government Department of Housing and Works submitted that:

Prescriptive standards (such as traditional building by-laws and the “deemed to satisfy” provisions in the BCA) allow an untutored person to prepare a design, and for that design to be checked against the prescribed standards by, say, a local authority building surveyor. In such a model it is conceivable that a single person, or a single profession (building surveyor) can master the prescribed standards and check all aspects of a building.

Performance standards mean the designer must have a strong understanding of the principles underlying the standard, and in effect restrict design to professionally trained people (architects, engineers, and the like). Equally, checking the validity of a design against a performance standard requires the same sort of professional knowledge as the designer needs. For a complex building it is inconceivable that a single person or a single profession is capable of checking all aspects of a building against all performance standards. (sub. 14, p.5)

And Arup Fire noted that:

Fire safety engineering is a combination of fire science and building engineering and requires practitioners to understand a significant amount of detail and concepts related to fire development, smoke control, human behaviour and building engineering. Those approving solutions should also have the same level of training and experience as those practitioners carrying out designs. (sub. 15, p. 3)

The difficulties associated with assessing compliance under performance-based regulations is likely to increase building costs and may increase uncertainty regarding what is required to comply with the regulations. While to some extent, these are inherent in the use of performance-based regulations, the particular structure of the BCA96 may exacerbate these difficulties (see section 5.3). Nevertheless, the inclusion of deemed-to-satisfy solutions in the BCA should alleviate these problems by allowing practitioners to use the equivalent of

prescriptive regulations where the costs associated with proving compliance of an alternative solution are too great.

An increased need for maintenance?

As discussed above, the use of performance-based regulations allows greater flexibility for practitioners when designing and constructing a building. However, the design of a building may have (possibly large) effects on the costs incurred by owners and occupiers of a building throughout its life. Primary amongst these are maintenance costs, although others such as the level of energy consumption or restrictions on the way the building is used or occupied may also have marked effects on the life-cycle costs of the building. When a building is designed to meet prescriptive regulations, these regulations imply a certain level of life-cycle costs. However, the use of alternative solutions allows buildings to be constructed that may result in a higher (or lower) level of life-cycle costs for the owner or occupiers. This may be a particular problem in the case of maintenance that is necessary to ensure that the building continues to achieve the minimum levels of health, safety and amenity mandated by the BCA.

To some extent, the issue of life-cycle costs should be addressed by the owner or builder during the design and construction of the building. As noted by the Insurance Council of Australia (ICA), if the owner is fully informed, they should be able to assess upfront savings and life-cycle costs, and find the balance that best meets their needs:

Property owners do not expect to pay for the extra cost of what is considered “unnecessary” building features, and frequently make choices between cost and quality when selecting how buildings are constructed. This is a choice the owner of the building makes, a trade-off between the lower initial construction cost and the higher cost of maintaining and renovating the building in the future. (sub. 38, p. 4)

Nevertheless, building owners or occupants may not have complete information about the relative costs and benefits of alternative construction methods. As discussed in chapter 3, market failures (in particular, information asymmetries) may mean that the occupier is not able to assess particular designs and judge the level of maintenance (or other life-cycle costs) that a particular design or building will require. As noted by the Campbell Report (2002), this may be a particular problem for multi-dwelling residential (class 2) buildings.

By allowing alternative solutions that increase the level of life-cycle costs (in particular maintenance costs), the use of performance-based regulations may provide an incentive for builders (or developers) to shift costs onto owners and occupiers. A designer or builder may have an incentive to use an alternative

solution that increases maintenance costs if the initial costs are lower. This is especially the case if the maintenance costs are likely to be borne by the building owners or occupants and are not considered (or are not considered as being important) by the designer or developer when assessing the design. This may be a particular problem if owners or occupiers are not able to judge the level of maintenance that a building will require. A further difficulty may arise if increased maintenance costs and more complicated maintenance requirements lead to building owners or occupiers failing to undertake necessary maintenance (either through wilful neglect or simply being unaware of the maintenance needs).

The extent to which these problems are apparent within the BCA is discussed in section 5.3 along with strategies for minimising their adverse consequences.

Summing up

The use of performance-based regulation can bring significant benefits by way of flexibility, innovation and cost savings to the building industry and consumers. While there are some disadvantages associated with the use of performance-based regulation, the existence of deemed-to-satisfy solutions in the BCA should at least limit the extent of these. The Commission supports the objective of performance-based codes.

Community expectations of health, safety and amenity

A key objective contained in the mission statement of the ABCB and pursued through the BCA is ensuring that buildings meet community expectations of health, safety and amenity. This aim is reiterated in objective two of the IGA⁵ and in the BCA itself.

Community expectations

The term ‘community expectations’ is used to identify the *level* of building performance that is to be embodied for many areas regulated by the Code. For example, in the cases of energy efficiency and sound insulation, the Code has to specify a level of energy use and sound abatement that meets ‘community expectations’. However, ‘community expectations’ is a vague concept and what the

⁵ The mission statement of the ABCB (which is stated early in the IGA) requires that the ABCB ‘provide for efficiency and cost-effectiveness in meeting community expectations of health, safety and amenity’. The ensuing IGA objectives require that the Code ‘pursue regulatory objectives of safety, health and amenity’. The Commission interprets regulatory objectives, in this context, as objectives determined by community expectations.

community expects may bear little relationship to what it is willing to pay for or what would be the solution that maximises net benefits to the community.

The use of the ‘community expectations’ concept to outline the level of building performance to be embodied in the Code may raise some difficulties. First, it may be difficult to gauge precisely what community expectations are in relation to a particular aspect of building performance. While an individual may have an expectation about what an appropriate level of building performance is, it is difficult to draw from this a measure of a community’s expectations. Should it be the minimum acceptable to the member of the community with the highest expectations, or the member with the lowest? Should it be the average level of expectation amongst individuals in the community? Should it be the community’s consensus (assuming one exists) as to the acceptable level? Second, community expectations are likely to differ from community to community, reflecting differences in geographical and social conditions. Thus, finding a level of building performance that represents a general or nationally acceptable level may be difficult. And third, community expectations are likely to change over time, perhaps reflecting changes in social and economic conditions. Fourth, some participants have also questioned whether the pursuit of minimum standards is consistent with meeting community expectations. While there is a prima-facie conflict, objective two of the IGA requires that community expectations of health, safety and amenity are given priority over the objective of minimum standards. In essence, the ABCB (and the BCA) is first required to choose solutions that meet community expectations. However, of the range of solutions that do so, the Code is required to reflect the minimum of these.

Nevertheless, with respect to some (perhaps many) areas, it seems that the community has an expectation about building performance. For example, in Australia, the community would generally expect a house to have a functioning toilet (although this may not be the expectation in every country). As discussed in box 5.2, these expectations are similar to a social norm, where individuals in the community have developed a shared understanding that buildings will attain a certain level of performance, and act as a ‘given’ — providing certainty in people’s minds on some aspects of building performance and thus removing or reducing the need for people to verify these matters.

Box 5.2 **Social norms, community expectations and building performance**

Social norms are shared understandings, informal rules and conventions that prescribe, proscribe or modulate certain behaviours in various circumstances. Generalised social norms can include honesty, law abidingness, the work ethic, respect for elders, tolerance and acceptance of diversity, and helping people in need. Social norms can also relate to specific situations such as paying bills on time, queuing at shop counters, returning other's lost possessions, surrendering seats for the elderly on public transport, and forms of greeting. Social norms are often unwritten, although they can also be expressed or reinforced through tribal or religious beliefs and dictums, nursery rhymes, social sayings, music and drama. Under some interpretations, social norms can also be embodied in laws and regulations themselves. (PC 2003a)

In many ways 'community expectations' can be seen as being similar to a social norm. While they are not rules or conventions per-se, they may be seen as shared expectations (of building performance) that individuals rely on and which affect their actions and decisions. For instance the community may have a shared expectation that a building will withstand a moderately severe hail storm. Armed with this expectation individuals may not assess the storm resistance of a building before occupying it, relying instead on their expectations.

Nevertheless, community expectations (where they exist) may not provide the most appropriate level of building performance for regulation (assuming they can be pinned down to a particular level). To the extent that community expectations are similar to social norms, they would usually be formed through shared historical experiences. For instance, the reason a particular building attribute, such as a toilet, becomes a community expectation is because historically each building has had one and people have come to expect it. In this way the community expectation would not necessarily be the most efficient level of building performance, rather the level that people have come to expect.

Indeed, it may be the case that where an information asymmetry exists, community expectations will imply a different level of building performance to that which individuals would have adopted had they had full information. For instance, if a new and worthwhile product becomes available, but is not taken up due to an information asymmetry (individuals cannot adequately assess its value or benefits), it will not be widely used and people will not come to expect its use. In this case, if the level of regulation were set to reflect community expectations, they would not require use of the product, even though on a proper assessment of costs and benefits regulating for its use may provide net benefits.

In situations where such 'community expectations' exist, the ABCB may wish to consider these when determining the appropriate regulation. It is not clear that a community expectation exists for all aspects of building performance. Further, even where one does exist, it may be the case that the most efficient level of regulated building performance is higher than the level of community expectation.

Source: PC 2003a.

Regardless of whether the concept of ‘community expectations’ is useful, identifying a level of building performance to be achieved through regulation is an important part of specifying regulatory objectives. As noted in chapter 3, a general principle of good regulation is that it should go no further than is necessary to address the market failure. Thus, the challenge is to identify a level of building performance that will adequately address the identified market failures, primarily information asymmetries and externalities in the case of building.

The ideal solution would be for regulation to result in each individual attaining the level of building performance they would have chosen if there were no market failure. Unfortunately this level of building performance will inevitably vary from individual to individual, and the ABCB is unable to determine this level for each individual. Further, even if the ABCB could determine this level, it is impractical for the BCA to be varied to reflect the preferences of each individual. Rather the BCA must incorporate a single level of performance that is applied to all buildings, regardless of individual preferences.⁶

No matter what level of building performance is incorporated in the BCA, some portion of the population is likely to find that it either exceeds or falls short of their desired level of performance. For instance, if the BCA embodies a level of performance that meets the preferences of the community member with the highest standards, the majority of society will be obliged to incur the cost of paying for a level of performance well above what they consider necessary. Similarly, if the BCA embodies the level of performance desired by the individual with lowest preferences, the majority of the population will be obliged to incur the cost of accepting what they consider sub-standard buildings.

The efficient level of regulated building performance is likely to depend on a number of factors that the ABCB should consider:

- *The ability of individuals to voluntarily choose higher levels of performance than that mandated by the BCA.*⁷ It is unlikely that individuals will have the ability to fully assess building performance and choose the precise level of building performance that they desire (or else there probably would not be a market failure and rationale for regulating in the first place). However, the less costly it is for individuals to attain information about, or the easier it is to estimate the performance of, a building, the lower the optimal level of

⁶ Although as noted earlier, the BCA may be varied on certain geographic or other objective grounds.

⁷ This is particularly important when considering ‘minimum acceptable’ regulations. The rationale behind the use of minimum acceptable regulation is dependant, to some extent, on the ability of individuals to voluntarily choose higher levels of performance at a reasonable cost (see below – ‘other objectives’).

(regulated) building performance is likely to be. For example, in the case of energy efficiency, where information gaps are likely to be relatively small and where information is reasonably easily obtained (especially through compulsory ‘star’ ratings systems), the optimal level of mandated building performance is likely to be quite low. Nevertheless, with respect to externalities the capacity to choose higher levels is unlikely to improve outcomes, as the consumer has no incentive to do so.

- *The uniformity of preferences.* As discussed above, the preferences of individuals in the community will vary and the extent and nature of this variation should be considered by the ABCB. If preferences are largely clustered, it may be relatively easy for the ABCB to find a level of building performance that is reasonably acceptable to all. However, if preferences are more diverse, it will be more difficult for the ABCB to find a level of building performance that satisfies all individuals. It will have to trade off the interests of various sections of the community to find a level of performance that maximises net benefits to the community.
- *The type of market failure.* As discussed in chapter 3, the main market failures afflicting the building industry are information asymmetries and externalities. The most appropriate level of regulated building performance may not necessarily be the same for each. As noted above, ideally the ABCB regulation would result in a level of building performance that individuals would have chosen in the absence of the market failure. In the case of information asymmetries, the ABCB is attempting to find the level of performance that individuals would adopt if they had full information about the costs and benefits of various levels of performance (and were able to ensure that this level was embodied in their building). In the case of externalities, the ABCB is attempting to find the level of performance the individuals would have adopted if they had to fully charge and compensate all external parties for the costs and benefits, respectively, visited on them by the building. In some areas of building performance both market failures may be present, in which case the ABCB should choose the level of building performance that fully addresses the more extreme of the two.
- *The costs associated with higher performance.* Building higher levels of performance into buildings is not costless and these costs are incurred by all building users. If they are significant, it may impact upon the affordability of housing and have particular impacts upon certain groups in society. All of these costs need to be weighed against the benefits of higher building performance.
- *The benefits associated with higher performance.* While higher levels of building performance clearly provide benefits to owners and occupiers, regulating in some areas of performance may provide (potentially) larger

benefits than others. For example, ensuring that a building is structurally sound and preventing loss of life from building collapses or fires, may be seen as providing higher benefits than ensuring that levels of energy consumption in a building are acceptable.

- *Community expectations.* If the ABCB can identify any community expectations in relation to an area of building performance, these may also help guide it toward the most efficient outcome. As discussed in box 5.2, in many cases the level of building performance associated with community expectations will not be precisely that which maximises net benefits. In some areas regulating for a level of building performance that falls short of community expectations may be sub-optimal. In other cases, community expectations may exceed the efficient level of regulated building performance. For instance, in the case of environmental externalities (such as greenhouse gases or sustainability issues), some communities may expect buildings to be constructed to the highest standards and be as ‘environmentally friendly’ as possible, even though a proper assessment of the costs and benefits would find this level of regulated building performance to be excessive (especially where individuals can voluntarily choose a higher level of building performance).

Achieving efficiency involves maximising net benefits to the economy and society. To precisely maximise net benefits would require a thorough understanding of each individual’s preferences, which is impossible. Thus, it may not be possible for the ABCB to maximise net benefits and, even if it were, the costs to the ABCB are likely to render this approach infeasible.

In its place, the ABCB should attempt to ensure that when choosing a level of (regulated) building performance there is no other feasible alternative (whether available to the ABCB or not) that generates greater net benefits.

Health, safety and amenity

The IGA sets out an objective to protect health, safety and amenity. This provides guidance to regulators both as to what areas of building performance should be regulated and as to the regulatory objective.

Identifying areas of building performance that affect the health and safety of occupants (and external parties) is normally relatively straightforward and non-contentious. Relevant areas may, for example, include protecting the occupants from structural failure or fire in a building or ensuring adequate levels of sanitation.

However, identifying the aspects of building performance that affect amenity is more difficult.

Amenity is not explicitly defined in the BCA and there is no universally agreed definition in the industry that could be used as a benchmark. General definitions differ somewhat, ranging from a focus on the basic comforts of life to encompassing broader issues of quality and aesthetics. For example, the Macquarie dictionary defines amenity as:

Features, facilities or services of a house, estate, district, etc., which make for a comfortable and pleasant life.

Another popular definition identifies an amenity as being:

A feature of real property that enhances its attractiveness and increases the occupant's or user's satisfaction although the feature is not essential to the property's use.⁸

In any case, most definitions of amenity are relatively broad and to some extent all aspects of building design and construction affect the wellbeing and comfort derived from a building. In this sense, using the concept of amenity does not offer much guidance as to what should and should not be regulated by the BCA.

This lack of guidance may be the source of some confusion in the industry about the aims and ambitions of the BCA. For example, the HIA noted that:

References to the term amenity have caused confusion within the industry for some time and there may be significant benefit to it being interpreted more narrowly in order to provide focus. (sub. 6, p. 9)

Similarly, the South Australian Government submitted that:

The difficulty with the term 'amenity' in the BCA process is that it is a qualitative measure and is more open to subjective opinions. It would be useful to provide an explanation of what the term means as applied to the BCA. Matters such as visual design, building bulk and overshadowing are probably not appropriate to be included in the term where as thermal comfort, noise and access for the disabled probably are. (sub. 36, p. 10)

At present, it appears the ABCB has adopted a narrow definition of amenity and has only regulated to protect amenity in a relatively small number of areas.⁹ Indeed the HIA (sub 6, p. 9) argues that areas of the BCA that currently have the objective of protecting amenity can actually be related back to the protection of health and safety. In a similar vein, the ABCB Chairman sees the protection of amenity in some instances as a by-product of the protection of health and safety:

⁸ See: <http://www.google.com.au/search?hl=en&lr=&ie=UTF-8&oe=UTF-8&oi=defmore&q=define:amenity>.

⁹ Several areas of building performance are regulated by the BCA with the objective of protecting people from a 'loss of amenity'. These include: structural provisions; room sizes; light; ventilation; sound transmission; and personal hygiene facilities.

On the delivery of amenity to the community, the achievement of acceptable levels is often linked to the achievement of other code objectives. For example, requirements for minimum numbers of sanitary facilities guards against conditions developing that could impact on building occupants' health, but also provides for positive amenity by minimising the inconvenience in public buildings of having to queue for an unreasonable time to use the facilities. The primary purpose of structural standards in the BCA is to prevent collapse (safety) but they also address serviceability (amenity); eg: a timber floor must not only resist collapse under load but must also be rigid enough to prevent excessive 'bounce' that can result in a feeling of discomfort. (sub. 4, p. 12)

An additional issue concerning health, safety and particularly amenity is determining whose health, safety and amenity should be protected. In general, the BCA protects the occupants of the building from health and safety risks, and protects neighbouring buildings from physical dangers (for example, in the case of fire or structural failure). While it is less clear in the case of amenity, the ABCB Chairman's submission notes that, in general, the BCA aims to protect the amenity of the occupants of the building, not people external to the building:

The amenity issues dealt with by the BCA are concerned primarily with building users or occupants. Other amenity issues, particularly dealing with external factors and the broader community, have traditionally been dealt with by planning controls. (sub. 4, p. 12)

As discussed in chapter 3, aspects of building performance should only be regulated where there is justification on grounds of market failure (such as information asymmetries or externalities). It is plausible to expect that many aspects of building performance related to health and safety would suffer from market failures. First, many building owners and occupiers may not be able to judge the 'level' of safety that a building provides. For example, many home owners may not be able to judge if their home contains dangerous asbestos products. Second, even if home builders or owners have knowledge about the safety levels in their buildings, they may not take into account the preferences of visitors or tenants when building. For instance, builders of office buildings may not adequately take into account the preferences for safety of the workers who will use the building once it has been completed.

As discussed above, amenity is a much more amorphous term and it is unclear as to whether it is associated with significant market failures. This is reflected in the level of confusion surrounding the term, and in the fact that the Board has treated protection of amenity as being of secondary importance to health and safety concerns (even in areas of building performance regulated with the objective of protecting amenity). Nevertheless, allowing the Board to intervene to protect the amenity of individuals would allow it to address market failures that were not related to health and safety.

In summary, ‘health, safety and amenity’ is used as an indicator of areas for possible regulation and as an objective of regulation. While health and safety are relatively straight-forward, amenity is less easily defined and may not offer significant guidance as to what areas of building performance should be regulated. While the Commission considers that the ABCB should only intervene to address identified market failures, many of these will be in the health and safety aspects of buildings. Further, allowing the Board to intervene to protect amenity, would enable it to address any market failures not associated with health and safety. (See chapter 6 for a discussion of environmental externalities.)

Plain language

Objective six of the IGA requires the ABCB to ‘simplify the wording of building requirements to achieve user friendliness and plain language style’. It is important that any regulation and in particular the BCA is accessible for its users. This relates to the dissemination of the BCA (which is discussed in chapter 8) as well as how the BCA is written and presented to the user. As noted by the International Council for Building Research and Documentation (CIB 1997), building codes need to be written in a simple and straightforward manner:

Two factors influence the extent to which a building code can be understood by all of its users: the format (organisation and content) and the language.

The format must be clearly and consistently applied throughout the code, to ensure that users seeking to understand what a particular provision requires, and why, are guided to the relevant information quickly and easily.

The language used must be simple, devoid of jargon and chosen with a full awareness of the level of understanding of the average code user. (p. 3)

The BCA is used by a variety of practitioners with a range of backgrounds. Some of these are likely to have significant tertiary training, such as engineers and architects, while others, such as builders and tradesman, may have taken more practically based courses. Some may also have English as a second language. In addition, consumers of building products may also wish to access the BCA to find out what is covered and what levels of building performance they can expect. Given this, it is important that the Code be expressed clearly and in plain language.

Other objectives

In addition to the objectives outlined individually above, the ABCB’s mission statement and IGA objectives require that the BCA should be:

- efficient;

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- cost-effective;
 - representative of minimum, least-cost solutions; and
 - representative of modern solutions.

A number of these requirements relate to the concepts of efficiency and cost-effectiveness. While these are similar concepts and are aimed at generally the same outcome (the best use of scarce resources), they do have different meanings:

- **Cost effective** — implies that an objective has been identified and the Board is required to meet that objective in the least-costly manner (or implement via the BCA the least-costly technical solution that meets the objective). For example, the ABCB may wish to ensure that buildings achieve a set level of thermal protection. A cost-effective objective would require that the ABCB regulate for the least-costly method of gaining this level of thermal protection. The outcome is not subjected to a net-benefit test and could even result in a net cost.
- **Efficient** — as discussed in chapter 3, efficiency implies that the regulation (the BCA) maximises net benefits (ie benefits minus costs). That is, the ABCB would assess the benefits from obtaining the objective as well as all the costs involved. The ABCB would choose the approach which leads to the greatest net benefit. In the example of thermal protection, the ABCB would look at all options, including aiming for different levels of thermal protection or other ways of achieving the ultimate objective of reducing greenhouse gas emissions, and choose the avenue that would lead to greatest net benefit.

In general, an efficient solution will be cost effective. However, a cost-effective solution is not necessarily efficient (ie it may not maximise the net benefit). There may be a number of cost-effective solutions (each relating to a particular objective or level of benefits); however, only one will usually be efficient. The mission statement, and objectives of the IGA, refer to cost effective, efficient and even least-cost (which the Commission interprets in a similar manner to cost-effective¹⁰) in various places. This points to a significant overlap in the objectives and lack of clarity and is unnecessary as any regulation that is efficient will also be cost effective.

In addition, The objectives require that the ABCB base building requirements on minimum, least-cost solutions which address the regulatory objectives (community

¹⁰ Objective 2 requires that the Code reflect ‘minimum least cost solutions which address regulatory objectives...’. This could be interpreted as implying that the Code should reflect the lowest cost method of building construction. However, as the requirement is constrained by the need to meet regulatory objectives it appears that this requirement is in effect the same as ‘cost effective’ (which implies that the Code should adopt the least cost approach that meets the objective).

expectations) of safety, health and amenity. As discussed in chapter 3, one guiding principle for good regulation is that it should be the minimum intervention necessary to achieve the objective of regulating.

The primary rationale behind the implementation of minimum standards is to increase the level of flexibility for building practitioners and, in principle, increase the level of choice over building performance for consumers. Preferences in regard to building performance are likely to vary from consumer to consumer and a single solution or level of building performance is not going to best meet the needs of all consumers. For example, price conscious consumers may not wish to pay for increased levels of energy efficiency in their homes while other consumers may be willing to do so in order to reduce future utility costs or out of concern for the environment. By adopting minimum acceptable standards, the BCA aims to ensure that all buildings provide adequate levels of health, safety and amenity but beyond this, the level of building performance can be tailored to best meet the circumstances of the consumer. Mandatory best practice, on the other hand, limits consumers to adopting one level of building performance (best practice) regardless of their preferences or income levels.

Nevertheless, the adoption of ‘minimum’ standards does not derogate from the need for the regulation to address the market failures. Under the current BCA, this means that the regulation still has to meet community expectations (that is, be ‘acceptable’ to the community), not just reflect the lowest possible standard. As discussed above, the level of building performance that addresses the market failure may, in some cases, be quite high. This is particularly the case where there are large information asymmetries and it is impractical, or too costly, for consumers themselves to ensure a higher level of building performance.

The objectives also require that the building solutions be modern as well as efficient. This may introduce an additional conflict. While, in general, modern building solutions will represent more up-to-date technical solutions, it is not necessarily the case that these will be efficient. Indeed, ‘tried and tested’ solutions (that are not necessarily modern) may represent more efficient solutions. In this sense the concepts of modern and efficient may, in some instances, be in conflict.

Overall, the intended meaning of these objectives is not entirely clear. The concepts of efficiency, cost-effectiveness and least cost overlap, and modern and efficient may, in some cases, be contradictory. The Commission considers that these objectives can be clarified and simplified.

Summing up

As outlined above, there are currently a number of IGA objectives pursued through the BCA. Many of these, such as consistency and performance based, are central to the ambitions of the ABCB.

Overall the Commission supports the majority of these objectives, in particular, the pursuit of consistent, performance-based regulations. Nevertheless, some objectives, such as efficient, cost-effective and least-cost are not clearly defined and appear to overlap. In addition, other objectives such as modern and efficient have the potential to conflict. It would be possible to discard ‘cost effective’, ‘least cost’ and ‘modern’ as each of these objectives will be implicitly achieved whenever regulations are efficient.

The Commission believes that it would be possible to refine and simplify the objectives pursued through the BCA. Recommendations regarding revised objectives are outlined in chapter 11.

DRAFT FINDING 5.1

The majority of the ABCB’s objectives pursued through the BCA are appropriate. However, some objectives are unclear and appear to overlap. In addition, some other objectives have the potential to be in conflict with one another.

DRAFT RECOMMENDATION 5.1

The objectives of the ABCB (or its replacement) should be clarified in order to remove unnecessary conflict, overlap and imprecision.

5.3 Assessing the ABCB’s performance in meeting IGA objectives

While the previous section discussed the appropriateness of the ABCB’s objectives this section assesses the ABCB’s performance in achieving the IGA objectives that are pursued through the BCA.

National consistency

As noted above, the pursuit of consistency was one of the major driving forces behind the creation of the ABCB and the BCA96 appears to reflect substantial progress toward establishing a nationally consistent building Code for Australia.

One key measure of consistency is the number of State and Territory variations to the BCA and it appears that the ABCB has been successful in reducing the number of these variations. In reviewing the progress of the ABCB, the Laver Review (2000) found that:

When the BCA was first published there were a significant number of State and Territory variations to the code. Three national conferences were subsequently held which reduced the number of variations to 22 in volume 1, and 12 in volume 2. (p. 9)

Further, the ABCB has informed the Commission that, with regard to variations in the deemed-to-satisfy provisions:

... since 1990 there has been significant and continuous reduction in variations. By 2003 there had been a total reduction of nearly 80% (1990 – 359 variations, 2003 – 74 variations). (ABCB, pers. comm. 16 June)

In addition, the ABCB informed the Commission that there was a relatively small number of variations to performance requirements, involving ‘17 instances out of a total set of 95 BCA Performance Requirements’(ABCB, pers. comm. 16 June).¹¹

While the ABCB appears to have been successful in reducing the number of variations in the past, recent amendments to the BCA appear to have led to an increase in the number of inconsistencies. In particular, recent amendments regarding energy-efficiency are subject to a significant number of variations, reflecting the fact that some jurisdictions (NSW, Victoria and the ACT) have not adopted the measures, and that other states have only adopted the measures with variations. The ABCB has acknowledged that:

... in recent years, the overall reduction in variations has been offset to some extent by the emergence of new variations, primarily, but not exclusively, in the area of state variations in “new” areas of BCA consideration. (ABCB, pers. comm. 16 June)

Further, some other participants in the study have noted that there are still significant jurisdictional variations in the BCA:

There is presently a lack of consistency between States and Territories with the permitted BCA variations, which lead to inconsistencies in building design and does not promote the aspect of a national Code. Issues such as the permitted volume of high fire hazard goods in Victoria, 12m travel distance in Victoria for sprinkler protected residential buildings of less than 25m in height and the requirements for Places of

¹¹ There appears to be some confusion regarding the precise number of variations in the Code. In a recent submission to the Productivity Commission’s inquiry into First Home Ownership, the Building Products Innovation Council (2003b, p. 2) indicated that there were ‘some 105 state and territory government variations ... in the BCA’. This difference may reflect different interpretations of variations in the code (ie what counts as a variation) and different points in time at which the estimates were made (especially reflecting the recent introduction of energy efficiency measures).

Public Entertainment in NSW are good examples. These variations should be removed to ensure that the BCA is a national document. (Arup Fire, sub. 15, p. 3)

There are times when one could reasonably question whether Australia is one country. There are many instances where differences exist between the states and where it is difficult to see clearly the justification for these differences. (Air Conditioning and Mechanical Services Association of Victoria, sub. 16, p. 9)

Thus, while the ABCB appears to have been successful in reducing the number of variations in the BCA, there is still room for more progress to be made in achieving national consistency. In this vein, the ABCB Chairman has acknowledged that:

... there are still opportunities to further reduce variations and to consolidate other on-site regulatory requirements into the BCA, as has been the case with Tasmania. Efforts will continue to be directed to these matters. (sub. 4, p. 15)

In addition to variations to the BCA, inconsistency in building regulations may also come about through the creation and implementation of other regulations that affect the construction of buildings. For instance, regulations covering food safety or dangerous goods may have requirements about the design or construction of certain buildings. Most jurisdictions have a number of such regulations (see chapter 6) and these may be inconsistent with the BCA and/or may introduce additional inconsistencies between jurisdictions.

Other areas that may also lead to inconsistency between building regulation in various jurisdictions include local government regulations, in particular, planning controls (chapter 6) and the administration of the BCA (chapter 7). In addition, because some other issues remain unresolved, in particular those relating to the scope of the BCA and whether it should be setting standards for qualities not impacting on health, safety and amenity, there is greater potential for inconsistency and conflict across jurisdictions.

DRAFT FINDING 5.2

The ABCB has reduced the number of jurisdictional variations in the BCA. However, there are still significant inconsistencies, particularly in relation to energy efficiency regulations, which have only recently been added to the BCA.

Performance based

As discussed in section 5.2, there are three main types of regulation: prescriptive, performance based, and principle based. One of the primary objectives pursued through the BCA96 (adopted in 1997) was a conversion from a prescriptive Code to a performance based, albeit one with prescriptive style deemed-to-satisfy solutions provided.

Progress towards a performance-based code

In each area of building performance regulated under the BCA, a performance requirement has been adopted stating in broad terms what the building must achieve to be compliant with the BCA. In this sense the BCA has been successful in embracing a performance methodology and previous reviews of the ABCB have assessed the BCA as having satisfied the objective of achieving a performance-based approach (Laver Review 2000, KPMG 2000).

However, the majority of the ‘performance requirements’ do not give readily measurable outcomes that must be achieved. In fact, the BCA follows a more ‘principle’ based approach and specifies broad, but not measurable, targets or objectives for the building. For instance, in the case of structural provisions the BCA does not specify precisely the loads that must be withstood by any building (such as wind-speed loads or dead loads) — rather it requires that the building must withstand ‘actions to which it may reasonably be subjected’.

The AEA noted that:

The BCA performance provisions are too brief and the deemed to satisfy provisions are too specific, too complicated and too limiting. ... Substantial effort goes into maintaining and applying deemed to satisfy provisions yet seemingly little change occurs in relation to performance based provisions in order to make them more broadly usable instead of DTS. (sub. 44, p. 19)

An International Council for Building Research and Documentation report (CIB 1997), noted that the intention was to add aspects of ‘measurability’ to the BCA96 after it had been introduced:

One of the significant decisions made during the development of BCA96 was that it was not necessary for each performance requirement to be measurable. The measurability issues will be revised after BCA96 has undergone a settling period and more research is completed. Studies undertaken by the fire code reform centre will provide information which will be useful in resolving this issue in the future. BCA96 continues to allow for acceptable existing building practices through the deemed-to-satisfy provisions. (annex A p. 5)

In relation to some areas of building performance, verification methods have been included in addition to the performance requirement. For example, in the case of fire resistance requirements, the BCA includes a verification method which sets out measurable requirements for the level of heat that a building must be able to withstand in the case of fire. Nevertheless, these verification methods are not mandatory and a designer can choose an alternative verification method for the purposes of proving that the building meets the performance requirement. Even so,

these verification methods have only been used in relation to a few performance requirements and the majority have no readily measurable method of certification.

Thus, it appears that, in many respects, the current BCA may more readily be described as being principle based rather than performance based. Principle-based regulation does have some advantages over performance-based regulation —chiefly it offers even greater flexibility to designers and regulators. Nevertheless, it does pose some problems, in particular with implementation and verification (which are discussed in more detail below).

An additional short-coming with the BCA is that, in some instances, the deemed-to-satisfy provisions do not accord with the performance requirement. That is, the deemed-to-satisfy provisions embody a higher or lower level of performance than is required by the performance requirement. As discussed in chapter 6, this appears to be particularly the case with regulations directed at providing safety from fire. The deemed-to-satisfy solutions appear to protect life and property, while the performance requirements are only aimed at life safety (and the protection of neighbouring property). For instance, the Fire Protection Association of Australia noted that:

In practice, many in the industry would think that a number of the solutions described by the Deemed-to-Satisfy text in the BCA would not meet the Performance Requirements. Equally, in other cases, the DTS would seem to include provisions that go beyond the implied BCA objectives and provide a high degree of property protection. This is illustrated by provisions in the BCA for 3 and 4-hour fire resistance which is well beyond the expected evacuation period for life safety. By contrast, fire safety provisions in building codes in New Zealand and Sweden, which have no property protection objective, typically have fire resistance levels of 1/2hr and 1hr more related to life safety objectives. (sub. 19, p. 5)

DRAFT FINDING 5.3

The ABCB has introduced a framework for performance requirements for all areas of building covered by the BCA. However, actual requirements still follow a ‘principle-based’ approach, broadly outlining what is required, but not offering readily measurable or verifiable requirements, even though it was intended to revise and convert them to measurable ‘performance-based’ standards. In some areas of building performance regulated by the BCA, the deemed-to-satisfy solutions prescribe a level of performance that is not aligned with the performance requirement.

DRAFT RECOMMENDATION 5.2

The ABCB (or its replacement) should enhance efforts to make the performance-based requirements in the BCA more effective. This should include providing

measurable criteria to aid in judging compliance and clarifying the assessment process to be used. This should be given a high priority.

DRAFT RECOMMENDATION 5.3

The ABCB (or its replacement) should enhance efforts to ensure that all deemed-to-satisfy provisions in the BCA offer an equivalent level of building performance to that required by the performance requirements.

Difficulties in pursuing the performance-performance based standards/code

As noted in section 5.2 there are, in theory at least, some difficulties and disadvantages associated with the use and implementation of performance-based regulations. This section looks at how these have manifest themselves in relation to the performance-based BCA96.

Assessing compliance with the performance requirements

An important issue with performance-based regulation is being able to determine when a proposed solution does or does not meet the performance criteria (see section 5.2). As noted in chapter 2, there are several ways through which a building solution can demonstrate compliance with the BCA. These need to provide clear signals as to whether or not a proposed solution meets the performance requirement.

The ability of practitioners to judge compliance with the performance requirements may be made more difficult by the nature of the current requirements. As noted above, the BCA96 resembles a principle-based code rather than performance-based code, and many performance requirements lack readily measurable outcomes. Submissions have noted that this makes designing and judging alternative solutions difficult and creates uncertainty as to what is required to meet the criteria:

Currently, the Performance Requirements in the BCA are written in qualitative terms and subjective arguments arise as to whether these Performance Requirements are satisfied by any particular design. The BCA provides for the concept of “equivalence” to be used to assess fire “engineered solutions”, but again, without a standard measurement tool, establishing “equivalence” can be quite difficult. (FPAA, sub. 19, p. 7)

The idea of descriptive rather than prescriptive regulation - whilst good in theory - has resulted in great uncertainty: This uncertainty is resolved only when an independent certifier can be found to 'sign-off' proposals. This is because the means of verification are in the most cases uncertain and tentative. This leads to the most conservative 'deemed-to-satisfy' solutions being employed - stifling innovation. (Dr David Leffer, sub. 34, p. 1)

To those who are not too close to the issues, this ABCB stance may seem perfectly acceptable, but the major problem is that the objectives, functional statements and performance requirements were in our opinion promulgated in haste to meet the publishing deadlines for the new 1996 version of the PBCA and are open to serious interpretation issues by nature of their current format. (Alliance for Fire and Smoke Containment, sub. 31, p. 4)

Further, the AEA argued that inspectors and certifiers had difficulty in applying the performance-based requirements and this meant that ‘the majority of BCA users simply prefer to follow the deemed-to-satisfy approach, ignorant to, or uncaring of the disadvantage it brings’ (sub. 44, p. 5).

An additional difficulty in assessing compliance with performance requirements is created where the deemed-to-satisfy provisions do not accord with the performance requirement (see above). One key method of proving that an alternative solution meets the performance requirement is via comparison with the deemed-to-satisfy provisions. That is, if the alternative solution can be demonstrated to offer an equivalent level of performance as the deemed-to-satisfy solution then it complies with the performance requirement. However, when the deemed-to-satisfy solution does not align with the performance requirement, this method of proof becomes impossible.

Comparison with deemed-to-satisfy solutions may be particularly important where the performance requirements themselves do not represent a well-defined level of performance. Thus, to some degree, difficulties arising from disparate deemed-to-satisfy and performance requirements may be abated by the adoption of more readily measurable and verifiable performance requirements.

Nevertheless, deemed-to-satisfy solutions should still achieve a level of building performance commensurate with that required by the performance requirement as any differences distort the choices of builders and designers, even where the regulations should address the same objectives, and create competitive disadvantages between the two.

In any case, difficulties associated with assessing whether alternative solutions meet the performance requirements are likely to lead to increased costs and uncertainty, and may act as a disincentive to innovate and use alternative solutions.

An increased need for maintenance?

As noted in section 5.2, one disadvantage associated with performance-based building codes is that they may be associated with increased maintenance costs, and possibly failure to complete necessary maintenance.

There are different views as to whether the introduction of performance-based regulations has markedly increased maintenance costs (and loads). The ABCB Chairman, for instance, submitted that it was impossible to make a judgement about whether performance-based regulation had increased the need for maintenance:

Building owners and developers make decisions on up-front construction costs versus building life cycle costs regardless of whether the building design follows the prescriptive Deemed-to-Satisfy Provisions, or relies on a performance-based solution. The BCA is therefore ambivalent to whether performance-based solutions require more or less maintenance. Consequently, it is not possible to make a general assessment about whether the performance-based code tends to transfer costs from the construction to the maintenance of buildings. (sub. 4, p. 52)

Similarly, Arup Fire submitted that ensuring buildings are adequately maintained has always been necessary:

Many accidental commercial fires in Australia in the past 20 years have been caused through poor building maintenance, whether it be inactive fire systems, illegal building works or general poor maintenance to aspects such as fire doors or fire walls. ... The change to a performance based code has highlighted the need for improved building maintenance requirements, but the need has always been highly relevant. (sub. 15, p.4)

Nevertheless, several other participants have suggested that performance-based regulations have led to increased maintenance costs:

It has been the experience of AFAC members that performance based building regulations, and the associated reliance on design solutions, have led to the increased use of mechanical building systems requiring regular and ongoing maintenance. These systems can have the effect of transferring the cost from the construction to the maintenance phase. (AFAC Inc, sub. 28, p. 22)

Performance-based requirements tend to lead to alternative solutions that have a greater degree of reliance on mechanical (active) building systems requiring ongoing maintenance to have the necessary level of reliability for building safety. There is certainly the potential for significant ongoing costs for the building owner that should be explored by the design team. These solutions are also often tied to particular uses that in the longer term reduce flexibility for the building owner. (South Australian Government, sub. 36, p. 16)

Deem-to-satisfy (DTS) provisions have always been conservative and have had redundancies built into them. Redundancies have resulted in additional capital cost. With performance solutions the redundancies are not included to the same degree and therefore the continued compliance of the building is reliant on the building systems working as they were designed. This requires the systems to be maintained. The redundancy costs are therefore transferred to maintenance costs. Maintenance provisions are included in BCA2004 but need to be developed further to achieve national consistency. (Tasmanian Building Regulation Advisory Committee, sub. 29, p. 9)

Building Design and Regulation should properly address the life cycle requirements of all buildings. There are decisions taken at the design stage which will result in an inefficient building which imposes increased maintenance/lifecycle costs on a building for successive owners. (NFIA, sub. 3, p. 4)

[One challenge arising from the BCA96 is a] tendency for performance based design solutions to shift the financial burden from the builder in the construction phase to the owner in the maintenance phase. (KPMG 2000)

There appears to be reasonable grounds to conclude that the use of ‘performance-based’ regulation has allowed costs to be shifted from the construction of a building to the maintenance phase, particularly in the case of fire resistance provisions. However, this is not necessarily a problem, especially if prospective owners or occupiers are made aware of (and agree to) these extra maintenance needs or if the extra maintenance costs are reflected in the price or rental cost of the building. Although as noted in section 5.2, owners or occupiers may not always be able to assess the maintenance requirements of a particular building.

Addressing the issue of increased maintenance, and the problem of ensuring that maintenance requirements are undertaken, can be approached in two (not mutually exclusive) ways. First, regulation can be put in place that requires maintenance to be undertaken and second, measures can be implemented with the aim of improving the awareness of prospective owners and occupiers concerning the maintenance needs of a building (perhaps requiring clear statements about maintenance needs in occupancy certificates or purchase contracts).

At present, the BCA has a performance requirement that certain safety systems and water systems of commercial buildings be adequately maintained.¹² It is not clear how broadly these provisions are interpreted. They could conceivably cover most safety aspects covered by the Code, or they could be interpreted narrowly to refer only to limited life safety measures such as alarms or sprinklers. In any case, the BCA does not impose maintenance requirements for other aspects of building performance¹³ or for class 1 and 10 buildings (housing).

A number of participants have argued that the BCA’s maintenance provisions should be strengthened:

From a BPIC perspective there is a definite need to ensure building maintenance is included in the BCA. The maintenance of products and systems on a regular and

¹² For commercial buildings, the BCA requires that “Safety measures must be capable of performing to a standard no less than that which they were originally required to achieve” and that “Mechanical ventilation and hot water, warm water and cooling water systems must be adequately maintained to safeguard people from illness or injury”.

¹³ Although other government regulations may have requirements in this regard — sub. 4, p. 52.

realistic basis will ensure their long-term performance while maintaining the credibility of the product. (BPIC, sub. 23, p. 64)

Whether a building is developed through a performance based solution or one that wholly meets with the prescriptive requirements, a national set of guidelines regarding maintenance is required. ... There are presently national Australian Standards for the installation of fire safety features (passive and active) and yet there is no national approach to maintaining these fire safety elements. (Arup Fire, sub. 15, p. 4)

A large proportion of performance-based solutions involved reducing the fire resistance of building elements, in exchange for additional active fire detection or suppression systems. It is therefore critical that the installed active systems may be relied upon to perform correctly in case of a fire, and proper and regular maintenance is an essential part of the solution. ICA believes it is essential that maintenance requirements be incorporated into the BCA. (ICA, sub.38, p. 12)

MBA argued that maintenance of non-essential services should be at the discretion of building owners, but maintenance of essential services should be a requirement of the BCA:

There has been a proposal that maintenance issues be included or covered by the BCA. As a general principle, we strongly oppose the coverage of maintenance in the BCA. This matter we believe is the responsibility of owners in the normal commercial management of buildings. We support, however, the setting of maintenance requirements for essential services such as fire services, health and safety, but we would oppose the inclusion of general maintenance. (sub. 24, p.10)

The ABCB Chairman submitted that maintenance requirements in the BCA have recently been strengthened and that work in this area is ongoing:

With the introduction of BCA 2004, more substantial maintenance provisions were inserted into the BCA for Class 2 to 9 buildings. Essentially these new provisions reinforce and clarify the intent of the pre-existing maintenance provisions. Further work is necessary to resolve concerns industry has about the lack of consistency on how maintenance is administered under the current state-based approach. (sub. 4, p. 52)

While the BCA may be able to specify further maintenance requirements, an additional concern relates to their administration and enforcement (that is, how do the authorities ensure that maintenance provisions are observed). This is discussed in chapter 7.

Another avenue for helping to ensure that essential maintenance requirements are fulfilled is to ensure that prospective owners and occupiers are fully informed of their maintenance responsibilities. A number of participants have suggested that this should be done before or at the time of building, purchasing or occupying a building:

[Maintenance costs] should be detailed fully, and clearly stated to the owner before a building is commenced, and when a building is sold. (NFIA, sub. 3, p. 4)

The problem is one of market forces where building owners/purchasers should be informed of the implications when purchasing a building with a high maintenance infrastructure. (Building Products Innovation Council, sub. 23, p. 64)

... documents describing performance-based solutions must be noted on the Certificate of Occupancy, and maintained in a central repository, to facilitate maintenance of performance-based solutions. (Fire Protection Association of Australia (Tasmanian Branch), sub. 35, p.3)

In addition, the Insurance Council of Australia noted that insurers should be made aware of the design criteria used in constructing the building:

In attempting to determine an appropriate premium rate, it is essential for insurers to have an understanding of the design criteria for the building construction. Risk engineers who perform these inspections are familiar with the DTS provisions of the BCA, and any noted departures from these provisions may result in a higher premium than may be justified if it was known that an appropriate performance-based solution had been used. (sub. 38, p. 11)

Ensuring that potential occupants and owners (and insurers) are made aware of the life-cycle costs of a building will allow them to make more informed decisions and perhaps trade off these costs with the upfront savings in building or leasing costs. In turn, this will allow developers and industry practitioners to make more informed decisions when designing and constructing and should help in arriving at a more efficient solution.

DRAFT RECOMMENDATION 5.4

The BCA and related regulations should require that buildings continue to meet the health and safety requirements of the BCA throughout their life, irrespective of whether they were constructed using alternative solutions or deemed-to-satisfy provisions.

DRAFT RECOMMENDATION 5.5

Where a building solution imposes maintenance requirements throughout the life of a building, these should be required by regulation to be documented and prospective owners and occupiers should be informed of these requirements.

Community expectations of health, safety and amenity

As noted in section 5.2, judging community expectations is difficult for a number of reasons. One particular difficulty is that community expectations vary between communities and across time. The ABCB Chairman has acknowledged community expectations vary and, in particular, that they may change in response to particular events:

It is inevitable that, in a country with 20 million people, significant geographical and climatic variation and cultural diversity, there will be different and even conflicting expectations about aspects covered in the BCA. For example, a community that has recently experienced significant building damage caused by storm and flooding may have a higher expectation of the protection against storm and flooding afforded by the BCA than a community that has not experienced an event for some time, if at all. (sub. 4, p. 11)

Similarly, Ronald Swane noted that:

One of the difficulties is to keep pace with changing community expectations. Compare the first home that our parents acquired to that which our grand daughter considers acceptable. These changing expectations may not be economically rational, but they are a reflection of rising affluence and should be considered in a regulatory sense through building regulation. (sub. 12, p. 3)

While the level of community expectations is likely to vary, the BPIC noted that through the ABCB's consultation process (see chapter 8), it can gain a relatively well formed view of community expectations:

Community standards continue to evolve as part of the ABCB regulation development process, which includes significant periods of public review. In most instances the BCA amendment process is initiated by a Regulatory Document fully explaining the reasons for the proposed change and seeking public review for periods in the vicinity of 2 months. This provides an insight into community acceptance of the proposal including cost/quality trade-offs.

BPIC believe that the ABCB have been able to develop national regulations on a case by case basis with a reasonable understanding of community expectations and cost/quality trade-offs. (sub. 23, p. 15)

In addition, some recent amendments to the BCA (and sections of the ABCB's future work program) may be seen as broadly addressing changing community expectations. For instance, recent energy-efficiency regulations are largely in response to growing community concerns over sustainability and the environment. It is also the case that if the ABCB does not adapt the BCA to changing community expectations, it will be more difficult to keep consistency between jurisdictions, as community pressures may result in particular jurisdictions amending and varying the Code.

Nevertheless, a number of organisations have questioned whether the present technical requirements of the BCA (in particular, those relating to fire protection) are in line with community expectations:

While the mission of the ABCB is "to provide for efficiency and cost effectiveness in meeting community expectations for health, safety and amenity..." AFAC members believe that the current regulatory approach falls far short. While the evidence to support the following position is largely anecdotal at this stage, the strong relationships

that AFAC members have with their local communities leave them in no doubt that community expectations go beyond the parameters currently articulated by the ABCB. Indeed, AFAC believes that the community expects that their properties will remain protected, that the negative impact on the environment from fire will be contained and that community and business disruption, whether a building is used as a hospital, school or a factory, will be kept to a minimum. Further, in the case of residential homes and where buildings house multiple occupants (eg. townhouses, flats, and apartment buildings), the community expects that the potential for fire spread from one occupancy to another will be prevented by the building's features. (Australian Fire Authorities Council, sub. 28, p. 8)

The Alliance questions whether or not the overall community expectations are in fact accurately portrayed by the existing PBCA2004 performance requirements where the minimum acceptable requirements do in fact allow a building to burn down and a business, hospital or school to perhaps be forced to close its doors and/or shut down after a fire. Is it really acceptable for a building to burn to the ground as long as all the occupants safely escape? (Alliance for Fire and Smoke Containment, sub. 31, p. 2)

The BCA reflects the objective of delivering a minimum acceptable level of safety rather than a **community expected** level of safety. (National Fire Industry Association, sub. 3, p. 2)

In addition, the Campbell Report argued that the BCA did not meet community expectations with regard to quality and durability of housing:

Most consumers believe that codes and standards need to be expanded to include levels of quality of all work and not just minimum requirements in buildings. As noted by one consumer in describing their home renovations:

“Our experience has demonstrated that the Building Codes and standards are not comprehensive enough. There is a huge void between the codes and standards and recognised minimum levels of quality in a building.” (2002, p. 74)

And the Australian Elevator Association argued that:

Taking the Premises Standard as an example of the ABCB's most recent major effort to determine community expectations including cost-quality tradeoffs, we believe the ABCB have not adequately carried out that task. The proposed regulation appears to be based on too narrow consultation and input and even though the Regulatory Impact statement does not give a good economic outcome the ABCB still chose to publish the draft. (sub. 44, p.5)

Thus, it appears that there are differing views on the success of the BCA in meeting community expectations. These differences may partly reflect confusion about the objective of the BCA (to reflect minimum acceptable standards rather than best-practice standards) and about the appropriate coverage of the BCA (see chapter 6).

Plain language

As discussed in chapter 2, the ABCB has undertaken steps to make the BCA more user-friendly, including:

- the introduction of a companion guide to volume one that clarifies and provides illustrations and examples of the BCA requirements; and
- the inclusion of additional interpretive material and information, such as diagrams, examples and explanations, within volume two of the Code.¹⁴

In an additional effort to improve the accessibility of the Code, the South Australian Government has released a 'South Australian Housing Code', which is intended to be a plain language manual to aid in the construction of housing. The manual gives a set of building instructions that are deemed by the South Australian Building Act to 'satisfy the performance requirements of the BCA for commonly used materials and methods of construction'. The manual covers certain class 1 and class 10 buildings (common house constructions) and is written in a manner that is intended to be more accessible for industry practitioners working in this area.

There are mixed opinions about the degree of success that the ABCB has achieved in making the BCA more user friendly. The Laver Review found that 84 per cent of survey respondents found the BCA96 user friendly, and concluded that the:

BCA96 significantly improved the user friendliness and plain language of the previous edition of the BCA. In particular, BCA volume 2 covering houses and outbuildings was written in user friendly style and includes explanatory notes and diagrams. (2000, p. 17)

However, the Campbell Report (2002), found that:

The code is not written in a *plain English* format that can be easily understood by builders in the home building industry who may have varied education and language backgrounds. The overall view gathered by the Committee is that the Codes are too complicated and not written simply for end users.

Further, the Nigel Lilley of the Builders Registration Board of Western Australia has grave concerns about the usability of the BCA:

The BCA is not designed for builders to understand but rather comprises a legal document that is subject to substantial interpretation and guesswork. Whilst it is a good reference tool for engineers, architects and legal practitioners, it is not understood by builders.

¹⁴ In addition, the ABCB undertakes a number of other activities to help users to understand building regulation including training, education and promotion activities and the provision of supplementary material such as guidelines. These activities are discussed in chapter 9.

In particular, from the perspective of both builders and owners, the use and application of the deemed to satisfy provisions and the alternative solutions need to be clarified and simplified. (sub 40, p. 2)

The Queensland Government noted that:

... the BCA could be written in “plain English” to make it easier to use. (sub. 41, p. 9)

And the ACT government submitted that:

The main use of the BCA appears to be by building designers and architects in their professional work, building surveyors/certifiers in approving plans and building work, governments in regulatory compliance proceedings, and legal practitioners in related litigation. (sub. 48, p. 3)

Thus it appears that the language and style of the BCA is not easily accessible to all industry practitioners. In particular, some builders and sub-contractors may have difficulty understanding the BCA as it is currently presented. Nevertheless, new technology (such as the MiniCode Generator, discussed in chapter 8) may allow the ABCB to make the BCA more easily understood and tailor the language and examples to particular audiences.

DRAFT FINDING 5.4

The ABCB has implemented a number of strategies aimed at improving the clarity and accessibility of the BCA. However, it appears that the BCA may still be difficult for some users, in particular builders and tradespeople, to access and understand.

DRAFT RECOMMENDATION 5.6

The ABCB (or its replacement) should continue to examine ways for the BCA to be expressed more clearly and simply, to articulate building requirements better and to enable access by all levels of building practitioners.

Other objectives

The ABCB also pursues a number of other objectives through the BCA, that, in essence, imply that the BCA is expected to be:

- efficient;
- cost-effective; and
- representative of minimum, least-cost, and modern solutions.

As discussed in section 5.2, some of these requirements effectively overlap and in some cases they may be contradictory. In particular, efficient, cost-effective and

least-cost overlap and the concept of efficiency effectively covers all three objectives.

The ABCB's fulfilment of many of these objectives is largely reliant on the performance of other BCA based objectives. For example, efficiency is an overriding objective and the ABCB's performance against this objective is largely pursued as part of other board objectives being met.

Overall, the ABCB primarily uses three strategies to ensure that the technical solutions contained in the BCA are efficient and represent minimum and modern solutions:

- The use of a performance-based methodology — as discussed above, performance-based regulations allow designers and builders to use any building solution that meets the performance requirement. Thus, as new and possibly more modern or efficient solutions are created, they can be utilised immediately without the need for them to be written into prescriptive regulations. In this manner, the existence of a performance-based Code should allow and encourage modern and efficient building solutions.
- Regularly updating the deemed-to-satisfy solutions — as a significant portion of buildings are constructed using deemed-to-satisfy solutions, it is important that these are regularly updated so as to reflect minimum, modern and efficient building solutions.
- Research into new and innovative building solutions — by coordinating research into new building methods, the ABCB endeavours to reduce building costs, especially in areas regulated by the Code (see chapter 9).

It is difficult to assess the extent to which the BCA has succeeded in pursuing minimum, modern and efficient building solutions. As discussed earlier, it appears that the performance-based methodology adopted by the BCA has brought a number of benefits. In particular, box 5.1 outlined several building projects where the use of performance-based regulation and alternative solutions had led to significant cost savings and more modern and innovative designs. Nevertheless, it has been suggested that the deemed-to-satisfy solutions have not been updated frequently enough, and thus, they may not continue to embody up-to-date building practices (see chapter 8). All the same, the ABCB Chairman has recognised the importance of updating these sections of the BCA:

... a significant part of the ongoing work of the ABCB relates to the need to continually maintain and update the existing BCA and its application, including the need to:

... establish a national register of alternative solutions and use it as a mechanism for initiating changes to the Deemed-To-Satisfy solutions. ... (sub. 4, p. 15)

In general, submissions have made little comment as to whether the BCA itself actually represents modern, minimum or efficient building solutions. This may reflect confusion surrounding the objectives of the IGA. It may also reflect difficulties associated with estimating the level of building performance that should be embodied by the BCA. First, any building solution contained by the BCA must meet community expectations of the minimum acceptable level of performance. As discussed in section 5.2, judging community expectations is not straightforward and it is difficult to know what level of performance the BCA is expected to embody. Second, even if the community expected level of performance can be determined, without in-depth technical knowledge, it is difficult to know whether the BCA actually represents these levels of performance.

6 Code content and coverage

This chapter assesses the past performance of the Australian Building Codes Board (ABCB) with regard to objective 7 of the Inter Government Agreement (IGA) and assesses its appropriateness for the future. This objective essentially tasks the ABCB to work with other agencies in order to ensure consistency of approach and to encourage consolidation into the Building Code of Australia (BCA) of all mandatory requirements affecting buildings. More specifically, this chapter looks at:

- the extent to which the Board has made progress with consolidation;
- some specific issues related to the coverage of the BCA that participants have raised (such as access for the disabled, sustainability, energy efficiency and asset protection); and
- the impact of Local Government planning requirements on building regulations.

Broadly, the Commission accepts that the areas currently covered by the BCA are justified — many are core areas where industry relies on the Code to provide technical information and the community relies on it to set a minimum standard. From an economic perspective, addressing market failures, which might arise from knowledge gaps and externalities, provides a sound rationale for some aspects of building regulation establishing minimum standards.

The regulations for on-site services of plumbing and electrical installation have remained outside the BCA, despite efforts to incorporate them. In addition, there is a range of other mandatory requirements (made by all levels of government) impacting on the construction of a building that are not included within the BCA. A number of participants have suggested that some of these should be incorporated into the BCA. This issue is discussed, in broad terms, in section 6.1.

The Commission has largely been guided by concerns raised by interested parties to identify areas where there are problems over the broad content or coverage of the BCA. In terms of existing core areas, our attention has been drawn to disabled access and asset protection. Issues raised about existing content largely reflect concerns about the level of the standards. With regard to what have traditionally not been core areas of the Code, standards for energy efficiency have recently been added to the Code.

Reflecting changing community expectations, there have been calls by a number of participants for sustainability objectives to be covered by the Building Code. Some governments and the private sector are taking initiatives to pursue sustainability objectives. In addition, the ABCB has been examining sustainability issues. In view of the advantages in achieving national consistency in building regulations, there may be a role for the Board in pursuing a national framework to systematically progress this issue further. The question of sustainability is discussed more fully in section 6.7.

In regard to the future development of the BCA, the BCA 21 Committee of the ABCB is responsible for developing the next BCA, including expanding coverage, where this is deemed appropriate. The Committee comprises representatives from industry and government. It is conducting an analysis of the broad framework of goals, objectives and structure of the BCA, including technical content. The program includes both policy and technical development phases. Assessment and consideration of the research and development projects at the national and international level are also part of the review and feed into the next generation BCA development. The Committee intended to rework the Code with a ‘top down’ approach — starting with objectives, leading to performance standards and then deemed-to-satisfy requirements; and conduct further work on fire safety issues (National President, Australian Institute of Building Surveyors, pers., comm., 21 April 2004).

The BCA 21 program was divided into three phases:

- the first phase has been policy development that included the identification of the issues and scope, framework and conceptual structure for consideration for the next generation BCA, including consideration of coverage and consolidation issues;
- the second phase is the technical component that will focus on the drafting of the technical provisions within the identified scope, framework and structure (currently in transition from the first to the second phase); and
- the third phase will involve the implementation process, which includes transferring of information through education and training programs.

6.1 Non-BCA mandatory requirements impacting on building

A particular concern arises in relation to certain legislative requirements affecting building that are additional to those contained in the BCA. Some examples are provided in table 6.1. While this is not an exhaustive list, it is clear that there are

many. These regulations have the potential to be inconsistent with the BCA and/or to introduce additional inconsistencies across jurisdictions.

Table 6.1 Examples of non-BCA mandatory requirements affecting building

<i>Regulatory area</i>	<i>Regulatory area</i>
Disabled access	Aboriginal housing
Fire safety	Heritage buildings
Occupational health & safety	Requirements for specialised buildings such as:
Sanitary plumbing, water supply & sewerage	Premises for lead processing
Electrical installations	Abattoirs, knackeries
Septic tank installations	Crematoria, vaults, mortuary, churches
Gas installations	Spray booths
Storage of dangerous goods	Dairies
Food premises	Hairdressers premises
Child care facilities	Dental surgeries and chiropractors
Accommodation: residential (boarding houses, guest houses, hostels, motels)	Premises involving skin penetration
Accommodation: supported residential services	Prisons and gaols
Hospitals, nursing homes, health care buildings	Pharmacies

Sources: Various submissions, BCA.

The Queensland Government stated that incorporation into the BCA of numerous building related issues currently included in State and Territory laws may be beneficial. It listed the following areas and noted that it is currently consolidating many of these standards into the Queensland Development Code¹ (QDC):

- health standards (hospitals, food premises, acupuncture clinics etc);
- workplace health and safety standards;
- external noise (airport flightpaths, rail corridors etc);
- on-site-standards for building related aspects such as access ways and parking areas, retaining walls, site drainage etc. (sub. 41, part 2, p. 12)

The Tasmanian Building Regulation Advisory Committee (BRAC) cited the example of the standards being developed by the Australia New Zealand Food Authority for construction of food premises (known as Standard 3.2.3 Food Premises and Equipment). Reform in this area has resulted in building construction standard issues being determined outside the BCA. The Committee also referred to

¹ The Queensland Development Code provides a framework within which Queensland-specific building standards that are outside of and in addition to the BCA, are consolidated into a single document.

the national standards for child care facilities, where standards over and above the BCA are implemented as a result of licensing or funding requirements of Federal, State and Territory Governments (sub. 29, p. 1). Particular requirements may also apply to a range of workplaces such as abattoirs and knackeries, prisons and gaols, lead processing facilities and spray booths.

The Tasmanian Government has dealt with this issue by requiring that any provision, affecting building, required by another area of government, has to be in the Tasmanian appendix to the BCA. The Tasmanian building legislation includes a provision that it prevails over any other Act, regulation, rule, by-law, guidelines, planning instrument, standard, condition, determination or directive made under any other Act relating to the design of any building, building or plumbing work. The BRAC suggested that adoption of a similar policy by the Australian Government would be appropriate (sub. 29, p. 1). Victoria and the ACT also have within their appendices to the BCA, a list containing some, but not all, of the relevant legislation that contains a building requirement. The Queensland Government has included specific provisions for that State in the QDC and intends to incorporate other pieces of legislation that contain building related provisions within that Code (rather than the BCA), and where there might be a conflict with the BCA, the QDC prevails.² This would appear to undermine the intention that the BCA serve as a nationally consistent document regulating building standards across the country.

In contrast, Western Australia has no appendices in the BCA listing any jurisdictional variations to the technical requirements, even though there are a number of regulations that alter the BCA requirements (for example, public health regulations).

The Laver Review commented:

The ABCB is also currently investigating the consolidation of energy efficiency, aged care, food premises and maintenance requirements in the BCA. There are potentially many other areas which could be consolidated. These additional areas are often covered by conflicting pieces of State and Territory legislation outside of the building legislation. Nevertheless, if the requirements relate to building standards, they potentially should be consolidated into the BCA. (2000, p. 18)

Indeed, the Building Products Innovation Council (BPIC) supported the ongoing effort to consolidate all building related matters within the one Code (sub. 23, p. 67).

Given the wide range of requirements contained in non-building legislation that impact on buildings, it appears the incorporation of all these requirements into the

² See <http://www.dlgp.qld.gov.au/Default.aspx?ID=247>.

BCA is not achievable in the near future. Where this is not possible, the Board should work to remove conflicts in objectives and ensure other mandatory requirements are easily accessible to the industry. One approach, at least in the short term, may be to require that all these extra requirements be included in an appendix to the Code, as is already done by Tasmania. Including additions to the BCA is an effective mechanism for assisting practitioners in each jurisdiction by providing one point of access for building regulations. Second, it should help ensure that these extra building regulations do not conflict with the requirements of the BCA, or at least make them transparent. Further, it may help identify areas where these regulations are inconsistent across States and Territories, and allow jurisdictions to work towards reducing these inconsistencies. The Commission endorses such an approach.

DRAFT FINDING 6.1

There are various mandatory requirements impacting on building that have not been incorporated into the BCA.

DRAFT RECOMMENDATION 6.1

The ABCB (or its replacement) should continue to work on incorporating into the BCA, as far as practicable, all mandatory requirements affecting building (ie current objective 7).

However, as discussed below, it is not appropriate for all mandatory requirements to be incorporated into the BCA, at this stage.

6.2 Coverage expansion

Progress to date

A number of areas of building performance had been identified as possible targets for inclusion in the BCA. The ABCB has devoted considerable resources to, and made progress in relation to two of these areas, namely, energy efficiency and disabled access. Minimum energy-efficiency provisions for houses have been added to the Code and the Board is continuing work in this area to increase the standard and extend the measures to encompass all other classes of buildings. For disabled access, the Board has issued a Regulation Impact Statement (RIS) and is considering the substantial public comment on the proposals. Given the objectives of the Disability Discrimination Act (DDA), work is proceeding on giving more precise guidance in the BCA on what constitutes compliance with the DDA.

However, it appears that there has been little or no progress made in incorporating some other proposed areas into the Code. Possible areas for inclusion that have been identified in previous reviews or by participants include some occupational health and safety matters, on-site services such as plumbing and electricity and maintenance of essential services (Master Builders Australia (MBA), sub. 24, p. 11).

The Board is undertaking work with Engineers Australia to explore how improved security arrangements could be incorporated into the built environment through building regulation and the BCA (ABCB 2003d). In addition, it is working with Emergency Management Australia in developing disaster mitigation strategies by ensuring acceptable levels of building construction and performance to protect Australian communities against natural hazards. These hazards include high winds, storm and storm surge, cyclone, flood, landslip, bushfire and earthquake. The ABCB is working on amendments to the Code for flood protection of buildings (sub. 43, pp. 1–2).

In regard to plumbing, the National Plumbing Regulators Forum has developed a Plumbing Code of Australia (PCA) that is separate to the BCA. There were earlier calls for its incorporation into the BCA and while, ideally, it may have been desirable to do so, in practical terms, it may be preferable that the two Codes continue to exist separately — provided that they are consistent with one another and there is no unnecessary overlap. The current situation in relation to plumbing and the arguments for and against incorporation into the BCA are discussed more fully in section 6.4. (Other on-site services are also briefly covered in section 6.5.)

The issues discussed in the remainder of this chapter are as follows:

- disabled access
- plumbing and gas installation
- electrical installation and telecommunications
- occupational health and safety
- sustainability
- energy efficiency
- asset protection
- Local Government requirements on building.

6.3 Disabled access

The BCA contains specific provisions for the use of buildings by people with a disability, including requirements for access to and within buildings and provision of appropriate sanitary facilities (appendix table D.1).

The accessibility of buildings for disabled persons is also affected by the application of the obligations of the DDA. The DDA, which commenced operation in March 1993, makes it unlawful to discriminate against a person on the ground of disability in a range of areas, including employment, accommodation, education, public transport and access to premises. However, the Act does not require that equitable access for people with a disability be provided where it would cause ‘unjustifiable hardship’ for an owner or operator of premises.

The DDA contains the objectives, but not the technical details, of how to provide access for people with a disability. In addition, the BCA does not yet contain provisions that would mean compliance with the DDA. The DDA is complaints-based legislation and such complaints to the Human Rights and Equal Opportunity Commission (HREOC) and to several equivalent State and Territory bodies have highlighted this difficulty.

In April 2000, an amendment was made to the DDA to allow the Australian Government Attorney-General to formulate Disability Standards for Access to Premises (called the Premises Standard). The intention is that the specific accessibility requirements of the Premises Standard would replace the general ‘non-discrimination’ provision of the DDA for access to premises. Thus, owners and developers of buildings used by the public would be able to meet the objectives of the DDA (as they apply to buildings) by meeting the requirements of the Premises Standard. Compliance with the Premises Standard is intended to create greater certainty for the community, building developers, owners or operators of their obligations under the DDA. An ‘unjustifiable hardship’ provision within the Premises Standard will apply to existing buildings only. While people with disabilities can still lodge complaints, these will be dismissed where owner/managers comply with the deemed-to-satisfy provisions of the Premises Standard.

The ABCB’s Building Access Policy Committee has identified changes to the BCA (BCA96) which, if adopted, would allow the BCA to be referenced as part of a Premises Standard. Following extensive public consultation, a draft RIS on ‘Proposals to formulate Disability Standards for Access to Premises and to amend the access provisions of the BCA’ was released for public comment in February 2004.

The draft RIS provides an analysis of the social and economic impacts of the proposals. It considered a range of options. A market based approach was discounted as the existence of the DDA meant that the broad legislative direction has already been set (ABCB 2004b, p. 5). Possible options beyond the development of a Premises Standard were not considered in recognition of the request made by the Australian Government to revise the BCA so that it could form the basis of the Premises Standard. The draft RIS concluded that the development of a Premises Standard and a revised and aligned BCA is the only option that will provide consistency and certainty for people with a disability, building owners and developers through the codification of the DDA.

Considerable feedback has been received on the draft RIS. Following an assessment of comments and any necessary revisions, a final proposal will be developed. This proposal will be forwarded by the ABCB to the State and Territory Governments, as well as to the Minister for Industry, Tourism and Resources and to the Australian Government Attorney-General. Final proposals for change are proposed to be submitted to Ministers in late 2004. The Commission understands it is unlikely that any Premises Standard will be introduced before May 2006.

A Protocol for Administering Building Access has also been developed with the aim of ensuring a consistent approach to the implementation of the access requirements for specific buildings. Under the Administrative Protocol, each State and Territory building control administration would set up or designate a methodology for determining whether a proposed Alternative Solution meets the Performance Requirements of the revised BCA and whether a provision in the revised BCA applied to a certain design would result in unjustifiable hardship for a particular development in an existing building. The Protocol requires that each State and Territory establish access panels to make decisions on access-related issues that are referred by a building control authority (the authorities responsible for building approvals in each jurisdiction). The Protocol will also define triggers that describe what level of new building work would prompt upgrading beyond the new work in part, or all, of an existing building.

The Protocol will not form part of the Premises Standard, but it will be open to State and Territory administrations to use the Protocol or develop their own mechanisms for determining access-related issues. People will continue to have the right to lodge a complaint with HREOC and the courts if they believe that access to premises has been or will be compromised by the decision of an access panel. A draft Protocol is currently being finalised and will be available for public comment later this year.

The Productivity Commission (PC) report on the Review of the *Disability Discrimination Act 1992* (PC 2004c) noted that the proposals for formal links between the BCA and disability standards on access to premises would help to

address the difficulties posed by the lack of specific technical details contained in the BCA. The Commission found that the DDA appeared to have had some impact on making new buildings more accessible although it has been less effective in improving the accessibility of existing buildings, and the proposed Disability Standards will only address this issue for refurbished buildings (PC 2004c).

Further, the Commission considered that it was not appropriate to restrict ‘unjustifiable hardship’ to existing buildings only. The draft RIS for the Premises Standard shows that many adjustments can generally be made to new buildings at little cost. However, some have the potential to increase the costs of some types of new buildings (for example, two and three storey offices and restaurants) by approximately 60 per cent. The report found that these standards have the potential to restrict competition and distort resource allocation (see chapter 6 of the DDA report). Defences such as unjustifiable hardship are important to ensure that the DDA provides the necessary checks and balances. These defences encourage changes where the benefits to the community outweigh the costs and discourage changes where costs outweigh the benefits. Removing these defences could result in regulations that impose significant costs on organisations covered by the DDA. Accordingly, the Commission recommended that the DDA be amended to allow for unjustifiable hardship in all areas of the Act that make discrimination on the grounds of disability unlawful.

Issues raised by participants

Blind Citizens Australia, representing people who are blind or visually impaired, commented on some specific aspects of the BCA and Premises Standards. It recommended that the BCA be amended such that premises are only assessed as being compliant if tactile ground surface indicators are installed according to the deemed-to-satisfy provisions. This would ensure consistency and predictability in the design of buildings, and aid the visually impaired in knowing what to expect.

In addition, it indicated that the draft Premises Standard contains few deemed-to-satisfy provisions that specifically address the access needs of people who are blind or visually impaired. It stated:

The draft Premises Standard also does not include instructions for how to provide:

- braille, raised tactile or audible maps;
- braille, raised tactile or audible signs for finding services or facilities in a premises;
or
- safe and detectable paths to a building from a street. (sub. 20, p. 8)

It also identified three concerns related to the proposed Administrative Protocol. These are the role of third parties, the selection of access experts and the voluntary nature of the protocol. In regard to the first, it recommended that people with disabilities should be able both to refer a matter to an Access Panel and make submissions to an Access Panel. With respect to representation, it considered that all members of an Access Panel should have extensive and compulsory training in disability access issues. For the latter, it recommended that an alternative solution or decision that unjustifiable hardship exists must be referred to an Access Panel during the first two years of operation of the Protocol and Access to Premises Standard (sub. 20, pp. 10–11).

The DDA does not cover discrimination occurring within residential dwellings as the decision has been taken to exempt class 1a buildings from the coverage of the Access to Premises Standard. The Disability Council of NSW recommended that the Australian Government mandate building code requirements for both commercial and residential premises to meet the objectives of its Disability Strategic Plan. It also recommended that the ABCB adopt adaptable housing design (AS 4299 Adaptable Housing) as a minimum building requirement due to its long-term cost reductions and its positive impact on the health, safety and amenity of all citizens (sub. 26, pp. 3–4, 7). Such an approach is supported by the Australian Network for Universal Housing Design. This organisation is calling for access provisions in the BCA for all new and extensively modified housing to be based on universal design principles (another term for adaptable housing). Essentially, this universal design recognises that people’s needs and abilities change throughout life and provides housing which is initially more accessible for everyone and which can be adapted at a future date to suit individual needs (sub. 2, p. 1). The supporters of this universal design state it is both more desirable and cheaper to build houses able to cater for all stages of one’s lifestyle than to have to make major alterations later.

In relation to the requirements for disability egress, the Fire Protection Association Australia noted that when considering emergency evacuation of occupants with disabilities, ‘building codes and standards need to be reviewed to provide a solution of safe evacuation of all occupants’ (sub. 19, p. 13). Such strategies could include:

- a safe refuge where occupants can remain without being subjected to heat and smoke from the fire until rescued by the Fire Brigade; and
- the provision of facilities for occupants to evacuate without using the stairs (through the use of lifts by overcoming the problems of smoke and water ingress).

Similarly, Blind Citizens Australia recommended that emergency egress provisions for the disabled be addressed as a matter of urgency (sub. 20, p. 11). There are currently no technical (deemed-to-satisfy) provisions for emergency egress for

people with disabilities in the BCA. Research is being undertaken in this area for future inclusion in the Premises Standard/revised BCA.

The Tasmanian BRAC (sub. 29, p. 7) considered that aligning the BCA with the Premises Standard is a compromise as the ideal solution would have been for one set of requirements in the BCA that are not duplicated in the Premises Standard. The requirements of the BCA could then be referred to from the Premises Standard, if required.

Similarly, the Queensland Government felt that consideration could be given to a framework where access requirements are dealt with in the BCA and where the DDA includes a reference to the BCA as the acceptable standard. It also said that:

The Protocol is currently being considered as part of the proposed access proposals, but if it remains an advisory panel with no enforcement powers, it may not be of much benefit to industry. (sub. 41, p. 10)

The Australian Elevator Association (AEA) was critical of the ABCB and its processes in regard to disabled access and referred to the ‘poor quality of the draft Premises Standard and its RIS’ (sub. 44, p. 11). It considered that the Board had not properly implemented some of the Council of Australian Governments’ (COAG) guidelines.

DRAFT RECOMMENDATION 6.2

The ABCB (or its replacement) should continue its work on amending the BCA whereby the disabled access provisions would be linked to the Disability Discrimination Act 1992 so that compliance with the BCA would also ensure compliance with obligations under the Act.

6.4 Plumbing and gas installation

Generally, on-site plumbing can include water plumbing, sewerage plumbing, stormwater plumbing, on-site gas fitting (in some States) and mechanical plumbing (dealing with heating, cooling and ventilation, but only in some States). Of these, only the technical requirements for stormwater plumbing are currently included in the BCA.

States and Territory Governments have the responsibility for regulation of on-site plumbing services, in some cases delegating authority to local water authorities or councils. All jurisdictions’ plumbing regulations cover performance requirements and acceptable solutions for plumbing works by reference to a range of Australian Standards, relevant water authority by-laws and jurisdictional plumbing codes. The

AS/NZS 3500 Plumbing Codes series is referenced across Australia for technical requirements for installations and establishes acceptable standards for plumbing related materials, products, designs and installations.

The Fisher Stewart Report on the Australian On-site Plumbing Regulatory Framework (2000) highlighted marked disparities in regulatory regimes for plumbing between various States and Territories. The Report did not include any analysis or make any recommendations, but it was apparent from the information collected that opportunities existed for rationalisation of the regulation of plumbing that could provide benefits to industry and the community.

The 2000 Laver Review supported the establishment of the National Plumbing Regulators Forum that would have the objective of developing a PCA. This Plumbing Code was to be consistent in scope and structure with the BCA. The inclusion of plumbing in the BCA was discussed in the Laver Review. Some submissions to the review had recommended all on-site activities should be included in the BCA, to make the BCA comprehensive and to avoid overlaps with other regulations. A user survey found 41 per cent believed inclusion of plumbing was ‘very important’ and a further 36 per cent classified it as ‘important’ (Laver report 2000, p. 29).

However, further work concluded that cost efficiencies from including plumbing in the BCA would be small and that ‘significant sections of the plumbing industry were strongly opposed to the incorporation of plumbing in the BCA’ (Laver report 2000, p. 29). Users of the BCA also rated the inclusion of plumbing as a lower priority than other areas such as energy efficiency and disabled access. Based on this, the ABCB chose not to pursue the integration of plumbing in the short term. The Laver Review suggested that further consideration of the incorporation of plumbing in the BCA could be undertaken once the national plumbing code was developed and widely accepted (Laver report 2000, p. 30).

A National Plumbing Regulators Forum, convened by the Plumbing Commissioner in Victoria, with representatives from all States and Territories, was established in 2002 to draft the PCA. An agreed PCA was finalised early in 2004. The establishment of the PCA aims to provide for a consistent, efficient and effective regulatory environment for plumbing activities to achieve appropriate levels of public health, safety, resource conservation and amenity across Australia. Particular goals of the code include fostering water and energy conservation, encouraging best practice, and ensuring compatibility with the BCA. Each State and Territory may adopt the PCA subject to the variation or deletion of some of its provisions, or the addition of extra provisions. These variations are provided in appendix 3 to the PCA.

The draft PCA consists of two parts presented in a single volume. Part A of the PCA is a set of performance-based technical provisions for the construction, installation, replacement, repair, alteration and maintenance of plumbing and drainage installations throughout Australia. It allows for variations in climatic and geographic conditions. Part B defines the processes for certification of plumbing products that require statutory authorisation. While the PCA has been written on a performance basis, prescriptive solutions obtained from published Australian Standards and joint Australian Standards/New Zealand Standards are also referenced, where applicable, as deemed-to-satisfy solutions.

Arguments for and against incorporation into the BCA

There are advantages in incorporating plumbing requirements into the BCA. On-site plumbing is an integral part of the building and construction process and most plumbing is carried out in a building context. A major benefit would be that a consolidated BCA would provide a ready source of information to all participants in the construction industry about the technical requirements for both building and on-site plumbing. This would promote greater consistency of regulatory approach within these two activities of the broader construction industry. However, incorporation would mean that plumbers would need to access and sort through the whole combined Code.

The MBA expressed support for incorporation of the plumbing regulations into the BCA as ‘such adoption will make access to codes and regulations simple and easier and provide greater certainty to industry’ (sub. 24, p. 4). BPIC also supported incorporation of plumbing requirements into the BCA (sub. 23, p. 60). Such an approach could well pave the way for incorporation of other on-site building related activities (such as on-site electrical work; discussed in the next section) into the BCA.

The NT Minister for Lands and Planning considered that the proposed PCA should continue to receive support from the ABCB but that a separate administration for the PCA could not be justified (sub. 30, p. 2). The ACT Government stated:

... avoidance of duplication and overlaps between various regulatory approaches is vital. The potential dangers of such overlap are already evident, for example, in the development of the Plumbing Code of Australia.

... prima facie, the existence of separate, jurisdictionally-based approaches to these matters [plumbing, gasfitting and electricity technical standards] as they relate to building and construction appears to raise the issue of real or perceived duplication and overlap. (sub. 48, p. 2)

The Queensland Government commented that the benefit of consolidating plumbing (and electrical codes) into the BCA is unclear as different trades use these (sub. 41, part 2, p. 12). Further, it said:

While there is no particular advantage in combining the PCA and plumbing codes into one document, the industry and codes would benefit from a more integrated approach to administering these documents. A draft Plumbing Code has now been finalized and states and territories are currently establishing legal structures to administer it. Therefore, it may be appropriate that the Laver proposal be revisited. (part 1, p. 2)

However, there are costs in attempting to incorporate plumbing requirements into the BCA. Provided that national consistency in plumbing requirements is achieved across jurisdictions through the National Plumbing Code and these are not in conflict with the BCA, are these additional costs warranted? As some jurisdictions have different Ministers and departments responsible for building and plumbing regulation, the appropriate Ministerial and departmental arrangements would need to be resolved. In addition, the form of representation from the plumbing industry and the appropriate structures within the ABCB would also need resolution. There would be problems in defining what plumbing covers as there are differences in the scope of plumbing across jurisdictions. In the past, there has been considerable resistance from the plumbing industry against attempts to consolidate plumbing requirements into the BCA (Laver report 2000, p. 29). Given this lack of support from the plumbing industry, the Commission questions whether any such attempts would be successful.

One option would be to retain a separate Plumbing Code, reference it in the BCA, and seek to remove inconsistencies between the BCA and the PCA. The Tasmanian BRAC regards that ‘harmonisation is the key’ (sub. 29, p. 9). The South Australian Government stated:

The national Plumbing Code of Australia will provide for plumbing what the BCA has provided for the building fabric. It is closely aligned with the BCA and should eventually be seen as a companion document regulating plumbing on a nationally consistent basis. (sub. 36, p. 4)

In view of pressure being placed on the Board to include sustainability as a goal and measures to regulate for energy and water use efficiency, the Chairman of the ABCB commented that:

The overlap between building and plumbing in these sustainability areas is considerable, even further underpinning the necessity for greater alignment of the regulatory Codes. (sub. 42, p. 4)

The Chairman of the ABCB has proposed the establishment of a regulatory regime for plumbing that mimics the ABCB — an IGA for plumbing and the establishment of a Plumbing Code Board (sub. 42, p. 4).

The Commission recognises that incorporating plumbing requirements into the BCA would necessarily involve a diversion of resources from the Board's current work program and an ongoing commitment to any new structures that are set up.

In relation to fire safety, the Fire Protection Association Australia commented that if the ABCB were to incorporate standards such as the National Plumbing Codes into the BCA, all references to fire equipment should be deleted and a National Fire Protection Code should be developed (sub. 19, p. 16). It said that:

Such deletion would avoid confusion between BCA requirements and extant Australian Standards dealing with fire hydrants and the like. (p. 8)

In respect to gas installation, on-site gas fitting in some States is contained within the PCA.

DRAFT FINDING 6.2

Incorporating the Plumbing Code of Australia (PCA) into the BCA would not seem to be warranted at this stage.

DRAFT RECOMMENDATION 6.3

The ABCB (or its replacement) should continue to work with the eight plumbing associations to identify and resolve differences between the BCA and the PCA and on-site gas requirements.

6.5 Electrical installation and telecommunications

The States and Territories regulate on-site electrical wiring in buildings. In the past, these services were regulated by the service supplier, namely the electricity supply authorities.

The review of the ABCB in 2000 recommended that the Commonwealth Minister should write to the Chair of the Electrical Regulatory Authorities Council with a request that the Council addresses the question of adopting a national code for electrical connection and metering in buildings (Laver Review, p. 2).

The Chairman of the ABCB commented that progress in aligning electrical regulation with the BCA has been limited and considerable obstacles need to be overcome. He said:

The necessity for change is probably less pressing in this area but it would be facilitated if it is possible to successfully implement the types of changes proposed for plumbing, to act as an example of what constructive discussion can achieve. (sub. 42, p. 2)

The National Electrical and Communications Association (NECA), representing 90 per cent of the electrical communications installation market, expressed the view ‘that building regulation should not be extended to embrace the electrical and communications sectors beyond its present coverage’ (sub. 9, p. 1). The reasons advanced for this are that the regulations covering the electrical and communication sector are much wider than just the building industry; the objectives of the regulation would be undermined if responsibility were to be transferred to the ABCB; and this sector is already achieving uniform regulation across Australia and harmonisation with international standards. NECA, however, did express concern about an attitude of ambivalence that has crept into the Regulators’ commitment to national uniformity and harmonisation. It believes there is scope for rationalisation of the management structure for electrical regulation (sub. 9, pp. 1–2).

The MBA expressed support for inclusion of the electrical regulations into the BCA (sub. 24, p. 4). BPIC expressed the same view (sub. 23, p. 60).

To date, no submissions have suggested that requirements for telecommunications services should be incorporated within the BCA.

In regard to telecommunications, a national guideline on access for digital communications will provide advice to industry on physical access and spatial requirements for the efficient distribution of telecommunications to and within multi-tenanted buildings. It is expected that the draft will be developed during the latter half of 2004 with publication in mid 2005 (sub. 50, p. 11).

Similar arguments to those for incorporating plumbing into the BCA generally apply for electrical installation and other on-site services.

DRAFT RECOMMENDATION 6.4

The ABCB (or its replacement) should continue its work to identify and resolve differences between the BCA and on-site electrical installation and telecommunications requirements.

6.6 Occupational health and safety

The Office of the National Occupational Health and Safety Commission (NOHSC) commented that, while current occupational health and safety (OH&S) regulations require consideration of a range of issues, some of these are covered by the BCA. It referred to instances where some conflicts exist between OH&S legislation and the Building Code requirements in one or more jurisdictions. For example:

-
- provision for permanent anchorage points on buildings and structures for working at height is not required under the BCA (although the Queensland Appendix to the BCA ... requires anchorage points according to the specifications of [an] Australian Standard) ...
 - the height requirement for barriers for fall protection on, and in, buildings (such as balustrades, parapets and guard rails) — for example, the *ACT Safe Demolition Work Code of Practice 2000* requires adherence to the [an] Australian Standard ... while the BCA specifies different height requirements depending on the location and use of the barrier. (Information paper, p. 2³)

As the Office of NOHSC indicated ‘it is desirable to address inconsistencies in the regulation so that the requirements complement each other’ (Information paper, p. 2). Further, the NOHSC Office felt that there was scope for the Building Code to cover some additional issues that are not currently contained in the BCA. It said:

... the BCA does not deal with the OHS of those constructing the building, nor does it deal with a wider range of OHS matters related to building design, which may affect those who occupy the building or those maintaining, cleaning or servicing the building. (Information paper, p. 2)

Accordingly, the Office of NOHSC indicated it is pursuing strategies to assist the ABCB to consider its draft National Standard for Construction Work from the perspective of promoting consistency with, and integration into, the future Building Code. In some cases, a nationally consistent approach would need to be adopted before this could occur.

The AEA raised the question of the appropriate placement for regulation governing the safety of lift and escalator technology. It noted that there are differing requirements in several pieces of legislation, including State OH&S Plant Regulations, State Building Regulations, the BCA, State electrical regulations and fire services regulations. It considered that ‘the multitude of regulations can cause difficulty and inefficiency but worse, it can lead to safety oversight’ (sub. 44, p. 29).

While the AEA recognised that the prior practice of handling requirements for safety through the State OH&S regulations was appropriate, it has suggested that consideration be given to both referencing ‘Lift Directives’ and introducing OH&S regulation principles within the BCA. It said:

... it now seems incongruous that the safety of equipment used in places like factories and open spaces etc, is governed by the same rules that govern the safety of equipment used in finished commercial and residential buildings. We can even report absurd situations stemming from that; for example in Western Australia a lift installed in a commercial building is governed by the State OHS regulations, but the same kind of lift installed next door in a residential building is not. (sub. 44, p. 29)

³ See <http://www.pc.gov.au/study/building/external/nohsc/index.html>.

The ABCB (or its replacement) should continue its work on removing inconsistencies between occupational health and safety (OH&S) legislation and the BCA and incorporating relevant OH&S requirements that impact on building into the BCA.

6.7 Sustainability

The IGA directs the ABCB to take account of the objectives of health, safety and amenity, but not sustainability. Nevertheless, the BCA contains provisions for energy efficiency (discussed in section 6.8) that are oriented towards environmentally sustainable development. Also, as a performance-based Code, innovative sustainable solutions may be acceptable as alternative solutions.

The ABCB has recently made decisions regarding the role it should play on sustainability and the built environment. Its view is that sustainability should be included as a goal of the BCA, alongside existing BCA goals of health, safety and amenity. It sees a need for a nationally coordinated approach to these policy issues and, where regulation is involved, that the ABCB and BCA should play a role. If elements of sustainability are to be addressed by regulatory action, it acknowledged that they would need to be subject to COAG's regulatory review processes. The ABCB has identified energy, water, materials and indoor environmental quality as possible areas for consideration (ABCB 2004c).

What is sustainability?

Sustainable development is a generic term with various meanings. Perhaps the most frequently quoted definition is from the report of the World Commission on Environment and Development (1987):

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. (p. 54)

All Australian Governments endorsed the National Strategy for Ecologically Sustainable Development in 1992. The Strategy states that ecologically sustainable development:

... aims to meet the needs of Australians today, while conserving our ecosystems for the benefit of future generations. (CoA 1992, p. 6)

The Cooperative Research Centre for Construction Innovation conducted workshops in Australia and, in consultation with the ABCB, developed the following definition:

Sustainability in building construction means “a way of building that reduces the negative health and environmental impacts caused by the design and construction process, by buildings or the built environment.” (sub. 4, p. 21)

The Queensland Government defines sustainability:

... of housing in a broader social, environmental and economic context. From this perspective, a sustainable house is seen as one that has been designed with people in mind i.e. is safe, secure and universally designed; is resource efficient in water, waste and energy; and is cost efficient. (sub. 41, part 2, p. 11)

The ABCB Chairman (sub. 4, p. 21) noted that:

Operational energy in buildings is seen as only the first chapter of addressing the sustainability agenda. Other aspects of building design, construction and use that could potentially be subject to sustainability consideration are:

- water efficiency;
- renewable energy;
- emissions;
- embodied energy; and
- reuse of materials.

The Housing Industry Association (HIA) noted the emerging issues relating to sustainable construction and listed factors related to the design and construction of buildings that impact on the sustainable performance of buildings including: energy efficiency; water conservation; stormwater management; waste minimisation, recycling/reuse and resource management; building materials selection; indoor air quality; noise attenuation; accessibility, durability and adaptability of buildings; household features; urban salinity prevention and building maintenance (sub. 6, p. 35).

The HIA considered that there appears to be a consensus that energy efficiency and water conservation are the two most important issues to be addressed. Although it also noted that in New South Wales, Local Governments are currently developing new regulations for adaptable housing as this is seen by some to be a significant local community issue (sub. 6, p. 35). The Tasmanian BRAC identified waste management, reuse of materials and water conservation for consideration (sub. 29, p. 8). In addition, it also considered that any public health outcomes must be carefully considered. For example, the installation of water tanks for sustainable

water use may increase the risk of mosquito borne disease, particularly in the tropics.

The Insurance Council of Australia (ICA) expressed the view:

As a large amount of material is used in building each year, the BCA could consider requirements to minimise the use of non-recyclable materials made from non-renewable resources. Where recyclable materials made from non-renewable resources are used, the BCA could define construction techniques that facilitate the removal of these materials for recycling. (sub. 38, p. 12)

Priorities for the OECD Sustainable Buildings Project (2003) were the reduction of carbon dioxide emissions (through energy efficiency measures), minimisation of construction and demolition waste and prevention of indoor air pollution. The focus of the UK Sustainable Buildings Task Force will be on areas such as water and energy savings, the use of timber and other construction materials and waste reduction.

In considering the different elements, there is a need to be mindful of the impact of one measure on other aspects of sustainability. As the Australian and New Zealand Solar Energy Society (ANZSES) pointed out:

These [sustainability requirements] should be assessed with an holistic approach, as no one thing is necessarily the preferred option. Rather, issues of energy efficiency, recycling, sustainability, water conservation, and insulation standards should all work together collectively to provide a better built environment. (sub. 1, pp. 8-9)

The Fire Protection Association Australia warned of the impacts of any change in regulation to conserve water (under the sustainability agenda), as fire protection systems in buildings require high pressures to meet the performance requirements for fire fighting. It added:

Any decrease in Towns' main water supply pressure at the meter or in the network will impact on installed and proposed [fire protection] systems. Systems are designed to achieve a minimum pressure at the hydraulically most disadvantaged point, based on a minimum acceptable source of supply and agreed pressure. Effective and reliable system operation cannot be assured if pressures are reduced beyond these design limits.

Any change in regulation to conserve water must carefully consider the ability to supply water to existing engineered installations and quantify the impact on new build and maintenance routines. (sub. 19, p. 12)

The ABCB Chairman indicated 'it is difficult to determine at this stage whether there is community consensus over what is a desirable level of sustainability for buildings' (sub. 4, p. 21). The Tasmanian BRAC also noted that 'the community expectation in relation to a level of sustainability is still unclear and needs to be further developed (sub. 29, p. 8). Indeed, what elements of sustainability, if any,

ought to be included in any consideration of expansion of the BCA, are also matters for consideration.

Drivers for change

Community expectations change over time and there appears to be increasing interest in addressing issues regarding sustainability, including by building regulation. This is reflected in initiatives made at both the State and Territory and Local Government level. For example, some 'greener' Local Councils, particularly in New South Wales, have been pursuing an independent sustainability agenda with regulations about such matters as water tanks and stormwater runoff.

Similar developments are occurring in other countries. In reforming its *Building Act 1991*, the New Zealand Government's Building Bill recognises the concept of sustainable development by introducing it into the purpose (sub. 5, p. 4). The OECD Sustainable Buildings Project (2003) was initiated in May 1998 as a four-year project with the objective of providing guidance for the design of government policies to address the environmental impacts of the building sector. The United Kingdom recently announced the establishment of a Sustainable Buildings Task Group to identify how government and industry can improve the quality and sustainability of new and refurbished buildings. A range of mechanisms are to be considered including the promotion and adoption of best practice and the potential for the use of voluntary agreements.

A number of environmental groups support greater emphasis being given to issues of sustainability in building design, construction and use. The Green Building Council of Australia stated that:

The drivers for the residential and commercial property sectors to adopt more sustainable practices need to move beyond the approaches to date. (sub. 11, p. 1)

ANZSES said:

... it is hoped that the ultimate outcome of the review [PC study] will be to ensure that regulations both enable and encourage the use of the renewable and sustainable energy supplies into building design, as well as incorporating high levels of energy efficiency. (sub. 1, p. 2)

The MBA felt that the 'future building code should cover all issues pertaining to sustainable buildings, environmental issues that impact directly on the building itself and other elements' (sub. 24, p. 4). BPIC expressed similar sentiments and recommended that 'the BCA should incorporate all energy efficiency and sustainability issues that relate to building construction' (sub. 23, p. 61). The NT

Minister for Lands and Planning supported the inclusion of sustainability issues in the BCA:

If these matters [including sustainability] are not addressed within the code they will emerge within Commonwealth, State, Territory and Local Government regulations and undermine the effectiveness of a national building code. (sub. 30, p. 2)

Thus, there appears to be general agreement that sustainability is an important consideration for buildings. While there is support for a ‘better built environment’, there is divergence over what elements of sustainability should be covered and what the threshold levels should be.

The Board uses the term sustainability to refer to environmental issues. Sustainability is hard to define and is harder to relate to market failures than is the concept of adverse environmental impact. As evidenced by the different definitions of sustainability, the Commission considers it would better focus discussions, if instead, the nature of the market failure relating to the externality was identified. Hence, the focus would be on the problem, its size and whether it is appropriate to address it via the BCA.

The case for intervention

At the outset, the case for government intervention should depend on whether there is a market failure that needs to be addressed and whether the community benefits of any action exceed the costs. Sources of market failure in this area may include information deficiencies and environmental externalities, such as the emission of greenhouse gases.

In relation to information deficiencies, the main owners of residential buildings are individual consumers who may have little knowledge of building technologies, and may have limited opportunities to obtain valuable information through past transactions in the building market. While prospective buyers of commercial buildings may conduct research and seek energy efficiency, individual consumers often lack basic information on the environmental performance of the dwellings that they are going to buy or occupy. In addition, residential buildings are usually constructed by small-scale contractors who tend to be slow to adopt new technologies and other sorts of innovations (OECD 2003, p. 152).

With respect to externalities, much of the benefit from the adoption of measures designed to reduce environmental damage accrue to society at large. Because these external benefits are not taken into account by firms when making decisions about such issues, their level of adoption may be lower than is socially desirable (PC 1999a, p. xiv).

Intervention by means of regulation imposes benefits as well as costs. In cases where the benefits exceed the costs and there are no other non-regulatory means of achieving the objectives of the measures proposed, then regulation can be justified. This is done using a RIS process. (This is discussed in greater detail in chapter 8.) For example, RISs have been prepared for sound insulation and energy-efficiency provisions.

Where government action can be demonstrated to be the most efficient and cost-effective solution to the externality, there are issues about the appropriate form of such intervention. The most direct way of altering energy use is to ensure that individuals and firms account for the external environmental impacts of their consumption of energy through the use of market mechanisms. The PC report on the environmental performance of commercial buildings noted that the use of market based mechanisms to incorporate environmental externalities into decision making (through pricing) should improve resource allocation and the efficiency of the economy as a whole (PC 1999a).

The White Paper on Australia's energy future acknowledged that lower energy prices in Australia are one factor driving our poor energy-efficiency performance. While not the only factor, lower energy prices reduce the commercial attractiveness of some energy-efficiency opportunities, making it less likely (or rational) for individuals or businesses to pursue. At the same time, Australia has access to low-cost reliable energy that is regarded as a source of competitive advantage. This low cost is driven by ready access to relatively inexpensive sources of energy, especially coal. Energy market reform and other related policies over the last decade have created downward pressure on energy prices. The White Paper noted that in regard to improving market signals:

The Ministerial Council on Energy's reform programme for the Australian energy market includes a strong focus on improving market signals and arrangements for demand side management. These reforms will provide greater incentives for the uptake of energy efficiency.

The government will complement these reforms through its Solar Cities trials. These trials (which are being developed as part of Australia's long-term strategy for climate change will bring together support for energy efficiency technologies in the context of revised market arrangements. The trials will provide a substantial living demonstration of the benefits of energy efficiency. (Department of Prime Minister and Cabinet 2004).

The OECD commented that, although building regulation has played a central role in the improvement of energy efficiency, other non-regulatory policy instruments are increasingly being adopted (2003, p. 32). Measures could include economic instruments, such as subsidy programs and tax exemption schemes, and information programs. In addition, sustainability can be affected by planning frameworks.

Viewpoints differ as to whether it is more appropriate to address sustainability through planning or building mechanisms or whether both must be involved.

There are many approaches and policy instruments that may be used concurrently in the pursuit of sustainability and, for maximum impact, they would be used to reinforce each other. However, the effectiveness of the outcome of any sustainability, water or energy efficiency measures will also depend on the behaviours of the occupant/user of the building rather than just any technical features of the building.

The way ahead

As noted, the Board considers that if elements of sustainability are to be addressed by means of regulation, the goals of the BCA (that is, health, safety and amenity) should be expanded to also include sustainability. Participants noted that local governments have been adding their own requirements to cover sustainability issues as the BCA does not currently address these aspects (with the exception of the energy-efficiency provisions). The introduction of various additional measures have the potential to erode the benefits of the national Code. As mentioned in chapter 8, some would argue that the long lead times involved in effecting changes to the BCA have contributed to this problem.

In discussing sustainable construction, the HIA said:

The need for regulation of these design components must be determined in forums that can facilitate a nationally consistent approach to regulatory matters. Where regulation is determined to be essential, appropriate provisions must be contained within the Building Code of Australia. (sub. 6, p. 8)

Similar views were also expressed by the Western Australian Government Department of Housing and Works:

A meeting of Planning and Local Government Ministers in Perth in February 2004 considered the need to manage the proliferation of sustainability standards and responded favourably to a proposal for all sustainability issues to be managed by the ABCB and incorporated in the BCA. (sub. 14, p. 7)

The Green Building Council expressed its concerns about a lack of uniformity:

Our national standards and in particular the Building Code of Australia are rapidly being overtaken by a proliferation of state based schemes. Local government too, is adding to the proliferation of sustainability demands. (sub. 11, p. 2)

The Commission supports the objective of the incorporation of all technical requirements for buildings into the BCA. Much work, however, remains to be done on establishing a case for building regulation including requirements in relation to

sustainability objectives. The use of mandatory standards through the BCA generates costs and benefits and these should be well understood before proceeding with such a policy and then, only when the benefits exceed the costs, and where a more cost-effective policy is not available. Any new mandatory requirements need to be rigorously assessed before inclusion. There needs to be a system in place for this rigorous assessment.

DRAFT RECOMMENDATION 6.6

The ABCB (or its replacement) should set up a rigorous framework to assess whether it is appropriate to include any additional mandatory requirements in relation to environmental objectives in the BCA.

6.8 Energy efficiency

As noted, energy-efficiency measures could be regarded as falling within the broad objective of sustainability. The ABCB introduced minimum mandatory energy-efficiency measures for houses (Classes 1 and 10) on 1 January 2003. A draft RIS on proposed mandatory energy-efficiency measures for residential buildings other than houses⁴ was released for public comment in February 2004. It is anticipated that the provisions will be finalised in November 2004, for introduction in May 2005. The ABCB is also working on mandatory standards for other classes of buildings. The energy-efficiency measures allow for variability in the standards based on climatic zones.

The Australian Government announced a range of initiatives in March 1999, following the Kyoto international conference on greenhouse gas emissions. These included minimum standards in the BCA designed to reduce energy consumption and the encouragement of voluntary best-practice initiatives. The Australian Greenhouse Office (AGO) has provided funding to the Board over a number of years to progress work on energy efficiency and building regulation. This funding has amounted to \$1.8 million to 30 June 2004.⁵ Combined with funding from the Board, an amount of \$3.75m has been expended on the BCA energy provisions to 30 June 2004. Energy-efficiency measures in houses will provide one of the largest

⁴ Applies to class 2, 3 and 4 buildings, namely, apartments, hotels, motels and residential units contained within a building that is primarily used for something else.

⁵ In accordance with an MOU of 5 January 2001, an amount of \$1.3m and an MOU of 23 October 2003, a further \$0.5m were provided to the ABCB by the AGO. This was in addition to \$1.95m expended by the ABCB on the BCA energy efficiency provisions to 30 June 2004. An MOU for 2004-05 is currently being finalised.

single decreases in greenhouse gas emissions⁶ (AGO 2001). This will be reflected in savings over the life of the house. The approach has been for minimum improvement in energy-efficiency standards, designed to eliminate ‘worst practice’.

The current BCA energy provisions are based on a ‘star rating’ measurement system, from 1 to 10 stars, with 10 stars being superior. The Code covers five main areas of energy intake or usage, namely:

- building fabric to control conduction of energy through the building fabric;
- solar radiation to control discomfort in warmer climates from solar radiation and provide solar heating in cooler climates;
- building sealing to control air leakage into or out of a building and hence avoid an increased need for heating or cooling;
- ensuring adequate air movement either with external and internal openings provided to permit a building to be ventilated naturally or with fan assistance; and
- services to avoid losing energy through piping or ductwork.

The BCA energy-efficiency measures generally aim to achieve a 4 star performance in climates where winter heating is the dominant need and 3.5 stars where summer cooling is more important. The current software used to determine the star rating does not give sufficient credit in the rating for a well ventilated tropical house. Once this problem with the software is corrected, following CSIRO research commissioned by the AGO, the same rating will apply across Australia.

While some jurisdictions have adopted the BCA measures, some have amended aspects of the regulations and others have allowed pre-existing regulations on energy efficiency in their building codes to take precedence over the BCA amendments (table 6.2). Victoria and the ACT have pre-existing regulations incorporated into their building codes that have taken precedence over the BCA amendments. NSW has developed its own energy-efficiency measures, using the Building Sustainability Index, as part of a larger package of measures covering a number of ‘sustainability’ issues that took effect from July 2004 (box 6.1). In addition, while South Australia, Queensland and the Northern Territory have adopted the BCA measures, they have also amended some aspects of the regulations.

⁶ Buildings make a significant contribution to Australia’s greenhouse gas emissions. The AGO estimates that in 1997, buildings were responsible for the emission of 95Mt of greenhouse gases (CO₂-e) as opposed to 64Mt for all forms of road transport.

Table 6.2 Adoption of BCA energy codes by jurisdictions (at February 2004)

<i>State/Territory</i>	<i>Date adopted</i>	<i>Rating</i>	<i>Comment</i>
NSW	Current	No statutory mandatory minimum*	*The voluntary SEDA ^a Smart Homes policy, which applies to around 70% of new building approvals, requires 3.5 stars SEPP 60 ^b requires some housing development to have 3.5 stars
Victoria	Current From 1 July 2005	4 star 5 star	New homes, combined with new water/plumbing requirements
Queensland	1 September 2003	3.5 to 4 star	New homes, with 4 stars in mountain areas
SA	1 Jan 2003	4 star	New homes
WA	1 July 2003	3.5 to 4 star	4 stars south WA, 3.5 stars north WA, for new homes
Tasmania	1 Jan 2003	4 star	New homes
NT	1 Jan 2003	Nil	However, the NT has BCA requirements equivalent to 3.5 star rating for new homes
ACT	Current From 1 July 2005	4 star 5 star	New homes, 4 star requirement was already established prior to Code introduction

^a SEDA is the Sustainable Energy Development Authority. ^b SEPP60 State Environmental Planning Policies – Exempt and Complying Development. In effect, this SEPP applies to about half of the councils in NSW (mostly non-urban) to complying development ie. certain detached or double storey houses.

Source: Parliament of New South Wales Standing Committee on Public Works 2004, pp. 39, 55.

There are currently no specific energy-efficiency measures in the BCA for buildings other than houses. There are a number of voluntary rating schemes available. The Australian Building Greenhouse Rating Scheme, originally developed by the NSW Sustainable Energy Development Authority in conjunction with industry representatives, is a voluntary program that assists owners and tenants to reduce energy use, reduce energy costs and reduce greenhouse gas emissions. The scheme benchmarks a building's greenhouse impact on a scale of 1 to 5 stars. The more stars the better the performance. A 3 star rating is regarded as representing current best practice in the property industry. The Scheme is endorsed by the Property Council of Australia and supported by some other industry associations and property owners.

The ABCB noted that the level of stringency of the energy-efficiency requirements adopted for houses was lower than that originally intended. It indicated that this was

to allow the actual results to be monitored and to allow the industry to become accustomed to working with these design requirements. The Board is working currently toward an amendment for higher standards for houses (ABCB 2004a, p. 46).

Box 6.1 Energy-efficiency measures adopted in certain jurisdictions

New South Wales: New energy use and water targets for all new homes built in NSW using the Building Sustainability Index (BASIX) include:

- for energy, development approved from July 2004 (Sydney metropolitan area) is required to achieve BASIX rating of 25, which means taking measures to potentially reduce greenhouse gases by 25 per cent. The target will be increased to 40 in July 2006 (a 40 per cent reduction in greenhouse gases); and
- for water, development approved from July 2004 (Sydney metropolitan area) is required to meet a BASIX rating of 40 for water conservation (or 40 per cent reduced potable water consumption). Mechanisms to achieve this may include installation of AAA shower heads and rainwater tanks where appropriate.

Victoria: The Government announced a minimum 5 star energy-efficient rating requirement for all new housing that would start in July 2004 and become fully operational in July 2005. The standard is performance based rather than prescriptive. The building industry will have three regulatory options for demonstrating compliance when the new standard is introduced:

- Option 1: 5 star energy rating for building fabric provided by an accredited House Energy Rater;
- Option 2: 4 star energy rating for building fabric plus water savings measures and solar hot water system;
- Option 3: 4 star energy rating for building fabric plus water savings measures and a rainwater tank.

These three compliance routes will be available for a 12 month transitional period. From July 2005, compliance with the new residential energy standard will require:

- 5 star energy rating for building fabric plus water savings measures; and
- a rain water tank or a solar hot water service (currently subject to a RIS).

ACT: The system links energy standards to the sale of homes. New homes are required to achieve a minimum four-star rating (except for some special circumstances). The ACT scheme requires that vendors notify and display at point of sale the energy standards of their new homes. It also requires existing homes to have an assessment of their energy standard for disclosure at point of sale.

Sources: Victorian Government Department of Sustainability and Environment 2003, Parliament of New South Wales Standing Committee on Public Works 2004.

The Australian Government has indicated its intention to improve information measures on energy efficiency by working with the States and Territories to require landlords and building owners to disclose energy performance information in leases and sales agreements. It also announced that it will establish a Productivity Commission inquiry to examine the potential economic and environmental benefits from improving energy efficiency. The inquiry will examine the full range of options to improve energy efficiency and report in the second half of 2005 (Department of Prime Minister and Cabinet 2004).

The OECD Sustainable Buildings Project noted that building regulation is the most effective measure for upgrading the ‘bottom end’ of energy performance of new buildings and should continue to be seen as one of the most important policy instruments for the improvement of the energy efficiency of new buildings (2003, p. 174). It added:

It is important to note that, in many countries, there seems to be much room for further upgrading energy efficiency standards. Such potential for energy efficiency improvement should be fully explored. Moreover, in order for the regulation to keep its current level of effectiveness, the standards have to be regularly upgraded in line with the evolution of average energy efficiency levels. Furthermore, governments should continue efforts to make the standards as flexible as possible so as to improve the economic efficiency of the regulation and provide more incentives for innovation.

As noted, the Commission reported on the environmental performance of commercial buildings and the range of options available to government to improve the environmental performance of buildings. It examined factors affecting the decision making of firms about the adoption of input-saving technologies and processes that are available during the design, construction, operation and demolition phases of a commercial building’s life. It concluded that market-based approaches are the most direct way of accounting for externalities. The Commission considered that mandatory technical performance standards for energy or input efficiency were likely to be distortionary, inefficient and inflexible, targeting only the commercial buildings sector and possibly stifling further innovation (PC 1999a).

Many submissions called for greater consistency in energy-efficiency measures across jurisdictions. For example, the Tasmanian BRAC (sub. 29, p. 2) expressed concern that some States have retained or recently developed housing or energy codes outside of the BCA. Such measures erode the objective of the BCA serving as a national document regulating standards for building across the country.

Similarly, BPIC commented that in regard to energy efficiency:

The BCA has the capacity to address any concerns regarding climate variability and other differences across Australia. There is no valid reason to provide variation based on jurisdictional or municipal boundaries. (sub. 23, p. 60)

ANZSES, while supporting some degree of flexibility, said that:

... the national Code must be thoroughly researched prior to implementation, and whilst regulatory in its outcomes, must be equipped with suitable flexibility to allow the necessary variances [location, climate, lifestyles, social and demographic and/or cultural issues]. In this way, there would not be the need for individuals or communities to enforce a higher standard than that outlined in the Code. (sub. 1, p. 4)

While recognising that there will be some variability based on climatic zones, the Commission endorses an approach of consistency in energy-efficiency measures across jurisdictions.

DRAFT FINDING 6.3

A number of jurisdictions are implementing minimum energy performance requirements for buildings. These are leading to substantial divergences across jurisdictions, thereby eroding the national approach for building regulation.

DRAFT RECOMMENDATION 6.7

The ABCB (or its replacement) should put in place a system for assessing mandatory standards for buildings for energy efficiency to ensure they are soundly based (with benefits greater than costs) and that they are applied consistently across jurisdictions.

A new IGA would be the appropriate mechanism to empower the ABCB (or its replacement) to pursue draft recommendations 6.6 and 6.7 (see chapter 11).

6.9 Asset protection

Fire safety ‘represents some 60-70% of all prescriptive requirements in the technical provisions of the Building Code,’ so fire safety represents a significant part of all building regulations (Fire Protection Association, sub. 19, p. 3). The deemed-to-satisfy provisions of the BCA, in the area of fire safety, contain a mix of passive systems (such as fire-resisting walls) and active systems (such as fire sprinklers).

The fire safety regulations in the BCA relate to the protection of building occupants and the protection of property adjoining a building on fire, but not generally to the protection of the property that is on fire.⁷ There are provisions in the BCA requiring certain buildings in a designated bushfire prone area to be designed and constructed to reduce the risk of ignition from a bushfire while the fire front passes. In this case,

⁷ Volume 1 of the Code also contains some provisions for fire fighting equipment.

the Code provides property protection to houses (class 1 and 10) and residential-type buildings (class 2 and 3) only.

In contrast to the approach taken in Australia, the Fire Protection Association Australia noted that protection of property as a community objective is part of the performance-based building codes and fire safety regulations being developed or implemented in USA, Canada, Hong Kong and Singapore, and this appears to be a growing trend globally (sub. 19, p. 4).

Difference in objectives

As well as provisions contained in the BCA, each State and Territory has legislation relating to the role of the fire brigade services.

There is a difference in the objectives of the BCA and the Fire Brigade legislation. For the building that is on fire, provided the BCA's spread of fire criteria have been satisfied, it may burn down and still comply with the performance requirements. In contrast, fire brigade services' legislation in the States and Territories generally require that fire fighting activities must be directed towards the protection of life and property, including the building that is on fire. The ABCB concedes that the BCA objectives are lower in regard to property and environmental protection (sub. 4, p. 51).

As the HIA pointed out:

... due to the conflict in legislation, alternative solutions that may present unacceptable occupational health and safety outcomes for Brigades personnel, or unacceptable environmental outcomes, may not be endorsed [by building certifiers] even though these issues are not related to compliance with the BCA. Consequently, the Brigades may not accept complying alternative solutions and the design flexibility allowed by the performance based BCA is being stifled by a legislative conflict in the operation of a regulatory approval system. (sub. 6, p. 33)

Arup Fire (sub. 15) said:

This uncertainty in design, whereby the building owner can meet with the national Building Code and still not have a design that is compliant with all the requirements [for fire safety] leads to significant dissatisfaction with the process for developers, builders and owners and causes uncertainty in the process. As each State and Territory Fire Brigade/Service develops approvals/endorsements under their own Act, the issues and resolutions are not consistent between States and Territories. (p. 1)

Protection of fire fighters within buildings is not a present requirement/objective of the BCA, other than through Performance Requirements that require a design to consider "fire fighting intervention" - yet it may be a determining factor for building fire safety design. There is a significant difference between providing facilities for fire fighting to

allow for intervention and providing fire safety features to allow for fire fighter safety. Also, there are no clear, consistent policies on how fire fighter safety is to be achieved (and if it needs to be achieved) and no agreed benchmarks for establishing adequate performance, inconsistencies in design and approval result. (p. 2)

Similar sentiments were expressed by the Fire Protection Association Australia, a peak industry body dealing with technical and educational aspects of fire safety. It stated that:

... the BCA needs to be very explicit about what are and what are not the fire safety objectives in the BCA.

The benefits will come in the form of less interpretation difficulties by designers, certifiers and certification fire authorities, a smoother design process, and greater local, regional and national consistency. (sub. 19, p. 4)

There are also apparent tensions between the objectives of the BCA and the requirements of insurance companies. Some participants have suggested that insurance companies are playing an increasing role in the design and approval process for non-residential buildings. Insurers have become increasingly concerned with performance-based fire safety solutions, given their interest in property protection. For example, concerns have been expressed about the use of polystyrene, which is a very popular building material because of its versatility, appearance and cost and in many applications is deemed compliant with the BCA. However, it burns much faster than alternative materials.

The ICA commented that:

Some owners try to get their property insured only to find that a BCA compliant, council approved building does not meet the requirements of an individual insurer, resulting in further expense. (sub. 38, p. 4)

The differences in objectives have created uncertainty about what is acceptable and, in some cases, building certifiers may not endorse a design due to differing approaches and requirements of fire authorities. For example, for major retailers operating across Australia, performance-based design solutions for their buildings have been accepted in some jurisdictions, but not in others.

The situation is further complicated by the claim that the deemed-to-satisfy requirements of the BCA, largely derived from the old Code, do embody a degree of property protection while the performance-based provisions do not.

There is some debate about whether the community expects that the Building Code should provide property protection. The Australasian Fire Authorities Council (AFAC) considered that the community expects that their properties will remain protected by the building regulations. It said:

While the evidence to support the following position is largely anecdotal at this stage, the strong relationships that AFAC members have with their local communities leave them in no doubt that community expectations go well beyond the parameters currently articulated by the ABCB. Indeed, AFAC believes that the community expects that their properties will remain protected, that the negative impact on the environment from fire will be contained and that the community and business disruption ... will be kept to a minimum. (sub. 28, p. 8)

The ICA expressed support for the position put forward by AFAC. Similarly, the Alliance for Smoke and Fire Containment questioned:

... whether or not the overall community expectations are in fact accurately portrayed by the existing PBCA2004 [current version of BCA] performance requirements where the minimum acceptable requirements do in fact allow a building to burn down and a business, hospital or school to perhaps be forced to close its doors and/or shut down after a fire. (sub. 31, p. 2)

It felt that the issue of property protection and protection against business interruption needed to be addressed by the ABCB.

The Tasmanian Branch of the Fire Protection Association of Australia commented that the community would not support the current philosophy reflected in the BCA:

It is our belief that the community expect buildings of these types [hospitals, schools, historical buildings etc] to survive a fire, and for business carried on within these buildings to be able to continue more-or-less uninterrupted following a fire. (sub. 35, p. 2)

AFAC stated its belief that the current approach to building regulation in relation to fire safety is flawed, as the safe evacuation of building occupants is regarded as the sole objective. It recommends that the ABCB's mission and the IGA's objectives should be expanded to include property protection, environment protection, fire fighter safety and community sustainability (sub. 28, p. 3).

On the other hand, MBA did not support the proposition that the BCA objective should be changed to include property protection as they 'believe that the cost of compliance across Australia, in the event that one day a building may catch on fire, would be prohibitive' (sub. 24, p. 11).

As the ABCB has pointed out:

If issues concerning the regulation of life safety/property protection are to be reconciled, it would be necessary for the States and Territories to require the centralised development of technical provisions to meet the fire service legislation objectives. Alternatively, better coordination of the roles of the fire service and building/planning legislation would assist. (sub. 4, p. 27)

Possible approaches

Participants have put forward a number of possible approaches for resolving the differences in objectives between the BCA and the fire brigade services.

The Fire Protection Association Australia commented that:

If we look at other countries, which potentially have this conflict, we see that either the different pieces of legislation are aligned or complementary, or in the case of the UK, there is a statutory bar on the fire brigade affecting the levels of building fire safety in design. (sub. 19, p. 6)

The NSW BRAC stated that the introduction of a nationally uniform Peer Review Process could provide a greater degree of certainty in the approval process (sub. 25, p. 3). HIA suggested that alternative solutions be peer reviewed by a panel that includes representatives of the Brigades as well as other appropriate industry practitioners. Under this proposal, the HIA stated that ‘while the Brigades could contribute to the assessment of an alternative solution, the proposal could not be dismissed on their view alone’ (sub. 6, p. 34). While this proposal would not resolve the difference in objectives, the source of the problem, it could provide a greater degree of certainty in outcomes.

The Victorian Government commented that:

If these objectives are to be reconciled, it must at a State and Territory level. One way for this to occur could be for State and Territory Governments to require the ABCB to develop technical provisions to meet the objectives of the fire service legislation. Alternatively, better coordination of the roles of the fire service and building/planning legislation could assist. (sub. 51, p. 8)

A solution to this inconsistency, suggested by Arup Fire, is to establish one national body responsible for setting the objectives and goals for national fire safety. This body should include representatives from State and Territory building regulators, fire brigade personnel, fire safety engineers, building surveyors, fire researchers, equipment suppliers and some peak bodies (sub. 15, p. 6). Arup Fire proposed an approach to develop future priorities for fire safety improvement based on a framework that links a consistent set of fire safety objectives with the performance requirements. Buildings would be rated based on their relative community importance and likelihood of fire incidence based on a framework developed by the International Code Council⁸. This is the approach adopted and used by the seismic design community for many years. Arup Fire considers this methodology could

⁸ Three major building code bodies in the United States have recently collaborated to produce model codes for adoption by all States under the banner of the International Code Council. The Council has developed a performance-based code for buildings that utilises fire safety objectives based on community importance.

have significant advantages in Australia in overcoming the issues of conflicting objectives between the BCA and the various State and Territory Fire Brigade Acts.

There is merit in assessing the risk and determining whether it is justifiable to protect certain buildings on the basis of, for example, their importance to the community and/or because they would cause a major interruption to business. Some buildings such as hospitals and facilities providing essential services perform an important role in the provision of services to the community and may justify particular treatment. An example mentioned by Arup Fire (sub. 15, p. 14) related to the damage to a sewage pumping station in Canberra that was destroyed during the bushfires in 2003. While the building complied with the BCA's fire safety provisions, it resulted in a significant proportion of Canberra being without an operable sewage system for some time, worsening the impact of the fires. A large fire in a commercial premises (such as the fires at Tip Top in Sydney and a Victorian abattoir in the early 2000s) could have severe consequences for the business and its employees. There can be a major interruption to business, loss of market share and skilled employees, that may take years to rebuild.

The issue of differing objectives and the feasibility of a risk-assessment system for fire safety require further examination. Given that the advantages and resulting efficiencies from a national Building Code are recognised, it seems necessary that steps be taken to obtain consistency in the objectives for fire safety design. However, the Commission acknowledges the difficulties of achieving such an outcome.

Stand alone dwellings

As implied in comments from some interested parties, it is not clear that higher asset protection from fire is warranted for all categories of buildings. Those supporting higher protection generally focused on the net benefits for commercial buildings. This is particularly pertinent given that higher protection would in effect put in place regulation already being applied via the fire authorities and/or insurance companies' requests.

Prima facie, it seems doubtful that the asset protection objectives should be expanded to include stand alone residential dwellings as such provisions would not be cost-effective. The extent of loss to commercial premises and for those businesses nearby that may also be affected, can be substantial. This is reflected in insurance company requirements and premiums. The benefits that might accrue to housing from increased asset protection are considerably less. The cost of installing and maintaining a sprinkler system in a house, for example, is regarded as more costly than any perceived benefits.

DRAFT FINDING 6.4

The degree of asset protection from fire in the objectives of the BCA is below that generally applied by fire authorities (and some insurance companies) in relation to building requirements, particularly in relation to commercial buildings.

DRAFT FINDING 6.5

It appears unlikely that increasing the asset protection objective of the BCA for stand alone residential buildings would be cost effective.

DRAFT RECOMMENDATION 6.8

The ABCB (or its replacement) should pursue, in consultation with interested parties (especially fire authorities), increasing the asset protection objective of the BCA in relation to building categories other than stand alone residential housing, to align with the requirements generally imposed by fire authorities and favoured by insurance companies.

A new IGA would be the appropriate mechanism to empower the ABCB (or its replacement) to pursue draft recommendation 6.8 (see chapter 11).

6.10 Local Government requirements on building

As discussed in chapter 2, Local Governments generally have authority for giving planning approval for developments in their area. This encompasses such considerations as site aesthetics, environmental impacts and zoning. Increasingly, Local Governments have been using these planning approval processes to extend or alter building requirements, over and above those contained in the BCA and its appendices (see box 6.2). There are numerous planning regulations and codes covering, for example, bushfire, water, waste management, energy efficiency and salinity. BPIC noted with respect to local government regulations that:

Planning schemes are imposing controls beyond the scope of “health, safety and amenity” of buildings. (BPIC 2003a, p. 3)

HIA also noted that Local Governments:

... place the new regulations in planning schemes and apply their requirements as conditions of development consent. In essence, they will use their planning schemes to apply building regulations to developments. (sub. 6, p. 17)

In a survey conducted by MBA, 47 per cent of respondents indicated the existence of extra local council planning requirements and 37 per cent indicated the existence

of extra local council building laws (sub. 24, p. 14). The frequency of additional requirements was generally higher in the residential sector than the commercial sector, with the incidence of additional requirements relating to flooding significantly higher in the residential sector.

Box 6.2 Local Government building regulations

Local governments across Australia have increasingly been introducing or changing building requirements through their land planning and development regimes.

The HIA gave a recent example, relating to the design and construction of new dwellings so that they are 'adaptable' for future use:

HIA recently commented on a proposal released for comment by a Sydney metropolitan council that set out proposed requirements for new dwellings in its local area. This proposal was of great concern to HIA for a number of reasons, primarily because the scope of the proposal must be addressed through the BCA. Also of great concern, the document contained no evidence that the council had prepared it in accordance with proper regulatory procedures ... it did not indicate that any formal cost-benefit analysis had been undertaken. (sub. 6, pp. 28-29)

The Green Building Council of Australia commented, with respect to sustainability issues:

Local government too, is adding to the proliferation of sustainability demands. Often under-resourced and desperate for improved practice within their local area, many local governments are producing checklists and requirements that, although well meaning, often do not guarantee an environmental outcome and, with the costs of administration, are the very reason planning approvals are delayed. (sub. 11, p. 2)

In noting the costs of market fragmentation caused by a proliferation of standards, BPIC said:

An example of consumer loss is reflected in the decision of Karingal council in NSW to ban the use of termite chemical treatments. The treatment methods were approved by the National Registration Authority for use in Australia, the BCA and the Australian Standard. However, they could not be used in this particular municipality.

The inability of the residents in that municipality to use chemicals severely reduced the range of product available and was particularly problematic for existing buildings where the replenishment of existing chemical barriers was critical to maintaining an ongoing effective system. The result was that many buildings in the region had reduced or no termite management systems exposing them to termite infestation and the consequential damage to buildings. (sub. 23, p. 17)

HIA noted that the introduction of additional building requirements at a local level is occurring, despite some States and Territories having legislation to prohibit local authorities requiring higher standards on any design and construction matter that is addressed within the BCA (sub. 6, p. 12).

Why is this occurring?

The ABCB Chairman suggested that, as the coverage of the BCA moves beyond traditional health and safety issues to issues of sustainability, the ‘distinction between building and planning control systems and other areas of administrative responsibility, such as environment and/or energy policy, becomes increasingly blurred’ (sub. 4, p. 25). The HIA further suggested that for emerging issues (such as energy efficiency) there were no regulations in the Code and this allowed local governments to regulate as they saw fit (sub. 6, p. 16).

The HIA also commented that ‘local governments are generally more able to rapidly respond to emerging issues, perceived community needs or local political agendas’ (sub. 6, p. 17). They may feel that State governments and/or the ABCB do not respond to their concerns in sufficient time to satisfy local political agendas and this forces them to act independently (sub. 6, p. 18). The HIA saw sustainable construction as the next big issue that will emerge as a problem for the planning/building interface (sub. 6, p. 18).

The Australian Local Government Association commented that Local Government is responding to the needs and demands of local communities:

Through effective community partnerships, local government has the ability to develop innovative, best-practice solutions to local requirements. This process ultimately leads to better built environments, tailored to community needs and should be encouraged, not restricted through further regulation. (sub. 45, p. 5)

Is it a problem?

Many interested parties expressed concerns about the increasing tendency for planning regulations to contain building requirements.

BPIC (sub. 23) submitted that Local Governments did not have the resources to ensure their proposed building regulations are soundly based:

Municipal governments do not have the resources to ensure a proper and transparent building regulation development process is implemented. They do not appreciate or have the capacity to address the broader national building reform agendas and display little or no understanding of the importance of consistency to support a competitive national and international construction industry. (p. 20)

With the burden to local governments becoming increasingly large and complex BPIC would argue that the complexities of the BCA preclude local government from being able to effectively administer additional requirements over and above the BCA. (p. 35)

In discussing the role of planning systems in implementing urban sustainability in the built environment, the Victorian Department of Sustainability and Environment acknowledged that:

Focussing the planning system on the prescription of outcomes traditionally associated with building, plumbing or other regulations can potentially undermine the capacity of all of these systems to achieve sustainable outcomes for the built environment and has been a source of concern and inconsistency. (2003, p. 39)

Further, the Tasmanian BRAC commented that:

There is no sound rationale for a local council to impose additional requirements above those in the BCA. They are quite often poorly researched and ad hoc solutions to building problems. ... The ABCB has the resources and research capability available to it; a local council does not. (sub. 29, p. 4)

The South Australian Government pointed out that mechanisms already exist through State or Territory requirements to allow for local or regional circumstances:

... the township of Coober Pedy in South Australia has unique requirements as many of its buildings are constructed underground in rock. There are no provisions within the BCA for such construction, but by working through Planning SA a satisfactory means of administering building applications was devised. (sub. 36, p. 10)

A key concern, as also noted in chapter 8, is that no formal regulatory impact assessment was necessary for these additional regulatory requirements, as Local Governments are not bound by rules setting out RIS requirements. As BPIC pointed out:

Planning regulation is not subject to the same level of scrutiny as building regulation. (BPIC 2003a, p. 3)

The implication of this is that new regulations may be introduced that contain extra requirements on business, with increased costs, for uncertain benefit. The ABCB Chairman noted that these actions ‘open the way for less than desirable regulatory outcomes for the community and can compromise the cost effectiveness test as set out in the IGA’ (sub. 4, p. 43). The HIA agreed, saying:

... the IGA requires new regulation to be subjected to a regulatory impact assessment in order to ensure that governments do not introduce regulation for regulation sake and that regulations are cost beneficial. Without this safeguard the cost of buildings can rise significantly without commensurate benefit to individual building owners, or the general community, being achieved. (sub. 6, p. 28)

A survey conducted by MBA revealed extra costs of around \$2700 per new dwelling to meet additional council requirements. The amount varied by State — Tasmania was the lowest with a cost increase of \$1121 to build a new house, while New South Wales was the most expensive, at an extra \$3117 per house (sub. 24,

p. 15). BPIC submitted that the fragmentation of the Australian market into an array of regulatory arrangements is ‘costly to administer, costly to comply with, provides no certainty and stifles innovation’ (sub. 23, p. 26).

However, as discussed in chapter 3, the concept of jurisdictional sovereignty suggests that some local variations may be justified. In some cases, decisions made at the local level are the most appropriate, particularly when the greatest knowledge and the greatest impact of the changes is at a local level. Blind Citizens Australia recommended ‘that state, territory and local governments continue to have the capacity to regulate for improved access for people with disabilities’ (sub. 20, p. 4).

The key question is deciding under what circumstances a regulatory change that produces a net benefit for a particular community, but which would impose net costs if introduced for Australia as a whole, may be implemented.

How can the planning/building nexus be tidied up?

In order to fulfil objective 7, the problems resulting from the planning/building regulatory interaction need to be addressed.

Principles

The HIA suggested that mandatory regulations should only reflect minimum standards that are essential for all members of the community and that higher standards may be incorporated voluntarily by individuals (sub. 6, p. 12). This is consistent with BPIC’s comment that market forces will provide the stimulus for products to exceed national benchmarks (sub. 23, p. 19) and the South Australian Government’s suggestion that councils should use other mechanisms (such as rate rebates) to encourage ‘best practice’ (sub. 36, p. 12). MBA proposed that only when there are issues that are not covered by the BCA, should Local Government have the opportunity to create a by-law or local law (sub. 24, p. 8).

Local Governments do impose higher standards on matters contained in the BCA via regulation. If it is accepted that the BCA already reflects minimum acceptable community expectations for health, safety and amenity, then a first principle would be that jurisdictions could seek agreement that, if any local government did wish to impose a *new* building standard, they would either use non-mandatory means such as subsidies or rates rebates or that the matter would be taken up and progressed through formal processes that incorporate a suitably rigorous justification process involving impact analysis. (This issue was discussed in the PC report on First Home Ownership (PC 2004b, pp. 189–192)).

One option for this is to refer to the ABCB all local government standards impacting on building regulations. The ABCB Chairman noted that, in the report of the Small Business Deregulation Taskforce to the Australian Government, it was ‘recommended that no State or Territory should agree to any variation to the technical requirements for building requested by Local Governments unless this had been agreed to by the ABCB’ (sub. 4, p. 43).

The Tasmanian BRAC commented that:

If Local Government believes the BCA provisions are inappropriate then they should put the issue forward for review by the ABCB through their representation on the ABCB. (sub. 29, p. 4)

Currently, the IGA contains only a best endeavours clause where jurisdictional variations are to be limited, so far as is possible. Sending proposed regulatory changes to the ABCB for consideration would ensure the participation of all States and Territories and is more likely to lead to an agreed national position, thus maintaining consistency of regulations across Australia. It would also ensure any new regulations pass a cost-benefit test. To support this, BPIC suggested:

State and territory heads of power allowing municipal governments to create their own regulations should be revoked where they directly conflict with the BCA. ...

Where this legislative provision currently exists ... governments should implement procedures to enforce the requirement in a more rigorous manner to ensure municipalities are accountable in their local law making to the broader community. (sub. 23, p. 20)

For example, in Victoria, every municipality has a planning scheme that includes the State Planning Policy Framework, the Local Planning Policy Framework and zone and overlay provisions that control the use and development of all land. The State’s planning schemes are based on an over-arching State policy framework and strategic plan. The planning scheme may be changed by council by means of an amendment but any amendment requires the Minister for Planning’s approval. Further, the Victorian legislation makes a clear distinction between a planning permit issued under the Planning and Environment Act and a building permit issued under the Building Act. The Victorian Government said:

In Victoria, section 13 of the Building Act 1993 and section 123 of the Local Government Act 1989 (schedule 8) render a local law ineffective or liable to revocation if it provides for a matter in the building regulations or a matter for which a regulation may be made under the Building Act. (sub. 51, p. 5)

It is also important to address the problem underlying the introduction of building regulations through planning schemes – local governments feel they must act because the speed of response to their community’s need is not fast enough. As noted in chapter 8, some participants felt ABCB processes were too lengthy and

time consuming. There is a balance to be struck between getting local government input, undertaking a robust analysis of costs and benefits, and achieving a national response.

As such, a second option may be to address local government concerns at the State level, so that an impact analysis is still undertaken and the regulation could potentially be uniform at least at that jurisdictional level. A requirement could be that a building regulation imposed by a Local Government be included in the BCA appendix of the relevant State, to support the transparency of building regulation. It could also be automatically referred to the ABCB for discussion, for possible incorporation into the next BCA amendment, if appropriate, for national adoption. The ABCB could maintain a register of State RISs undertaken for local government building regulations, to help inform Board discussions.

A review could also be undertaken, with a view to revamping the decision-making processes of the ABCB so as to speed up the review of technical matters.

Another, more constraining option, would be for the State Governments to take action to proscribe their Local Governments establishing building requirements.

Delineation of planning/building issues

A number of interested parties agreed that regulation-making powers relating to planning and building needed to be better delineated. The ABCB Chairman suggested that ‘definitive direction on the respective roles of building and planning in controlling amenity would remove uncertainty and assist in the consolidation of all technical requirements affecting the design and construction of buildings’ (sub. 4, p. 12). Anything that could be contained in the BCA, should be, rather than in local planning regulations (sub. 4, p. 45). The HIA commented that ‘there appears to be general acceptance among regulators and industry that any regulation relating to the design and construction of buildings should be contained within the BCA’ (sub. 6, p. 18).

The Tasmanian BRAC commented on the need for a delineation between building and planning:

The Tasmanian experience of separating the Building and Planning Legislation has proven to be a worthwhile exercise and is well regarded by the Industry. This separation needs to be maintained and encouraged. ... some Councils require increasing of the building standards above and beyond the BCA requirements through planning permits and this is not desirable. All that is needed is an agreed delineation between the two processes. What is a building issue and what is a planning issue should be nationally agreed. Planning schemes and amendments should be regularly checked to verify that they are not in conflict with the BCA before adoption. (sub. 29, p. 4)

The Victorian Department of Sustainability and Environment suggested a potential split between planning and building requirements, where energy ratings and energy-efficiency standards, passive solar design, insulation, natural ventilation, shading of windows, thermal efficiency and the use of low embodied energy materials would be enforced through Victorian Building Regulations (2003, p. 45).

MBA stated:

It is our view that planning matters should only deal with the allotment or land use issues and environmental and other issues outside the building. Within the building envelope the building laws and regulation, i.e., the BCA, should control all the health, life, safety and amenity issues. (sub. 24, p. 8)

Other interested parties suggested there may be a potential delineation between ‘macro’ planning issues and ‘micro’ planning issues, with ‘micro’ issues more closely aligned to building approvals. ‘Macro’ issues such as town planning and zoning are clearly planning and development issues, while ‘micro’ issues such as siting on a block sit more comfortably within the scope of building regulations and associated administrative processes.

As part of its work on a consistent regulatory framework, the ABCB is involved with the Development Assessment Forum (DAF) in its attempts to revamp the planning process across jurisdictions (sub. 4, p. 33). Although DAF is ‘process-focused’, this working relationship may contribute to a greater understanding of the range of planning and building issues, which would be a useful step in the establishment of clear delineation between planning and building. The South Australian Government noted ‘the ABCB is now represented on the Development Assessment Forum and there is the opportunity to at least define a desirable delineation between building matters on a national basis’ (sub. 36, p. 6). In discussing the benefits of a harmonised administrative process for building regulations, the Allen Consulting Group commented that it is likely that ‘maximum benefits will be achieved through an integrated reform process involving building administration and development assessment’ (2002, p. 11).

To support the delineation of planning and building regulations, MBA suggested:

... there is a case for the IGA to have authority to arrange better interaction and referencing between planning and building provisions. This would go some way to alleviating the conflict that currently exists ... We believe that this interaction and cross-referencing should be formally written into the IGA as opposed to the current practice whereby this is done on an ad-hoc basis. (sub. 24, p. 5)

DRAFT FINDING 6.6

Local governments, through their planning approval processes, are imposing regulations on building, thereby generating inconsistencies across Australia.

DRAFT RECOMMENDATION 6.9

The future work agenda for the ABCB (or its replacement) should include an examination of ways to reduce the scope for the national consistency objective of building regulation to be eroded inappropriately by Local Governments through their planning approval processes. Avenues for this include:

- *the possibility of Local Governments being required to seek prior approval from the relevant State Government to apply building requirements that are inconsistent with the BCA;*
- *requiring these changes to be assessed as to whether net benefits would accrue.*

To assist the design of such a system, the ABCB, in consultation with key stakeholders, should examine the possibility of defining a clear delineation between those issues to be addressed by planning regulation and those issues to be addressed by building regulation.

A new IGA would be the appropriate mechanism to empower the ABCB (or its replacement) to pursue draft recommendation 6.9 (see chapter 11).

7 Regulatory systems: compliance and delivering outcomes

The Building Code of Australia (BCA) is essentially a technical document, prescribing mandatory minimum acceptable standards for buildings, while aiming to embody technological developments. However, the Code's ultimate value depends on the extent to which it is adopted and enforced efficiently by the States and Territories. This is reflected in the ABCB's mission statement, which recognises the role regulatory systems have in achieving the efficient and cost effective satisfaction of community expectations for building.

In the past, to improve compliance, emphasis has been placed on bringing greater consistency across jurisdictions to administration through model legislation. More recently, attempts have become more focused on advancing individual reforms, such as development of national standards and accreditation for building certifiers. The momentum behind initiatives to gain greater national consistency in administration of the Code and to contribute explicitly to achieving compliance appears to have waned, perhaps due to the inherent difficulties and obstacles encountered. Nevertheless, the possibility of potential benefits from achieving greater administrative consistency and more effective enforcement remains.

This chapter analyses:

- the extent to which the administration of the BCA makes a substantive difference to building outcomes;
- the ways in which improvements could be made, particularly with respect to national consistency and cost effectiveness of the regulatory system (IGA Objective 1), opportunities for deregulation (IGA Objective 3) and the efficiency of the regulatory environment (IGA Objective 8); and
- whether the ABCB (or its replacement) should take on this aspect of regulation more actively in its future reform agenda.

7.1 Administrative systems — history and compliance issues

There is considerable regulatory activity in administering the BCA — a whole regulatory system underpinning the delivery of the requirements of the BCA and their desired outcomes. As noted by the Campbell Report, good technical regulations are not enough to ensure good building outcomes:

... if the home building process is to consistently produce good quality dwellings, “quality” must be an ingredient in all elements of the process, these being:

- the quality of the building practitioners
- the quality of home building as prescribed in codes and standards
- the quality of home building as prescribed in contracts
- the quality of information systems for consumers and participants
- the quality of the planning process and certification systems for home building
- the quality of the dispute management system for home building. (Campbell Report 2002, p. 6)

The core regulatory activities involved in administering the BCA, in terms of ensuring compliance with the Code’s requirements, currently include building approval, inspections, enforcement of building notices and orders, occupancy approval and essential services maintenance. Supporting these core regulatory activities are systems for practitioner licensing, accreditation and audit, insurance, and dispute resolution. (The accreditation of products and processes is discussed in chapter 9.) Each State and Territory determines its own approach to the administration of building regulations. Details of the various aspects of their administrative systems are contained in appendix F.

The focus of much of this regulatory activity is about allocating and enforcing responsibility, risk and liability for compliance with the Code. It is thus an essential complement to the technical regulations of the BCA.

Currently, a number of differences exist across States and Territories in their approach to compliance and enforcement of building regulations. These differences are contained not only in jurisdictions’ building legislation, but also in administrative regulations and procedures. For example, States and Territories may differ on the length of time authorities are allowed to take for their deliberations. The Allen Consulting Group also noted the disparities in government personnel resources devoted to building control, with 84 staff in Victoria compared to eight staff in New South Wales (2002, p. 22).

The prominence given to issues concerning the regulatory systems implementing the BCA has varied over the last 40 years. For some time, the issues were ‘left on the backburner’ while national consistency in the BCA itself was progressed. In a submission to the Productivity Commission’s Inquiry into First Home Ownership, the ABCB noted that, in early attempts to formulate a building code that incorporated both technical and administrative matters, it was:

... clear that the difficulty in obtaining agreement on administrative provisions was distracting the States from agreeing on the technical provisions. Consequently, it was agreed to concentrate solely on the technical building requirements and that work eventually led to the production of the Code. (ABCB 2003a, p. 36)

However, by the 1990s, attention to the administrative aspects of building regulation began to increase again. In 1991, the Building Regulation Review Taskforce (BRRT) recommended a Model Administrative Code be developed as a key element of the national building framework (BRRT 1991, p. 4). At the same time, model building legislation was published by the Australian Uniform Building Regulations Coordinating Council (AUBRCC), the ABCB’s predecessor. Its purpose was to ‘enable the introduction of microeconomic reform in this vital industry, to enable national uniformity and *consistency of approach*, and to increase efficiencies within the industry’ (AUBRCC 1991, p. 10, *emphasis added*). In their commentary on the model building legislation, AUBRCC (1991, p. 23) noted that a logical next step for their work would be the development of a model set of building regulations to complement the model legislation.

The model legislation had extensive input from the Victorian Government and introduced significant reforms in the areas of certification and liability. The key elements of the model legislation were:

- limitations on liability for building practitioners — introducing a 10 year cap on liability for property damage due to defects in design, construction, approval or inspection of building, and replacing joint and several liability with proportionate liability;
- competition in the provision of building approvals and inspections — allowing private sector building certifiers to undertake these tasks, in addition to local government certifiers. (In the ACT and the Northern Territory, only private certifiers may now provide building approvals and inspections.);
- compulsory registration of building practitioners; and
- compulsory insurance for building practitioners.

Lampert (1999) pointed out that the reforms constituted ‘an integrated approach to building regulations which recognised that each part is dependent on other parts’. For example, requiring insurance of building certifiers aimed to promote the smooth

operation of competition in the certification process, by ensuring that there were enough funds to rectify any defects resulting from errors or omissions by the private certifier.

However, few States and Territories adopted the model legislation in its entirety. The ABCB noted that, while the Building Acts of Victoria, the Northern Territory and Tasmania were revised to follow the principles of the model legislation, NSW, South Australia and Queensland incorporated only some of the features of the model legislation in their legislation (ABCB 2003a, p. 37). Meanwhile, Western Australia has recently commenced a review of its building legislation. The Housing Industry Association (HIA) pointed out one potential reason for the slow take-up of the model legislation, saying:

At the time the Model Building Act was being developed, some jurisdictions were concurrently undertaking reviews of their existing legislation and had already expended significant resources on the development of new processes and procedures which had been approved by respective governments. In this context, it is always unlikely that these jurisdictions would be prepared to abandon their substantial endeavours and recommence a legislative review based on the proposals within the Model Act. (sub. 6, p. 38)

The ABCB noted that ‘[s]ignificant differences remain even between those States and Territories that have chosen to most closely follow the Model Building Legislation’ (ABCB 2003a, p. 37). For example, the terminology used to describe similar processes and events can differ widely, as can the allocation of building related functions to various government departments and bodies.

There are concerns that the degree of non-compliance with building regulations is higher than is desirable and is leading to poor building outcomes. This suggests the current enforcement and compliance systems across States and Territories may be deficient. For example, the Campbell Report (2002, p. 13) highlighted a number of problems in the NSW residential building market, including:

- buildings that did not meet BCA requirements, including those that had been certified as compliant by either council or private certifiers;
- principal certifiers not properly performing their functions;
- builders and certifiers not operating in the interests of the property owner;
- dwellings that were not consistent with the approved design that had been certified for occupation; and
- the operation of unqualified builders.

Some interested parties also pointed to situations where ‘corners had been cut’, accountability was unclear and dispute resolution avenues did not result in

satisfactory outcomes for building consumers. However, the extent of the problem appears to differ across States and Territories and over various types of building. It is also important to recognise that building owners themselves bear some responsibility for ensuring good building outcomes (chapter 3). It is difficult, therefore, to draw a general conclusion about the degree of non-compliance across Australia and the extent to which better compliance systems can fully address this.

DRAFT FINDING 7.1

There are concerns that the current compliance and enforcement systems for building regulation may be deficient, to varying degrees across jurisdictions.

Against this background of non-compliance concerns and differing compliance and enforcement systems across jurisdictions, the next five sections explore the various areas of administration, noting the reasons for regulation, any issues with the current arrangements and suggestions for improvements. Section 7.7 discusses whether increased national consistency in building administrative systems would be of use in supporting improved compliance procedures, while section 7.8 offers suggestions for the future role of the ABCB in finding more effective ways to administer the Code.

7.2 Practitioner licensing, accreditation and audit

Licensing and accreditation

Licensing and accreditation are both concerned with attesting that an individual or firm meets certain criteria before being able to practise. Licensing is usually required by governments, while accreditation is usually undertaken by professional bodies. As noted by the Tasmanian Department of Infrastructure, Energy and Resources, a system of building practitioner licensing and accreditation:

... addresses the information asymmetry which frequently disadvantages consumers. As consumers are frequently non-repeat customers for these services they have difficulty assessing the product prior to purchase. By requiring that building practitioners ... be accredited, owners will be better informed ... Typically consumers will be able to expect:

- *the practitioner meets qualification and competence requirements*
- *he/she has a requisite level of experience*
- *he/she has undertaken continuing professional development*
- *he/she may be audited, and a complaints/investigation procedure is in place*
- *he/she has the required insurance (1999, p. 16)*

To try to ensure good building outcomes, many States and Territories have implemented licensing schemes to ensure that building work is undertaken by suitably qualified building practitioners. Licensing of building practitioners was also seen as an important complement to changes to liability rules, as it provided more information to insurers about the risks presented by an individual practitioner and so facilitated the provision of insurance products. (Insurance is discussed later in this chapter.)

Accreditation fulfils a similar purpose to licensing. It generally indicates compliance with professional guidelines on qualifications and continuing education. Proof of accreditation may be required in order to be registered in an occupation and be eligible for a licence.

The scope of licensing, and the requirements to get a licence, vary across jurisdictions. As Arup Fire noted, ‘whilst there is a national Code, those using the Code are not accredited or registered through a nationally consistent system’ (sub. 15, p. 3). States and Territories differ in the range of practitioners that require a licence to practise and, in many cases, the qualifications and experience required to be eligible for a licence also differ. While the operation of mutual recognition allows mobility of licensed practitioners across jurisdictions, there are concerns about the consequences of these variable requirements, as discussed below. (Chapter 9 notes the importance of including knowledge of the BCA in practitioner qualifications.)

Issues for the licensing system

Some industry professionals expressed a need for an increase in the *scope of licensing*. For example, Hilti Pty Ltd suggested training and licensing is required (preferably on a national level) for installers of passive firestop products — it believed the quality of installation of passive firestop products can be poor and that this has brought into question the safety of some buildings (sub. 7, p. 1). The Fire Protection Association of Australia noted that one of its objectives for the building industry is ‘the introduction of a licensing and accreditation system for all individuals and companies involved in fire protection related activities’ (sub. 19, p. 9). The Association said that an extensive suite of nationally endorsed competency standards has already been developed under the Australian Qualifications Framework, in conjunction with the Australian National Training Authority, to support a nationally consistent licensing scheme.

A number of interested parties expressed a desire for more *uniform licensing processes* across jurisdictions. The National Fire Industry Association believed this would reduce duplication and costs (sub. 3, p. 2). It also questioned why some

licences were based on persons and other were corporate, depending on the jurisdiction.

Comments from other interested parties suggest a desire for *additional* and *more stringent qualification requirements*. The WA Government Department of Housing and Works commented that:

It is apparent Australia has access to a state-of-the-art technical building code through the BCA but the benefits are reduced due to the ad hoc skill levels of those who administer and enforce building standards. ... It is highly desirable to develop a uniform process for the qualification and registration of all building practitioners — especially for dealing with performance solutions. (sub. 14, p. 8)

With respect to fire safety engineering, Arup Fire noted:

Fire safety engineering is a combination of fire science and building engineering and requires practitioners to understand a significant amount of detail and concepts ... Those approving solutions should also have the same level of training and experience as those practitioners carrying out designs.

... The lack of significant formal education for some practitioners and approving authorities leads to inconsistent designs and can also result in poor outcomes for the industry as a whole, with significant risks to the Australian community. (sub. 15, p. 3)

In order to obtain better building outcomes for blind or visually impaired people, Blind Citizens Australia recommended ‘disability awareness training form a greater part of building industry professions’ training and ongoing professional development’ (sub. 20, p. 7).

Some *additional licence requirements* were also suggested. In examining the linkages between builders’ insurance and the building process, Allan (2002, p. 31) noted that:

Where licensing exists, eligibility criteria are normally confined to technical qualifications and good character with no checks on financial viability or managerial competence.

Allan believed upgrading builders’ licensing requirements to include financial criteria would increase the accessibility of insurance and the sustainability of the home builders’ warranty insurance market, thus providing greater consumer protection. Insurance is discussed later in this chapter.

Ongoing competency requirements can also serve an important purpose in licensing and accreditation arrangements, by ensuring practitioners keep up to date with the latest developments in their field and the latest amendments to the BCA.

Audits

Auditing of a practitioner's performance is an essential part of ensuring ongoing competence and compliance with regulatory requirements. The Allen Consulting Group noted:

Without regular and often random auditing practitioners are more likely to cut corners. Regular verification of building work and certification is therefore integral to ensuring the quality and safety of building work. (2002, p. 16)

Audits can take place at both a technical and administrative level, checking a practitioner's technical competence and their handling of the required administration and paperwork.

Arup Fire supported a system of technical audits for practitioners, saying:

If practitioners, both private and public (fire engineers, building surveyors/certifiers, fire brigade personnel involved in design checking) were audited technically through an independent body on a regular basis (3 or 4 yearly) then issues on on-going education and knowledge of research and design changes would certainly be improved.

... The provision of a technical audit system would help to raise the standard of performance based design and also potentially improve overall consistency. (sub. 15, p. 4)

One model, used by Victoria in the plumbing area, is to undertake random audits of a certain percentage of practitioners each year. This could have wider application in the building industry.

Issues for certifiers

The introduction of private certification (and the performance-based Code) has increased the focus on the skills and qualifications of certifiers. Certifiers bear a significant amount of responsibility for ensuring compliance with building regulations and good building outcomes, as they undertake approvals and inspections of buildings up to and during the construction phase (discussed in section 7.3 below).

The focus on the qualifications and competencies of certifiers will become even sharper as the role of the certifier expands along with any extension of coverage of the BCA. For example, as energy-efficiency standards are brought into the Code, so certifiers need to have some understanding of energy efficiency in order to be able to undertake their role (either assessing compliance themselves or contracting an appropriate specialist to help them make an assessment). The use of innovative

performance-based solutions puts extra pressure on certifiers to be highly skilled and competent in their assessment tasks.

Currently most certifiers need to be registered, although requirements can differ between public and private certifiers. Registration usually involves meeting certain qualification requirements, and meeting ongoing competency requirements in some jurisdictions. The most common occupations to become certifiers are building surveyors and engineers.

Audit requirements also differ across jurisdictions. The ACT, for example, has an audit team to maintain ongoing checks on the performance of practitioners, with private certifiers being audited on a targeted basis, depending on their past performance and demonstrated competency.

Until recently, the differences across jurisdictions in registration requirements for certifiers were not considered material, due to the low number of cross-border practitioners and the operation of mutual recognition across jurisdictions (Allen Consulting Group 2002, pp. 8-9).

However, a number of concerns have emerged relating to the qualifications and registration processes for certifiers. First, the introduction of private certification has led to an increasing amount of cross-border certification activity, as certifiers may now build market share across jurisdictions, and some registration bodies are concerned that mutual recognition is leading to a lowering of standards for certifiers (Allen Consulting Group 2002, p. 9). Second, the qualifications required of private certifiers exceeds those required of council certifiers in some jurisdictions, leading to concerns of a disparity of ability and competence. (In response to concerns raised about this in the Campbell Report (2002, p. 55), NSW is working to align the requirements for public and private certifiers.¹) Third, there have been broad concerns about the overall competence of certifiers and the quality of service provided by them, with questions being raised about the skill levels and qualifications acquired by certifiers. The Commission received considerable complaints that some certifiers were not sufficiently qualified to assess performance-based solutions.

In response to these concerns, and to attempt to maintain the effectiveness of private certification, the ABCB recently introduced national competency standards and an accreditation framework for certifiers. The national competency standards complement earlier work on higher education benchmarks in respect of building surveying qualifications attained through university (ABCB 2003b). The 1999

¹ See http://www.dipnr.nsw.gov.au/pdf/dp_councilcertification_fin4_forprint.pdf (accessed 12 July 2004).

Technical Review of the ABCB regarded the efforts of the ABCB to address the issue of national accreditation for surveyors as ‘consistent with the IGA94 Objective 3’ (Meacham et al 1999, p. 28).

The framework establishes two levels of certifiers, with level 1 certifiers requiring a degree qualification and being able to certify all classes and size of buildings, and level 2 certifiers requiring a diploma qualification and being able to certify buildings up to three storeys or with a maximum floor area of 2000m². Slightly different requirements are specified for certifiers employed by local government authorities.² Existing practitioners move across to the new framework on a ‘person follows function’ basis, meaning that the current activities (rather than job titles) of practitioners will determine their level within the new framework.

The Australian Institute of Building Surveyors was involved in the drafting of the framework and, as of June 2004, require their practitioners to be accredited against this framework (sub. 4, p. 56). States and Territories have approved the competencies and the ABCB Chairman noted that the intention is for the overall framework to ‘form the basis of the accreditation/registration of building certifiers/surveyors in each State and Territory’ (sub. 4, p. 18).

The introduction of a national framework for certifiers has a similar flavour to recent reforms undertaken in New Zealand. In response to problems with the weather tightness of buildings, New Zealand has sought to strengthen its regulatory framework to increase the quality of inputs into the building process (sub. 5, p. 5). The new Building Bill will, among other things, require accreditation and auditing of building consent authorities (who issue building consents and undertake inspections).

However, some interested parties felt that the detail of the Australian national framework could be further improved by basing certifier levels on the type or complexity of the building, rather than the size of the building. Pitt and Sherry noted that many practitioners and industry bodies align themselves with classes of the BCA, in particular, residential classes versus commercial classes, and that this would appear a natural division of responsibility for building surveyors (sub. 37, p. 4). They further submitted:

Many assistant building surveyors [ABS] deal solely with domestic construction and are needlessly burdened with the task of additional training to approve class 2-9 buildings. The approval of a three-storey hospital that relies on an alternative fire safety solution may be an extremely complex task. ... the ABS will need to develop

² See http://www.abcb.gov.au/documents/accreditation/accreditationframework_may01.pdf (accessed 17 May 2004).

essentially all of the skills and competencies of an unlimited building surveyor, as the distinction between the two tasks is minor.

This is also seen as a significant and unnecessary impediment to the entry of assistant building surveyors into the profession. ... because they are forced to undertake highly technical training with limited application to their market sector. (sub. 37, p. 4)

It was also suggested that benefits would arise from introducing more uniform auditing procedures across jurisdictions. The Allen Consulting Group noted that, while private certifiers are subject to audit procedures, many local government certifiers are not. It noted that this diversity 'places additional requirements and costs on private certifiers, in turn placing them at a competitive disadvantage over their public sector counterparts' (2002, pp. 16–17).

The way forward

Adequate competency levels for those involved in the building process are vital for the successful implementation of the BCA and performance-based solutions. Licensing, accreditation and audit processes are three key mechanisms by which minimum standards may be imposed and maintained. In the case of New Zealand, regulation of inputs to the building process, including people, has been seen as the most effective way to increase the quality of building outcomes as well as overcome recent problems with weather tightness.

The combination of the licensing, accreditation and audit processes in Australia is currently providing an important part of the foundation which determines whether building standards and their enforcement are effective and efficient. In some cases, the combination is not working, and this is undermining public and industry confidence in the regulation of building. It appears that movement towards higher skill levels within a more harmonised licensing system is desired. Greater uniformity of minimum qualification, competency and audit requirements may give participants in the building market some degree of comfort that their work is being undertaken by appropriately skilled individuals. Greater uniformity of licensing systems could additionally allow the introduction of a linked database, which would assist in ongoing monitoring and audit functions.

However, there can be costs as well as benefits from more stringent licensing and accreditation arrangements. For example, licensing can create barriers to entry and can be inflexible to changing market conditions. It will be important to consider, when contemplating changes to the licensing regime, whether alternatives, such as more rigorous auditing arrangements or higher penalties for faulty work, could achieve the same health, safety and amenity outcomes.

Given New Zealand's recent reform experience, the requirement for the Trans-Tasman Building Regulatory Reform Council to promote consistency in the education, training and accreditation of industry professionals (sub. 4, p. 22), and the mutual recognition arrangements between the two countries, there may be benefits from including New Zealand in any discussions.

DRAFT FINDING 7.2

The compliance system for building regulation could be improved by establishing more soundly based requirements for licensing, accreditation and audit of building practitioners. The ABCB (or its replacement) could provide a national forum for this.

7.3 Building approvals/permits, inspections and occupancy approvals

Processes

Building approvals, inspections and occupancy approvals are the key regulatory processes involved in the erection of a building. These processes are the prime means by which jurisdictions attempt to ensure that the BCA is complied with and that the required health, safety and amenity outcomes are achieved.

Building approvals are referred to differently in different States and Territories — approvals, permits and construction certificates are all examples of the terminology used. However, it essentially is the process by which approval is given for building work to commence. This usually entails a check that the construction plans and specifications are consistent with the BCA and any planning/development consents.

Inspections during the building process aim to ensure defects are caught while they are still visible, for example, a concrete foundation check before any further building activity takes place. Jurisdictions differ in the required number and timing of inspections during the building process.

Once the building is completed, some jurisdictions require an occupancy approval to be issued before occupants may move in. This generally entails a final check of compliance with the BCA and planning approval requirements.

These tasks are undertaken by private or local council certifiers, since reforms (originally introduced in the model building legislation) were enacted to allow private certifiers to operate. States and Territories differ in the range of areas in

which private certifiers are empowered to act, for example, in some jurisdictions a private certifier may check compliance with development approval, but the local government will issue the building approval.

Process issues

For building practitioners and consumers, it is important to have clarity regarding the processes required to get construction underway and a building completed. However, a number of concerns have been expressed about the differences across jurisdictions relating to the building approval and inspection processes. A lack of uniformity in these processes can lead to confusion, delays and increased costs.

First, the Allen Consulting Group drew attention to the variety of approaches to private certification across jurisdictions, in terms of the activities private certifiers may undertake. Pointing to cases of large time delays for permit issuance by councils, it commented ‘there is sufficient evidence to indicate that significant benefits could be realised from a more uniform approach to building certification’ (Allen Consulting Group 2002, p. 11).

Second, the Group commented on the variety in approval timeframes across jurisdictions, noting that in some instances minimum timeframes are not specified and may be extended without the applicant’s approval. It suggested a national administrative framework ‘may be a mechanism by which best practice arrangements may be put into place nationally, with consequent pressure to reduce unnecessary delays’ (Allen Consulting Group 2002, p. 13).

Third, in noting that jurisdictions differ in their requirements for inspections the HIA commented:

The basis of this difference can be political, however it should relate to the complexity of the specific project and the best judge of the scope of an inspection regime should be the person who will be responsible for signing off the completed construction. (sub. 6, p. 39)

The Allen Consulting Group supported a harmonised mandatory inspection regime, stating that inspections are not only essential to the enforcement of the BCA, but also:

- provide reassurance to the community that governments take their commitments to building and fire safety standards seriously;
- assist in educating builders on proper construction practices and proper fire safety practices; and
- help protect consumers against unscrupulous builders and building practices. (2002, p. 13)

In contrast, however, the HIA noted that self-regulation by large volume builders, in the form of comprehensive internal inspection and compliance checking regimes, works well and may even be more comprehensive than regulated regimes (sub. 6, p. 39). The Master Builders Association of Western Australia (MBAWA) also referred to ‘an alternative model of self-regulation as a control mechanism on the industry’ (sub. 8, p. 2).

Master Builders Australia (MBA) also cautioned that, while inspections are imperative at key intervals throughout the building project, to verify compliance at stages of critical structural adequacy:

It is not the responsibility of the certifier or the building inspector to ensure that quality control has been completed to meet all standards and Building Code requirements throughout the entire project. It is unrealistic to expect every element of the construction phase to be inspected. To achieve this, a building surveyor/inspector would be required to be on-site all day every day. This would be cost-prohibitive nor would there be resources available to achieve this. (sub. 24, p. 12)

It noted that the legal system appears to be seeking total compliance at all stages of a project, which impacts on the costs and availability of professional indemnity insurance (sub. 24, p. 12). Insurance is discussed later in the chapter.

Fourth, the lack of consistency with respect to the requirements for the protection of adjoining property during construction was also noted, including the varying requirements to pay compensation and costs, undertake dilapidation surveys and hold appropriate insurances (Allen Consulting Group 2002, p. 14).

Approval processes for alternative solutions

The approval of alternative solutions raises particular issues with respect to the approval and inspection processes. The WA Government Department of Housing and Works suggested that it may be vital to implement ‘a nationally consistent framework that deals with the complexities of performance standards in a regime of proportionate liability and capped professional liability’ (sub. 14, p. 6). Second, the Department also submitted that there needs to be a more rigorous and standardised process for the approval of alternative solutions, to avoid unnecessary delays at the building licence stage or a challenge to a solution during the construction phase. The Department suggested:

- Developing an administrative process to specify how a BCA alternative solution is to be managed describing what form of application documentation is required and how to successfully argue for a proposal to be approved by a regulatory authority.
- ...

-
- Greater control of the application, review and approval timeframes associated with BCA alternative solutions.

... an administrative requirement stipulating that all alternative solutions be identified when an application is lodged with a licence issuing authority and a requirement that the licence issuing authority be made fully aware of the proposal and it has approved it. (sub. 14, p. 6)

Industry members from the New South Wales Building Regulations Advisory Council also stated:

... a more rigorous national approach to the development, assessment and certification of alternative solutions needs to be introduced to prevent any abuse of this system and ensure that alternative solutions are delivering appropriate outcomes. (sub. 25, p. 1)

The Insurance Council of Australia (ICA) further highlighted the importance of being able to identify performance-based solutions within buildings when calculating premiums for fire insurance:

... Insurers regularly inspect industrial premises, sometimes to provide cover to the owners and sometimes to provide cover to the tenants. In attempting to determine an appropriate premium rate, it is essential for insurers to have an understanding of the design criteria for the building construction. Risk engineers who perform these inspections are familiar with the DTS provisions of the BCA, and any noted departures from these provisions may result in a higher premium than may be justified if it was known that an appropriate performance-based solution had been used.

One suggestion made to ICA is that relevant information about performance-based solutions should be permanently displayed in the building entry lobby. (sub. 38, p. 11)

These issues were also raised in the NSW Campbell Report, with a submission to that inquiry noting:

- there is no recognised methodology for the assessment design or approval of alternative solutions;
- it is up to the accredited certifier to determine how much information and documentation must be provided for each alternative solution therefore there is huge variance in the way alternative solutions are dealt with. (Campbell 2002, p. 78)

Greater clarity and structure around the approval processes for alternative solutions may assist in speeding up approvals. Some interested parties noted a reluctance to approve alternative solutions, due to a fear of liability. In fact, the Building Products Innovation Council (BPIC) noted that some professional indemnity policies have exclusion clauses prohibiting the insured permit authority from determining an alternative solution (sub. 23, p. 32). Working within a recognised process may help to alleviate these problems.

With respect to increasing scrutiny of alternative solutions, the Campbell Report identified two options — a system of independent peer review or the establishment of a Government panel of experts (2002, p. 83). The report favoured the panel approach, recommending that the panel should: determine standard methodologies for verification of alternative solutions; assess any alternative solutions referred to it by councils; examine all fire engineered alternative solutions; and collate information about alternative solution designs to help develop a body of knowledge and precedents (2002, p. 84). (See chapter 5 for a discussion of suggested improvements to performance-based standards.)

However, the Australian Institute of Building Surveyors (NSW) suggested a model of peer review, similar to that used by the Olympic Coordination Authority (OCA) for the Sydney 2000 Olympic Games, would provide a robust, timely and honest system of assessment. The OCA independently appointed peer reviewers for all alternative solutions and incorporated information from the reviewers as well as its own technical staff and fire authorities in making approval decisions (AIBS NSW 2003, p. 4).

Any new system may also need to specify the role of the fire authorities in approving alternative solutions, as fire engineering appears to be the area in which alternative solutions are most used. Fire brigades may be referenced in State and Territory legislation as a body required to give approval for certain facets of building design or construction (see chapter 6). The Fire Protection Association of Australia recommended the development of a national administrative framework that could ‘regulate the involvement of the fire services throughout the construction and the building-in-use cycle’ (sub. 19, p. 14). The industry members from the New South Wales Building Regulations Advisory Council also highlighted ‘the need to provide a nationally consistent approval process that involves the Fire Brigade’ (sub. 25, p. 2).

However, Pitt and Sherry cautioned that an expanded role for fire authorities could reduce clarity about responsibility for approval processes:

An aim should be to ensure that there is a single chain of command that ensures that a transparent and accountable process is achieved. Having two approval authorities dealing with a single application has the potential for internal conflict, particularly where both elements have on site supervision functions. (sub. 37, p. 4)

Pitt and Sherry suggested clear identification of a single approval body was essential. They also suggested care is needed to avoid a situation where fire authorities undermine the benefits of private certification, through a lack of responsiveness and stymieing of development (sub. 37, p. 3).

Role of the certifier

As noted earlier, certification may be undertaken by either local government certifiers or private certifiers. Private certification was introduced in the Northern Territory, Victoria and South Australia in 1993, in Queensland and New South Wales in 1998, in the ACT in 1999 and in Tasmania in early 2004 (sub. 4, p. 40). Western Australia is currently reviewing its building legislation and will consider private certification in the context of that review.

The 1999 Technical Review of the ABCB noted that, while the introduction of private certification was driven by similar interests in each jurisdiction, the form it took varied across jurisdictions:

These systems have evolved based upon the recognised need to streamline the building approval process and thus become more competitively positioned within an economy where the construction activity contributes substantially to the bottom line return to the State or Territory. The private certification systems that are now in place are those that have been developed solely based upon the needs and constraints of the individual States and Territories. As expected, these systems while sharing some commonality, differ both in scope and detail. (Meacham et al 1999, p. 27)

A number of interested parties pointed to benefits from private certification in the area of approvals and inspections. The HIA noted that benefits primarily result from time savings (sub. 6, p. 41). The Fire Protection Association of Australia also saw benefits in terms of efficiency and timelines and said it ‘provided a broader, more technically competent resource in Australia in relation to certification’ (sub. 19, p. 8).

However, other interested parties raised concerns about private certification. The MBAWA commented ‘the concept of private certification to enable private sector building certifiers to issue building approvals and ensure Code compliance is not supported at this stage by our Association’ (sub. 8, p. 2). The South Australian Government said the system had caused ‘a notable fragmentation of the building assessment system and inherent difficulties in ensuring adequate accountability and transparency of such decision-making’ (sub. 36, p. 19). The Queensland Government also noted issues with the cost to the State Government of administering the licensing, auditing, complaint investigation and disciplinary system for certifiers, and with ensuring consumers are adequately protected from faulty work (sub. 41, part 2, p. 17). Several interested parties also pointed to problems with the independence of private certifiers.

Whether public or private, the role of the certifier from the building approval stage onwards is crucial in ensuring that buildings are BCA compliant. Depending on the particular legislative and contractual arrangements, it may be that the point at which

the certifier enters the process is the first time responsibility for giving explicit consideration to the BCA is made clear. For example, at the time of writing the Campbell Report, in NSW there was:

... no assignment of responsibility for Building Code compliance to a building designer or architect with respect to the original design. ...

Councils in their role as consent authority for the development application ... have a statutory obligation to check Building Code compliance of the design. However, in reality the DA only contains the envelope description of the building ... Effectively, Building Code compliance is not enforced at this time. (2002, p. 70)

The South Australian Government also noted the pressures on certifiers:

... there appears to be insufficient effort to place some responsibility for compliance with designers and contractors. This often has the result that designers prepare inadequate project documentation and fail to address Code requirements during design. There is often an over reliance on the certifier to detect compliance issues and to suggest ways of addressing them. This is a very inefficient process and the system needs to place greater onus on designers for the quality and level of compliance designed into projects. (sub. 36, p. 17)

The regular checking of building progress by certifiers via inspections is also important, as builders themselves may not be explicitly required to ensure compliance with the BCA. For example, in NSW prior to 2004, the BCA was not mentioned in standard consumer/builder contracts, was not explicitly mentioned in legislation on statutory warranties, and was not necessarily referred to in contracts between builders and their subcontractors (Campbell Report 2002, p. 71). The Campbell Report said:

The only articulated reference to the Building Code is in the planning instruments, to which builders and consumers are not directly contractually involved. (2002, p. 73)

Given the importance of the role of the certifier, it is vital that they perform their duties competently. There are some concerns that where building certifiers have not performed their tasks adequately, poor building outcomes have resulted. A recent article noted that in NSW:

... tales of woe have continued: building certificates issued without as much as a site visit; unaccredited certifiers busy signing certificates, and even whole floors constructed above and beyond local council approval. (Perinotto 2003)

The Campbell Report also noted that poor quality buildings were resulting from the certification of buildings in NSW (by both council and private certifiers) that failed to meet Building Codes and from principal certifiers not properly performing their functions (2002, p. 13). It has even been suggested that, due to the history of problems in NSW, many people have lost faith in the system and are bringing in independent experts to assess compliance.

Poor quality certification puts at risk the achievement of fundamental health, safety and amenity outcomes for which the Code exists. And it adds extra costs to the building process, while undermining faith in governments' regulatory systems.

The ABCB Chairman noted that many jurisdictions have undertaken or are undertaking reviews of certification (sub. 4, p. 56). In NSW, changes to the audit system have been implemented, as the failure to set up an audit system at the introduction of private certification was found to be a significant contributing factor to the problems with the new system (ABCB 2003c, p. 2). Auditing was also identified by South Australia as an area to refine.

'People' issues or 'process' issues may be further underlying causes of the problems with certification. As discussed earlier in the chapter, some moves have been made to improve the accreditation processes and required educational qualifications of certifiers, to raise the competency levels of those working in the industry. However, there may be conflict of interest concerns, with the independence of private certifiers potentially questionable when they are engaged directly by the builder. On the process side, there may be procedural issues, where certifiers' performance is being undermined by the processes they use. These issues are discussed below.

Conflict of interest

Depending on their relationship with the builder and with the designers of a building, certifiers can potentially be pulled in different directions. For example, Arup Fire raised some concerns with the independence of practitioners who undertake both performance-based design and approval tasks. It noted:

Specific areas relate to private building surveyors carrying out fire safety engineering design (often using "expert judgement") and then approving these designs "in house" or through the same staff working under the umbrella of two differing companies.

The requirements for independence between those carrying out a design and approving the design are presently not clear in many States, with practitioners having to make an ethical choice ... Clarification and set guidance would be beneficial to all practitioners. (sub. 15, p. 4)

In noting that private certifiers are acting on behalf of the community when they approve designs or levels of fire safety, the Fire Protection Association of Australia commented:

This can represent a challenge in some situations where the private certifiers are being paid by the project developer and expected to assist in development of the most cost effective solutions as part of the design process, and then approving the same design. (sub. 19, p. 8)

Other interested parties noted the potential for difficulties where certifiers frequently work with the same building companies, such as can occur in smaller or more remote areas. In a report for the Ministerial Council on Consumer Affairs, on insurance and consumer protection, Allan (2002) noted:

Private surveyors ... sometimes depend too heavily on a few large builders for most of their income. This may compromise their independence and objectivity. It certainly undermines consumer confidence in their professional judgements. (p. 33)

To start to combat these problems, a number of jurisdictions have guidelines or rules about the conduct of certifiers. For example, the ACT advises:

A certifier must also be independent. They must not have any direct or indirect financial, legal or equitable interest in the work or have any relationship whether personal, professional, commercial or financial, with you or your builder. A certifier must also not be involved in the design or construction of the work being done. (ACTPLA 2003, p. 8)

NSW has also recently introduced amendments to its building legislation, tightening up rules around certification. Under these amendments, a builder will not be able to appoint a certifier unless he/she is also the landowner. The amendments also establish penalties for offering or accepting a bribe, with respect to certification functions.³

Beyond providing guidelines, the Australian Institute of Building Surveyors (NSW) suggested in a submission to the ABCB that developers should approach the building regulator to seek the appointment of a certifier:

The regulator would then liaise with the developer to identify assessors that the developer considers that his business has had no recent involvement with ... the developer would have to complete a statutory declaration to the effect that he and any subsidiary companies have no current involvement with the private certifier ...

The regulator would then seek a fee proposal from the assessor/s — the assessor/s would have to complete a statutory declaration to verify no conflict of interest to their knowledge.

The regulator would then appoint the assessor ... (2003, p. 7)

In a similar vein, a system of random selection of a certifier from a pool of accredited certifiers could help to avoid situations where a ‘compliant certifier’ is hired. However, the anti-competitive aspects of such a system, in terms of reducing the incentive for certifiers to operate an efficient service, would need to be considered.

³ See Department of Infrastructure, Planning and Natural Resources 2003, Q&A on development assessment and certification, http://www.planning.nsw.gov.au/planningsystem/pdf/QOCQ&A_final231203.pdf (accessed 18 May 2004).

The Australasian Fire Authorities Council suggested that ‘a vigorous approach to auditing private certifiers and the establishment of an accessible and well-promoted complaints system’ would also help to reduce problems with conflict of interest or improper conduct of certifiers (sub. 28, p. 23).

Alternatively, the South Australian Government suggested returning certification duties to councils (with stringent statutory performance criteria in terms of timeliness), or allowing private certifiers to only undertake ‘structural certification’ (where competition for certification work would be based on the less subjective assessment of structural adequacy) may be worthy of consideration (sub. 36, pp. 19-20).

Adequacy of processes

There are a number of ways in which compliance with the BCA can be assessed. Apart from situations where the certifier inspects and certifies the work themselves, options include self certification (where the building practitioner verifies their own work, such as a concreter assessing the compliance of the slab they have laid) and third party assessments (where a specialist assesses a particular part of the building, such as a consulting engineer checking a retaining wall).

Some criticisms of self certification have emerged. Allan (2002, p. 33) felt that some certifiers ‘rely too heavily on self compliance certificates and do not inspect each stage of work themselves’. For self certification to result in good building outcomes, the practitioners involved need to be competent in their profession and of high integrity.

The ICA also raised concerns that compliance checking has been ineffective due to certifiers signing off on plans, rather than actual site conditions, and checking the process around alternative solutions rather than the underlying design theory (sub. 38, p. 13).

The HIA pointed to a trend for approval authorities to require independent assessments to demonstrate compliance with the BCA, saying ‘the practice is becoming more common as a means of risk sharing in the event of litigation’ (sub. 6, p. 28). It also suggested increasing use of third party assessments may be due to a lack of accredited certifiers able to undertake approval or inspection work. With respect to the recent introduction of mandatory inspections in NSW, the HIA noted that ‘it was subsequently realised that there will not be a sufficient number of accredited certifiers to undertake the scope of required inspections’ (sub. 6, p. 28).

Third party assessments may become an increasing part of the certification process. With the growing number of issues covered by the BCA, and the rising use of

alternative solutions, the role of the certifier may move towards almost a project manager role, organising and collating the assessments of a number of experts to form a view on compliance. Assessment of alternative solutions requires a significantly higher level of skill than that required for deemed-to-satisfy standards, which can essentially be assessed against a list of prescriptive requirements in a ‘tick and flick’ manner. The WA Government Department of Housing and Works noted:

Performance standards mean the designer must have a strong understanding of the principles underlying the standard, and in effect restrict design to professionally trained people ... Equally, checking the validity of a design against a performance standard requires the same sort of professional knowledge as the designer needs. For a complex building it is inconceivable that a single person or a single profession is capable of checking all aspects of a building against all performance standards. (sub. 14, pp. 5-6)

In making use of self certification and third party assessment, certifiers must ensure that the practitioners whose opinions they are relying on are competent and able to undertake their roles in a professional manner. Some of the complaints about certifiers may be due to their reliance on other practitioners, who have not adequately assessed compliance against the Code.

The process of certification may also be assisted by clearer allocation of responsibility for compliance with the BCA by other practitioners in the building process. For example:

A requirement on building designers to have quality assurance checks prior to submitting documents to a certifier would ensure greater risk management analysis at the design stage ... If such quality checks were mandatory the risk associated with compliance would be spread more equitably between designers and certifiers. (South Australian Government, sub. 36, p. 18)

The way forward

The essential role of approval, inspection and certification processes is to ensure compliance with building regulations and assign accountability for achieving building outcomes. This section has highlighted some of the difficulties and hurdles currently being experienced, due to such factors as jurisdictional differences, the use of performance-based regulations and the operation of private certification.

Any changes to the processes must generate a net benefit and provide greater faith in the system.

While there may be benefits from some alignment across jurisdictions of administrative procedures relating to approval, inspection and certification processes, it is not clear that net benefits would arise from the harmonisation of all aspects of these processes.

Conflict of interest concerns relating to private certifiers may be reduced with greater use of guidelines, agreed by jurisdictions and issued nationally. Guidelines for the use of self-certification could be useful.

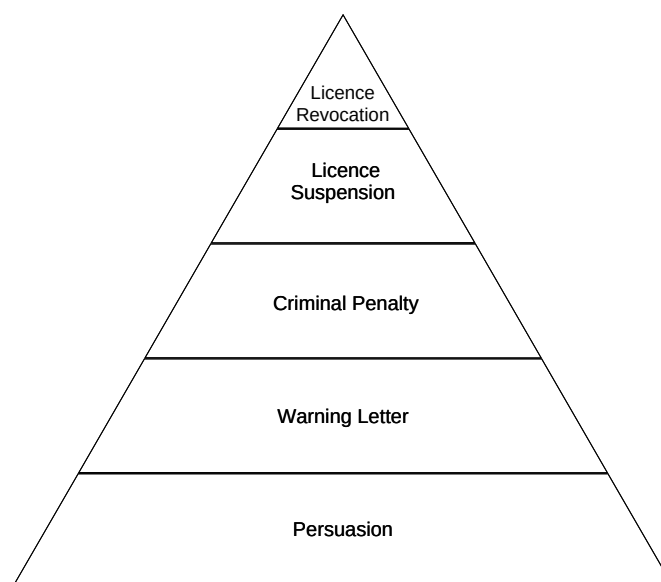
7.4 Enforcement and dispute resolution

Enforcement

Enforcement mechanisms provide the ‘sticks’ to promote compliance with health, safety and amenity requirements of the BCA. While inspections determine the probability of non-compliance being discovered, enforcement is the consequence of that non-compliance. Building regulations are enforced at both the local governments and State or Territory levels.

When inspections find defects, local governments have a variety of enforcement tools at their disposal. These include: orders to do, or halt, particular work; warnings; and fines, among other things. These tools can be used to create lower or higher penalties for non-compliance, and can be used in a graduated fashion over time. An example of this is shown in figure 7.1. State and Territory Governments enforcement roles primarily are derived from their registration and licensing powers.

Figure 7.1 **An example of an enforcement pyramid**



Source: Office of Regulation Review 1995, *Regulation and its Review*, September.

Assessing breaches and how they may be rectified or penalised can require significant resources and expertise, which may not be available to every enforcement body. Additionally, the expertise required to effectively enforce building regulation is not solely technical:

... if a building control organisation decides to go down the path of enforcing its legislation... then it is more efficient to provide technical support to trained investigators than to try and train technical experts in the skill of investigation. A technical expert can easily identify a technical breach however linking that breach to the legislation and preparing the case for presentation at a court or other formal hearing in a legally admissible form is not so simple. Simply knowing that a building professional has done something wrong is not good enough. (King 2002, p. 3)

Some considerations for enforcement options are given in box 7.1 below.

Box 7.1 Considerations for enforcement options

Enforcement approaches vary between jurisdictions for a variety of reasons. These reasons also form considerations for the determination of an optimal enforcement approach:

- resource constraints on enforcement agencies
- available enforcement mechanisms
- corruption issues
- nature of the regulations involved: performance based or prescriptive
- visibility of breaches
- benefits of compliance - ie how costly is the problem being regulated
- cost of rectification
- variations in the cost of compliance amongst firms.

Source: See Office of Regulation Review 1995, *Enforcing Australia's food laws*, November, for a discussion of enforcement issues.

The visibility of breaches and the cost of their rectification are particular issues for buildings. As the Campbell Inquiry heard, these factors can have substantial implications for the affected parties:

As the Committee learnt time and again through case studies provided in submissions and at public hearings, when things do go wrong, the impacts extend in many directions. Where the problems relate to actual structural integrity and safety, the consequences can be life threatening. Financial costs to obtain rectification, dispute resolution, rehousing and/or sale costs can mount. In some cases, these costs may lead to significant debt and even bankruptcy. The human costs of problems such as impact on employment, relationships and general health and wellbeing of individuals and families are also a major concern. (Campbell Report 2002, p. 3)

A fault in a building is not necessarily visible, for example it could be present within the foundations or the wall or roof cavities. As such, by the time a user becomes aware of a breach of building regulations, the fault may have been in existence for many years and may have become worse over time. Given the incentive for builders to devote less effort to compliance in less visible areas, it would be appropriate for penalties in these areas to be significant to counter this incentive. Additionally, the cost of rectification may be more than simply the materials and labour to rectify the problem itself. It can include further work on areas affected by the fault, loss of property value and the loss of the use of the property for a period of time. Again this indicates that building faults, particularly those that may affect other parts of the building (ie structural faults), should warrant substantial penalties.

In some jurisdictions, private certifiers may also undertake enforcement activities. For instance, in the ACT, private certifiers may issue stop work notices for building work on which they are the certifier. In other jurisdictions, the enforcement of building regulations reverts back to local councils in the area.

Building contracts

In addition to the enforcement of building regulations by authorities, consumers themselves may also have some enforcement tools at their disposal. Through the contract they have with the builder, consumers may be able to look after their own interests by requiring that defects are rectified, specifying certain levels of quality and setting details with respect to deadlines and payments. This way, the consumer can insert requirements above and beyond the BCA in their own contract. Enforcement of this contract through building tribunals and the common law court system is a major, though potentially costly, means for the consumer to obtain their desired level of quality in the building process.

The building contract can also be used by parties to shift liability, by assigning the responsibility for compliance with codes and government regulations to a particular party, such as a project manager or sub-contractor. This party then assumes responsibility for any non-compliance with regulation. Contracts can be regulated to require certain base clauses, for example ruling out unconscionable, oppressive or misleading conduct by the builder, requiring insurance, allowing for cooling-off periods and setting limits on when payments may be required. These regulations are often used with respect to home building contracts, where the consumer possesses less information than the builder about the completed building (see box 7.2).

A national template setting out the minimum requirements for home building contracts could go some way to addressing the information asymmetry between consumers and builders in this section of the market. This would help in clarifying consumers' expectations and identifying the risks that they are assuming.

Box 7.2 **Building Contracts**

As a result of the Campbell Report, the NSW Government introduced a number of reforms, including changes to home building contracts to include additional information to help prevent disputes. These reforms aim to ensure that the consumer understands major issues within the contract, such as the price (and deposits), insurance, and requirements to obtain building approvals. Additionally, compliance with the BCA and other relevant codes, standards and specifications is to be included in contracts provided by industry associations. These changes took effect from 16 February 2004.⁴ Licensed builders who do not comply with the new contractual requirements may be subject to disciplinary action.

In Victoria, under the Domestic Building Contracts Act 1995, contracts must include details such as insurance, start and finish dates, cooling-off periods and the price. Unlike New South Wales, Victorian contracts do not require compliance with the BCA.

Another example of regulated contracts is in Western Australia, under the Home Building Contracts Act 1991. In addition to setting out insurance requirements, fixing the price, minimising variations to the contract and timelines for payments, Western Australian builders are prohibited from including provisions that are unconscionable, harsh or oppressive.

DRAFT RECOMMENDATION 7.1

The ABCB (or its replacement) should work to facilitate a national template for home building contracts.

Dispute resolution

There are two main circumstances where a party in the building process will seek some form of legal remedy – where they have a dispute with another party (for example, the consumer against the builder, often involving other parties such as architects or designers) or where a party wishes to appeal a decision made by an authority (for example, certification or a decision by a council or a State or Territory department). If disputes arise during the building process, the parties have several options available to them.

Where a party has a dispute with a practitioner, dispute resolution can be both formal and informal. At the first instance, the parties are encouraged to use methods of alternative dispute resolution — to discuss their dispute and attempt to resolve

⁴ See <http://www.fairtrading.nsw.gov.au/building/builderstradespeople/homebuildingreforms.html> (accessed 24 June 2004).

their differences before resorting to more formal, time-consuming and expensive means of resolution. These more formal methods can include:

- complaint to a responsible department;
- appeal to a specialised tribunal;
- notification of a licensing authority where the practitioner is subject to a licensing scheme; or
- taking the matter to a common law (generalist) court, for example, in the case of contract disputes.

Where a party wishes to appeal a decision of an authority, usually a government body, there are several options that exist across jurisdictions, including:

- appeal to the responsible body itself;
- appeal to a specialist tribunal; or
- appeal to an administrative tribunal (such as the Administrative Appeals Tribunal).

Often the longer the dispute resolution process takes, the more expensive, complex and difficult to resolve it becomes. As such, earlier intervention in the process can result in significant savings, if a protracted dispute is avoided. In the context of building, this may be achieved by an early independent inspection of building work (where the standard of the work is at issue), which will resolve particular facts that are under dispute, and lead to faster resolution.

In addition to dispute resolution bodies, the Campbell Report noted the role of other systems — such as consumer protection, contracts, practitioner licensing, insurance and training — in the dispute resolution process:

... [making] other practitioners more accountable in building disputes can be achieved through the licensing mechanism. The recommendations in this report to license other practitioners, to enable consumers to complain about those other practitioners, and to have audits and disciplinary action imposed upon them is one part of improving accountability. By requiring indemnity insurance on those practitioners, the builder is able to pursue a practitioner in cases where they are liable for contributing to the building problem. (Campbell Report 2002, p. 164)

The process of private certification can cause complications in the dispute resolution process. It may be more difficult to obtain information from private certifiers regarding a dispute, as the certifier may have a commercial relationship with the builder. Additionally, in a system that uses both private and council certifiers, some avenues are available against private certifiers (professional boards), while some are specific to council certifiers (government investigation).

This can lead to confusion for the consumer, resulting in costs and delays in the dispute resolution process. An example of this arose in NSW during hearings for the Campbell Report:

When ***** went to council to request a copy of the building application file she was told that it was not possible to provide her with these documents as they would be on the private certifier's file. Sutherland Shire Certification Service said that the only way to view this file was to subpoena it. Mr Peter Blatch (PCA office) explained to ***** that they were independent from Council ...

... [I] spoke to Mr Jeff French, who confirmed that Sutherland Shire Certification Service was an independent certifier ... We lodged a complaint against the independent certifiers to the Building Surveyors Allied Professional Accreditation Board ... The board rang ***** and advised her that Peter Blatch and the PCA were not registered with them and she should ring the urban planning department. ...[the complainant was advised] that the PCA is in fact the council. (Campbell Report 2002, p. 15)

A further issue for dispute resolution is that, as a Code enshrining minimum acceptable standards, the BCA will not dictate the quality of buildings above the minimum. However, many disputes relate to the quality of the work, where the work required was expected to be above the minimum standard. In these cases, the BCA provides little to no guidance for the dispute resolution process. To address this, some jurisdictions have published 'guidelines to standards and tolerances'⁵ to provide guidance on judgments to be made regarding quality standards that are not covered by the BCA.

Suggestions for the future

As mentioned above, disputes may involve recourse to forums that apply more legal than technical standards. The HIA comments that 'the general principle of resolving disputes on the basis of technical merit rather than legal assessment does appeal' (sub. 6, p. 40). Greater recourse to bodies constituted by technical experts, applying technical standards, is likely to reduce the time and cost associated with the resolution of building disputes. The Campbell Report examined the issue of dispute resolution and it favoured the use of technical standards, commenting that:

...the [New South Wales Consumer Trader and Tenancy] Tribunal should modify its use of technical witnesses and expert reports. It has been proposed that where expert opinion is needed, the Tribunal should establish a standing panel of building experts. These experts would provide a report on the disputed matter to both parties which would be jointly filed. (Campbell Report 2002, p. 161)

⁵ See, for example, the Victorian guidelines at: http://www.buildingcommission.com.au/asset/1/upload/Standards__Tolerances.pdf (accessed 26 May 2004).

Often disputes can arise over workmanship or compliance with regulations. Such disputes lend themselves to resolution by technical expertise. However, parties will always retain the option for legal recourse in their dispute resolution. For example, contractual disputes may raise more points of legality than technical standards, and as such may not be so easily resolved. Where base contracts are regulated in jurisdictions and the dispute is over the regulated provisions of the contract, involvement of the responsible department at an early stage of the dispute may help to clear up any complications. However, where the provisions under dispute were inserted by the parties and do not contravene building regulations, it may be up to a court of law to decide if the contract is valid and if it has been upheld by the parties.

7.5 Maintenance

The role of building regulation does not cease once a building is completed and occupied. Beyond codes for the construction of a building, the BCA contains provisions concerning the maintenance of essential services, particularly aspects relating to fire safety. As mentioned in chapter 5, these provisions apply to commercial, not residential, buildings. As such, regulatory systems must monitor these aspects of maintenance of commercial buildings to ensure ongoing compliance with the BCA.

Typically councils are responsible for enforcing essential services maintenance, with procedures usually set at a State (or Territory) level. Most jurisdictions have chosen to administer inspections with a system of self-certification by the building owner, coupled with random checks by either building surveyors or fire authorities. The owner must prepare documentation, in a 'check list' fashion, to record a maintenance check. Depending on the jurisdiction, this documentation must either be lodged with an authority (for example, a Fire Commissioner) or be displayed or easily available on the property in case of an inspection.⁶ If an inspection is failed, penalties may include fines levied by the inspector or by a council.

As with other administrative systems in building regulation, differences exist in the administration of maintenance across the States and Territories. Arup Fire pointed to the need for a national set of guidelines regarding maintenance, saying:

Whether a building is developed through a performance based solution or one that wholly meets with the prescriptive requirements, a national set of guidelines regarding maintenance is required. Many accidental commercial fires in Australia in the past 20 years have been caused through poor building maintenance, whether it be inactive fire systems, illegal building works or general poor maintenance to aspects such as fire

⁶ See for example, maintenance requirements in Victoria: <http://www.buildingcommission.com.au/www/default.asp?casid=3136> (accessed 2 July 2004).

doors or fire walls. There are presently national Australian Standards for the installation of fire safety features (passive and active) and yet there is no national approach to maintaining these fire safety elements. (sub. 15, p. 4)

It suggested that the New Zealand 'Building Warrant of Fitness' and IQP system could be adapted for use in Australia (sub. 15, p. 4).

The Fire Protection Association of Australia agreed, saying:

... FPA Australia strongly supports the adoption of uniform inspection, testing, preventative maintenance and survey regimes on a national basis. The Association believes that this is best accomplished by adoption of Australian Standard AS1851 ...

Ideally, AS1851 should be referenced in the Building Code of Australia. Alternatively, it should be adopted in State regulations. In this way ... the true intent of installing such essential protection services is realised in the continuum. (sub. 19, p. 9)

The KPMG impact assessment of ABCB reform activities also noted that:

It is not clear who is responsible for maintenance of the documentation and the ongoing enforcement of the standards and it was suggested that the ABCB could assist in clarifying this. (2000, p. 40)

The HIA argued that '[m]andatory maintenance procedures should be administrative provisions as they relate to administrative processes that need to be undertaken throughout the life of the building ...' (sub. 6, p. 36). HIA suggest these provisions should be part of the national administrative framework.

In addition, the ABCB Chairman noted that:

Further work is necessary to resolve concerns industry has about the lack of consistency on how maintenance is administered under the current state-based approach. (sub. 4, p. 52)

Without ongoing inspections and enforcement, the intent of the BCA to maintain essential services may not be delivered. Given that maintenance requirements apply to many commercial buildings across Australia, and that they form a regular, recurring part of building operation, the compliance costs associated with administering the requirements has the potential to be high.

In line with other inspection and approval requirements, some degree of national consistency in the administration of maintenance would be beneficial. For example, in relation to the handover of buildings to new owners, the KPMG report found that:

Case study participants suggested that the BCA be further enhanced in that a new and separate section dealing with the handover of buildings to new owners be established. ... Given the variety of practises and standards participants suggested that a minimum requirement in respect of the handover procedure, format of documentation, and follow up of fire related procedures be established. (2000, p. 49)

Agreement across jurisdictions as to the most appropriate and efficient administrative provisions for maintenance requirements, and the subsequent issuance of clear, concise national guidelines, would provide benefits to both owners of buildings and regulators.

DRAFT RECOMMENDATION 7. 2

The ABCB (or its replacement) should work towards reaching agreement across jurisdictions as to the most appropriate and efficient administrative provisions for maintenance requirements.

7.6 Other mechanisms for achieving outcomes

Regulatory processes for licensing, approvals, enforcement and dispute resolution are mechanisms to assist achieving good building outcomes. But other activities, including training and insurance, also may have a large impact on the building process. These are discussed below.

Training

Education and training programs are a key mechanism for giving building practitioners the ability to undertake their activities in a professional and skilful manner. Formal education and training for the many building industry occupations may be obtained through several different pathways: apprenticeships and vocational education and training (VET) (available to school students as well) or university training. Qualifications range from Certificates and Diplomas, to Bachelor and post-graduate degrees.

The ABCB is tasked, via IGA Objective 9, with looking at matters ancillary to its objectives, including training. To assist in raising education awareness, the ABCB developed a ‘One Stop Education Shop’ website, which:

... identifies accredited courses relating to the building and construction industry which can lead to a qualification. ... also provides other information including the Recognition of Prior Learning Framework, National Competency Standards and the ABCB Industry Based Learning Program. (sub. 4, p. 17)

Achieving IGA Objective 3 on deregulation has also been assisted by the ABCB’s activities in training, with the establishment of a national competency and accreditation framework for certifiers (discussed earlier).

A number of participants raised concerns that training has declined, with adverse impacts on the numbers and skill levels of building practitioners. These concerns are consistent with issues raised in several other fora in recent years.

Building trades generally obtain qualifications through the VET sector. There are currently three Training Packages for the building and construction industry, with a fourth under development (see box 7.3). Educational attainment has historically been low, with the NCVER (2001, p. 10) finding that, in 1996:

- fewer than 1 per cent of employed persons in the building and construction trades had a degree or higher as their highest qualification (cf 15.5 per cent of the total Australian workforce);
- 1.7 per cent had a diploma or associate diploma (cf 8 per cent of the total workforce);
- 44.1 per cent had a skilled vocational qualification (cf 14.2 per cent of the total workforce); and
- 45.1 per cent had no formal post-school qualifications (cf 51.3 per cent of the total workforce).

Skill shortages

ACIL (1998) called into question the notion of skill shortages and under-training in the building and construction industry. The NCVER (2001, p. 32) also commented that the sector compared favourably with other trade workforces and with the workforce as a whole on indicators such as levels of separation from the trades, take up of apprentices and levels of stock of skills in the workforce. However, Construction Training Australia (CTA)⁷ was concerned that skill levels would fall as the propensity to train and the intensity of training declined along with firm size in the building and construction industry. It noted:

In the private sector as a whole in 1996, firms with more than 100 employees spent 340 per cent more per employee on structured training than firms with less than 20 employees. The proportion of firms providing structured training is 6.6 times greater in larger firms than smaller firms. (CTA 2003, p. 13)

⁷ CTA ceased trading on 31 May 2004. A new advisory arrangement, the Construction and Property Services Industry Skills Council, is expected to commence operations shortly.

Box 7.3 **Training packages in the building sector**

Training Packages for the building sector were created by Construction Training Australia (CTA) – formerly the national Industry Training Advisory Body (ITAB) for the industry. The body covered residential construction, non-residential construction and engineering construction, and its main task was to develop the standards that are required for jobs in the industry.

The Training Packages available are:

- Civil Construction: as well as a general qualification it also covers qualifications relating to plant, road construction and maintenance, tunnel construction, bridge/marine construction, foundation work, railway construction and maintenance, pipelaying and road marking.
- General Construction: as well as a general qualification it also covers qualifications relating to wall and floor tiling, wall and ceiling lining, solid plastering, painting and decorating, structural cladding, bricklaying and blocklaying, carpentry, roof tiling, materials handling, demolition, concreting and steelfixing and building surveying.
- Off-site Construction: covers general off-site construction qualifications as well as qualifications in shopfitting, joinery (timber/aluminium/glass), stairs, pre-fabrication, machining, monumental/installation, sign writing/computer operations, sign manufacture and neon manufacture.

A Construction Services Training Package (covering general plumbing and drainage, air conditioning and mechanical services, gasfitting, roofing and cladding, fire protection and urban irrigation) was endorsed by industry in June 2003 and was forwarded to ANTA for endorsement. Packages are endorsed for a period of three years, after which they are reviewed to ensure currency and relevance.

There are also Training Packages formulated by other bodies that cover trades working in the building and construction industry. For example, the Electrotechnology Training Package offers qualifications for electricians, air conditioning technicians and lift mechanics (Stenning 2002b, p. 63).

Training Packages contain national competency standards – the skills and knowledge that a person must be able to demonstrate at work – and assessment guidelines to ensure valid, reliable and fair judgments to be made about an individual's performance against those competency standards. Each Training Package developed by CTA contains a number of qualifications from AQF level 1 to AQF level 3, made up of a combination of competency standards/units that students must complete. For example, in the Diploma of Building Surveying, there are 15 core units on surveying and nine core units on 'cross industry' skills that must be completed.

Source: See <http://www.constructmycareer.com.au/index.cfm?MenuID=174&TopMenuID=26> (accessed 20 August 2004).

CTA also suggested there had been a relative decline in apprenticeship numbers compared to the level of activity in the industry, saying 'training activity is lagging

far behind the levels of building and construction activity and employment resulting from such activity' (2003, p. 34). CTA suggest this may be partly due to the trend to smaller firms (perhaps firms cannot afford apprentices or cannot offer the variety of work required) or the privatisation of government entities (with the pressures of the bottom line within privatised entities meaning less apprentices are hired) (2003, p. 16).

The quality and adequacy of courses

A submission to the Campbell Report noted courses were not always in line with current practice:

The TAFE system has been under constant criticism for not having its courses and teachers fully up to date with current practices, materials, codes and regulations. (2002, p. 61)

CTA also noted those delivering training may not be well equipped:

So far Training Packages have been implemented with very little personal development opportunities for the trainers who are involved in providing training and assessment services. The discussions that CTA has had with RTOs indicate that some trainers continue to find it difficult to make the transition from curriculum based training to competency based training and assessment. (CTA 2003, p. 64)

Applicability of courses to the industry

A further debate is whether 3–4 year broad-based apprenticeships are still applicable to the more specialised contract/subcontract environment. CTA commented:

The specific training needs of this segment of the Construction Industry workforce have not been well catered for by the traditional apprenticeship system, which is still largely geared to providing broad, all-round trade skills. ... Training Packages and New Apprenticeships, could, if applied creatively, provide the basis for flexible training programs to meet the needs of the specialist sub-trades workforce. However, current industrial relations culture and to some further extent, State/Territory licensing issues, prevent this from currently happening to the satisfaction of many in the industry. (CTA 2003, p. 16)

However, a counter-concern is that a more specialised trade qualification leads to more limited occupational outcomes and that this may have a number of adverse consequences. CTA noted:

Building apprentices and tradespersons such as carpenters and bricklayers who have been engaged in a narrow range of tasks have difficulty understanding the broad scope of the construction tasks to which they contribute. This means they often require higher levels of supervision; they cannot identify and correct faults in the work of other

tradespersons; and they find it difficult to adapt if conditions or specifications differ across projects. Further, it has been argued that because of their specialisation, they have lower intra-industry mobility than multi-skilled tradespersons. ... [this] has the effect of increasing labour shortages within the industry as a whole. (CTA 2003, p. 59)

ACIL saw the limitations of the apprenticeship system as the ‘inability to obtain the necessary qualifications by attending a tertiary institution full-time and gaining the necessary practical training through supervised work experience, including at the designated tertiary institution’ (1998, p. 9).

The Commission invites comments on whether the current education and training arrangements in the building and construction industry are adequate and whether there would be a future role for the ABCB (or its replacement) in relation to training.

Insurance

Insurance requirements are another mechanism by which regulators can seek to promote good building outcomes, lessen the incidence of building faults and provide redress for consumers in the case of faults or noncompletion. As mentioned in chapter 3, building defects may not be revealed until some years after construction is completed and consumers often have little information (compared to a building practitioner) to help them make judgments about the standard of their building. The risk of financial loss to the consumer, due to the substandard performance of those involved in the building process, can be high. Requiring practitioners to be insured not only manages some of the risk to consumers, but adds another incentive for practitioners to undertake their tasks professionally and competently.⁸ Their insurance status may also be a useful signal to consumers as to their capabilities.

All building practitioners, from designers to builders to certifiers, play a part in ensuring successful building outcomes and are potential candidates for insurance requirements. Insurance requirements for the various practitioners currently differ across the States and Territories, although Home Builders Warranty Insurance (HBWI) and professional indemnity insurance are the two key insurance products generally required. Insurance in the building industry has also been seen as an

⁸ Although the provision of insurance creates moral hazard issues, where the insured party feels they do not need to take as much care because insurance will ‘foot the bill’, these can be reduced by the design of insurance products (for example, by requiring an excess) and careful use of eligibility criteria (for example, looking at a practitioner’s reputation and history). Further, establishing a feedback loop so that higher claims and higher risk leads to higher premiums can give a clear signal to the insured party about the consequences of their actions.

important complement to the wider liability reforms that have taken place in some jurisdictions, in particular, the introduction of private certification and proportionate liability. Requiring adequate insurance cover for practitioners ensures that they are able to meet their share of liability in the event of claims for damages.

HBWI is required in all States and Territories, and in some cases (Queensland and the Northern Territory) the insurance is provided by a government body. Aimed at consumer protection, this cover provides a guarantee that the building work will be completed, and that it will be constructed without fault. However, it is generally ‘last resort’ insurance, which only covers claims where non-completion or fault occur and the builder is unavailable through death, disappearance or insolvency. If the builder is still trading the consumer must pursue the builder through other avenues, mainly through the courts for breach of contract.

The content of HBWI — for example, the length of the cover, the minimum value of work requiring insurance and the minimum value of coverage required — is regulated, however the supply and pricing of the insurance are unregulated. One notable feature of the HBWI market is that:

... HBWI is taken out by a different identity (the builder) to the beneficiary (the homebuyer). Hence, the consumer has no choice over which policy is chosen. In most cases it is not until they make a claim that the true nature of the insurance becomes apparent to them (Allan 2002, p. 10)

Eligibility criteria vary across jurisdictions. Queensland, for instance, relies on the builders’ licensing system, with four categories of builder based on their turnover and assets. Once licensed, insurance for each contract can be obtained over the phone through the use of a pin number and phone payment of premiums.

A contentious area, HBWI has been the subject of 20 reports or reviews in the last ten years (sub. 39, p. 2). A 2002 report for the Ministerial Council on Consumer Affairs detailed the grievances of builders, consumers and insurers:

Many builders complain they cannot get insurance or if they do it is insufficient to support their business turnover. Private insurers are skittish and recently threatened to withdraw from the market if governments did not scale back mandatory insurance requirements. Consumers are realising insurance either does not exist (for example, high rise apartments) or is cold comfort since claims are only recognised if their builder has died or gone out of business. (Allan 2002, p. vii)

Professional indemnity insurance covers practitioners for claims — primarily of professional negligence — made against them. Within the building industry this insurance is often a condition of licensing for professions such as certifiers, architects, engineers and designers, among others.

Builders are generally not required to hold professional indemnity insurance. However, in some jurisdictions, some categories of builder not covered by HBWI requirements may be required to take out a form of builders indemnity insurance. For example, in Victoria the practitioner category ‘commercial builder (unlimited)’ is required to take out builders indemnity/structural defects insurance.⁹ For builders who wish to voluntarily take out additional insurance, insurers such as Vero offer insurance products tailored to various types of builder (such as small residential builders).

There are three key issues related to insurance in the building industry:

- the cost and availability of insurance and the impact this has on the industry
- the role insurance is playing in providing incentives for good building outcomes
- the degree of consumer redress that is being provided by current insurance requirements.

These issues are discussed in turn below.

Cost and availability of insurance

A number of interested parties expressed concern with the level of availability of insurance (both HBWI and professional indemnity) and its cost. Difficulties with obtaining insurance at an affordable price was seen as a contributing factor to firm closures and incidences of practitioners working without insurance cover. (Of course, the concerns of the building industry must be seen in the broader context of insurance cost and availability issues in Australia in recent years, particularly in the aftermath of the collapse of HIH Insurance. Many groups have found it difficult to access affordable and suitable insurance products, with premiums, exclusions and conditions tightening up.)

The Builders’ Collective of Australia submitted that issues with the availability of HBWI may force some small to medium builders out of business (sub. 39, p. 2). The Collective noted that the Building Designers Association of NSW believed the HBWI scheme encourages incompetent builders ‘to enter into illegal covert arrangements with owner-builders [who are exempt from HBWI]’ (sub. 39, p. 3). The Collective also noted these issues can extend beyond small builders:

The Victorian Government also in May 2003 saw fit to exclude themselves from the warranty scheme due to their inability to access builders with the relevant insurance cover for their own projects. (sub. 39, p. 6)

⁹ See <http://www.buildingcommission.com.au/www/default.asp?casid=3896> (accessed 2 July 2004).

Additionally, in Western Australia:

A common complaint ... is that insurers are placing too many restrictions on builders' turnover, thereby impeding the natural growth of the company. This has the potential to create an anti-competitive market for builders. (Lilley, Nigel – Builders' Registration Board of WA, sub. 40, p. 4)

With respect to professional indemnity insurance, the HIA noted that '[m]andatory insurance requirements will be of little benefit to clients if practitioners cannot gain insurance cover and such an outcome will simply lead to a deficiency of practitioners' (sub. 6, p. 40).

In discussing the consulting engineering profession, Charles (2003, p. 2) also remarked on the escalation of insurance costs:

Ours is an industry where the average cost on an annual PI insurance policy (if you can get one) now exceeds \$70,000, where the cost of a PI policy has, on average, increased by over 300% in the last two years, and policy excesses have increased by over 240%.

... Almost half of our firms have been unable to pass the full cost of PI insurance on to the market. Of these, almost 30% have had to absorb the entire PI cost increases.

... as PI costs continue to escalate, and exclusions increase, the bottom line profits and commercial viability of many firms are increasingly marginalised to a point where some of them will eventually close, amalgamate with other firms, or work uninsured.

Interested parties offered some suggestions as to why the cost and availability of insurance had deteriorated. For example, the Airconditioning and Mechanical Contractors Association of Victoria (AMCA) pointed to the allocation of risk, noting that head contractors are taking steps to 'shift a large portion of the project insurance responsibility onto the specialist trade subcontractors' (sub. 16, p. 7). This was also noted by Charles (2003, p. 5):

The way in which some private and public sector clients shift most or all risk and liability on to consulting engineers and subcontractors is of concern to ACEA ...

Whereas, on the one hand, insurers are carefully choosing to provide PI cover on the basis of least exposure to liability, some clients, on the other, are intent on placing all risk squarely on the shoulders of consultants and subcontractors. ... some levels of risk being demanded by clients are both impractical and uninsurable.

Inappropriate risk classification was also raised as a potential problem. Charles (2003, p. 8) commented that insurers' sometimes limited knowledge of the building industry may be contributing to increased costs:

... insurers are themselves concerned at the lack of their own industry's understanding of what consulting engineers actually do. ...

Insurers need to understand that their PI cover for most engineering professionals is not a high risk gamble. ...

We are also looking to develop risk profiles for various engineering services, to assist insurers to make decisions on the true riskiness of various activities presented to them for insurance support.

AMCA also commented that insurance requirements for work in the domestic sector need to be differentiated from those for work in the commercial sector (reflecting the different risks posed by each sector) (sub. 16, pp. 6–7).

As noted earlier, MBA also felt the tendency for the legal system to seek compliance at all stages of a project, as compared with the current legislative requirements to check compliance at various structural stages, was impacting on the cost and availability of professional indemnity insurance (sub. 24, p. 12).

The ICA pointed out that liability arrangements had been onerous on insurers:

... The requirements were the inclusion of all building professions, a ten-year run-off provision, limitation of excesses and inability to alter the wording to address emerging exposures.

From 2002 the professional liability market sought to address these requirements. ...

The result was changes to the legislation in all States and Territories to remove the requirement for a ten-year run-off provision, limitation on excesses and allowing insurers to amend the wording to address emerging exposures, for example asbestosis. (sub. 38, pp. 14–15)

The ICA submitted that the industry was prepared to provide coverage, but only if it can be done profitably:

... It must be understood that if this market segment cannot be profitably underwritten and at the same time ensuring premium and coverage is affordable and reasonable to the insured, insurers may not participate. (sub. 38, p. 15)

To overcome cost and availability issues, the South Australian Government suggested there may be a role for the ABCB in brokering insurance for private certifiers:

... there is a distinct likelihood that the insurance issue will cause the number of practices to substantially decline to just a few large practices who are able to carry the insurance premiums. This will result in reduced competition and a greater demand on councils.

There is scope for the ABCB to broker a common insurance portfolio for private certifiers on a national basis. To achieve this the State administrations may need to commit to a common set of risk management strategies such as auditing arrangements. (sub. 36, p. 20)

Additionally, there have been some recent improvements in the cost and availability of HBWI and professional indemnity insurance. For example, in response to the removal of HBWI requirements for buildings above three storeys, Insurance

Australia Group entered the HBWI market in NSW and Victoria and the incumbent, Vero, announced it would cut premiums by up to 15 per cent (Murray 2004). In Queensland, practitioners who can demonstrate that it is not financially viable to obtain professional indemnity insurance, may apply for an exemption (sub. 41, part 2, p. 15).

There have also been wider insurance reforms resulting from collaboration between Commonwealth, State and Territory Ministers, which have included some changes to professional indemnity insurance. Jurisdictions agreed to introduce:

- Proportionate liability for claims of economic loss or property damage. This replaces joint and several liability and means that professionals will no longer be liable for the full amount of a loss where they have only made a small contribution to the total loss. This reform has been legislated in NSW, Victoria, Queensland and Western Australia, and by the Australian Government.
- Professional standards legislation. This aims to assist in delivering certainty to insurers, protection to consumers and affordable, available insurance to professionals, by allowing professionals to limit their liability in exchange for risk management, compulsory insurance and other consumer protection initiatives (such as professional education and disciplinary mechanisms). These reforms have been legislated in NSW, Victoria and Western Australia, as well as by the Australian Government. (Australian Government Treasury 2004, pp. 10, 63, 98, 99).

Additionally, the Australian Procurement and Construction Council has developed a set of guidelines for the assessment of professional indemnity insurance requirements in building contracts (sub. 41, part 2, p. 16). This may lead to greater clarity and consistency in insurance requirements across jurisdictions.

In this light, continuing inability to obtain insurance indicates that the risk of inadequate building outcomes are high and fundamental changes are needed.

More broadly, Allan (2002) believed that problems in the HBWI market could be alleviated by achieving a better building process, with better built homes, better home builders and better dispute resolution leading to fewer insurance claims and a more sustainable and accessible insurance market (p. 30). Allan identified the requirements needing to be addressed as:

- Controlling builder risk by improving builder registration, business capitalisation, technical skills and managerial competence as well as consumer knowledge of builders' performance;
- Reducing construction risk by improving building standards, contracts, specifications, approvals, practices and inspections; and

-
- Solving building disputes by improving complaints handling, defects assessments, mediation and arbitration so as to avoid prolonged and costly litigation. (Allan 2002, p. 31)

Insurance and incentives

Also of interest is whether the current mandatory insurance requirements provide appropriate incentives to reduce building faults and promote good building outcomes for consumers (see box 7.4 for a general discussion of the role of insurance in providing incentives).

The last resort HBWI system clearly does not provide incentives to builders to ensure fault-free construction. As the insurance only ‘kicks in’ when the builder is dead, insolvent or has disappeared, there is no feedback loop from the builder’s behaviour to the premium that they pay.

However, professional indemnity and builders indemnity insurance can provide more influence over practitioner behaviour. As claims are not restricted to situations where the practitioner is no longer available, the practitioner will feel the effects of any adverse event or higher risk through the premium they pay. However, while private certifiers may be required to hold professional indemnity insurance, local government certifiers are generally covered by council-wide risk management policies and insurance, thereby limiting any insurance incentives for them to undertake their duties with care.

Incentives for better building processes can also be provided through other non-regulatory means, such as private industry awards (or media exposure), aimed at informing the consumer by highlighting high quality builders (and low quality builders through dispute registers or other means). Other mechanisms for the consumer to gain information and influence behaviours include through the building contract or by privately commissioning their own building inspections.

Consumer redress

It is not clear how successful HBWI and professional indemnity insurance are at providing consumer redress in the case of faults or noncompletion.

Box 7.4 Insurance and incentives

Insurance essentially works by providing incentives and signals. Insurers offer cover for a particular event (for example, a negligence claim) in exchange for a premium. Premiums generally reflect risk (that is, the probability and the consequences of the adverse event) in order to send a clear signal to the insured party about the costs of that event. A higher risk of claims equals a higher premium. In addition, when the probability of loss depends on the actions of the insured party, insurers usually offer only partial insurance, so that the insured party bears some of the costs of claims. Together, these features provide incentives to the insured party to take care and attempt to avoid occurrences of the adverse event.

The incentives and signals sent by insurance are blunted to some extent by the way insurance markets operate. Insurers manage the risks they take on by pooling them — grouping together firms or individuals who present the *same* risks and offering premiums based on that group risk. While not every member of the group will have the same claims experience over the year, all of them will share the costs of meeting any claims from within the group. This reduces the link between the insured's behaviour and their premium, and so can reduce the incentive to take care. Similarly, if an insurer cross subsidises across *different* levels of risk, this can also blunt incentives.

Premiums, therefore, reflect a balance between signalling risks and providing incentives, and maintaining the benefits of risk pooling for insurers. Some common elements of premium setting are:

- A predictor of the cost of claims (for example, turnover or work done)
- Risk ratings, including the risk of the industry class and the experience of the individual firm
- Bonuses and penalties
- Upfront discounts for 'good behaviour'
- Excesses

Of these elements, risk ratings are a particularly important part of premium setting. The industry class can provide a broad indication of the risk of adverse events occurring and can help to differentiate premiums across different risks. For example, residential building may present a different risk to that of commercial building, and attract a different risk rating and premium. The experience rating then sharpens the analysis by looking at the risk profile of the individual firm, in terms of its recent claims experience.

The more information available about a firm, the more emphasis is able to be put on its own experience. Experience ratings are generally more difficult to undertake for small firms, due to the lower level of information. This means small firms often pay a premium based on industry risk, which blunts the link between their behaviour and the premium they pay, and can reduce the incentive to take action to reduce risk. This may be a key consideration in the building industry, which has a small average firm size.

Source: See Productivity Commission 2004, pp. 288–304 for a discussion of premium setting.

Allan (2002) noted that defect claims under HBWI were medium to very high in NSW, Victoria, Queensland and Tasmania over the period 1996-97 to 1999-2000. However, the Builders' Collective of Australia submitted:

... these three circumstances [death, insolvency, disappearance] also have conditions applied to the extent that not one claim against this insurance has been satisfied... (sub. 39, p. 6)

Risk-averse consumers may wish to seek out further insurance products to protect against faulty work. Consumer protection concerns could be addressed by informing consumers, for example through required information in building contracts, of the relevant risks and insurance options available. The consumer could then take insurance if they feel the risk warrants it.

The Commission invites comment on the appropriate role of the ABCB in regard to insurance sector issues with respect to building regulation.

7.7 Regulatory systems – national consistency?

This chapter has discussed a number of issues relating to the administration and enforcement of the BCA and has highlighted areas where improvements could be made to deliver better compliance with building regulations. In some instances, achieving a consistent approach across States and Territories may provide greater net benefits than each individual jurisdiction implementing its own solution. Indeed, a number of interested parties have pointed to benefits from increased national consistency and have called for further progress in this area. This section looks at the desirability of increased national consistency for building administration, some possible approaches to this and whether greater national consistency is an achievable goal.

Is administrative consistency desirable?

There appears to be support for introducing greater national consistency into the current diverse range of approaches to the administration of the BCA across the States and Territories. In a report for the ABCB on costs and benefits of harmonisation of administrative processes, the Allen Consulting Group commented:

This uncoordinated administrative process is inconsistent with best practice regulatory approaches. In particular, the arrangements are inconsistent with the concept of 'minimum effective regulation' that seeks to remove duplication and unjustified inconsistencies between jurisdictions.

It is illogical that so much effort has been put into developing a single technical building standard that is then applied differently in each Australian jurisdiction. This alone is sufficient justification for harmonisation oriented reform. (2002, p. vi)

The 1999 Technical Review of the ABCB suggested that ‘failure to achieve a reasonable level of consistency in the administration of the national codes has been viewed by many as perhaps the one major failure of the ABCB’ (Meacham et al 1999, p. ii). The authors believed a substantial benefit had not yet been realised and that a review was required to determine the appropriate role of the ABCB in achieving greater consistency (p. 15). They recommended the task of achieving uniformity in the building regulatory system ‘should be ascribed a high level of priority for ABCB resources’ (p. 51).

A number of interested parties also expressed the view that development of a national harmonised administrative framework should be a high priority. BPIC stated that nationally consistent building administrative provisions ought to be introduced as a matter of urgency (sub. 23, p. 4). Industry members from the New South Wales Building Regulations Advisory Council stated that the development of a national administrative framework, with a commitment from State and Territory Governments to introduce the procedures without change, needed to be given the highest priority (sub. 25, p. 2). And a current member of the ABCB Building Codes Committee noted:

Most of industry’s current regulatory frustration is in this area of variation between the States and Territories both in the application of regulatory requirements and building control systems adopted by them. (sub. 12, p. 2)

The WA Government Department of Housing and Works commented that the harmonisation of jurisdictional administrative provisions could have numerous benefits, including:

- enabling the growth of interstate, and international, business by making it easier for a manufacturer to enter the market knowing that a national system of building regulatory measures is consistently applied across the nation
- supporting access to a national pool of suitably qualified, and accredited, building practitioners who are conversant with national building control law
- facilitating building surveyors, builders, architects, engineers and other building industry professionals understanding of the relevant Acts, Regulations and Codes by reducing the number of jurisdictional differences currently embedded in State and Territory building control legislation. (sub. 14, p. 2)

The Allen Consulting Group estimated that harmonisation of building control administration around best practice models could result in a saving to the community of between \$214 million and \$402 million per year (2002, p. vii). These gains accrue to governments, industry and consumers as:

- governments’ administrative costs fall, their access to knowledge and expertise rises, and their ability to respond to new issues increases;

-
- industry faces lower compliance costs, increased certainty, greater opportunities for cross border activity and economies of scale and more incentive for innovation; and
 - consumers take advantage of lower prices and greater choice of practitioners, greater certainty and improvements in the safety and quality of buildings (Allen Consulting Group 2002, pp. 21-27).

The Group suggested that the benefits of harmonisation would be spread relatively broadly throughout the community and transitional costs were unlikely to be significant for any single stakeholder group (2002, p. 36).

DRAFT FINDING 7.5

There is some support for an increased level of consistency in the administration of building regulations across States and Territories.

Approaches to achieving increased administrative consistency

There are a number of possible approaches to achieving greater uniformity in the administration of building regulation across States and Territories. As the Allen Consulting Group pointed out, these approaches sit on a spectrum between complete uniformity of law and policy and no uniformity at all (2002, p. 37). Importantly though, different areas of regulation may suit different levels of uniformity — an assessment of costs and benefits may suggest a higher level of uniformity in the approvals process compared to dispute resolution, for example.

A useful (and quickly achievable) starting point may be the establishment of common terminology across jurisdictions. This would enable easy comparisons of regulatory requirements across States and Territories and would facilitate industry and consumer understanding of required processes. A similar exercise was undertaken by the Development Assessment Forum with respect to planning terminology, although the extent to which the agreed terminology was adopted appears to have been limited.

A second step may be to streamline or consolidate the range of government departments and other bodies involved in the regulation of the building industry in each jurisdiction. This would enable industry, consumers and other jurisdictional regulators to quickly identify appropriate points of contact and sources of information. It may also bring greater efficiencies within governments. However, the benefits would need to be balanced against any possible disadvantages, such as loss of expertise.

Beyond these initial steps, the Allen Consulting Group's preferred option for increasing the level of harmonisation was commitment to a new Model Act, with an intermediate step of agreeing to nationally consistent principles (2002, p. 43). This option was judged to provide the greatest benefit when scored against criteria including: the difficulty in gaining agreement/implementation; the degree of initial uniformity; the ongoing cost of maintaining uniformity; and the degree of ongoing uniformity.

The Model Act option has a number of desirable features. First, the existing model legislation may be used as a 'conversation starter' to form a consensus amongst jurisdictions on national principles and then an updated Model Act. (Indeed, the 2003-2004 ABCB work plan lists the revision of the Model Act and advancing key principles as key tasks in achieving a consistent regulatory framework (sub. 4, p. 33)). Second, the option may be more palatable for jurisdictions, as it does not require word-for-word adoption of the legislation.

However, as noted earlier, greater uniformity of legislation will not, by itself, bring uniformity to the regulation of building. The accompanying regulations would also need to be aligned, in order to achieve the highest level of uniformity. At a theoretical level, such alignment may be desirable as it would bring total transparency and clarity to the requirements across jurisdictions. However, at a practical level the costs and benefits of achieving uniformity at this high level of detail require further examination.

Is greater consistency an achievable goal?

The extent to which greater consistency in the administration of building is achievable depends a great deal on the drivers behind the current differences across jurisdictions. Sometimes, differences in the regulation or in the way it is implemented and enforced reflect underlying differences in legal frameworks and regulatory philosophies. Hence, it can be difficult to transplant identical standards into the regulatory machinery of different States and Territories. However, there are other cases, where it is difficult to understand why regulatory differences prevail. Sometimes, one can only conclude that the pursuit of difference reflects either a desire to protect local industry, using standards to act as non-tariff barriers to trade; or a desire to justify the existence of state-level or local-level bureaucracy.

Interested parties offered a variety of opinions on this, but many pointed to a lack of impetus for change as a prime reason for the continuation of the status quo, with the HIA suggesting that:

... political will is the panacea for some State/Territory allergic reactions to national consistency in building regulations. (sub. 6, p. 12)

The HIA considers the governance arrangements of the ABCB Board are a prime reason for the lack of fulfilment of some of its objectives, including that of greater national consistency in administration of the Code (sub. 6, p. 38).

Alternatively, the WA Government Department of Housing and Works suggested that, while it would be desirable to have truly uniform legislation on building standards and administrative frameworks, ‘the time and cost involved in such an exercise are unrealistic ...’ (sub. 14, p. 5). The Department suggested, however, that scope for further harmonisation exists in some of the newer building issues, such as insurance, sustainability and amenity, and that:

The most achievable outcome is national harmonisation of administrative process, supported by individual legislation in each jurisdiction to deliver a consistent framework. (sub. 14, p. 5)

The resources available to each jurisdiction to undertake administrative tasks is also an important consideration. Some jurisdictions may simply be unable to provide extra staff or funding to bring their building regulatory systems into line with a new national regime.

Given these considerations, the feasibility of achieving greater consistency may differ according to the particular administrative process. For example, greater consistency in the approvals process may be more feasible than greater consistency in dispute resolution. A standardised process and timeframe for approvals could be implemented by private certifiers (so lessening the impact on government resources) and is of prime importance to the achievement of health, safety and amenity outcomes (so raising the probability that governments will want to move towards a best practice system). In contrast, more consistent dispute resolution could put considerable pressure on smaller governments to upgrade their systems, where greater gains could possibly be made from improving, say, enforcement procedures so that recourse to dispute resolution is not needed as frequently.

The structure of the planning and building system in each State and Territory may also affect the level of consistency that is achievable. The South Australian Government noted:

The model building legislation does not fit well with a unified development control system such as exists in South Australia. While it is desirable to have a nationally consistent administrative framework, and a lot can be done to substantially achieve this, complete uniformity is unlikely until the planning system is also nationally consistent. (sub. 36, p. 17)

Overall, the attainment of national consistency in administrative systems for building regulation is likely to be of lower priority for the ABCB than some other Code-related issues. However, if the ABCB were to take on the issue of greater

consistency in the regulatory framework for building, an achievable program might progress in the following manner:

- agreement on consistent terminology;
- some streamlining or consolidation of the State and Territory bodies involved;
- agreement on national principles for building regulation;
- implementation of a revised Model Act on administration of the BCA; and
- agreement on consistent regulation regarding: approval processes; certifiers; enforcement; maintenance; licensing and accreditation for building practitioners; dispute resolution; and insurance.

Some suggestions for consistent regulatory approaches regarding approvals and so on have already been raised in this chapter.

As noted by the South Australian Government, State and Territory legislative programs may dictate the speed of adoption of any changes to administrative procedures:

... complete consistency of the administrative systems on a national basis needs to be seen as a desirable long-term goal and an overall framework would provide the basis for progressive improvements.

The Inter Government Agreement may need to include a provision for implementing legislative changes within a set time (say 5 years) of the principles (or key features) being agreed. (sub. 36, p. 4)

7.8 Looking to the future

It is clear that there is room for improvement in the compliance and enforcement of the BCA. Many interested parties pointed to deficiencies in the current administrative procedures and the negative consequences of these for building outcomes. While some improvements could be introduced through a national approach, it is likely that most progress will be made through reforms at a State and Territory level. The question is what role, if any, the ABCB might play in addressing the concerns of the building industry and promoting better processes with regard to the administration of the Code.

In his submission, the ABCB Chairman pointed out that the original IGA did not include administrative arrangements in its scope as it was not envisaged to be a problem (sub. 4, p. 19).

However, reforming the administration of the BCA was seen as an important task for the ABCB. This may be not only because of its deregulatory aspects (which

contribute to IGA objective 3 for the ABCB), but also because of the increasing calls for progress on this issue from the industry. The ABCB's 2003-04 work program included a Committee whose function was to seek greater harmonisation across Australia in the administration of the BCA. They estimated that further harmonisation could yield savings for the Australian economy of more than \$400 million annually (ABCB 2003a, p. 49). However, the ABCB Office noted that while some elements of the harmonisation strategy (such as the proposed new national product certification scheme) had advanced well, work on the National Legislative and Administrative Framework was significant, complex and required significant resources (sub. 50, p. 5). The Office suggested slower progress in this area in part reflected the demand on the resources of State and Territory administrations from other major reform work, such as disability access (sub. 50, p. 5).

The ABCB Chairman suggested there is 'a need for continued development through the ABCB's work programme to develop a best practice model that State and Territory governments can adopt when considering where building control should be positioned and what linkages should exist with other regulatory agencies' (sub. 4, p. 19). He further suggested consideration be given in any revised IGA as to how the ABCB might progress harmonisation of administration arrangements. Certainly, the ABCB, as a group with representation from all Australian jurisdictions, would be well placed to act as a central secretariat for work on national administrative consistency and as a forum where jurisdictions could share experiences and ideas on best practice.

DRAFT RECOMMENDATION 7.3

The ABCB (or its replacement) should work at identifying and communicating best practices that improve compliance and enforcement of the BCA. The development of a best practice model, for use by States and Territories, is one option for achieving this.

A revised Inter Government Agreement would be the appropriate mechanism to empower the ABCB (or its replacement) to pursue draft recommendation 7.3 (see chapter 11).

8 Code making processes and access

This chapter discusses issues relating to the processes employed in developing and amending the BCA (the Board's principal role), including processes for referenced standards (section 8.1). It also examines various concerns regarding access to the Code, including the Board's cost recovery policy (section 8.2).

The chapter directly addresses IGA objectives three, five and eight, but also indirectly addresses most of the other objectives in so far as processes impact on outcomes.

8.1 Regulation making: the Code and standards

The process for developing additions and amendments to the BCA involves extensive research and consultation, with input from the community, industry, professional and specialist technical organisations, as well as the Australian, State, Territory and Local Governments. This is facilitated through a network of technical and advisory committees, as well as through open community consultation.

Proposed amendments to the BCA are produced as a Regulation Document (RD) that is circulated to the States and Territories and also disseminated more widely for public comment. In addition, for more significant building code reform proposals, a Regulation Impact Statement (RIS) is prepared and released for consultation (see below).

After taking account of feedback received through the consultation process, the final document is published by the ABCB, as an amendment to the BCA. Up to 2003, amendments to the Code were issued twice a year. However, with the publication of BCA 2004, the ABCB has moved to an annual amendment cycle.

The rest of this section discusses the following aspects of the Board's regulation and standard-making processes:

- economic evaluation and regulation impact analysis
- referenced standards
- consultation

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- timeliness of reforms
 - updating of the Code.

Economic evaluation/impact analysis

Australian governments have imposed quality control processes to ensure that regulation should not be introduced unless it results in net benefits to the community. Regulatory agencies are required to justify the need for explicit government regulation and consider alternative ways of attaining policy objectives. In addition, regulatory arrangements must adhere to the Competition Principles Agreement, which requires governments to remove from regulations any provisions that restrict competition, unless it can be demonstrated that there is a net public benefit and the objective cannot be achieved by any means other than restricting competition.

The statement of goals contained in the introduction of both volumes of the BCA, states the intention: ‘that the BCA extends no further than is necessary in the public interest, is cost effective, easily understood, and is not needlessly onerous in its application’. These aims are consistent with several of the best practice design principles for quality regulation, set out in chapter 3.

As a national standard setter, the ABCB must comply with the *COAG Principles and Guidelines for national standard setting and regulatory action* (COAG 2004)¹ — the major element of which is the preparation of a RIS (see box 8.1). The RIS is a major vehicle for ensuring quality control. It calls for an economy-wide perspective in identifying who benefits from the regulations, who incurs the costs and whether the regulation achieves its objectives without excessively burdening the community. With the preparation of a national RIS that satisfies the COAG requirements, it would normally not be necessary for State and Territories to prepare separate RISs to meet their own scrutiny requirements (although on occasion they do).

In 1997, the ABCB developed an *Economic Evaluation Model* to assess the impact of building code proposals ‘that may involve increased cost burdens for industry, consumers and government’ (ABCB 1997, p. i). The model was designed to satisfy the COAG RIS requirements. It is based on a staged approach, with an initial preliminary analysis determining whether more detailed impact analysis is necessary. Only proposals having a major impact undergo every step of the Model (which is equivalent to undertaking a RIS).

¹ The COAG Principles and Guidelines were endorsed by COAG in 1995 and amended in 1997 and 2004.

Box 8.1 **Regulation Impact Statement (RIS) requirements**

A RIS is a document prepared by the department, agency, statutory authority or board responsible for a regulatory proposal. It requires an assessment of the costs and benefits of various feasible options, followed by a recommendation supporting the most effective and efficient option. A RIS should be available for consideration by decision makers prior to decisions being taken about regulatory issues. RISs are used by all levels of government except local government. RISs should be publicly available.

The RIS process for national standard setting

COAG requires RISs to be prepared for proposed new regulations, or existing regulations which are reviewed or reformed, by Ministerial Councils and national standard-setting bodies. These requirements are set out in COAG's *Principles and Guidelines for National Standard Setting and Regulatory Action by Ministerial Councils and Standard-Setting Bodies* (COAG 2004).

Where a Ministerial Council or standard-setting body proposes to agree to regulatory action or adopt a standard, it must first certify that the regulatory impact assessment process has been adequately completed. Adequate completion requires that an impact statement for the proposed regulatory measures has been prepared, which:

- demonstrates the need for regulation;
- details the objectives of the measures proposed;
- outlines the alternative approaches considered (including non-regulatory options) and explains why an alternative approach was not adopted;
- documents impacts, showing which groups benefit from regulation and which groups pay the direct and indirect costs of implementation;
- demonstrates that the benefits of introducing regulation outweigh the costs (including compliance and administrative costs);
- demonstrates that proposed regulation is consistent with relevant international standards (or justifies the extent of inconsistency); and
- sets a date for review and/or sunseting of regulatory instruments (COAG 2004, pp. 9-10).

State and Territory RIS processes

Formal RIS requirements exist in New South Wales, Victoria, Queensland, South Australia, Tasmania, the Northern Territory and the ACT. Western Australia does not have formal RIS requirements, however, it does have requirements for Small Business Impact Statements and Regional Impact Statements. RIS requirements for each State and Territory are outlined in appendix E of *Regulation and its Review 2000–01* (PC 2001b) and appendix D of *Regulation and its Review 2002–03* (PC 2003c).

Sources: COAG (2004), PC (2001b), PC (2003c).

The full model comprises:

- a rationale check;
- identification of alternative ways of achieving the objective;
- an assessment of impacts (financial and non-financial) on major stakeholders;
- detailed analysis of those factors assessed as having a major impact;
- sensitivity analysis; and
- a final comparison of alternatives, finishing with a suggested approach (ABCB 1997, pp. 101–103).

Consistent with the COAG Guidelines, a draft or consultation RIS is prepared for public comment. The consultation period is typically 6-12 weeks. After taking into account feedback from industry and other stakeholders, a final RIS is prepared and presented to the Board as an input to its consideration of proposed changes to the Code.

All RISs are assessed by the Australian Government Office of Regulation Review (ORR) for adequacy of analysis and whether the RIS satisfies the COAG requirements.²

Examples of regulatory proposals for which RISs have been prepared include: the Energy-Efficiency Measures for Housing; Energy-Efficiency Measures for Class 2, 3 and 4 Buildings; Sound Insulation Provisions; Fire Hazard Properties of Building Materials and Assemblies; and the Disability Standard for Access to Premises. RISs are published on the ABCB website.

There is widespread recognition amongst interested parties of the importance of good process and regulatory impact analysis. For example, the Housing Industry Association (HIA) stated:

The most important goal for the BCA should be that it develops regulations in accordance with the COAG document Principles and Guidelines for National Standard Setting and Regulatory Action by Ministerial Councils and Standard-Setting Bodies. The processes described within this document should achieve the most appropriate outcome and therefore, by inference, be acceptable to the community. (sub. 6, p. 31)

² The ORR assesses RISs at two stages: before they are distributed for consultation; and again just prior to a decision being made. The COAG requirements make it clear that the depth of analysis in the consultation RIS need not be as great as in the RIS for decision makers. The final document should reflect the additional information and views collected from those consulted, and provide a more complete analysis. (PC 2003c, p. 60)

Adequacy/compliance with COAG RIS requirements

ORR reporting indicates that the ABCB has a good record of compliance with the COAG Principles and Guidelines over many years.

The Queensland Government (sub. 41, Part 2, p. 9) considers that the regulation impact analysis system for changes to the BCA is working effectively and that there has been adequate cost benefit analysis of proposals and evaluation of alternatives. The South Australian Government notes that:

... the regulation impact analysis utilized for changes in the BCA is extremely thorough and cost-effective benefits have to be demonstrated before implementation. (sub. 36, p. 3)

Nevertheless, the NSW Department of Housing (sub. 33, p. 3) did make the general observation that the ‘scope and quality of Regulation Impact Statements and reform processes appears to have declined over the last five years’.

While ABCB RISs have generally been of a good standard and commensurate with the significance and likely impacts of proposals, there is scope for improvement in the following areas:

- the trigger for the preparation of a RIS
- consideration of non-regulatory alternatives
- the stage at which RISs are prepared
- coverage and treatment of costs and benefits
- the need for more explicit risk analysis
- ex post reviews.

Trigger for a RIS

Currently the ABCB prepares a RIS for *significant* changes to the BCA. For changes considered to be very minor or of a technical and/or editorial nature, not likely to have a significant impact on industry or the community, no impact analysis is undertaken. Where the significance of likely impacts is not clear, the Board will initially conduct a less detailed preliminary impact analysis (PIA) (and only then prepare a full RIS if further analysis is warranted — determined in consultation with the ORR).

The Building Products Innovation Council (BPIC) considered that:

All changes to the BCA must be subject to an impact assessment to ensure the changes are in the best interests of the community ... (sub. 23, p. 54)

HIA (sub. 6, p. 28), also proposed that RISs ‘should be prepared for all changes to regulatory regimes (other than editorial amendments) ...’.

The ORR is not always consulted, where decisions are taken not to prepare a RIS, and this has concerned some participants.

While the Commission considers it appropriate that the level of analysis should always be commensurate with the significance of impacts (and therefore, by extension, that no RIS should be required for minor changes) there are always going to be some ‘grey’ areas. It is important that any decision not to undertake a RIS (or at least a PIA) is well informed — if necessary on the basis of preliminary consultation with relevant technical experts/affected parties. The ORR should also be consulted wherever the COAG RIS requirements may be triggered.

It may also be appropriate for the ORR to undertake additional ex post checking of the judgments of Board staff, by randomly reviewing an appropriate number of the Board’s decisions not to undertake a RIS.

Consideration of non-regulatory alternatives

One criterion for assessing compliance with the RIS requirements is whether there has been adequate consideration of alternatives, including non-regulatory options. However, the focus of the ABCB’s mission statement is on meeting objectives through regulatory instruments.

The Australian Elevator Association (AEA, sub. 44) submitted:

The ABCB mission statement unfortunately places too much emphasis on creating codes, standards, and regulation. And indeed the culture at the ABCB, based on the output, seems to be one of needing to codify and prescribe “how” to comply. (p. 4)

... Instead of more prescription, more needs to be done to empower industry to make informed and economic decisions for itself. (p. 5)

While the ABCB RISs have been assessed by the ORR as containing sufficient consideration of alternatives, the prime role of the Board as a code writer may have created a mindset based on regulatory solutions. This appears to constrain, to some degree, the early and integrated consideration of non-regulatory options.

The ABCB should, at the earliest possible stage, consider all feasible alternatives (whether available to the ABCB or not) for addressing an issue, including non-regulatory options. Where a non-regulatory solution is judged to be the best option further policy development could be referred to the appropriate body.

Stage at which RISs are prepared

In order to obtain the maximum benefit from the RIS process, the RIS should be prepared as early as possible in the regulation/standard development process. (The standards development process is discussed later). Further, the cost-benefit framework underpinning a RIS should be used throughout the process. This ensures that community-wide impacts are central to the assessment of the relative merits of alternative options right from the outset, and that sectional interests do not dominate choices made early in the development process.

The Commission considers that this best practice model is not always applied, in particular where proposals for changes to the Code are based on new or amended Australian standards. Rather, the RIS is prepared relatively late in the process. Standards Australia International (SAI) typically does not formally apply a RIS framework during the early consideration of the standards. Yet, it is at this earlier stage where there is the greatest opportunity to identify feasible alternatives — including non-regulatory options, or different regulatory approaches. With current practice, by the time a RIS is prepared it effectively becomes an assessment of whether or not to adopt a specific well-developed proposal for which a substantial level of commitment already exists (certainly substantial Committee time has already been invested). There is also the risk that a RIS in such circumstances can become more of an advocacy document than a balanced assessment of feasible alternatives.

Coverage and treatment of costs and benefits

Several submissions raised issues relating to the coverage and/or treatment of costs and benefits in RISs. Some had concerns about the ability of RISs to take account of *all* relevant costs and benefits (in particular those that are hard to quantify), while others raised issues about the treatment of specific costs and benefits.

A number of submissions raised particular concerns in relation to the recent draft *Access to Premises Standard* RIS. AEA, for instance, commented:

The cost-benefit analysis ... in the Premises Standard RIS is seriously flawed and it can even be argued that it is misleading. It also relies too much on "qualitative" assessments of cost and benefits. The impact of the proposed regulation in Australia would be enormous and we believe the level of detail in the RIS is not commensurate with the impact of the proposed regulation. COAG principles further indicate that a RIS should be able to demonstrate that the benefits of the regulation should outweigh the costs. The RIS does not do that and the quantifiable benefits fall well short of the costs which are furthermore understated. (sub. 44, p. 21)

The Disability Council of NSW also raised specific concerns relating to the RIS for the Access to Premises Standard, but, more fundamentally, questioned the application of cost benefit analysis:

- ... it is only appropriate when attempting to measure that which is measurable in dollar terms (ie it is inappropriate when trying to determine if making premises accessible will benefit members of the community); (sub. 26, p. 16)

Australia and New Zealand Solar Energy Society (ANZSES) also expressed concern that:

... an impact assessment made purely on economic rational may be flawed, especially in relation to issues of energy efficiency and energy use. There are often perceived increased costs, both real and imagined, incurred with the implementation of energy efficient measures, but when taken in a holistic context of social, environmental and human amenity, the benefits will often outweigh such costs, real or otherwise. Such assessments should clearly indicate what criteria are being assessed – if the objective of energy efficiency regulation is to achieve reduced greenhouse gases which in turn will benefit the community economically (as well as environmentally) to then reject such measure due to short term cost increases would be foolhardy. Such assessment must be clearly identified for criteria and relevance to the particular reform being proposed. (sub. 1, p. 7)

In fact, RISs are intended to comprehensively identify and assess all significant costs and benefits (economic and social), whether they be short-term or long-term and whether they can be quantified or whether only a qualitative assessment is feasible. The COAG Principles and Guidelines (COAG 2004) provide the following guidance:

... impact assessment should attempt to assess all costs and benefits to the greatest extent possible, that is, not just economic ones. For example, social and environmental, public health and consumer safety effects should be considered. (p. 4)

Inevitably, some costs and benefits resist the assignment of dollar values. Known as ‘intangibles’, these are separately presented to decision-makers for assessment in conjunction with those that can be quantified. (p. 27)

Participants highlighted a number of specific areas where the coverage of impacts in RISs could be improved, including:

- recognition of cumulative costs
- better consideration of life-cycle costs and benefits
- the treatment of compliance costs — including recognition of possible material supply constraints and the costs of compliance with administrative processes
- more comprehensive assessment of fire consequences.

For example, BPIC considers that there is inadequate attention paid to the *cumulative cost impacts* of regulations:

... Regulators are failing to recognise the cumulative costs arising from the incremental impacts of each change or variation introduced over time on housing.

At the last count there are over 1100 pages of the national building code, some 100 state and territory government variations and additions, and over 200 standards relating to building products, design and construction referenced or called up in the BCA. (sub. 23, p. 27)

Such cumulative costs should be considered as far as possible in RISs prepared for specific BCA amendments. However, this may often not be feasible. Periodic reviews of building regulation more generally would provide a better opportunity to consider such cumulative impacts.

In relation to *life-cycle costs*, the Insurance Council of Australia (ICA) submitted:

The cost benefit assessments made by the BCA are inappropriate, as they tend to concentrate solely on the initial cost of the building. The BCA ignores the potential costs to building owners over the life of the building. (sub. 38, p. 1)

On *supply chain constraints*, HIA noted that:

... RIS do not appear to address issues such as the availability of materials or components of construction that will need to be used in order to comply with new proposals. (sub. 6, p. 28)

Further, HIA emphasised that RISs must address *compliance costs*, including:

- compliance with BCA technical regulations,
- demonstrating compliance with BCA technical regulations, and
- compliance with administrative provisions. (sub. 6, p. 28)

The Commission notes that the COAG RIS requirements were recently strengthened (COAG 2004) to, among other changes, make it clearer that before a RIS can be assessed as adequate, it must include an assessment of compliance costs. The following additional guidance was also included:

... A Regulatory Impact Statement should provide quantitative data on regulatory compliance costs, including information about the number and type of businesses or individuals affected, and the likely financial (and other) impacts on those affected. Compliance costs can include additional paper burden costs, additional staffing, licence fees or charges, external advice, transport and/or restrictions on competition. Regulatory Impact Statements should also give full consideration to ways of minimising such costs. Where quantitative data about such costs are unavailable, a qualitative assessment should be provided; (COAG 2004, p. 31)

BPIC (sub. 23, p. 65) highlighted the importance of considering maintenance obligations in any impact assessment.

The Australasian Fire Authorities Council (AFAC, sub. 28, p. 8) called for a fuller range of direct and indirect socio-economic *consequences of fire* to be considered when regulatory impact assessments are undertaken. AFAC submitted that this should be based on a ‘Total Cost of Fire’ concept and include the following consequences:

- death and injury
- physical damage to buildings and contents
- consequent loss of production, loss of sales, goodwill and so on
- administrative costs associated with insurance
- provision of fire response
- risk prevention measures. (sub. 28, p. 8)

Need for more explicit risk analysis

Some participants expressed the view that changes to the Code and standards were being made without adequate risk assessment.

Risk assessment is a means of analysing the risk of an undesirable event occurring and the consequences that are liable to arise if it does occur. Risk analysis is an important tool for determining if regulation is justified and/or appropriate. The COAG Principles and Guidelines (COAG 2004, p. 23) states that a risk assessment for proposed regulation would appraise:

- the current level of risk from an identifiable source;
- how the proposed measures would reduce the risk;
- whether the proposed measures are the most effective available to deal with the risk; and
- whether there is an alternative which would result in greater overall benefit to the community.

AEA submitted that ‘COAG good regulation principles should be applied more rigorously’ and in particular ‘risk management should be applied more broadly and the full analysis from it detailed in regulatory impact statements’ (sub. 44, p. 10).

And the Tasmanian Building Regulation Advisory Committee (BRAC) find that:

Generally the RIS process is effective and adequately used for changes to the BCA, however, ... there are some difficulties in the system in assessing costs related to health

and safety issues. Risk assessment would be more appropriate for a lot of health and safety issues rather than cost assessment. (sub. 29, pp. 6-7)

Ex post reviews

The Commission endorses BPIC's recommendation that, at some reasonable time after the implementation of a regulatory proposal, the RIS be reviewed and the validity of the original proposal and assumptions assessed in light of actual outcomes. This is consistent with the regulatory best practice principles set out in chapter 3. BPIC stated:

Regular review is needed to ensure the objectives of the regulatory intervention have been achieved including what if any unintended consequences may be emerging, the nature and level of compliance and other implementation/compliance issues. This will assist in improving the overall design and utility of the RIS for the ultimate benefit of the community. (sub. 23, p. 54)

DRAFT FINDING 8.1

The ABCB has a relatively good record of compliance with Regulation Impact Statement requirements, but there is scope for further improvement. It is important for good regulatory systems that the requirements are rigorously applied for BCA amendments.

DRAFT RECOMMENDATION 8.1

The ABCB (or its replacement) should continue to pursue improvement in its use of Regulation Impact Analysis, drawing on the advice of the Office of Regulation Review.

RISs for local government building requirements

Concerns have been raised about the imposition of building requirements by local governments through planning regulations, that are additional to and/or inconsistent with BCA requirements. In chapter 6, the Commission discusses this trend and its implications for the achievement of the IGA objective of national consistency and questions the appropriateness of local governments implementing their own requirements in areas covered by the Code. To the extent that this practice continues, however, any building requirements that impose substantial costs need to be justified and therefore should be subjected to a suitably rigorous assessment of impacts.

Referenced standards

The BCA, directly or indirectly, references several hundred building-related Australian Standards developed by SAI. The BCA also references certain other technical documents, including Joint Australian and New Zealand Standards, International Standards, American Society for Testing and Materials Standards, CSIRO standards and industry-based documents.

These standards provide detailed technical specifications for the building industry and form the basis for deemed-to-satisfy provisions in the Code. The Building Codes Committee (of the ABCB) needs to approve any new standard or referenced document before it can be referenced in the BCA.

SAI is an independent company, but operates on a not-for-profit basis (SAI 2004).³ A Memorandum of Understanding with the Australian Government recognises SAI as Australia's peak non-government standards-writing body. SAI and the ABCB have also signed a Memorandum of Understanding (MoU) (ABCB 2003e) to ensure close cooperation in the development of Australian Standards referenced in the BCA. Recently the ABCB, in conjunction with the State and Territory administrations, has developed a Protocol (box 8.2) for the development of BCA referenced documents more generally (ABCB 2004d).

Further, as part of a broader ongoing project to ensure standards/BCA alignment, the ABCB is progressively seeking to incorporate into the BCA 'public policy matters' contained in referenced documents:

It has been determined that the appropriate location for public policy matters is in the BCA rather than in technical standards. This project involves identification of public policy in existing standards and facilitating their review and transfer to the BCA. (sub. 50, p. 8)

A number of issues and concerns have been raised in relation to the development and referencing of standards. These are discussed below.

Committees and consultation process

Australian standards are developed by technical committees established by SAI. These committees work towards consensus.

³ SAI is funded from a range of sources, including sales of publications. An Australian Government grant partly funds SAI's participation in international and regional standardization activities where SAI represents Australia (SAI 2004).

Box 8.2 **Protocol for Referenced Documents**

The Protocol provides rules and sets out policies, objectives and principles for the development and/or the revision of BCA referenced documents, including:

- ABCB's objective is to provide transparency in process and encourage competition among organisations that wish to prepare referenced documents.
- ABCB's policy is to reference only documents that reflect current best regulatory practice and provide standards acceptable to government and the community.
- Referenced documents are to be produced, revised or amended only where there is a 'clearly demonstrated need' (must comply with COAG Principles and Guidelines).
- A proposed new or revised reference document may be subjected to a RIS. The proposer may be required to supply information on impacts on the community, in terms of costs and benefits, as input to the RIS process. At the commencement of the public comment period, estimates of cost/benefit shall be provided to the ABCB — ABCB will evaluate whether a RIS may be necessary. If the document changes significantly in response to public comment, the need for a RIS will be reassessed. The RIS, if required, will be conducted on the Final Draft.
- Protocol also applies to documents referred to in a BCA referenced document.
- To facilitate free trade and to avoid duplication, the ABCB has a policy of referencing international or regional documents in preference to national documents, where they are available and suitable. BCA referenced documents must satisfy the provisions of the WTO TBT Agreement and the CER Agreement with NZ.
- Consistent and transparent development processes are to be used and the ABCB and State and Territory Building Control Administrations are to be fully informed about the progress of the development of the document. Minimum public comment periods are specified. For revisions to an existing referenced document, a summary of changes shall be provided with the consultation draft.
- The Development Committee shall have membership that is representative of relevant parties (ABCB reserves the right to appoint a representative).
- ABCB is to examine the proposed document:
 - at the proposal stage;
 - prior to the consultation stage;
 - prior to the pre-publication stage (including record of comments received and summary of changes from consultation draft); and
 - prior to BCA referencing and publishing.
- Documents shall be consistent, clear and accurate, avoid use of uncertain terms such as 'adequate', and take account of available technology.

Source: Based on ABCB 2004d.

Some participants submitted a positive assessment of SAI's committee structure and processes. For example, ICA believes that:

... the current process employed by Standards Australia meets international code making requirements for a balanced representation on the various committees involving knowledgeable persons to ensure the technical content is accurate and well based. (sub. 38, p. 9)

However, concerns have also been raised.

The first of these related to ABCB participation on SAI committees. It is intended that the ABCB participate directly in the technical committees involved in the development of standards referenced in the BCA, including voting to approve the standards for publication. However, BPIC has suggested that in practice ABCB's participation is severely constrained:

The ABCB have one full time standards representative and approximately 11 part time people, responsible for ABCB involvement in 200 BCA primary standards and all associated sub standards. This easily equates to over 700 documents.

The ABCB represents the States and Territories on standards committees nominated in the BCA and accordingly have a direct responsibility to ensure community/stakeholder interests are achieved. Other obligations include drafting to align with legislative protocols, least cost solutions, balanced input from experts and other commitments related to the Inter Government Agreement objectives.

Unfortunately, these standards are continually evolving and it is impossible for the ABCB representatives to keep fully informed of changes to these documents exposing the BCA to possible corruption due to poorly considered reference standards. (sub. 23, p. 46)

While industry representation on SAI committees potentially contribute substantial expertise, a concern has been raised about possible conflict of interest. HIA pointed out:

... committee membership will often include representatives who have a commercial interest in the outcome of the project. Consequently, conflict is inevitable in such circumstances. (sub. 6, p. 24)

And the South Australian Government submitted:

There has ... been concern by some local stakeholders that Standards committees (developing new standards) are often dominated by vested industry interests and by the eastern States. The level of public accountability is therefore questionable. (sub. 36, p. 5)

The consensus voting model used by SAI exacerbates this problem since an industry, or other interest group, is effectively able to exercise a veto power and can hold out for the outcome that is beneficial to their interests. Although occasionally

consensus may be deemed to have been achieved where there are outstanding negative votes, a serious practical limitation is that this deeming can only occur where a minimum 67 per cent of those eligible to vote have voted affirmatively; a minimum 80 per cent of votes received are affirmative; and importantly '*no major interest involved with the subject of the standard has collectively maintained a negative vote*' [emphasis added] (SAI 2004).

Some participants also raised the concern that standards committees may not be utilising the best expertise because of SAI's policy of not paying for non-government representatives to participate. Costs in travel, accommodation and time away from normal responsibilities can mean the most appropriate representative is not always able to participate. HIA stated that:

... committee representation is voluntary and members must meet all costs involved in attending meetings. While many highly qualified personnel contribute significant effort to this process, it is sometimes the case that committee members are those that have the money or the time to attend. This outcome is inappropriate when the importance of expert contribution to the standards writing process is considered. (sub. 6, p. 24)

Arup Fire stated:

There is a concern by many in the industry that the Codes and Standards being developed are not reflective of current practice or desired practice, as many industry practitioners cannot afford to volunteer their time to be represented on Standards and Code committees.

The ability for industry volunteers to be partially paid may reduce these concerns and encourage more practitioners to be involved. (sub. 15, p. 4)

Finally, some participants called for broader community participation in the standards development process. The South Australian Government submitted:

... it could be argued that industry is too heavily represented and the expectations of the broader community are not sufficiently sought or understood. (sub. 36, p. 13)

Are some referenced standards set too high/low?

While it may be appropriate for standards developed for voluntary adoption to be set at a higher or even 'best practice' standard, it is not appropriate, on cost-benefit grounds, for referenced standards that become a mandatory minimum standard to be set too high. HIA expressed the concern that SAI documents:

... are not necessarily prepared on the basis of regulating minimum standards and that there appears to be a trend toward "best practice" creeping into draft documents. (sub. 6, p. 30)

Master Builders Australia (MBA) called for greater scrutiny and justification of proposals for increased standards:

... We believe that there should be greater onus put on the proponents for change to demonstrate that the existing code or standards are either inadequate or otherwise deficient in the area of health, safety and amenity. ... and that [the ABCB should] be given authority to more rigorously contest such claims. (sub. 24, p. 3)

At the same time, some participants pointed out that certain standards have been set too low. For example, until amendments were made to the Code in 2003, sound insulation standards referenced in the Code were below equivalent standards set by other developed countries⁴, and the BCA requirements were widely recognised as being inadequate relative to community expectations. However, reinforcing the difficulty associated with setting the appropriate level of stringency, some Australian jurisdictions have chosen not to adopt the new standards because they consider that they are not cost efficient.⁵

A rigorous RIS process fully integrated into the standards development process (see discussion below) helps to ensure that standards are set at a level that maximises net benefits to the community as a whole. The preparation of a RIS also ensures that there is a transparent record of the justification for and thinking behind a regulation. AEA submitted that more needs to be done to ensure transparency in the process for determining technical regulations:

It should be possible for anyone to question the foundations of a technical regulation at any time. All too often industry persists with compliance to a prescriptive technical regulation, not really understanding the real technical reasons for it. A new imported technology that does not comply will often be the trigger to questioning the requirements. All too often we are lucky that some person on a technical committee many years ago is still alive to explain the basis for it and we generally find that the regulation was poorly formulated, based on a limited view of the technology of the day. (sub. 44, p. 9)

Alignment with international standards

Australia has signed the World Trade Organization (WTO) Technical Barriers to Trade (TBT) Agreement which requires that members consider the adoption of

⁴ For example, Great Britain, Germany, Denmark and New Zealand.

⁵ Currently, Queensland, Western Australia and the Northern Territory have not adopted the new BCA provisions. The ABCB advised the Commission that ‘Queensland and Northern Territory believe that the “lifestyle” in their jurisdictions (where people tend to have the windows open most of the day), suggests it would be impractical to sound insulate walls and floors as the sound will pass through the open windows’ (ABCB, pers. comm., 25 June 2004).

international standards when formulating their own standards.⁶ However, while the TBT encourages the adoption of international standards, members are still free to apply their own standards, particularly when such international standards or relevant parts would be ineffective or inappropriate (for instance, because of fundamental climatic, geographical factors or fundamental technological problems). The Asia Pacific Economic Cooperation's Sub-Committee on Standards and Conformance also seeks to remove technical barriers to trade.

Under the MoU between the ABCB and SAI, standards committees are asked to maximise the use of accepted international standards when developing standards to be referenced in the Code (ABCB 2003e).

Greater alignment, where possible, of Australian standards and building regulation with international standards can facilitate competition and trade, generating higher productivity for the building industry and potentially greater choice and lower prices for consumers. Importantly, however, any decision to align with an international standard must be based on a demonstration that there are net benefits to the Australian community as a whole. Some international standards may be set too high or too low, or otherwise be inappropriate for adoption in Australia.⁷ Further, there would generally be no barrier to a local producer voluntarily designing and manufacturing products to be compliant with higher overseas standards.

Submissions supported alignment with international standards where appropriate. For example, Ronald Swane stated:

I fully support the adoption of ISO standards as well as British and/or European standards by the BCA when this is appropriate and would enable further export opportunities. (sub. 12, p. 2)

And the National Fire Industry Association (NFIA) considered that:

The adoption of ISO standards where appropriate will assist local manufacturers to export product rather than direct the resources to the development of a product specific for the Australian market only, which is small and therefore products cannot be manufactured cost effectively. (sub. 3, p. 3)

However, appropriate international standards are not always available for Australian standards committees to draw on. In its *Building for Growth Report*, the then Australian Government Department of Industry, Science and Resources (DISR

⁶ Article 2.4 of the TBT Agreement.

⁷ For example, excessive costs might be imposed on the industry (and passed on to consumers) if building standards are aligned with an overseas standard that is higher than is necessary to achieve community expectations of minimum health, safety and amenity outcomes.

1999, p. 63) noted that ‘... the development of international standards for building and construction has been poor’. The Report suggests that one barrier to the development of international standards in the building area has been the significant differences between European and North American standards. Further, where International Organisation for Standardisation (ISO) standards have more closely reflected building practices in Europe, they have sometimes not been appropriate for the Australian environment.

Nevertheless, as the example with sound insulation demonstrates, even where well established, suitable overseas standards exist, they have not always been adopted. AEA suggest, in relation to the Draft Access to Premises Standard, that ‘international standards have largely been ignored’:

... There is certainly no reference to major International Standards in any of the available Premises Standard documentation. If they were considered and rejected, then the RIS should have stated that and explained why. (sub. 44, p. 22)

While SAI (sub. 27, p. 3) indicated that some 11 per cent of Australian Standards in the building area are harmonized with international standards, only a small proportion of these are referenced in the BCA. The ABCB Chairman stated:

At present, a limited number of international standards are referenced in the BCA, and such standards are not widely available for the building and construction sector. (sub. 4, p. 47)

The ABCB Chairman’s submission notes that the recent introduction of the *Protocol for the Development of BCA Referenced Documents* (ABCB 2004d) may facilitate further adoption of international standards. The Protocol is to apply to any organisation that produces standards to be referenced in the BCA. It specifies procedures for the various stages of document development and also the principles to be applied to the preparation and drafting of documents (see box 8.2).

In relation to international standards, the Protocol states:

... To facilitate free trade and to avoid duplication, the ABCB has a policy of referencing international or regional documents in preference to national documents, where they are available and suitable. (p. 4)

The Protocol also requires that any proposed BCA referenced document must satisfy the provisions of the WTO TBT Agreement and the Closer Economic Relations (CER) Agreement with New Zealand (p. 4).

Recognition of overseas standards should also be considered where appropriate and where harmonisation is not feasible. In many cases, a number of suitable national (ie specific countries) or regional standards exist that, although different in their specification and/or design, can be shown to deliver broadly equivalent (or at least

the required minimum) performance outcomes. In such cases, adopting the mutual recognition principle and allowing conformance with any of the selected national or regional standards as sufficient to demonstrate compliance with a BCA requirement, could be the most effective and efficient solution. The RIS process provides the appropriate framework for evaluating, on a case-by-case basis, the relative costs and benefits of alternative strategies.

Australian representation at international building standards' forums

As noted in above, SAI receives funding from the Australian Government to represent Australia on some international standards forums. BPIC identified the importance of such forums:

... These forums are focused on the achievement of international standardisation and mutual recognition arrangements. These arrangements, the associated debate and related issues are critical to effective government policy regarding national and international trade. (sub. 23, p. 48)

A consequence of allowing SAI to be Australia's sole representation in such forums could be that knowledge and information gained through participation may not be shared to the extent desirable with Australian governments and the community. Notwithstanding that SAI has a commitment to serve the Australian community, there would appear to be some potential for a conflict between the interests of SAI in developing and marketing standards and Australia's national interests.

BPIC (sub. 23, p. 48) suggested that the role be performed by the ABCB with respect to international building and construction code writing bodies. The Tasmanian BRAC (sub. 29, p. 6) also considered it appropriate for the ABCB to represent Australia on such committees 'as well as or in replacement of Standards Australia representation'.

DRAFT RECOMMENDATION 8.2

The Australian Government should examine the appropriateness of a private company (Standards Australia International) being the sole Australian representative in international standards forums and consider the merits of having the ABCB (or its replacement) also perform this role for building and construction matters, perhaps in conjunction with SAI.

Cooperation with New Zealand

SAI and the ABCB have maintained strong links with New Zealand. (The ABCB's international liaison activities, more generally, are discussed in chapter 9.) The ABCB Chairman stated that the Board:

... has had success with aligning BCA referenced standards with New Zealand with the support and cooperation of Standards Australia and New Zealand authorities. About 20-25% of all referenced documents are joint with New Zealand. (sub. 4, p. 47)

The New Zealand Ministry of Economic Development stated that greater coordination of regulatory regimes between New Zealand and Australia: '... reduces costs and increases the effectiveness and efficiency of regulatory controls in the Trans-Tasman market for building' (sub. 5, p 6).

Standards New Zealand and SAI signed the *Active Cooperation Agreement (ACA)* in 1992 and have worked closely in the development of joint standards. However, evidence presented to the Commission's recent Review of Mutual Recognition Schemes (PC 2003b, pp. 116-117) suggested that the ACA was not as successful as anticipated. SAI recently advised Standards New Zealand that it did not wish to renew the ACA. A memorandum of understanding is being negotiated to replace the ACA (Standards NZ 2004).

NFIA raised concerns relating to progress in joint standards development:

The endeavours to produce AS/NZ standards seem to be faltering. The lack of progress in this area should be a concern, primarily to the NZ government, but could cause immeasurable difficulties for the Australian community if products developed for NZ to different (lesser?) standards are able to be sold in the Australian market without meeting the Australian Standard requirements. (sub. 3, p. 3)

Under the Trans-Tasman Mutual Recognition Arrangement (TTMRA) between Australia and New Zealand, any building products that meet the regulatory requirements in one jurisdiction can be lawfully sold in the other. However, as is discussed in chapter 9 (in relation to national product certification) this does not guarantee that the products can actually lawfully be *used* in that other jurisdiction.

A Trans-Tasman Building Regulatory Reform Council, has recently been formed with the purpose of fostering a common understanding of the building regulatory environment and to promote information exchange. Ultimately this should lead towards a more consistent building regulatory environment between Australia and New Zealand (see box 8.3).

The Commission considers it important to maintain a joint standard setting capability between Australia and New Zealand. Even where harmonisation of standards is not considered appropriate, there are benefits in working cooperatively, sharing information, and generating greater understanding of the basis for any outstanding differences.

Use of voluntary standards in legal proceedings

Several participants expressed concerns about voluntary standards (ie, ones that have not been incorporated into mandatory requirements) being used as ‘state of the art defence’ by courts and tribunals, to establish liability. Despite these standards being only of an advisory/guidance nature, evidence presented to the Commission suggests that they are being used as a benchmark for assessing manufacturers’ compliance. BPIC suggested that:

... Such voluntary standards have not been scrutinised for costs and benefits, yet take on the status of de facto regulation. (sub. 23, p. 31)

Box 8.3 Trans-Tasman Building Regulatory Reform Council

The Trans-Tasman Building Regulatory Reform Council has been established to enhance cooperative efforts in building regulatory reform. The Council comprises representatives of the ABCB and the New Zealand Building Industry Authority. The Ministry of Economic Development and the Australian Department of Industry, Tourism and Resources are also involved. An inaugural meeting was held in March 2004 and future meetings of the Council will be held on a quarterly basis. The principal objectives of the Council are to foster a common understanding of the Trans-Tasman regulatory environment and to achieve a more open environment of commerce in building design and construction. Some of the areas that it is specifically seeking to work on are:

- ensuring the development and implementation of product certification schemes in Australia and NZ that are consistent, as far as practicable;
- promoting consistency in the education, training and accreditation of industry professionals employed to support the Australian/New Zealand building regulatory regimes;
- promoting the pooling of resources to aid research and development of commonly-needed components of performance-based building regulatory systems;
- providing a forum promoting a common understanding of, and a framework for, further development of performance-based building regulatory systems; and
- promoting closer trade in goods and services within the building and construction industry.

Source: BIA New Zealand 2004.

The HIA submitted:

... Historically, compliance with the applicable regulatory regime and specified contractual matters provided certainty, but no longer is this the case. Decisions of various judiciaries are requiring the industry to comply with undefined documentation, particularly Australian Standards, even though these documents are not included within the BCA or contracts. Consequently, the industry finds itself in a position whereby it is exposed to constant uncertainty as to what is legally required to be done.

In this context, it could be interpreted that the industry must comply with every Australian Standard that could potentially be found by the judiciary to be related to a specific project. This is an inappropriate outcome that should be remedied ... (sub. 6, p. 25)

And MBA stated:

... This is not in the best interest of the industry, the community or government to have practitioners being sued for not being aware or familiar with amended Australian standards not called up or referenced by the BCA. (sub. 24, p. 7)

A more general concern is the widespread confusion amongst consumers and many builders about the status of SAI and Australian Standards. There is, for example, a continuing misconception that SAI is a government body. Ongoing ABCB education strategies should address this issue and continue to emphasise the distinction between mandatory BCA requirements and voluntary best practice standards.

Impact analysis and good process

As noted above, in the general discussion of regulation impact analysis, a RIS prepared as early as possible in the regulation development process, maximises the opportunity to properly assess the relative merits of alternatives. In the case of referenced standards, the RIS process should be commenced as soon as the standard is considered to be an option.

Formal impact analysis can help address some of the concerns raised by participants in relation to the standards development process by ensuring change is justified and by providing a rigorous basis for determining:

- when standards should be aligned with international standards; and
- the appropriate level of a standard (in terms of performance or stringency) or the degree of prescription that would be appropriate.

The MoU between Standards Australia and the ABCB requires that:

The approval process for a new Australian Standard referenced or likely to be referenced in the BCA will have regard to the balance of costs and benefits involved and where appropriate a cost/benefit analysis will be undertaken.

If considered necessary, the ABCB will undertake a regulatory impact statement for new standards or new editions of standards to be referenced in the BCA. Where possible SAI committees will identify costs and benefits associated with the development or revision of a standard to assist the ABCB with regulatory impact statements. (ABCB 2003e, pp. 4-5)

The MOU does not provide clear guidance on when impact analysis should be undertaken. Use of the terms ‘where appropriate’ and ‘if considered necessary’ create uncertainty. In practice, for any significant new standards or new editions of standards to be referenced in the BCA, the ABCB would normally undertake any necessary impact analysis as part of a broader evaluation of proposed Code amendments. But this occurs relatively late in the process.

Participants have raised concerns about the failure of SAI to undertake formal impact assessments:

SAI should undertake impact assessments for each new code and amendment and the ABCB should be required to play a proactive role in both the development and impact assessment of standards in parallel and in conjunction with SAI ... (BPIC, sub. 23, p. 47)

... if SAI undertook independent and credible impact assessments prior to publishing their documents ... [this] would provide a degree of confidence in the merits of the proposed new or revised code. The failure of the SAI to complete this process is significant for a number of reasons not the least of which is the fundamental issue of whether the change is necessary and the potential economic implications if other alternatives are not explored. (BPIC, sub. 23, p. 46)

SAI do not prepare appropriate impact assessments of changes to existing standards.

In the recent past, HIA has unfortunately had to oppose the further development of three draft standards on the basis that there has not been “*a clearly demonstrated need*” for the proposed changes. (HIA, sub. 6, p. 24)

The recently published *Protocol for the Development of BCA Referenced Documents* (see box 8.2 above) was developed partly as a response to concerns from industry about the standards-making process and the proliferation of standards. The ABCB Chairman (sub. 4, p. 47) stated that the Protocol will strengthen the rigour of standards being mandated in the BCA.

The Tasmanian BRAC identified as a particular concern:

... there has developed a process of fragmenting standards to 2 or more documents for many issues and for cascading referenced documents from one to the next and so on

until finally the relevant information is revealed. This is costly, time consuming and difficult for practitioners referencing the document. (sub. 29, p. 5)

The Tasmanian BRAC were of the view that the Protocol (together with the MOU between SAI and the ABCB) ‘have increased the quality of standard development and the basis on which they are made’. (sub. 29, p. 5)

The Protocol is welcome in that it restates a commitment to good process. However, it does not go far enough in stating a clear expectation that:

- RISs will be prepared for any proposed standard that may have non-minor impacts; and
- the significance of impacts (and therefore whether a RIS is required) will be determined in consultation with the ORR.

With the exception of new proposals or changes that are very clearly non-consequential, the onus of proof should be on establishing why a RIS is not justified rather than, as currently seems to be the case, demonstrating why one is required.

As a private organisation, SAI is not formally required to comply with RIS requirements — these requirements are obligations imposed on government agencies and intergovernment bodies. This is appropriate when SAI is developing voluntary standards. However, where standards are referenced, governments need to have an assurance that they have been subjected to rigorous impact analysis. HIA stated:

If SAI is to be considered to be [a] standards setting body then it should be bound to comply with the principles applied to other standards setting bodies as contained in the COAG document *Principles and Guidelines for National Standard Setting and Regulatory Action by Ministerial Councils and Standard-Setting Bodies*. (sub. 6, p. 24)

DRAFT RECOMMENDATION 8.3

The Memorandum of Understanding between Standards Australia International (SAI) and the ABCB and the Referenced Documents Protocol should be re-negotiated to provide for a clear requirement for RIS-type analysis to be undertaken by SAI (perhaps in conjunction with ABCB, or its replacement) at an early stage in the development of standards that are expected to be referenced in the BCA, and are likely to have non-minor effects.

BPIC (sub. 23, p. 47) notes that an advantage of having a RIS developed in parallel with SAI’s standards development process may be that it would ‘minimise the need for further delays’ associated with the ABCB preparing the RIS at the end of the process. Concerns about such delays are part of the discussion later in this chapter.

Consultation

One of the ten objectives for the Board set out in the IGA is ‘to undertake effective consultation and liaison with industry to achieve transparency in the reform process’. Transparency is a broad concept with consultation being just one facet. Another important aspect is transparency in communicating the Code. This includes accessibility, style, plain language etc. Access to the Code is discussed in the next section, while the other aspects of transparent communication are covered in chapter 5.

The Board itself, through its membership representing different industry and government interests, is an important consultative mechanism. The network of technical and advisory committees, including those involved in the development of standards, also represent key consultative mechanisms. These advisory committees all have Government, industry and community representatives involved in their work. The ABCB Chairman pointed out that:

... Through these avenues, the ABCB obtains input from government and industry stakeholders as well as advice and assistance from building professionals, research communities, industry peak bodies, local government, special interest groups, and the community, on a wide range of strategic, policy, technical, administrative and societal issues. (sub. 4, p. 8)

In addition, building code reform proposals are subject to extensive open public consultation processes. For more significant reforms, interested parties also have the opportunity to comment on the detailed impact analysis prepared in compliance with the Board’s Economic Evaluation model and the COAG RIS requirements. The analysis of the costs and benefits of the proposals and alternatives contained in the RISs can contribute greatly to the transparency of the reform process (see above).

The ABCB’s consultative processes have been praised for being open and transparent:

The level and type of consultation undertaken by the current Board is generally transparent. ...

HIA consider that there are adequate mechanisms in place for anyone to offer comment on ABCB regulatory proposals. (HIA, sub. 6, pp. 25–26)

... By the ABCB having direct links with State and Territory Administrations ... document[s] are circulated widely within industries and to State and Territory Building Advisory Committees. This process is fully transparent and appropriate and provides for interested parties not represented on the ABCB or its Committees to provide input into the development and reform of the BCA. (Tasmanian BRAC, sub. 29, p. 6)

... the consultation process for major reform initiatives including advertising in major papers and easily accessible internet access to proposed reform papers is effective and

provides sufficient means for parties outside the advisory committee process to comment. (BPIC, sub. 23, p. 49)

However, some concerns about consultation processes were also raised. Various submissions suggested that ABCB processes do not adequately facilitate consumer and broader community input:

... the major focus is on building and structural industry players, and not occupiers of buildings ...

Therefore consideration should be given to more robust community consultation processes with greater consumer input ... (Queensland Government, sub. 41, p. 5)

Much of the work conducted by the ABCB does not reach all interested parties. (ICA, sub. 38, p. 9)

... processes invariably target key industry stakeholders. It is suggested that some market research in the broader community on key issues would enhance outcomes. (South Australian Government, sub. 36, p. 3)

The Disability Council of NSW found consultation to be ‘minimal’ in relation to its own experience of the development of the Draft DDA Standard for Access to Premises. The Council submitted:

Council is extremely concerned that at no point in time was the merits of the action being proposed discussed with the affected community (ie people with disabilities).

... the level and type of consultations are inappropriate. ... (sub. 26, p. 15)

At the same time, there is evidence that some stakeholders are being overwhelmed by calls for their input on regulatory proposals. A consequence of this ‘consultation fatigue’ is likely to be a fall in the level of participation in the consultation process and/or a reduction in the quality of feedback. A number of factors seem to be contributing to this problem:

- the length of some of the regulatory documents and impact statements
- the time allowed for public comment may be too short
- the fact that in some cases stakeholders are being consulted more than once on the same issue.

On the first point, while documents must be comprehensive in terms of the information and/or analysis provided, drafters need to present material as concisely as possible. It helps if the accessibility of the documents is maximised, in terms of structure, plain language, use of summaries, etc as well as ease of transmitting comments to the Board (e-mail, public forums etc) (see chapter 5).

In relation to the second point, the South Australian Government (sub. 36, p. 11) informed the Commission that ‘there has been some criticism from stakeholders in

South Australia that the timeframes for commenting on proposed changes are too short'. The NSW Building Regulations Advisory Council (BRAC) — Industry members, called for:

... a review of the consultation process and time frame for industry responses to proposed amendments to the Building Code of Australia through State and Territory industry advisory bodies. (sub. 25, p. 2)

However, a potential implication of allowing a longer time period for comment could be further delays in the process of implementing reforms — although the recent move to annual Code amendments may allow longer comment periods, without major consequences for timeliness of reforms.

With respect to the third point, the Queensland Government noted stakeholder concerns about duplication in consultative processes and suggested that consideration be given to improving collaboration between the States and Territories:

... the consultation process [is] not clear, as ABCB undertakes consultation in developing policy proposals at a national level, and [the] State then undertakes further consultation before deciding whether to adopt proposals. (sub. 41, p. 5)

The Commission endorses AEA's suggestion that, to improve transparency, submissions/comments submitted on proposed amendments should be made publicly available on the ABCB's website:

... It is important that such information is made more public so that the broader community has opportunity to support ... it or refute it prior to and well after publication. (sub. 44, p. 17)

AEA also consider that greater consultation is necessary earlier in the policy-development process:

... While broad public consultation regarding the detail has occurred after publication of the draft regulation, not enough has occurred before it. (sub. 44, p. 22)

This comment is consistent with the Commission's observations above about the need to better integrate the RIS framework (consultation being a key element) and assessment of alternatives early in the process of considering amendments to the Code. Early consultation is also a best practice principle identified by the OECD (see box 8.4). It is clear that against most of the principles, the ABCB's systems rate well. The ABCB (or its replacement) should of course continue to be alert to possible improvements.

Box 8.4 OECD best practice principles for consultation

Consistency and Flexibility

Consultation programs must be flexible enough to be used in very different circumstances, but operate within a framework of minimum standards, in order to provide consistency and confidence.

- Minimum standards allow all parties to assess whether consultation has been properly undertaken and provide clear guidance for regulatory policy makers. Where widely understood procedures are employed, procedural problems can be identified.
- Consultation programs should include a range of strategies and approaches so as to offer wide access to affected groups and maximise information gathering.

Consultation should be broadly based and balanced

- Maximise participation (especially by less organised interests), minimise discretion in deciding who and when; make information widely accessible by:
 - innovative information dissemination including use of information technology;
 - plain language drafting and reader friendly formatting; and
 - clearly setting out issues and relationships between issues and outcomes.
- Structuring a continuing dialogue between parties can enhance the benefits derived from consultation.

Integration

- Consultation is most effective when information is made available early.
- Early consultation helps identify optimal policy options.
- Information on regulatory impacts can be collected more effectively if preliminary impact assessments are made available to the public.

Transparency and Responsiveness

- A systematic consultation policy facilitates public understanding of consultation. Consultation programs are more effective when regulators:
 - clarify why information is needed;
 - explain the process of decision making and opportunities for participation;
 - ensure public comments are appropriately taken into account; and
 - respond substantively to public comments.

Consultation 'habit' part of administrative culture

- Consultation policies must be explicitly supported at high political levels, and reinforced with staff training, incentives and resources.
- Ongoing investment in evaluation and review of consultation arrangements.

Source: Argy and Johnson (2003), based on OECD (2002).

Further examination of alternative strategies to ensure the widest participation by affected groups, for example consumers, may be appropriate, as well as longer minimum consultation periods for major reforms (although this may have implications for the timeliness of implementation of reforms, discussed below). There may also be opportunities for further enhancement in relation to:

- avoiding unnecessary duplication, by individual jurisdictions, of ABCB consultation;
- streamlining/shortcutting of processes to make consultation for less significant proposals less costly for stakeholders;
- consulting earlier when the opportunity to influence proposals is greatest;
- more reader friendly formatting; and
- the best use of the internet for electronic dissemination of material for comment, public access to submissions, and for transmitting feedback to the Board.

However, even with the best designed consultation processes, it is likely that some affected parties will feel that they have not had an adequate opportunity to contribute their views and/or that their input has not sufficiently influenced the eventual reform outcome.

Timeliness of reforms

Several participants expressed concerns about delays in reaching agreement and implementing reforms. MBA, for example, indicated that:

... Industry is concerned that amendments and changes can take up to three years or longer. (sub. 24, p. 6)

According to MBA, such delays have led to frustrations and a number of jurisdictional agencies have then sought to:

... implement or pre-empt the proposed changes before the BCA into their own jurisdictional area of responsibility and thereby weakening the objective of a national and uniform building code. (sub. 24, p. 6)

BPIC (sub. 23) raised similar concerns:

The recent failure to achieve consensus within the ABCB over the national energy code is of great concern to industry. ...

The prolonged processes for amendments to the BCA dictated by the Inter Government Agreement works against regulatory cooperation and national consistency. Many jurisdictions have decided not to wait for the ABCB processes to be finalised and introduced energy requirements under their town planning codes. (p. 34)

The BCA amendment process should be reformed to expedite change and remove the trigger for unilateral municipal level changes. (p. 35)

Some have concerns that the move from a biannual to annual Code amendment cycle could further prolong the introduction of some reforms. AEA noted the importance of adequate mechanisms for resolving problems with deemed-to-satisfy solutions between updates.

To some extent delays are an inevitable consequence of the need to achieve agreement between nine jurisdictions and the need for rigorous and transparent consultation and impact assessment processes. Further, the recent agenda for the Board has included reform issues for which acceptable resolutions are inherently more difficult to achieve (eg energy efficiency). Nevertheless, some participants considered that institutional and procedural reforms could improve the timeliness of decision making.

MBA suggested that:

... the Committee structure of the ABCB needs to be reviewed, including resources, to ensure that amendments and other technical matters can be dealt with expeditiously. (sub. 24, p. 6)

The NSW BRAC (Industry members), called for:

... the introduction of a regulatory development system that is able to be more responsive to community needs and expectations. (sub. 25, p. 2)

While, as noted above, the HIA has recognised the openness and transparency of ABCB consultation, it has also noted that '[i]t is the prolonged process of consultation during the development of regulations that is seen as being one of the primary hurdles to efficient process' (sub. 6, p. 25). On a similar note, the ABCB Chairman (sub. 4, p. 42) suggested that '[c]onsultation is extensive, to the extent that at times the ABCB is criticised for over-consulting and taking too long to make changes'.

The Chairman's submission indicates that the problem of delays in determining reforms has been recognised by the Board and some steps have been taken to address the issue:

In response to criticisms from industry about standards proliferation and processes, the ABCB has recently been able to bring standards making processes into a generic BCA referenced document protocol. This will strengthen the rigour and timelines for standards being mandated in the BCA ... (sub. 4, p. 47)

The governance arrangements for Food Standards Australia New Zealand impose clear timetables for decision making. There may be merit in incorporating such timelines for the ABCB in a revised IGA. However, there would need to be some

flexibility to accommodate unforeseen developments and any timetable must not come at the expense of good process.

There is some pressure from industry to get access to proposed Code changes much earlier, preferably well before implementation (and referenced standards should be made available at the same time). This is at the same time that there have been calls from some participants for longer consultation periods (although others have a contrary view, see above). The South Australian Government (sub. 36) recognises the difficulty, stating:

There is a real dilemma for the ABCB in that industry has asked for updated versions of the BCA to be available 6 months prior to implementation (to aid the development of designs that are ‘on the drawing board’) but this needs to be balanced by having adequate public consultation. ...

The balance between industry needs, adequate consultation and being responsive to new issues needs to be reassessed. It could be argued that the current approach too heavily favours industry. (p. 12)

... Although industry may object, a faster and more responsive approach would help to counteract pressures for jurisdictions to develop separate provisions. (p. 14)

However, at the same time that there exists widespread concern about delays in implementing reforms, some participants are concerned about the pace of reform being too fast for practitioners to keep abreast of reforms (see raising awareness discussion in chapter 9).

DRAFT FINDING 8.2

Delays in reaching agreement and implementing BCA reforms are providing some incentive for unilateral action at the State and Territory or Local Government level. This trend is contrary to the goal of a national and uniform building code. However, to some extent delays are an inevitable consequence of the need to achieve agreement between nine jurisdictions; and the need for rigorous and transparent consultation and impact assessment processes.

DRAFT RECOMMENDATION 8.4

The ABCB (or its replacement) should continue its efforts to expedite BCA reforms. Governments could consider incorporating into a revised IGA explicit target timeframes for different stages of the consultation and decision-making process. However, any such timeframes must appropriately reflect the need for comprehensive consultation and rigorous impact analysis.

Updating

The BCA is often described as a ‘living document’. It needs regular updating to reflect ongoing innovation in building technologies and practices. Some participants expressed the view that the Board has given insufficient attention to maintenance and updating of the Code.

In the development of BCA96, many of the previous prescriptive building requirements were transferred into the new Code as deemed-to-satisfy solutions.⁸ Further, at the time of release of the Code, it was recognised that some matters, such as the clarity of certain performance standards and the relationship between some deemed-to-satisfy solutions and performance requirements, would require revisiting. (The structure of the code and the relationship between objectives, performance requirements and deemed-to-satisfy solutions is covered in chapter 5.) Some participants suggested that the necessary reviews have in many cases not taken place.

BPIC referred to the Housing Provisions to highlight the problem:

... the Housing Provisions are not being developed to keep pace with evolving industry practices and innovative building materials coming on to the market. The implications are that the Housing Provisions are becoming obsolete.

... The original development of the code was seen as a preliminary step and a commitment of code specific resources was to enhance the content of the document. This has not occurred. (sub. 23, p. 77)

And Fire Protection Association (FPA) Australia submitted:

... requirements for fire safety were provided in the new BCA as prescriptive or acceptable solutions without detailed checking whether they completely reflected the BCA fire safety objectives (to the extent they were defined or assured) or technically satisfied the BCA Performance Requirements. ...

In practice, many in the industry would think that a number of the solutions described by the Deemed-to-Satisfy text in the BCA would not meet the Performance Requirements. (sub. 19, p. 5)

The NSW BRAC (Industry members) state that:

... At present the current BCA continues to retain some problems associated with the "bottom-up" approach that was used to convert the original prescriptive regulations into performance-based requirements.

⁸ Sometimes termed a ‘bottom-up’ approach in contrast to starting with broad functional statements, objectives and performance requirements and then determining appropriate deemed-to-satisfy requirements (a ‘top-down’ approach).

It is also considered necessary to raise the priority in the development of the Future Building Code of Australia [BCA 21] to introduce a “top-down” approach to the development of Australian building regulations. (sub. 25, p. 1)

MBA (sub. 24, p. 3) considers that an ‘important future objective of the ABCB is for it to also have a focus on maintenance of the current BCA’:

... Considerable investment has been made in the Code and therefore its implementation and adoption should remain one of its key priorities for the future.

The BCA 21 project (development of the next version of the BCA) provides an appropriate opportunity to review and update provisions in the Code, however, it appears that work on this area has been given lower priority in order to focus on the development of provisions for disabled access and energy efficiency.

DRAFT RECOMMENDATION 8.5

The ABCB (or its replacement), as a high priority, should continue to work towards maintaining and updating the core technical requirements in the BCA.

8.2 Accessing the Code

The Building Code contains requirements that become mandatory once they are referenced in regulation. Therefore, accessibility and transparency are important considerations. Accessibility has a number of facets, including the form (hard copy, electronic etc) and style in which it is communicated (structure, user friendly style, use of plain language etc) and also the cost of access. Chapter 5 assesses some of the style issues, whilst the focus here is principally on form and cost.

The ABCB has chosen to adopt a ‘user pays’ framework for access to the Code. The BCA is available for a fee in hard copy, on compact disc, or online (see box 8.5). These charges provide revenue to the Board additional to funding from the Australian, State and Territory governments. Access to referenced Australian Standards incurs an extra charge. To acquire the Building Code and relevant standards (primary only) can be very costly (well over \$1000) and in hard copy can amount to thousands of pages.

Hard copies of the BCA are available to be viewed free of charge in various locations in every State and Territory, including public libraries, local councils, Standards Australia outlets and tertiary institutions. A complete list of these locations is included on the ABCB website.

Box 8.5 **BCA pricing**

The BCA is priced as an annual subscription service providing latest amendment updates, along with additional amendment advice, and Building Code information during the subscription year. Prices range from \$130 for housing provisions only in hard copy to \$350 for the full BCA in hard copy and Online and CD-ROM.

Subscriptions also provide access to:

- historical versions of the BCA;
- BCA archived documents;
- e-mail alert service for amendments;
- Australian Building Regulation Bulletin;
- selected guideline documents; and
- the BCA MiniCode Generator (see box 8.6).

The ABCB provides discounted pricing for: building and construction industry students; classroom-based packages for tertiary institutions providing building and construction related courses and programs; and for organisations seeking to purchase multiple hard copy products or multiple licences to BCA electronic products.

Source: 2004 subscription prices from ABCB website (accessed 21 April 2004).

The Board has been able to achieve an overall reduction in BCA pricing and improved access in recent years with the development of an online BCA service. Other recent initiatives introduced by the Board to improve access to the Code, include:

- A newly formatted publication and less frequent updates — the recently released BCA 2004 replaces the hard copy ring binder with a newly formatted B5 sized annual publication (removes the need for subscribers to replace pages within the amendment cycle).
- Casual access online subscription — \$33 for either thirty consecutive days in a month or for twelve days in a year.
- MiniCode Generator — an electronic education-based search tool designed to be used in conjunction with the BCA (see box 8.6).

The costs associated with keeping abreast of changes to the Code may be reduced with the change to an annual amendment cycle, a move welcomed by most participants. MBA (sub. 24, p. 4), for example, supported this change describing it as a positive step that will ‘allow industry adequate time to prepare for changes to the BCA’. This can be particularly important with the long lead times involved in project development. Although it must be acknowledged that with less frequent

changes to the Code, the scope, or number, of changes with each amendment will be greater.

Box 8.6 BCA MiniCode Generator

Submissions to the Laver Review suggested that the useability of the BCA could be improved if it were possible to easily extract from the Code all references to specific subjects, including any applicable Australian Standards.

The ABCB has now developed the MiniCode Generator, which enables BCA data to be searched, compiled and presented through an online user questionnaire.

BCA users input their own building project specifications based on a series of prompts. Once the MiniCode Generator has received all the required project information, a search function then collects, compiles and presents all clause, sub-clause, and sub-sub-clause information relevant to the user's project, and in effect, compiles for the user a miniature version of the BCA. MiniCode is now available online to BCA subscribers for education and training purposes.

Source: Laver Review 2000 and sub. 4, p. 17.

The South Australian Government suggested that proposed changes to the BCA could be made more accessible by:

... placing the proposed changes on the web and providing a facility whereby any interested person can electronically make comments. (sub. 36, pp. 13-14)

Concerns about access to the BCA

In conjunction with the preparation of their submission to the Commission's study, MBA conducted a national survey of its members (see box 8.7). Some of the survey questions related to access to, and use of, the BCA. MBA reported that '77% of builders surveyed had a copy of the BCA or had access to the BCA' (sub. 24, p. 11); '94 per cent of respondents indicated that they use the BCA at sometime' (p. 13); and 'around a quarter of respondents indicated that they use the BCA on a regular basis' (p. 13).

While the proportion of respondents using the BCA on a regular basis seems quite low, the other figures, on the surface, present a somewhat positive picture on access to, and use of the Code. However, the wording of the questions 'had a copy...or had access to', 'use at some time'; and 'use on a regular basis' are broad, cover a great range of access scenarios and are open to subjective interpretation. The responses to these questions do not provide a definitive indication of the *adequacy* or quality of access. For example, a builder may be aware that the Code can be accessed at a local library, but this form of access may be quite inconvenient and impractical.

Box 8.7 Master Builders National Survey — Access to BCA

299 replies were received, comprising 211 residential projects (with a total value of \$77 million) and 88 commercial projects (total value \$87 million).

Results of the survey — for the BCA access questions — are presented below. The three sets of figures for each response line are, respectively: overall national results; national residential sector only; and range of state and territory aggregate (residential and commercial) results. MBA urged caution in using the results for ACT, SA and WA as the survey's sample size was quite small.

Do you have access to a copy of BCA?

	%	%	%
Yes hard copy	61.5	61.1	} (67 WA – 91 Vic)
Yes electronic	16.1	13.3	
No	22.4	25.6	(33 WA – 9 Vic)

Use of BCA

Use regularly	23.7	21.8	(20 Tas – 40 ACT)
Never refer to	6.4	8.1	(0 ACT, SA, WA – 10 Tas)

Source: Master Builders Australia (Sub. 24).

The ABCB Chairman states that:

... it is believed that there are many designers, builders and other industry participants who do not use it [the BCA] actively and could derive benefits from doing so. Uptake by subscribers as a proportion of those who could be potential users is around 30% ... (sub. 4, p. 16)

The HIA submitted:

... while many practitioners may be aware that the document exists, there remains a significant number who do not access the document on a regular basis. This outcome creates problems within the industry because regular amendment of the BCA means that the working knowledge of many practitioners can quickly fall behind current requirements. (sub. 6, p. 42)

Notwithstanding the above survey findings, MBA reported that:

... The cost appears to be a significant issue with most builders. A review should therefore be conducted as the appropriateness of the current pricing structure and to assess what impact pricing has on accessing the BCA by practitioners. (sub. 24, p. 11)

BPIC (sub. 23, p. 68) believes that the costs of accessing the BCA and referenced standards are ‘excessive and unreasonable’.

Currently, the BCA standards package (primary references only) is available at approximately \$1200.00 per annum. This combined with the BCA cost of approximately \$270.00 creates an expensive legislative regime with costs in the region of \$1500.00 per annum for building practitioners to fully understand their legal obligations in regards to building. This cost would perhaps triple if the secondary and tertiary reference codes were included. (sub. 23, p. 68)

Further, while it is possible to purchase the housing provisions of the Code (Vol 2) separately, users only interested in Volume 1, must also purchase Volume 2. This was described by one participant as a ‘rip-off’.

Some concerns were expressed about the new annual A5 hard copy version of the Code. The Commission was told that builders don’t like the new format because they have to break the spine of the book to photocopy extracts to show their workers. ANZSES recommended:

... a system that reduces paper wastage (contrary to the new bound hard-copy which prevents regular updates) and promotes electronic usage where applicable. (sub. 1, p. 9)

ANZSES pointed out that the online system could be further enhanced by providing:

... links to other sites which would assist a designer or builder in selecting appropriate deemed-to-comply systems or products ... (sub. 1, p. 9)

Blind Citizens Australia wants information about proposed changes to the Code to be provided in formats that are accessible to people who are blind or vision impaired so that these persons can more effectively contribute to the development of the Code:

... This information should be provided at no cost and should include as much detail from the Building Code as is required to competently comment on the proposed changes. (sub. 20, p. 11)

ABCB’s cost recovery approach

The submission by the Chairman of the Board, made the following observations about ABCB’s cost recovery approach:

... The ABCB’s cost recovery strategy was the subject of a public review and joint decision by all nine governments that supported a 50/50 approach to public and commercial funding for the ABCB’s activities. (sub. 4, p. 7)

... BCA charging arrangements can be deemed appropriate based on a previous DOFA audit and a review of the Australian Government’s Cost Recovery Guidelines.

... The ABCB cost recovery approach has a legal base. An Intellectual Property Deed and IGA are in place. The Deed merged intellectual property and vested it in joint Australian Government, State and Territory ownership in equal shares of all ABCB materials. This ensures that the code, which [is] the ABCB's major product, is subject at all times to an appropriate level of rigour and control and vests in the ABCB Executive Director responsibility to use, enhance or exploit this intellectual property. Moreover, the ABCB was the subject of an independent public review in 2000 that recommended an approach to the partial recovery of the costs involved in creating the governments' intellectual property in ABCB outputs, including the BCA and related material. (sub. 4, p. 30)

Assessment against Cost Recovery Guidelines

Well designed cost recovery arrangements can promote economic efficiency and equity by instilling cost consciousness among agencies and users; and ensuring those who use regulated products or request additional information (or a higher level of access) bear the costs.

At the end of 2002, following a public inquiry and report by the Productivity Commission (PC 2001a), the Australian Government adopted a formal cost recovery policy '... to improve the consistency, transparency and accountability of Commonwealth cost recovery arrangements and promote the efficient allocation of resources' (DoFA 2002). Guidelines have been developed by the Department of Finance, based on those recommended by the Commission, to assist Australian Government regulatory agencies to design and implement appropriate cost recovery arrangements — one set of guidelines for regulatory agencies and a second for information agencies.

While the DoFA guidelines do not technically apply to inter-governmental bodies, they are a useful reference for evaluating the efficacy of the ABCB's cost recovery approach.⁹ The ABCB is primarily an agency that develops regulations although it is also collects, compiles and disseminates information.

The DoFA Guidelines for regulatory agencies contain a number of broad principles or conditions for determining when cost recovery is appropriate and criteria for guiding cost recovery policy design and implementation (see box 8.8).

⁹ Although the ABCB cost recovery arrangements will be reviewed against the Guidelines as part of a broader review in 2006–07 (in line with the Government's five year review schedule) of cost recovery arrangements within the ITR portfolio.

Box 8.8 **Cost recovery guidelines**

When is cost recovery appropriate?

- The principal beneficiaries can be identified and charging is technically feasible.
- Cost recovery should be implemented for economic efficiency reasons, not merely to raise revenue. Cost recovery should not be implemented where: (i) it is not cost effective; (ii) it would be inconsistent with policy objectives; or (iii) it would unduly stifle competition and industry innovation.
- Case for cost recovery assessed on an activity basis, rather than an agency basis.

Design and implementation:

- Cost recovery arrangements should have clear legal authority.
- Partial cost recovery is generally inappropriate — the prices of regulated products should incorporate *all* of the costs of providing the products/service, including operational/administrative costs of regulation.¹⁰ Possible exceptions include: phasing in or adjustment periods; or to meet community service obligations or other government policy objectives.
- Choose an approach to charging that is consistent with the objectives of the activity.
- For information products (such as educational and training services, publications etc.) the collection, collation and dissemination of the Basic Product Set (BPS) should be taxpayer funded. Criteria for determining the BPS, include:
 - they have ‘public good’ characteristics¹¹; and/or
 - they generate significant spillover benefits to the broader community; or
 - there are other policy reasons for the product to be provided free.
- Additional (non-BPS) information products should be classified into three broad categories and priced accordingly:
 - dissemination of existing products at marginal cost;
 - incremental products (which may involve additional data collection, compilation, or wider/enhanced dissemination) at incremental (avoidable) cost; and
 - commercial (contestable) products according to competitive neutrality principles.
- Avoid cross subsidies.
- Ensure transparency and accountability, industry consultation and periodic review.
- Levies generally considered only if fees-for-service not efficient and cost-effective.¹²

Source: Based on information in DoFA 2002 and Minchin 2002.

¹⁰ Cost estimates should be based, where possible, on efficient costs, not actual costs.

¹¹ Public goods exist where it is costless to allow additional consumers to enjoy the benefits of a good or service and where it is not possible anyway to exclude them from doing so.

¹² Either because it is difficult to establish a fee that accurately links the costs of the activities to the regulated firms or individuals; or because the fee is costly to collect.

The ABCB's cost recovery policy and practices appear to be inconsistent with the DoFA Guidelines. Reference to the Guidelines and the concerns of participants outlined above, suggest that several issues in relation to the ABCB's approach should be examined:

- the potential conflict with public interest and policy objectives
- the appropriateness of setting targets (making the case for cost recovery on a case-by-case, rather than agency basis)
- transparency.

The first of these is the most significant and indicates that the appropriateness of charging for a minimum level of access to the code should be reviewed. Accessibility of legal requirements is a fundamental aspect of regulatory transparency and Australian governments have implemented measures aimed at ensuring the law is communicated clearly and is readily accessible. For example, in all jurisdictions legislation is accessible free of charge on-line. For Commonwealth legislation, the recently enacted *Legislative Instruments Act 2003* requires (from 1 January 2005) not only that legislative instruments be included on an electronically accessible *Federal Register of Legislative Instruments*, but further only those instruments on the Register will be enforceable.¹³ The ACT has also implemented a similar 'authoritative' register of all ACT laws, including primary legislation and legislative instruments.

Once the requirements in the Code are called up into State and Territory building laws they are mandatory requirements and effectively become legal instruments. Successful implementation of the Building Code and achievement of the ultimate health, safety and amenity objectives that it embodies, relies on a high level of compliance by those industry participants whose conduct it seeks to influence. High compliance, in turn, is dependent on a high level of awareness and understanding of the Code. Easier access to the Code is in the 'public interest' as it facilitates greater awareness — or conversely, charges that discourage access are likely to contribute to reduced awareness and poorer compliance, which undermine, to an extent, the Code's objectives.

Several participants agreed with these broad principles:

There are reservations about charges to access the BCA, given it is increasingly dealing with a broader range of public policy issues which the public will expect to access free of charge. Therefore, there may be benefit in reviewing current charging policies.

¹³ The Act allows for limited exemptions, but almost all Commonwealth legislative instruments will have to be registered. All legislative instruments that are required to be registered are not enforceable until they are registered.

The cost of accessing the BCA acts as a disincentive for builders, and therefore impacts on compliance levels and the application of innovative performance solutions. (Queensland Government, sub. 41, Part 2, pp. 6, 12)

... the BCA is a mandatory legislative document and should be available free of charge via electronic access in the same manner that other legislation is available. Hard copy versions of the BCA should also be available, however it would be reasonable [for] these to be sold. ...

Mandatory referenced documents should also be available free of charge via electronic access. It would be reasonable for optional referenced documents, such as the majority of SAI referenced standards, to be sold. (HIA, sub. 6, p. 37)

The BCA is a legislated document and therefore government law.

... as the law of the land [it] must be accessible to all of the community to ensure transparency of purpose, high levels of compliance and government accountability. Legislative requirements that are highly priced introduce exclusivity and preclude access to lower socio-economic groups.

It is unacceptable that SAI retain their conventional costing structure [for Australian Standards] when government law requires the document to be purchased and the information in that document forms an essential part of the national building regulatory system. (BPIC, sub. 23, pp. 67–68)

AEA (sub. 44, p. 26) suggested that at least the high level BCA objectives and performance-based requirements should be freely available via the internet.

The Tasmanian BRAC (sub. 29, p. 9), while considering charging for the Code to be appropriate, also thought that the ‘charges should be kept as low as possible to enable as many people to obtain and use the BCA’.

The Commission’s view is that the Code should be regarded (using the terminology of the guidelines) as part of the Board’s basic product set and a minimum level of access should be available at no cost. The current free access at libraries, whilst of benefit to some irregular users such as students, does not provide a minimal level of practical access for practitioners. Similarly, the casual access online subscription is also a good initiative, but again does not provide sufficient access.

One possible approach would be to:

- provide free access to the full code and essential primary referenced standards on-line and in hard copy at public libraries (and other public viewing locations as presently);
- recover ‘run-on’ or incremental costs (mainly printing and handling costs) for hard copies of the Code and referenced standards (this would also discourage frivolous demand); and

-
- charge commercial prices (recover all costs) for higher levels of access (eg more convenient format, CD-ROM, MiniCode Generator, automatic e-mail alert service etc, non-essential standards).

Improving access to the Code, will generate higher compliance with requirements that have been developed partly to correct market failures — improved compliance generates significant spillover benefits to the broader community. Better access is also consistent with broader government policy goals.

Revenue implications for the ABCB would be very significant as BCA sales revenue is currently a major source of funds. For this reason changes in pricing policy may need to be phased in. In any case, any reduction in sales revenue would require ipso facto, an increase in contributions from governments. However, to the extent that reduced charges lead to increased market penetration and higher sales of the Code and related products, unit production and dissemination costs may fall. Also, over the medium term the Board may be able to develop new value-added products (like the MiniCode Generator) that will provide additional sources of funds.

SAI as a private commercial organisation, must earn a return on the standards it develops and the intellectual property they embody. If referenced standards are to be made available to users of the Code free or at significantly reduced cost, the ABCB may need to subsidise the development and dissemination process, and in turn receive a funding supplement from governments.

The discussion above of the Board's current cost recovery policy suggests that there may be an informal, if not explicit, cost recovery target of approximately 50 per cent for the Board's operations as a whole. The Commission notes that any such target would be inconsistent with the DoFA cost recovery guidelines. When reviewing ABCB's cost recovery practices, a 'bottoms up' approach should be adopted, by distinguishing between activities and deciding on cost recovery on a case-by-case (ie activity) basis, rather than on a whole of agency basis.

Transparency requires that an agency articulate clearly the rationale for and objectives of its approach to cost recovery, as well as the basis for and details of costing models used. There would appear to be little public information about the ABCB's cost recovery approach. While charges for products and services are set out on the Board's website there is no information about the policy behind and basis for the charges. Transparency also requires consultation with stakeholders.

DRAFT FINDING 8.3

The number of BCA subscribers is low relative to the number of potential users. This has implications for awareness and compliance. The cost of the BCA appears

to be a significant barrier to improving access, awareness and usage. The ABCB's cost recovery arrangements are inconsistent with the Australian Government's cost recovery guidelines.

DRAFT RECOMMENDATION 8.6

The ABCB's cost recovery arrangements should be amended, to be made consistent with the Australian Government's cost recovery guidelines. The revised IGA, when presenting future funding for building regulation reform, should be structured so as to provide sufficient funding for the reform agenda and to enable a minimum level of access to the BCA, free of charge.

9 Other activities of the Board

This chapter examines other activities of the Board, undertaken in support of its central function of Code updating and development, as follows:

- research (section 9.1);
- raising awareness through education and training (section 9.2);
- preparation of guidance documents (section 9.3);
- product certification (section 9.4); and
- international liaison (section 9.5).

The chapter therefore, in effect, addresses IGA objectives one, four, eight, nine and ten.

9.1 Research

In accordance with objective 4 of the IGA, the ABCB supports research that promotes innovative and cost-efficient solutions. The ABCB research program covers a broad agenda, including: projects on the efficacy of technical solutions; areas for further development of the BCA; and the development of national administrative processes.

The ABCB employs a number of research strategies, including: in-house research; outsourcing to external consultants; partnerships with bodies such as the Cooperative Research Centre (CRC) for Construction Innovation and the CRC for Bushfires; and sponsoring of student research.

The Standards Australia International (SAI) standards development process is also based on extensive research, which feeds into Code amendments. In addition, research in the building and construction industry is conducted independently by several private and public bodies, such as the CSIRO, some of which is also reflected in referenced documents.

ABCB research priorities are determined after consultation with stakeholders. The key mechanisms for identifying stakeholder needs are an annual public call for proposals and an annual Industry Forum on Research facilitated by the ABCB.

While the Building Products Innovation Council (BPIC, sub. 23, p. 76) considered that the ABCB ‘are doing a commendable job in the area of research and development’, concern was expressed about political considerations of the day having too much influence over the research program:

The national regulatory body should have sufficient resources to undertake a structured and continual review and development of the BCA requirements outside the direct influence of political agendas. Although it is recognised that political concerns should be accommodated they should not hijack a structured research program. (sub. 23, p. 76)

Important areas of research covered to date include fire codes, disabled access, weather tightness, energy efficiency and the resolution of State and Territory variations from the Code. The ABCB Chairman’s submission identified some of the benefits of the Board’s research program to date:

- development of safe and cost-effective provisions for aged care facilities;
- development of energy-efficient and cost-effective provisions;
- acceptance of the use of timber framed construction in low rise Class 2 buildings;
- cost-effective provisions for structural steelwork in car parks;
- adoption of a more representative international fire test for interior linings; and
- development of a guideline for building professionals in the use of fire safety engineering solutions. (sub. 4, p. 23)

The Queensland Government (sub. 41, Part 2, p. 19), while noting that timeliness is an issue, was of the view that ‘[c]onsiderable benefits have been derived from the longer term investment in fire research and similar advantages are anticipated from other current research efforts’. A number of other submissions also made supportive comments about the ABCB’s research program:

Research has been focused and well placed to inform the development of provisions in the BCA (eg sound, energy efficiency).

The ABCB has been very effective in organising research programs to meet the priorities for the Board’s development of the Code. (South Australian Government, sub. 36, p. 21)

The ABCB has endeavoured to operate an efficient research program. The areas of research addressed to-date are generally considered to have been relevant to the further development of the BCA. (Housing Industry Association (HIA), sub. 6, p. 43)

The ABCB’s research is supported and resources adequately allocated. The research is cost effective and is developing benefits that States and Territories would be unable to do in isolation.

The research is being well managed ... and the ABCB is the appropriate body to conduct and coordinate such research. (The Tasmanian Building Regulation Advisory Committee (BRAC), sub. 29, p. 12)

BPIC (sub. 23, p. 78) also considered that the ABCB is the most appropriate body to *coordinate* the research, but argued that the ABCB should not *conduct* the research.

Some study participants identified priority areas for future research and/or commented on how the determination of priorities and allocation of resources could be improved.

The research program could be more strategically determined ie. where can research most effectively address the highest priorities ie. the biggest “bang for the buck”. (Queensland Government, sub. 41, Part 2, p. 19)

... too much research is mis-directed towards maintenance and expansion of deemed to satisfy prescription and not enough research is aimed at making the performance requirements more workable. And not enough research is aimed at clarifying the spectrum of risk for buildings. (Australian Elevator Association (AEA), sub. 44, p. 30)

There is ... a concern within the BPIC membership that insufficient research is undertaken into long-term strategic planning.

The current ABCB arrangements tend to be more reactive, and fail to provide sufficient emphasis on the importance of understanding the future construction needs of our society, say within 10 to 20 years time. This type of analysis is essential in the development of successful regulations, while also allowing industry to develop product to meet future demands. (BPIC, sub. 23, p. 39)

The areas of energy efficiency are of high priority to ANZSES, and the areas of energy sourcing and energy supply also need to be expanded to incorporate and encourage renewable and sustainable energy supply. (Australia and New Zealand Solar Energy Society (ANZSES), sub. 1, p. 11)

... more funding [should] be allocated to research in the area of disability access (Blind Citizens Australia, sub. 20, p. 12)

AFAC believes there is more scope to expand ... research but not necessarily with the only objective of innovative and cost-efficient solutions in mind. (Australasian Fire Authorities Council (AFAC), sub. 28, p. 16).

AFAC also expressed concern about the lack of a centrally located fire database, noting that Australia is one of the few developed countries without such a database. AFAC submitted:

Notwithstanding the current efforts on the part of fire services to improve fire-related data collection (particularly for performance measurement purposes), there remains a critical need to establish a national repository of fire-related data for the express purpose of supporting the development of evidence-based building regulatory reform. Such a repository should be managed by a Federal Government agency and made available to all key stakeholders. (sub. 28, p. 10)

Priorities for the ABCB’s future work program are discussed in chapter 11. Research priorities will be dictated, to a large extent, by this.

Overall, the ABCB's research program has been effective and it is important that it continue. It would be sensible for the research priorities to be guided by the future work program of the ABCB (or its replacement).

9.2 Raising awareness

An effective regulatory system in part depends upon the building industry's awareness of the Code and its capacity to respond to any changes. In addition, it is important that consumers and the general public have a basic understanding of the objectives and scope of the BCA. Objectives 9 and 10 of the IGA direct the ABCB's efforts in this area.

The ABCB has employed a number of strategies for promoting awareness of the BCA and for educating administrators and practitioners using the Code. Some of the key elements are outlined in box 9.1.

When considering appropriate education and awareness strategies, the Board needs to recognise the varying requirements of different categories of potential users. These include:

- administrators and certifiers
- regular users (for example, architects, designers, surveyors, and certain builders)
- less-regular users (for example, smaller builders and tradespeople)
- infrequent or one-off users (for example, students and home buyers).

State, Territory and Local Governments, who have responsibility for implementing and enforcing the Code, also have an important complementary role to play in education and raising awareness and usage of the Code. It is also the case that the more credible and effective are enforcement strategies, the greater will be the incentive for practitioners to familiarise themselves with their obligations under the Code (see chapter 7 on enforcement).

Box 9.1 Key elements of ABCB education and awareness strategies

The ABCB is promoting increased awareness of the BCA through a number of specific strategies, including:

- Publication of the Guide to the BCA (and other guidance documents) — provides users with ABCB agreed definitive information about the interpretation of technical matters.
- On-line answers to Frequently Asked Questions.
- E-mail alerts/updates for Code subscribers.
- Australian Building Regulation Bulletin — regular technical-based information on the Code and building regulations.
- 1300 BCA Telephone Advisory Service.
- One-Stop Education Shop website — identifies accredited courses relating to the building and construction industry; and other general education related information.
- Public awareness sessions on specific projects or aspects of the Code — for example recent sessions presented on BCA energy-efficiency provisions and the proposed Access to Premises Standard.
- Development of an ongoing education program, particularly in regard to changes to the BCA, for certifiers and other industry professionals.
- Redevelopment of the ABCB's 'Working with Performance' course so that the use of performance can be better understood and delivered not only through education programs, but also through information seminars.
- Biennial conferences, attended by industry and government representatives.

Sources: Sub. 4, p. 17 and ABCB website.

The Laver Review (ABCB 2000, p. 31) found that 'the take up rate of the BCA and the current practitioner knowledge of the code leave a lot to be desired'. The Review made a number of recommendations directed toward improving awareness. Many of these (for example, a searchable web based BCA and online answers to frequently asked questions) have now been implemented by the Board.

The Local Government Association of Tasmania (sub. 32, p. 1) submitted that the ABCB has 'made a significant contribution to the professional development and technical training of building practitioners through its various conference and seminar programs'. The Tasmanian BRAC stated:

From observations at industry meetings etc. it would appear that the strategies [for raising awareness and usage of the Code] have been effective and are transparent. ...

Where large changes occur, such as with energy efficiency, the ABCB's national training program appears effective and of a high quality. (sub. 29, p. 12)

However, information presented to the Commission, suggests that some concerns remain about the adequacy of the Board's education and awareness activities. As well as a low level of awareness and take up of the Code amongst small builders and tradespeople, there is a general lack of awareness amongst consumers.

The recent report of the NSW Joint Select Committee on the Quality of Buildings found that 'there is consumer confusion as to the purpose of the Building Code and what it includes' (Campbell Report 2002, p. 73). The Board's decision to make copies of the Code available at public libraries will improve access to the Code for consumers, but the average consumer would not have the technical expertise to interpret the requirements.

The Master Builders Association of Western Australia (MBAWA) (sub. 8) submitted:

In our view the Australian Building Codes Board has not achieved its stated objective to increase community awareness of building regulatory reform and the BCA. (p. 1)

ABCB and industry need to develop a better education program, particularly in regional areas of Australia to ensure that builders better appreciate BCA provisions. (p. 2)

Nigel Lilley, Builders' Registration Board of Western Australia, also does not believe that the ABCB has met its objective of increasing community awareness of the BCA:

Education is a key to compliance. To increase consumer and building industry awareness of the BCA, a sound education program to ensure a better understanding of BCA provisions should be developed by the ABCB and industry as a matter of priority. Education programs must promote the regular use of the latest BCA by the building industry, and create general awareness for consumers. (sub. 40, p. 2)

Further, MBAWA and Nigel Lilley were concerned about the consequences, for compliance and health and safety outcomes, of an inadequate understanding of the Code:

MBAWA has serious reservations about the degree of understanding of, and compliance with, the BCA by owner builders. (sub. 8, p. 2)

It is the experience of those who work at the Board and the Tribunal that many builders have little understanding of the BCA and its application, leading to non-compliance causing serious consequences. (sub. 40, p. 1)

For example, in a recent proceeding before the Board, a builder's lawyer noted that despite having 30 years experience as a registered builder and holding a first-class reputation, his client had little or no knowledge of the BCA requirements. The builder also had no idea whose responsibility it was to determine the wind loading requirements. The amalgamation of errors led to a tragic death. (sub. 40, p. 1)

BPIC submitted that although ABCB strategies have been ‘reasonably effective in reaching the main administrators of the code ... other areas of the building industry directly and indirectly affected by the work of the ABCB are poorly informed’ (sub. 23, p. 74).

Specifically, in the areas of energy efficiency and renewable/sustainable energy provision, ANZSES consider that further education ‘is essential for the industry to understand the critical issues, and for the Board to be able to implement them’ (sub. 1, p. 4).

Some participants expressed the concern that practitioners are having difficulty keeping pace with Code reforms. Pitt & Sherry (consulting engineers, building surveyors) submitted:

The performance of the ABCB should not be measured by the volume of reforms introduced, but by the capacity of the ABCB to transfer knowledge to those that give effect to reforms. If it can’t be demonstrated that practitioners are keeping pace, the rate of reform should be slowed. (sub. 37, p. 6)

It is important that users of the Code not only receive updated versions of the Code incorporating the latest amendments, but all significant changes and their implications should be explained. Guidance documents can play an important role in this regard. The South Australian Government (sub. 36) suggested the ABCB could make greater use of this strategy:

It would be useful for the ABCB to issue more guideline documents on how to use, interpret and apply the BCA ... (p. 18)

Guidelines would be useful on such matters as:

- How to develop alternative solutions for compliance with the performance requirements.
- How to apply the performance requirements when considering the upgrading of existing buildings. (p. 21)

More formal training also needs to be an essential element of education and awareness strategies. An important vehicle for such training is apprenticeships and other undergraduate training courses for the building trades. The HIA considers that a strategy to raise the profile of the BCA within the industry should:

... address the scope of building regulation education included within tertiary education programs provided through TAFE or University courses. (HIA sub. 6, p. 42)

The Victorian Government recognises a need for such training ‘to keep pace with building construction and regulation’ (sub. 51, p. 13). However, it acknowledged that:

... given the packed curriculum of these training courses priorities will need to be carefully considered. (sub. 51, p. 13)

The South Australian Government considers that training has been well organised and delivered, but suggested that in addition to training on changes to the Code, there needs to be:

... some “back to basics” refresher training for practitioners on interpreting and applying the BCA. These could be tailored to suit particular industry needs such as building surveyors or project home builders. (South Australian Government, sub. 36, p. 20)

Some participants consider that industry should play a greater role in the provision of training:

The existing industry associations provide the greatest opportunity to provide ongoing education within this sector. (Victorian Government, sub. 51, p. 13)

... more education and training could be delivered in conjunction with industry organisations. (South Australian Government, sub. 36, p. 20)

Consideration should ... be given to an assessment of the benefits [of] face to face delivery of education programs being undertaken through industry associations rather than the ABCB. (HIA sub. 6, p. 42)

BPIC (sub. 23) raised concerns about the apparent low level of awareness amongst its members of ABCB research activities and objectives (p. 76) and also suggested that, given resource constraints and other priorities, the current employment of a full-time educational officer ‘is considered to be a luxury’ (p. 75). This position was introduced by the ABCB in response to a recommendation of the Laver Review.

Some study participants identified a need for members of ABCB advisory committees (and SAI committees) to be better informed about the Code, standards and good regulatory practice and recommended that suitable training courses be provided.

There is inadequate education about good regulatory practices and lack of good regulatory culture within committees.

Steps need to be taken to ensure that committee members are properly skilled and qualified in good regulatory practice, economics and risk management. (AEA, sub. 44, pp. 14–15)

People with disabilities [serving on disability advisory committees] urgently need access to affordable and accessible training in Australian Standards, the Building Code, the Premises Standard and the Accessible Public Transport Standards, as well as relevant state and local regulations. (Blind Citizens Australia, sub. 20, p. 3)

While the ABCB has already made substantial progress toward improving awareness of the BCA objectives and requirements, more needs to be done, particularly in relation to reaching smaller builders, tradespeople and consumers.

The ABCB (or its replacement) should enhance its BCA awareness campaign, including investigating opportunities for further partnerships with industry in the provision of training.

There may be merit in the Board considering the following strategies for raising awareness:

- Preparation and wide dissemination of a user friendly, plain language BCA information guide. Such a guide could provide an accessible starting point for consumers and also certain builders and tradespeople with a poorer command of English, that perhaps only need a broad awareness and understanding of the Code. Such a guide could be modelled on aspects of the ‘user friendly’ South Australian Housing Code.
- Making the ABCB web site more interactive.
- Using open public forums for all major Code reforms, including the opportunity to interact, ask questions and provide feedback.
- Making a knowledge and understanding of the BCA an essential objective for apprenticeship and other training courses for the building trades, and a condition for the granting of building/trades licences/certificates.

9.3 Use of guidelines

There are two broad types of guidance documents prepared by the Board. The first are prepared for the purposes of providing clarification and explanation of BCA technical requirements. This type of document (discussed in *raising awareness* above) helps users of the Code to understand and interpret the mandatory requirements. The other type of guidance document, discussed below, does not necessarily relate to the technical requirements of the Code. Rather, they typically cover aspects (or a level) of construction or building performance that are considered not to warrant regulation.

The Board has made some use of non-regulatory guideline documents as an alternative to the enforceable requirements in the Code. The ABCB Chairman provided information on one example:

The ABCB has been responsible for the preparation of a number of guidelines for the information of industry, including a guideline for Fire Safety Engineers. Rather than a prescriptive regulatory approach, this guideline was complemented by the production of the Code of Practice for Fire Safety Design, Certification, and Peer Review by the Society of Fire Safety Engineers Australia. (sub. 4, p. 6)

Voluntary guidelines were also developed by the Board, in response to the Thredbo landslide disaster, in relation to construction in areas at risk of landslips. The Australian Government Attorney-General's Department (Emergency Management Australia) recommended that the ABCB give priority to developing further comprehensive guidelines for building in areas susceptible to other natural hazards, such as high winds, storm, cyclone, flood, bushfire and earthquake (sub. 43, p. 2).

The ABCB's work program for 2004–05 (sub. 50) indicates that guideline documents are also being developed on sound insulation (in association with the recent amendments to the regulatory requirements) and telecommunications access¹ and that other guideline documents on personal safety and waste management are on hold, due to resources being allocated to other projects.

Such guideline documents can educate builders, practitioners and consumers about good practices and the benefits of innovative design, potentially achieving a significant change in behaviour without the compliance costs associated with prescriptive legal requirements.

DRAFT FINDING 9.3

Greater use by the ABCB (or its replacement) of guidance/advisory documents could be a cost-effective mechanism for improving the performance of buildings.

9.4 National product certification

The BCA requires that materials used in construction must be fit for the purpose for which they are intended. Certification is one of a number of forms of evidence by which a product or system can be judged in terms of suitability for use.²

¹ The guideline will provide advice on physical access and spatial requirements for the efficient distribution of telecommunications to and within multi-tenanted buildings (sub. 50, p. 11).

² See clause A2.2 of the BCA.

The ABCB developed the *Australian Building Products and Systems Certification Scheme* as a mechanism for products and systems to be certified as compliant against specific provisions of the BCA. It was established to overcome difficulties in gaining acceptance in the building industry of new and innovative products and systems. State and Territory Governments had implemented their own product certification schemes (see chapter 2), but a national approach was seen as desirable to achieve consistency and eliminate duplication.

Products or systems certified under the ABCB scheme received a Certificate of Conformity and mandatory legislative recognition in each State and Territory — ensuring acceptance by Local Councils, building surveyors and private certifiers. The ABCB Director would sign off the Certificate of Conformity once the product or system had been approved by each of the States and Territories through their representation on the Australian Certification Committee.

However, the Board decided to cease accepting new applications under the scheme as of 1 November 2003. The System has been disbanded because of the difficulties inherent in getting approval in all Australian jurisdictions. Only nine products/systems achieved certification during the life of the scheme. Ronald Swane commented:

National product certification has had a chequered history within the ABCB largely because of a position taken by some State and Territory Administrations and their desire to retain the right of veto over the acceptance of new building products and systems. (sub. 12, p. 2)

In principle, any intractability would normally be addressed by mutual recognition obligations. Under the Mutual Recognition Agreement (MRA) between Australian governments and the Trans Tasman Mutual Recognition Arrangement (TTMRA) between Australian and New Zealand governments, any product certified as compliant with building requirements in one jurisdiction should be able to be lawfully sold in any other jurisdiction. However, in practice there are some important obstacles to realising the benefits of mutual recognition. These were identified in the Commission's *Evaluation of the Mutual Recognition Schemes* (PC 2003b):

- First, the legislation implementing the MRA and TTMRA has been interpreted so as to not include the *use of goods* — ‘while a good can be sold in all participating jurisdictions, local regulations may prevent its use in particular jurisdictions, constituting an effective barrier to the mobility of goods’ (PC 2003b, p. 238).
- Second, the relatively low level of awareness of mutual recognition obligations/opportunities amongst regulators, industry and consumers has been an obstacle.

The Commission's Report proposed that a cross-jurisdictional body be established to review, based on complaints, the scope for mutual recognition to be expanded to include regulation on the use of goods. The ten governments are still considering action in this area and this might lead to a mechanism for ensuring the mutual recognition for use of certified building products and systems.

The Laver Review recommended that the ABCB cease to undertake product certification, but instead establish certification criteria, and recognise appropriate product accrediting bodies to perform the tasks (Laver 2000, p. 2).

The ABCB is currently in the process of developing a new third party building products and systems certification scheme. Under the new *CodeMark Scheme*, independent certification bodies, accredited by JAS-ANZ, will assess and certify products and systems against provisions of the Code. Documentation for the Scheme is currently being finalised with implementation expected to take place later this year (ABCB pers. comm., 21 July 2004). The ABCB Chairman submitted:

Moves are ... under way to introduce a privatised system of national product certification in collaboration with NZ to remove the duplication involved in the existing system that involves approval processes in eight jurisdictions. (sub. 4, p. 49)

The ABCB, in its Work Plan for 2004–05, outlined the following aims for the CodeMark certification scheme:

- Is responsive to Government and Industry needs for a reliable, timely and cost effective source of recognition of compliance of products/systems with the provisions of the BCA.
- Provides Governments with the necessary degree of confidence to endorse the proposal for industry organisations to deliver this service to the broader industry.
- Is commercially viable for participating industry organisations. (sub. 50, p. 14)

One of the objectives of the new Trans-Tasman Building Regulatory Reform Council is to ensure the development and implementation of product certification schemes in Australia and New Zealand that are consistent, as far as practicable (see box 8.3).³

Product certification can be a useful mechanism for signalling that a product has certain minimum performance characteristics. There are many examples of voluntary certification schemes operated by industry. Businesses generally apply for certification of their product so that users have a degree of assurance that the product is 'fit for purpose' and so that consumers perceive it as superior to competing non-certified products in the market place. The National Fire Industry

³ Regulatory reform proposals in the New Zealand Building Bill currently under consideration inter alia 'introduces a new product certification regime for building products and systems;' (sub. 5, p. 5).

Association (NFIA), recognised the following reasons why a manufacturer might seek product certification:

- Protecting or insuring against liability in the market place;
- An exercise in risk management if the product/system is approved and certified by a third party and minimises risk of selling a product/system with liability issues;
- Best practice within a company requires testing of products/systems, therefore appraisal/certification is the logical next step;
- Third party substantiation on performance of product, providing confidence for manufacturer and building certifier in product application;
- Business decisions based on marketing advantage (some major customers placing importance on certification to the conformity level);
- New company or product requiring credibility in the market place;
- Sense of achievement, credibility or prestige of having successfully completed a rigorous process of certification ... (sub. 3, pp. 3–4)

BPIC (sub. 23, pp. 32–33) sees a national certification system as allowing recognition of innovative building solutions between amendments to deemed-to-satisfy solutions — which can be slow to reflect the latest building system developments. BPIC also argued that government sanctioning of certified products is critical to achieving national and international credibility and supported the work of the ABCB on a joint system with New Zealand.

NFIA recommended independent third party product certification and marking for building and construction products used in the Australian market. Further, NFIA suggested that the ‘minimum acceptable’ safety rationale for BCA standards, justified mandatory certification (sub. 3, p. 4).

The Commission sees value in a joint Australia/New Zealand product certification scheme, based on mutual recognition of products and systems certified by accredited government or industry bodies. Any scheme should not be mandatory, except perhaps for a very limited number of products that pose particular safety risks if they fail to meet Code requirements. Mandatory certification of products can become a barrier to entry for new (particularly imported) products and would also contravene the spirit of mutual recognition. The Commission’s view is that incentives exist for firms to voluntarily apply for certification and that a non-mandatory scheme combined with an education campaign would be a lower cost, more efficient solution.

9.5 International liaison

The Board is involved in various international liaison activities. These activities contribute to the achievement of objective 8 of the IGA ‘to create an efficient regulatory environment to encourage an internationally competitive building and construction industry’. Many other activities of the ABCB of course directly impact on the international competitiveness of the industry.

Some of the major recent international liaison activities of the Board are listed in box 9.2. Collaboration with New Zealand, including joint standards development and the recent Trans-Tasman Building Regulatory Reform Council initiative were discussed in chapter 8. That chapter also suggested that the ABCB might take a more active role in international standards forums.

Box 9.2 ABCB International liaison activities

Recent activities of the Board directed at improving international linkages, include:

- Bilateral regulatory cooperation, especially with Japan and New Zealand
 - Trans-Tasman Building Regulatory Reform Council (see box 8.3);
 - Recognition as the first evaluation body outside Japan to assess building products and systems under the Building Standard Law of Japan; and
 - Assistance with the development of a performance-based fire code for Hong Kong.
- International code-writing collaboration;
- Cooperation between Australia, Canada, United States and New Zealand on the development of International Fire Engineering Guidelines;
- Involvement in international conferences;
- Membership of international committees, for example the multi-country Inter-Jurisdictional Regulatory Collaboration Committee and International Council for Construction Research and Innovation; and
- International market access initiatives.

Source: Subs. 4 and 50.

The Board’s international activities can have a number of potential benefits for Australia, including:

- providing information on leading overseas regulatory practice and international construction trends
- contributing to a better understanding of the potential impacts of regulatory reform, particularly in relation to performance standards

-
- assisting in reducing trade barriers and enhancing export opportunities
 - access to innovative research and technology
 - improving relations with trading partners and contributing to the economic development of countries in our region.

The South Australian Government highlighted the value of these activities:

The overseas linkages that are being developed by the ABCB are ... important for trade opportunities by improving competitiveness and penetration into overseas markets. (sub. 36, p. 13)

While the Commission recognises that the ABCB's pursuit of overseas linkages has generated benefits, the priority assigned to these activities may need to be reviewed in light of pressing demands for resources in other areas (see chapter 11).

10 Governance issues

This chapter considers the effectiveness and efficiency of current governance arrangements for reform of building regulation. Overall, while there is strong support from interested parties for the Australian Building Codes Board (ABCB) and its role, the Commission has identified certain aspects of governance where improvements could be made.

The chapter is focused on assessing broad institutional arrangements, rather than directly addressing any particular ABCB objectives.

10.1 Issues raised

There is widespread support for continuation of an intergovernment body to further progress national building regulatory reform. This has been the finding of previous reports and is evident from submissions to this study:

There is unqualified support for the continuation of a national organisation such as the Australian Building Codes Board to maintain the process of building regulatory reform in a nationally uniform manner. (NSW Building Regulations Advisory Council (BRAC) — Industry Members, sub. 25, p. 1)

The broad objectives behind the Inter Governmental Agreement (as amended in 2001) to establish the Australian Building Codes Board has delivered certainty and efficiency to the building industry as well as benefits to the community and must therefore continue. (Master Builders of Australia (MBA), sub. 24, p. 1)

Indeed the need for this type of organization is increasing rather than diminishing with the nationalisation of building processes and the growing awareness of the importance of viable international export markets ... (Building Products Innovation Council (BPIC), sub. 23, p. 13)

Further, many participants considered that current institutional arrangements were working quite effectively. The South Australian Government, for instance, recommended that the ABCB should continue:

The ABCB has worked well to deliver the reforms to date and if all the parties to the Inter Government Agreement are to retain their commitment to national consistency then it is considered that the ABCB should continue in its present form. (sub. 36, p. 7)

The Queensland Government submitted that the ABCB ‘provides an effective vehicle for all governments to collaborate and pool resources for the benefit of the community and industry as a whole’ (sub. 41, part 1, p. 1) and further stated:

... the ABCB has been effective in achieving its mission to develop and maintain appropriate standards of health, safety and amenity. (sub. 41, part 1, p. 1)

Similarly, the Department of Housing and Works in Western Australia (sub. 14) considers that there are strong grounds for the IGA to be maintained to enable continuation and refinement of national building standards:

... the Australian Building Codes Board and the Building Code of Australia have delivered significant reform to the building industry and have successfully engineered a national approach to the maintenance and development of building standards in Australia. (p. 2)

... the ABCB has worked effectively to produce and manage the BCA and associated reforms.

... Its regulatory policy developmental processes are transparent, accountable, thoroughly researched and widely accepted. (p. 3)

The Tasmanian Building Regulation Advisory Committee (BRAC) went further, stating that:

No other institutional model is known that has been as effective as the ABCB model. The ABCB has been delivering. (sub. 29, p. 5)

There was also substantial support for the Board from amongst private sector stakeholders. The Green Building Council of Australia (GBC), for example, supports the continuation of the ABCB beyond 2005. The GBC considered that:

The Australian Building Codes Board has made a significant contribution to the design, construction and development industries and is the right vehicle to fund, facilitate and coordinate a national regulatory framework to continue the reform of building regulation.

The Inter Government Agreement on building regulation reform objectives continue to be relevant and needed. The Australian Building Codes Board and the Building Code of Australia has produced gains for the industry and the Australian economy. (sub. 11, p. 3)

Notwithstanding the widespread support for continuation of the Board, many participants had concerns about certain aspects of the current institutional arrangements and made suggestions for improvements. These suggestions vary from minor refinements to processes, through to quite major reforms to the IGA and the Board’s operations.

The Housing Industry Association (HIA), BPIC and the Property Council of Australia (PCA) called for substantial changes to institutional arrangements,

including the establishment of a new statutory body ('Australian Building (or Building Standards) Commission' or 'Building Australia') to replace the ABCB:

... a revised Inter Government Agreement and restructured Australian Building Codes Board is essential to the long-term national and international success of the Australian building industry and the associated benefits to the broader community. (BPIC, sub. 23, p. 2)

[BPIC recommends] ... the ABCB become a statutory commission, ... underpinned by mirror national and state legislation and with a revamped independent Board and a Ministerial Council. (BPIC, sub. 23, p. 4)

HIA considers that the IGA is not achieving its objectives and that a new agreement should be instituted. The new agreement should establish an organisation that has legislative powers to effectively fulfil the objectives of the IGA. (HIA, sub. 6, p. 3)

The Property Council ... supports the establishment of a revamped ABCB.

This should be a statutory body with responsibility over a broad range of construction policy issues ...

The new body could be known as Building Australia and would report to a Ministerial Council established under the auspices of COAG. (PCA, sub. 52, p. 34)

In order to address the terms of reference, the Commission has assessed alternative models for cooperation between Australian governments. Some of these provide important insights and lessons (both in terms of what can be successful and what may not work well) when considering possible revisions to governance arrangements for national building regulation reform. The key characteristics of three of these alternative models — Food Standards Australia New Zealand (FSANZ), National Transport Commission (NTC), and National Occupational Health and Safety Commission (NOHSC) — are summarised in table 10.1. For comparison, the current ABCB governance arrangements are also included in the table. The detailed alternative institutional arrangements proposed by BPIC and HIA drew, in particular, on the FSANZ and NTC models.

The main issues raised by participants with respect to the institutional or governance arrangements for pursuing national building regulatory reform, related to:

- involvement of the Australian Government (section 10.2);
- composition of the Board and committees (section 10.3);
- funding (section 10.4);
- level of commitment to uniformity (section 10.5);
- authority of the decision-making body (section 10.6); and
- independence of the decision-making body and the secretariat (section 10.7).

These are discussed in the following sections. The salient aspects of the alternative models in table 10.1 are drawn on where relevant.

While the Commission makes some recommendations for improving governance arrangements, more fundamental structural changes are not considered to be justified, particularly in light of the disruption and other transition costs that are likely to be associated with such changes. It is probable, for example, that progress in implementing key elements of the Board's current work program would be interrupted during the transition to a new institutional framework. While these would in the main be short-term costs, they would be borne at a time when there is significant pressure on the Board to expedite national reforms.

10.2 Involvement of the Australian Government

There appears to be universal support for the ongoing involvement of the Australian Government in progressing national building regulatory reform (through the ABCB or another forum for intergovernmental cooperation). Participants see support from the Australian Government as critical to the continuing success of a national system.

The Australian government has provided substantial support to building regulation reform and it is essential that it continue to do so. The scope of reform implemented to-date would not have been possible without the government's leadership and efforts to unite the States and Territories. (HIA, sub. 6, p. 4)

Without the leadership of the Australian Government it is likely that significant regulatory reform achieved to-date will be progressively unravelled by State and Territory jurisdictions due [to] a loss of focus on a national agenda. (HIA, sub. 6, p. 23)

In order to maintain a truly national approach it is critical that the Commonwealth continues to participate in, and support, the functioning and funding of the ABCB. (Western Australian Government Department of Housing and Works, sub. 14, p. 4)

... Without a strong financial commitment on the part of the Commonwealth, it is difficult for us to see how the much-needed consistency can be achieved. If left to themselves, the States have shown that they do not have a good record of pursuing national consistency and standards. (Airconditioning and Mechanical Contractors Association (AMCA) of Victoria, sub. 16, p. 7)

... continuing Australian Government involvement in the future of the ABCB is critical, particularly given that recent major ABCB projects have provided a means for delivering nationally consistent government policy initiatives including energy efficiency, access, aged care and a more sustainable built environment. (MBA, sub. 24, p. 1)

Table 10.1 Key characteristics of alternative governance models

	<i>ABCB</i>	<i>FSANZ</i>	<i>NTC^a</i>	<i>NOHSC^b</i>
Role	The Australian Building Codes Board's primary role is the development and maintenance of a nationally consistent approach to technical building requirements, embodied in the Building Code of Australia (BCA).	Food Standards Australia New Zealand is responsible for developing and maintaining uniform food standards for adoption in Australia and New Zealand.	The National Transport Commission is responsible for developing, monitoring and maintaining uniform or nationally consistent regulatory and operational reforms in the land transport area (road, rail and intermodal).	The National Occupational Health and Safety Commission leads and coordinates national efforts to prevent workplace death, injury and disease.
Legal basis	Inter Government Agreement (1994 and amended 2001) by the Australian and State and Territory Governments.	• <i>Food Standards Australia New Zealand Act 1991.</i> • Inter-governmental agreement (IGA) by the Australian and State and Territory Governments — Food Regulation Agreement 2002.	• <i>National Transport Commission Act 2003.</i> • IGA by the Australian and State and Territory Governments.	Established by the <i>National Occupational Health and Safety Commission Act 1985.</i>
Commitment to uniformity	IGA commits States and Territories to develop a nationally consistent regulatory framework and building regulation that is 'as uniform as possible ...'. Jurisdictions have freedom to deviate from the Code.	IGA commits the States and Territories to adopt, without variation, food standards which have been approved by the Australia New Zealand Food Regulation Ministerial Council (ANZFRMC). Australia and New Zealand are working towards the establishment of harmonised food standards in some areas.	All governments are required by the IGA to use their best endeavours to implement reforms, once approved by Ministers of the Australian Transport Council (ATC).	The national standards and other documents that NOHSC develops are of an advisory and guidance nature only. They need to be adopted by State and Territory governments before they have any legal force. NOHSC processes are aimed at achieving greater consistency, rather than national uniformity.

continued next page

Table 10.1 continued

	<i>ABCB</i>	<i>FSANZ</i>	<i>NTC^a</i>	<i>NOHSC^b</i>
Political authority/ Ministerial involvement	Board has the authority to make final decisions on the content and coverage of the Code, but has no control over adoption. No Ministerial Council involvement in approving decisions.	Ministerial Council sets policy and approves decisions — FSANZ has responsibility for developing standards and variations to standards, but ANZFRMC may then reject, amend or seek a review of any standard. FSANZ must have regard to policy guidelines set by ANZFRMC when it develops or reviews food standards.	Ministerial Council sets policy and approves decisions. All outputs of NTC put forward as recommendations to ATC, which can then approve them.	Ministerial Council sets policy and approves decisions. The national standards, codes and other documents developed by NOHSC must be approved by the Workplace Relations Ministers' Council.
Independence	Board established under IGA as a (non-statutory) decision-making body. Secretariat is a unit within Australian Government Department of Industry, Tourism and Resources.	FSANZ is an Australian Government independent statutory authority. The Australian Government Department of Health and Ageing is responsible for providing the Secretariat to the Ministerial Council.	The Commission is an independent statutory body. NTC Office is a Statutory Agency, staffed by Australian Public Service and non-public service staff.	The Commission is an Australian Government independent statutory authority. NOHSC Office is a Statutory Agency, staffed by officers of the Australian Public Service.
Representation	14 person Board: • Australian Government representative; • Senior officers responsible for building regulation in each State and Territory; • Representative of the Australian Local Government Association (ALGA); and • Four representatives of the building and construction industry.	12 person Board, comprising the FSANZ Chief Executive Officer (CEO), representatives from government, the National Health and Medical Research Council and other members drawn from specialist areas relating to food and consumer rights. All members are part-time, except the FSANZ CEO.	Five part-time Commissioners appointed on the basis of relevant expertise and skills, rather than as representatives of particular stakeholder groups. Chief Executive (Head of Office) is also a Commissioner.	Tripartite body with 18 members: • Chairman; • CEO of NOHSC; • Three members nominated by the ACTU; • Three members nominated by the ACCI; • One member nominated by Australian Government Minister for Employment and Workplace Relations;

	<i>ABCB</i>	<i>FSANZ</i>	<i>NTC^a</i>	<i>NOHSC^b</i>
Representation (continued)				• One member nominated by the Australian Government Minister for Health & Ageing; and • One member nominated by each of the State Premiers and Territory Chief Ministers (eight in total).
Advisory committees	The Building Codes Committee (BCC) is the peak technical advisory body to the Board. Membership comprises: • ABCB Executive Director (Chair); • Officials from Australian Government and each State and Territory administration; • ALGA representative; and • Three industry representatives. Various working groups provide advice to the BCC. Other ABCB advisory committees include: • Special project committees (eg energy efficiency, access, future Code) with government, industry and community representatives; and • Industry Liaison Committee.	Tripartite involvement in the decision-making process is accommodated by way of advisory bodies reporting to the Ministerial Council. Also assisting the Ministerial Council are the: • Food Regulation Standing Committee, comprising heads of department for which the respective members of the Ministerial Council have responsibility, as well as the ALGA; • Development and Implementation Sub Committee, comprising heads of the appropriate Australian and New Zealand inspection and enforcement agencies, a representative of FSANZ, and the ALGA; and • Technical Advisory Group, comprising senior food officers from the jurisdictions and chaired by FSANZ.	The NTC is supported by a number of committees and other consultative forums that provide advice on current issues and reforms. These include: • Road and Rail Transport Agency Chief Executives; • Road Transport Industry Advisory Group; • Rail Consultative Forum; • Bus Industry Advisory Group; • Motor Vehicle Environment Committee; and • Specialist technical committees and groups. Some of these committees comprise officials only, while others provide an opportunity for industry and other community groups to have input into policy development.	NOHSC is advised by various committees and subcommittees with terms of reference covering specific areas of NOHSC's functions, for example: • Chemical Standards Sub Committee; • Research Advisory Panel; and • Skills Development Sub Committee. Committees are tripartite and include representatives of governments, the ACTU and the ACCI. Representatives of professional organisations and community groups, or other experts, may also be included on some committees.

Table 10.1 continued

	<i>ABCB</i>	<i>FSANZ</i>	<i>NTC^a</i>	<i>NOHSC^b</i>
Transparency/ consultation	Broad and open consultation. Economic evaluation/regulation impact analysis.	Decision making based on scientific risk assessment; RIS analysis of economic and social impacts; and broad community consultation.	Broad and open consultation and rigorous RIS analysis of all costs and benefits, including social costs.	Before declaring a national standard or code of practice, NOHSC must invite and consider public comment. Wide use of RISs.
Delivery mechanisms	BCA, guidelines, training and education strategies.	Standards, codes of practice and guidelines.	Mainly national legislation (template, model or occasionally drafting guidelines). Other mechanisms include statements of policies; guidelines; codes; business rules; or training and education packages.	National standards and codes of practice which are forwarded to the individual jurisdictions for implementation.
Funding/ resourcing	Budget of approximately \$6m (2003-04). Australian Government (\$1m); State and Territory Governments (\$1m — shares based on building activity); cost-recovery (\$3.2m — mainly sales of BCA); and AGO (\$0.5m). Around 35 staff.	Funded by the Australian and New Zealand Governments (\$12.5m and \$1.6m, respectively in 2002-03) and from fees for services it performs. Around 120 staff. Australia New Zealand Food Standards Code and many other outputs available free on-line.	Budget of approximately \$7m (2003-04). States and Territories contribute 65 per cent according to vehicle registrations, and the Australian Government 35 per cent. Around 25 staff. No charges for access to standards.	Funded by the Australian Government. Budget of approximately \$15m (2003-04) and staff of around 90. National standards and codes of practice available free on-line.

^a The NTC replaced the National Road Transport Commission in January 2004 when rail and intermodal transport matters were added to its regulatory responsibilities. Intermodal transport is the interaction of operations between transport modes. Examples include the transfer and delivery of freight to its destination by road/rail, road/rail/seaport or road/rail/airport. ^b The Australian Government proposes to establish a new tripartite body, the Australian Safety and Compensation Council, to replace NOHSC. This was announced as part of the Government's response to the Productivity Commission's Report on Worker's Compensation and Occupational Health and Safety (Andrews and Costello 2004).

Sources: Based on various annual reports, and other documents and information accessible from the web sites of the relevant organisations — www.abcb.gov.au, www.ntc.gov.au, www.nohsc.gov.au and www.foodstandards.gov.au.

The ABCB Chairman said that the Australian Government has a direct interest in building regulation:

... because of the importance of building regulation to microeconomic reform and because of the national impact of building regulations on industry and the community as a whole. (sub. 4, p. 7)

BPIC also considers that the Australian Government has much to gain from a successful national system, particularly in relation to:

... expediting important national policy agendas such as sustainability and disability access ... (sub. 23, p. 12)

The nature of building regulation in Australia, in particular involving all levels of government, warrants direct involvement by the Australian Government in building regulation reform.

DRAFT FINDING 10.1

The involvement and support of the Australian Government is critical to the continuing success of building regulation reform.

10.3 Composition of the ABCB and committees

There was strong support for *State and Territory Government representation* on the Board. Given that the ABCB is the final decision maker on Code amendments, rather than a Ministerial Council, it is essential that governments have direct representation at the Board level. This is crucial to ensuring that ABCB decisions serve the public interest, and that jurisdictions have ‘ownership’ of outputs and therefore a level of commitment to their adoption. It also increases the likelihood of acceptance and cooperation by administering authorities and practitioners.

Some participants, however, raised specific issues in relation to government representation, including: the frequent changes in the nominated position holder and/or delegation of responsibility for attendance; and the suitability (expertise and/or authority) of delegates.

HIA, for example, suggested that a consequence of the integration of building and planning regulatory regimes in some jurisdictions has been a change in the suitability of their Board representation. HIA stated:

... in a regulatory environment in which States and Territories predominantly maintained separate Building and Planning legislative regimes ... the respective heads of government bureaucracies responsible for their jurisdiction’s building regulation regimes became members of the Board, ...

[After the integration of] building and planning regimes into one bureaucratic portfolio ... in most instances, planning administrators headed the joint bureaucracy. These administrators did not necessarily have the required level of understanding of the operation of the building industry, or the likely influence of regulatory reform on the industry.

Revamping the membership of the Board by requiring the States and Territories to be represented by practitioners who are held in high regard within the industry, irrespective of whether they are public or private practitioners, would facilitate the effective operation of the ABCB. (sub. 6, p. 19)

On occasions, decision making by the Board may be compromised because of the lack of authority of government representatives. The ABCB Chairman noted:

The ABCB Strategic Plan calls for a “Board of Decision Makers”. This implies members should have the authority to commit their administrations to any decision reached by the Board (other than those matters requiring Ministerial approval) rather than needing to seek endorsement at higher levels in their own organisations. The effectiveness of the ABCB is founded on this principle and generally it has worked well but periodically the situation needs to be reinforced. (sub. 4, p. 26)

In contrast with many intergovernmental standard-setting bodies, the ABCB has direct *industry representation* on the peak decision-making Board. There appears to be general support for this approach. The Western Australian Government Department of Housing and Works identified some of the advantages of direct industry involvement:

Input from independent members with considerable industry experience strengthens the quality of discussion and the robustness of decisions, and should continue. (sub 14, p. 4)

Currently, industry representatives on the Board are appointed by Ministers from nominations provided by the Australian Construction Industry Forum (ACIF). AMCA of Victoria commented on this selection process:

... industry should select and decide on its representative to be the member of the ABCB. The Minister should have the power to refuse the nomination, but this power should only be exercised after objective reasons are given to the industry as to why the nomination is not acceptable. (sub. 16, p. 7)

AMCA were of the view that ACIF is the appropriate body to provide the industry nomination. On the other hand, some believe that ACIF does not adequately represent important elements of the building industry and that bodies that are not members of ACIF should also have the opportunity to nominate candidates for Board membership:

The Housing Industry Association (HIA), one of the peak industry bodies, is no longer a member of ACIF so that under existing IGA industry membership appointment

arrangements, it is unlikely to be able to put forward candidates. (ABCB Chairman, sub. 4, p. 26)

There is no demonstrable need for change to the structure or level of industry membership of the ABCB. However, consideration needs to be given to amending the selection procedure to ensure that peak building industry bodies can be represented. (Victorian Government, sub. 51, p. 5)

Consumer and broader community interests are not directly represented on the Board or the Building Codes Committee (BCC). However, the special project committees set up to provide advice to the Board on particular issues all have some ‘community’ representatives. In any case, it is reasonable to consider that the involvement of government representatives is a mechanism for broader community interests to be taken into account.

It would not be practical to have all interests directly represented on the Board or even its supporting advisory committees and working groups. This is due to the great diversity of interests and views, not only between broad groupings (for example, consumer, environmental or disability groups), but also within these groups. For example, within the broad category of consumers of building services, large well-informed purchasers of commercial buildings have different interests when compared with ‘mum and dad’ consumers of residential housing.

Increasingly, the reform agenda of the Board is requiring that a broader range of skills and expertise be drawn on in decision making. For example, sustainability issues intersect with ecology, human behaviour and public health considerations. This may have a bearing on the appropriate Board and committee representation in the future. The Victorian Government submitted:

Should sustainability become a major and ongoing item on the ABCB agenda some consideration could be given to enhancing expertise of the ABCB in the field of sustainability. (sub. 51, p. 5)

Several submissions sought a broadening of the membership of the ABCB or its committees, variously to better reflect the views of:

- consumers (or as an alternative to Board membership, more active consumer consultation via focus groups or formalised consultation) (Queensland Government, sub. 41, part 1, p. 5 and Western Australian Department of Housing and Works, sub. 14, p. 4);
- the engineering construction sector (Air-conditioning, Fire protection, Electrical and Plumbing sectors) (National Fire Industry Association (NFIA), sub. 3, p. 4);
- the renewable energy industry and those involved in energy-efficient building design, products and systems (Australia and New Zealand Solar Energy Society (ANZSES), sub. 1, pp. 4, 6);

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- insurance industry (Insurance Council of Australia (ICA), sub. 38, p. 9);
 - fire authorities (South Australian Government, sub. 36, p. 7), fire and emergency services (AFAC, sub. 28, p. 18); and
 - the fire protection industry (Alliance for Fire and Smoke Containment, sub. 31, p. 8).

In addition, some participants questioned whether more active involvement by the New Zealand Government — beyond the current observer status on the BCC for the NZ Building Industry Authority — might be appropriate, particularly if there is going to be closer cooperation between the Australian and New Zealand governments in the development of building regulation.

On the other hand, some participants thought that current membership is appropriate. MBA, for example, considered that the current mechanism:

... works well and gives those stakeholders who are not on the Board or the relevant committees the opportunity to provide meaningful input. (sub. 24, p. 6)

While increasing Board membership would bring a wider range of viewpoints to the negotiating table, it may reduce the effectiveness and efficiency of the Board's operations. For this reason, MBA are 'very concerned' about proposals which seek to broaden membership:

We believe that extending the size of the Board would make the whole process unwieldy ... it would also work against the ability of the ABCB to respond in a timely manner. (sub. 24, p. 6)

Similarly, the ABCB Chairman saw 'no compelling reasons to increase Board numbers ...' and considered that representation chosen by designated industry organisations is undesirable 'in view of the large number of bodies likely to seek nomination' (sub. 4, p. 26).

Some suggested that it would be appropriate to have greater balance between private and government representation on the Board and committees (that is, increase the number of non-government members). Conversely, others called for greater government representation, including additional local government representation — recognising that this level of government is largely responsible for enforcing compliance with the Code.

The Queensland Government has concerns about proposals to increase the number of non-government representatives:

The Board is accountable to Australian governments to develop building regulations, which reflect public policy objectives. Additional industry representation may reduce the capacity of governments to determine these objectives, particularly given the scope

of second generational issues expected to be addressed by the BCA in the future. (sub. 41, part 1, p. 4)

Even so, in any decision-making body that has authority to influence regulations and, in turn, affect the commercial or other interests of industry or other stakeholder groups, there is a risk of government representatives being ‘captured’ by those interests. For the Board to work effectively, it is essential that government members understand the interests of stakeholders and that they develop close professional working relationships with industry members. However, it is also vital that any decisions made by Board members reflect the broader community interests, not those of any particular sector. Thus, for non-government members, irrespective of the selection process, once appointed there must be a clear expectation that they are to exercise broad objective judgments, rather than presenting a view that reflects only the interests of the organisation or sector they are nominally representing.

The Western Australian Department of Housing and Works pointed out that:

... this type of board works most effectively when members are not seen to represent a particular body or sectional interest, but rather are chosen for their individual knowledge and experience. With ABCB decisions being made by mixed industry and jurisdictional representatives, it can be argued that the role of the jurisdictional representatives is more that of technical and administrative experts, with strong understanding of their jurisdictions’ issues, rather than as persons representing a formal jurisdiction view. (sub. 14, p. 4)

And the ACT Government submitted:

Any proposals for changes to industry representation on the ABCB or its successor should recognise the principle that representatives must speak for industry as a whole, not simply the group with which they are associated. (sub. 48, p. 4)

The above discussion suggests that a number of factors need to be considered when deciding on the appropriate composition of the Board and its committees. These include:

- the need for governments to ensure representation by officials at an appropriately senior level and with the authority to commit their administration;
- the value of continuity of representation (delegation of responsibility for attending meetings should be kept to a minimum and for at least one meeting a year the most senior people from each jurisdiction should attend to agree on strategic plans, priorities, budgets etc);
- as a general principle members should be appointed as independent advisors on the basis of their knowledge and expertise, rather than as representatives of nominating organisations;

-
- if the current model of industry representation continues, appointments should as far as possible reflect the interests of all elements of industry (including small and medium size enterprises), and the nomination of industry representatives on the Board should not be the exclusive right of ACIF; and
 - although it may not be practical to have direct representation of all community interests on the Board:
 - government members should represent consumer and broad community interests; and
 - technical committees and specific project committees provide greater scope for special interests to be represented, for example in relation to disabled access, or sustainability. Even so, interest groups are many and diverse and direct representation for all is unlikely to be feasible.

DRAFT FINDING 10.2

Overall, the composition of the ABCB membership has been appropriate for the role of the ABCB to date. As the Board's priority should be the public interest, broadly defined, it is appropriate that government representatives are in the majority.

Technical Validation Panel

As noted in chapter 2 and further discussed in chapter 8, the ABCB Code development and amendment processes reflect a tiered decision-making system. Utilising expert technical working groups and consultative committees allows the time of the Board to be allocated in a more cost-effective manner. However, it has been suggested that there is scope for further efficiencies by asking expert technical committees reporting to the BCC and the Board to undertake more of the technical development and review work.

In essence, code development should be undertaken by expert panels comprising individuals who are expert in the respective field of design and construction being addressed, together with experts in code writing. This procedure has the potential to reduce inapt input to the initial drafting process, but still allows all individuals and organisations the subsequent ability to offer comment. (HIA, sub. 6, p. 26)

... Panels would comprise experts in their respective fields called together on a need-be basis to develop draft building regulations for specific issues.

Experts could be drawn from private practice, public practice or specialist organisations. (PCA, sub. 52, p. 13)

In a move in this direction, the ABCB has recently trialled the establishment of a Technical Validation Panel (TVP). The purpose of the TVP is to undertake reviews

of detailed technical matters, freeing up BCC resources to concentrate more on priority regulatory policy and administrative issues (see box 10.1). The Queensland Government considered that the BCC ‘could perhaps have a stronger role in policy development and co-ordination’ and supported the establishment of a TVP (sub. 41, part 1, p. 4).

While the results of the trial will not be evaluated until 2005, in principle such a reform of governance arrangements has the potential to further enhance the efficiency of the ABCB’s operations. However, it is essential that all advisory committees adopt a rigorous community-wide cost-benefit framework when formulating their recommendations to the Board (or the BCC, in the first instance). This is especially important where governments are not represented on the advisory committee (as is the case with the TVP). It is also essential that responsibility for accepting technical reform proposals rests with the BCC and ultimately the Board. This is consistent with the view of the Queensland Government:

... the role of the BCC in reviewing technical change proposals prior to Board sign-off needs to be retained. (sub. 41, part 1, p. 4)

Box 10.1 Technical Validation Panel

The ABCB provided the following information on the Technical Validation Panel (TVP).

The TVP has been trialled on BCA 2004 and BCA 2005 to compliment the work of the BCC and the ABCB Office. Upon completion of BCA technical change proposals by the ABCB Office, project specific working groups from the TVP have reviewed the technical content. The purpose of the TVP review is to free up BCC resources from the increasingly time consuming review of detailed technical matters and to allow the State and Territory Administrations to concentrate on priority regulatory and administrative issues, both at a national and local level.

TVP members, comprising Building Certifiers, Engineers, Architects, Builders, and Access, Acoustic and Energy Consultants were nominated for their experience and expertise. The Office coordinated the TVP and associated working groups.

These new arrangements are to be evaluated in 2005 to determine if they benefit the Community and Industry by providing further certainty in the amendment cycle, BCA amendments that are relevant and timely, and confidence that technical changes have been subject to quality assurance checks that are consistent with industry and international practice. On completion of the evaluation, recommendations will be developed and forwarded to the Board for consideration.

Source: Sub. 50, pp. 8-9.

10.4 ABCB Funding

The ABCB is funded by the Australian, State and Territory Governments and through cost-recovery activities (mainly sales of the BCA). Under the IGA (Part IV(4.4)), the Australian Government provides half of the government contributions, currently \$1 million per annum over the five years to June 2005. The States and Territories collectively match the Australian Government contribution, with respective shares based on a formula related to their relative share of total Australian building approvals. In recent years, the Australian Greenhouse Office (AGO) has contributed funds to progress the Energy Efficiency project, with a total commitment to date of \$1.8 million (see chapter 6).

In 2003-04, the contribution of the Australian Government and the States and Territories was \$2 million, the AGO also provided \$0.5 million and, in addition, gross funds from the sale of the BCA and related material are estimated to be \$3.2 million. (Cost recovery issues were discussed in some detail in chapter 8.) Further, as at 1 July 2003, the ABCB had accumulated cash reserves of \$3.7 million (sub. 4, p. 30).

MBA (sub. 24, p. 7) and the Tasmanian BRAC (sub. 29, p. 4) support retention of the current co-funding model, as does the Western Australian Government Department of Housing and Works:

The current funding model works well as it proportionally allocates contributions based on a jurisdiction's level of building activity rather than a formula based on population. The contribution is not onerous and the ABCB office contributes the lion's share of operating funds and generates a significant amount of revenue from sales of the BCA. (sub. 14, p. 4)

The ABCB Chairman, however, considers that the relative contributions of State and Territory governments may need to be reviewed:

A case exists to reconsider the contributions of the smaller administrations who have benefited considerably from the ABCB but whose current contribution scarcely covers the cost of servicing them. (sub. 4, p. 46)

The level of funding and resources available to the ABCB clearly impacts on its ability to function effectively and achieve its objectives. The Australian Sustainable Built Environment Council stated:

ABCB must be well resourced in order to keep ahead of trends ... [in] ... non-uniform building controls (for example local government one-off responses to sustainability). (sub. 22, p. 2)

BPIC (sub. 23) have significant concerns regarding current ABCB funding and resources, particularly when compared with intergovernmental bodies with similar responsibilities/functions such as the NTC:

The inability of the ABCB to meet its obligations under the Inter Government Agreement and introduce a broader reform agenda is directly related to resources ... (p. 10)

The NTC is also established by Inter Government Agreement ... and the signatories are committed to provide a budget of \$7 million per annum. (p. 36)

It would be fair to conclude that both the NTC and the ABCB would be providing similar cost savings to the community, if anything the ABCB is likely to deliver a higher return. However, the funding to the ABCB is in the vicinity of \$2 million per annum. (p. 37)

BPIC also drew a comparison with the Australian Government's commitment to Standards Australia International. BPIC submitted:

It is somewhat contradictory that a private company receives \$2 million in federal funds to participate in international forums, while the national building regulatory body responsible for Australian and international code development and harmonisation receives \$1 million per annum in federal funding. (sub. 23, p. 37)

However, the Australian Elevator Association (AEA) has concerns that despite the apparent funding constraints, the ABCB built up substantial cash reserves:

Given the questionable state of the BCA and the poor quality regulatory efforts as exemplified by the Premises Standard proposals, it is very disappointing to see that the ABCB preserved resources rather [than] applying them more fully to improving the regulation and improving the quality and availability of other nonregulatory guidance information and other ABCB resources.

The ABCB has let down the stakeholders by not directing spare capacity towards providing greater benefits to our society sooner. Those spare resources could have advanced the timing and quality of several important programs including; the Premises Standard Access Code, its RIS, the internet web site, training, research, BCA21. (sub. 44, p. 11)

The complexity of the issues, rather than funding constraints, would seem to be the main explanation for slower than expected progress in some areas of the Board's work program, for example the development of BCA 21.

The Australian Government has approved funding for the ABCB to the end of 2004-05. The question of ongoing Australian Government funding is addressed in chapter 11. (The ABCB's cost recovery approach and the appropriateness of charging for the BCA is assessed in chapter 8.)

10.5 Commitment to uniformity

The ABCB has made substantial progress towards national consistency in building regulations in Australia. However, as discussed in earlier chapters, significant variations still exist across jurisdictions and some study participants have called for reforms to institutional arrangements that would be more conducive to national consistency.

The benefits associated with greater consistency (or the costs of inconsistency) across jurisdictions are clear. However, complete uniformity of building regulation is unlikely to be a feasible or desirable goal. There are advantages associated with providing some room for local jurisdictions to implement regulation in a manner that takes account of legitimate differences in local conditions and arrangements. Institutional arrangements need to strike a balance between, on the one hand, a strong commitment to consistency and minimising variations, and on the other hand, respecting jurisdictional sovereignty to allow for flexibility where it can be justified. State and Territory governments would not be willing to give up their constitutional right to ultimately determine building regulation within their jurisdiction. This was clear, for example, from comments by the Northern Territory Minister for Lands and Planning:

... notwithstanding the benefits of a national uniform building code, the Territory will continue to retain the power to vary provisions of the code in response to the particular circumstances of the Northern Territory, especially matters affected by climate and remoteness. (sub. 30, p. 1)

The Commission's view, however, is that jurisdictional differences need to be kept to a minimum and should only be permitted if they satisfy strict criteria agreed to by all governments and clearly stated in a revised IGA (see chapter 11). Further, local differences are more often regional, rather than jurisdictional, and can usually be accommodated within the Code through, for example, provisions for different climate zones (chapter 5).

The current IGA includes a commitment to work towards uniformity:

- ... a nationally consistent regulatory framework should be developed ... (Recital A)
- (i) building regulation [to] be as uniform as possible between the States and Territories ...
- (ii) additions or variations of technical provisions of the BCA by the States and Territories [to] be limited, so far as is possible ... (Recital A)
- ... to establish codes, standards and regulatory systems that are, as far as practicable:
- consistent between States and Territories; ... (Recital B, (i))

The language of the IGA, with phrases such as ‘so far as is possible’ and ‘as far as practicable’, gives jurisdictions freedom to deviate from the national Code. While most States and Territories automatically adopt, in the relevant building legislation, changes to the Code ‘as amended’, this is subject to the jurisdiction specific variations, additions and deletions that form part of the Code (see chapter 2).¹ In addition, any provision of the Code may be overridden by, or subject to, State or Territory requirements outside the Code.²

Some models of intergovernmental cooperation in Australia provide for a higher level of commitment to uniformity, for example the NTC — which in 2003 replaced the National Road Transport Commission (NRTC) — and FSANZ (see table 10.1).

Originally, the NRTC relied on national template legislation as the single delivery mechanism for implementing agreed national road transport regulatory reforms. Intergovernmental agreements specified that, once accepted by the Australian Transport Council, template legislation would be adopted by all the jurisdictions. The particular mechanism involved agreed legislation being passed in one jurisdiction (the ACT), with the other jurisdictions passing legislation via reference to the template legislation. The NRTC, however, found model legislation (allowing jurisdictions to enact the substance of reforms or to reference if they chose) and other delivery mechanisms to be useful and more appropriate in some circumstances (NRTC 2002).

In the food standards area, under the Food Regulation Agreement 2002, the States and Territories have committed to take such legislative or other steps as are necessary to adopt or incorporate standards developed by FSANZ (and accepted by a Ministerial Council) *without variation*.

Conversely, the Productivity Commission in its recent report on National Workers’ Compensation and Occupational Health and Safety Frameworks (PC 2004a), found that the NOHSC model had been ineffective in achieving consistency in OHS regulation, partly because individual jurisdictions have too much discretion to either not implement or to modify national standards and codes developed by NOHSC and approved by the relevant Ministerial Council.

¹ In Volume One, State and Territory variations are identified in the body of the BCA following the Clause that is being varied, while additions are contained in an appendix. In Volume Two, variations and additions are contained in separate appendices for each jurisdiction and flagged in the body of the Code.

² In Tasmania, the Building Act (which adopts the Code) prevails over any other Tasmanian law relating to building or plumbing.

There should be a recommitment by governments, in a revised IGA, to the objective of consistency across jurisdictions for building regulation. State and Territory Governments should ensure that BCA amendments determined by the ABCB (or its replacement) are automatically referenced in State and Territory legislation and that jurisdictional variations and additions are minimised.

The implementation of draft recommendation 10.1 could be pursued through the revised IGA (see chapter 11).

10.6 Authority of the decision-making body

The ABCB has the authority to determine BCA reforms without reference to a Ministerial Council. But, in practice, because most jurisdictions implement agreed revisions to the Code automatically, officials representing their jurisdictions on the Board, may seek clearance from relevant ministers before supporting major proposals for reform. (Although as noted above revisions to the Code may embody State and Territory variations or additions.) In the case of Queensland, for example:

The Building Act adopts the changes made to the BCA without further amendments. As such, the Chief Executive seeks the Minister's endorsement before agreeing to the proposal, and if necessary, the Minister may also seek Cabinet endorsement. (Queensland Government, sub. 41, part 1, p. 3)

As noted above in the discussion of Board representation, government members must be sufficiently senior so as to have the authority to commit their jurisdiction. If governments have previously committed to broad strategies and policy direction as well as the criteria and processes for decision-making by the Board, then ministerial clearance should be the exception, rather than the rule. For the Board to be an effective decision-making body, where proposals require ministerial clearance, sufficient advance notice should be given to allow clearance to be sought before commitment is required at an ABCB meeting.

Some interested parties called for more direct involvement of ministers through a Ministerial Council that would be required to approve any changes to the Code. Such a Council could also potentially determine broad policy direction and strategic priorities. This approach would be similar to that used, for example, in the area of food standards, and road and rail transport regulation. The Queensland Government submitted:

It is noted that unlike other co-operative arrangements between Australian governments, there is no relevant Ministerial Council overseeing the operation of the

ABCB. The level of participation by governments, timeliness of amendments, and transparency and accountability may be improved through such a mechanism. (sub. 41, part 1, p. 5)

The ACT Government considered that ‘[t]here may be value in examining whether closer linkages could be established with an appropriate Ministerial Council, particularly with the Local Government and Planning Ministers Council’ (sub. 48, p. 4).

The advantage of such a model is that the decision-making body has greater authority and more clearly reflects the commitment of State and Territory governments. This can provide additional impetus to reform efforts, including perhaps making it more difficult for individual jurisdictions to implement variations to the Code. However, possible disadvantages, include:

- delays in reform associated with another layer of decision making — although the Commission notes that the Queensland Government submission considered that timeliness might actually improve; and
- reduced independence and authority for the Board — in practice, this may be more perceived than real, since government members are currently in the majority on the Board and as noted above would be expected to represent Government views and political priorities. (Strategies for achieving greater independence are discussed below.)

There would also be practical difficulties in establishing a Ministerial Council. First, there is no Australian Government Minister with direct responsibility for building regulation. Second, responsibility for building matters in each State and Territory jurisdiction typically crosses over more than one Ministerial portfolio. When the original IGA was signed in 1994, it was envisaged that the Board would report to a Ministerial Council, at the time known as the Planning, Housing and Local Government Ministerial Council. The Council was responsible for approving annual budgets and the appointment of industry members to the Board, but did not have a formal role in reviewing determinations of the Board.

Whether the Board or a Ministerial Council is the final decision maker on Code reforms, it is essential that a community-wide perspective is adopted. Government officials represented on the Board or relevant Ministers must present a whole-of-government coordinated viewpoint. The Queensland Government considers that there are difficulties in this regard under the current arrangements:

... the current administrative arrangements between the ABCB and State building administrations do not provide sufficient scope for individual States and Territories to participate in the policy development process from a whole of government perspective. As a result, the national consultation process is duplicated, as further consultation is required at the State level before a proposal is considered. (sub. 41, part 1, p. 3)

This may, however, be primarily an issue for coordination processes within each jurisdiction, rather than a weakness with ABCB processes.

Overall, while there may be some benefits from having a Ministerial Council, the costs, delays and disruption associated with putting in place a new decision-making framework may not be justified as long as the Board continues to be effective.

DRAFT FINDING 10.3

An annual meeting of Ministers (with appropriate whole of government backing) may be a useful mechanism to demonstrate ongoing commitment to a nationally consistent approach to reform of building regulation. Ministers could also determine funding and set broad strategic direction and priorities. Administrative arrangements, such as who would chair such a forum, would need to be determined.

10.7 Independence of the decision-making body and the secretariat

Some interested parties called for greater independence of the Board and also the ABCB Office (or secretariat). As noted above, BPIC and HIA suggested that the Board be replaced with an independent statutory Commission, along the lines of the NTC and FSANZ models.

Decision-making body

In its *Submission to the 2nd Review of the National Road Transport Commission*, the NRTC (2002) made the following observations about the advantages of a legislative base and the importance of independence:

A legislative base provides a degree of certainty over resources and allows the body to act as an independent entity. This is seen as essential in an inter-governmental body charged with making recommendations to a council of ministers for their decision.

The NRTC notes that its accountability to all jurisdictions collectively but independence from each jurisdiction individually is an important factor in its successes.

... independence is an important factor in it being able to make recommendations that can be adopted by all governments and can be viewed without suspicion of delivering the objectives of a single government in the federation. It also allows the body to act as an independent entity, which aims to serve the Australian community as a whole, not merely government agencies, the transport industry or any other group ... (p. 19)

The legal instrument establishing the Board (or equivalent body) may be a less important determinant of independence than the composition of the decision-making body and the nature of the decision-making process. A revised IGA could,

for example (in the same manner as any legislative instrument), more clearly state the overriding objective of maximising the welfare of the community as a whole (see chapters 5 and 11). Although it is acknowledged that an IGA does not have the same legal force to bind governments.

Interestingly, the New Zealand Government is moving away from an independent statutory Building Industry Authority (BIA). The New Zealand Ministry of Economic Development (sub. 5, p. 5) advises that building regulatory reform proposals in a Building Bill currently under consideration inter alia ‘strengthens the role of the building regulator and transfers the functions of the BIA to a government department to increase accountabilities to Ministers ...’.

A strong advantage of the NTC model is that Commissioners are appointed on the basis of their skills and expertise, rather than as representatives of governments or other stakeholder interests. This ensures a high degree of independence, with the process for developing recommendations to the Ministerial Council clearly at arms length from governments and political influence. While governments, appropriately, are the final decision makers, through the ATC, all advice to the Council is public and based on rigorous and transparent processes — making it more difficult for political considerations to take precedence over the broader community interest.

The composition of the ABCB and its committees was discussed above. Appointments based on skill and expertise was identified as a good principle. This is of more relevance to the non-government members, since as long as the Board is the final decision-making body (ie, there is no Ministerial Council), governments should appropriately be represented directly on the Board. Although this means that the Board does not have the same level of independence as the NTC, the transparent code-making processes are again an important mechanism for keeping governments accountable.

Nevertheless, the independence and accountability can be enhanced by having a Chairman that as far as possible is independent of other interests represented on the Board. As noted in chapter 2, under current arrangements the Chairman is appointed from amongst the Board members. The present Chairman is nominally an industry representative and therefore cannot be seen as being entirely at arms length from those interests.

DRAFT RECOMMENDATION 10.2

The ABCB Chairman should be an additional Board member, rather than being chosen from amongst the Government and industry members. The appointment should be independent from sectional interests and based on a demonstrated capacity to advance the work of the Board.

ABCB Office

A number of participants commented favourably on the performance of the ABCB office:

The ABCB administration is customer focused, professional, project-driven, provocative and democratic. The central co-ordinating role has enabled some very significant regulatory reforms to be implemented, such as the introduction of energy efficiency measures for houses in 2003. (Western Australian Government Department of Housing and Works, sub. 14, p. 3)

The ACT has been particularly appreciative of the role of the office of the Australian Building Codes Board ... in providing a centre of excellence for the maintenance and development of the BCA. (ACT Government, sub. 48, pp. 1-2)

We have found them to be responsive to our concerns and skilled at communicating complex technical issues in clear language. (Blind Citizens Australia, sub. 20, p. 11)

However, several participants raised concerns about the independence of the Office. As noted in chapter 2, the Office is a unit within the Australian Government Department of Industry, Tourism and Resources (ITR). Some consider that under this arrangement the Office is too close to the Australian Government and lacks the necessary separation of identity and agenda. BPIC, for example, noted that:

The structure is not sufficiently independent from the commonwealth department. The ABCB directorate are answerable to the federal government department and this often conflicts with sound national regulation policy. ...

This relationship with the department complicates management of the ABCB process and directly conflicts with the underlying philosophy of the Inter Government Agreement where the ABCB is to be a cooperative body between States, Territories and the Federal Government. The arrangement must provide for independence. (sub. 23, p. 38)

MBA believe that there is a 'strong case' for the ABCB to be more administratively independent:

The current arrangement runs the risk of raising conflict in the areas of priorities and policy independence. (sub. 24, p. 7)

The Western Australian Government Department of Housing and Works, on the other hand, thought that making the ABCB part of an Australian Government department:

... has worked and delivered good results. There do not seem to be compelling practical needs to change this arrangement. (sub. 14, p. 4)

This issue was considered in some detail by the Laver Review, which identified as a particular concern:

... a requirement for the ABCB's strategic objectives to be aligned with the Commonwealth Department's goals rather than those defined by the ABCB. In addition, the ABCB staff are required to undertake certain training programs at the direction of the Department, rather than consider the particular needs of the ABCB. (Laver 2000, p. 39)

The Review recommended that a more independent structure be investigated, such as a statutory authority. The ABCB Chairman advised that this and other options had been examined and 'no case has been developed as a viable alternative' (sub. 4, p. 25).

When considering alternatives, any disadvantages of the current arrangements must be balanced against the considerable benefits of co-location within the Department, in terms of in-kind corporate support services provided and staff recruitment and retention advantages. Three alternative models for achieving greater independence for the Office are assessed, with reference to a number of criteria, in table 10.2. The models are:

- a Memorandum of Understanding (MoU) with ITR
- an Executive Agency
- a Statutory Agency.

For comparison purposes, the key features of the current governance arrangements for the Office are also set out in the table.

The creation of a statutory agency would provide for the highest level of independence. However, this institutional model would impose some additional obligations and constraints, including:

- legislation would need to be drafted and passed through Parliament — this would likely involve substantial time and expense;
- some reduced flexibility to modify operating practices and procedures;
- full accountability obligations to the Parliament(s); and
- requirement for the publication of an annual report.

Table 10.2 **Alternative governance arrangements for ABCB Office**

<i>Status quo (ABCB Office)</i>	<i>MoU</i>	<i>Executive (and prescribed) agency^a</i>	<i>Statutory (and prescribed) agency^b</i>
Organisational Independence:			
Office is part of the Australian Government Department of Industry, Tourism and Resources (ITR).	Formalises revised administrative arrangements to increase separation (possibly including physical location) and autonomy from Department.	Provides for separation (and autonomy of operation) from ITR or other Department of State. Typical structure is of CEO with staffing and financial powers equivalent to a Departmental Secretary, reporting directly to a Minister.	Independence of the body is enshrined under the enabling legislation. Provides the highest degree of independence.
Financial management autonomy:			
Financial management of ABCB is currently undertaken by ITR utilising a Special Account under the <i>Financial Management and Accountability Act 1997</i> (FMA Act). This account quarantines the funds available to the ABCB from being used for other purposes.	Largely retains the status quo for financial management processes and procedures.	Full separation of accounting and financial reporting, with separate budget appropriations.	Full separation of accounting and financial reporting, with separate budget appropriations.
Involvement of all Australian governments:			
Funding from and accountability to all governments, but co-location of office in ITR may allow Australian government to exert influence over resourcing and policy.	No implications for funding from or accountability to governments, but reduces scope for ITR to influence strategic objectives.	Agency would be an Australian Government body accountable only to an Australian Government Minister and the Australian Parliament (and not to State and Territory governments).	Legislation establishing the agency would be an Act of the Commonwealth Parliament. The legislation could ensure continuing funding from, and accountability to, all governments though reporting arrangements to a higher intergovernmental decision-making body.

Accountability/reporting obligations:

No separate accountability and reporting obligations.

No separate accountability and reporting obligations.

Full accountability obligations to the Parliament. Annual report must be provided to the Minister, for presentation to the Parliament.

Full accountability obligations to the Parliament.
Annual report must be provided to the Minister (who is assigned portfolio responsibility for the agency), for presentation to the Parliament.

Transition costs and ongoing cost-effectiveness:

Substantial cost savings from in-kind support from ITR (financial, human resources, IT, other corporate support).

No transition costs.

Retains most of the benefits of in-kind support.

Some increased costs, especially if office is to be in a separate geographical location.

Minimal costs associated with preparation of MoU. Easy and simple mechanism to implement and maintain.

One off agency establishment costs, would include preparation of the establishing instrument for the Governor General's approval and transfer of staff from ITR. Other one-off and ongoing costs will depend on degree of financial management autonomy, but could include:

One-off:

- set up of human resource management, IT, communications and other administrative services; and
- establishment of accountability, reporting and other governance arrangements.

On-going:

- Additional costs associated with provision of services previously supplied by ITR and new accountability and reporting requirements.
-

Additional costs similar to prescribed executive agency (full financial management autonomy), plus significant extra costs associated with preparation of necessary legislation and passage through Parliament.

continued next page

Table 10.2 continued

<i>Status quo</i> (ABCB Office)	<i>MoU</i>	<i>Executive (and prescribed)</i> <i>Agency^a</i>	<i>Statutory (and prescribed)</i> <i>agency^b</i>
Flexibility:			
May be constrained by ITR decisions on resourcing priorities and by possible ITR strategic policy influence.	Could limit ITR's ability to influence resourcing priorities and strategic policy. MoU would be easy to update.	Some flexibility with respect to degree of operational and financial management autonomy. Direct access to an (Australian Government) Minister may enhance flexibility. Functions specified in establishing instrument may be amended by the Governor General as circumstances require.	Amending the establishing legislation would involve a time consuming process, including approval, legislative drafting and passage through parliament. Use of regulations to cover arrangements that may be likely to change would enhance flexibility, but would give the delegate (an Australian Government Minister) greater control.
Cross-portfolio links:			
Connection with one department (ITR) may not adequately recognise that increasingly functions and objectives of ABCB Office cross portfolio lines.	Connection with one department (ITR) may not adequately recognise that increasingly functions and objectives of ABCB Office (or replacement) cross portfolio lines.	Distinction from any single department may facilitate better management of cross-portfolio linkages.	Distinction from any single department may facilitate better management of cross-portfolio linkages.
Employee arrangements:			
ABCB Executive Director and staff of Office are Australian Public Service (APS) employees.	No change to staffing arrangements.	Appointment, tenure and remuneration arrangements for the head of agency would be determined by the Minister. Other staff would be APS employees.	Head of body would be a statutory appointment. Other staff would be APS employees.

^a Executive agency under the *Public Service Act 1999* and prescribed under the FMA Act. ^b Statutory agency under the *Public Service Act 1999* and prescribed under the FMA Act.

Sources: Finance Circular No. 2003/01 (DoFA 2003) and advice from Australian Government Department of Finance and Administration.

The recent report of the *Review of the Corporate Governance of Statutory Authorities and Office Holders* (Uhrig 2003, p. 58) emphasised the importance of ensuring that ‘the benefits of establishing functions separate from government are significant enough to warrant the creation of statutory bodies’ and further stated:

The powers and functions ... are generally specified in significant detail in the enabling legislation. ... it ... has the effect of limiting the flexibility in responding to changing government and community priorities. Legislation may become dated and can be difficult to change.

Consideration should be given to whether functions can be accommodated successfully within a departmental structure or an executive agency, reducing the need for the creation of a separate authority and the associated costs and demands placed on the public sector. (Uhrig 2003, p. 58)

The Commission understands that the option of establishing the ABCB as an Executive Agency (see box 10.2), under section 65 of the *Public Service Act 1999* was considered by the ABCB, following the Laver Review. However, the status of the ABCB Office as essentially a secretariat for an independent intergovernmental board of decision makers, may make the executive agency structure unsuitable. The Australian Government Department of the Prime Minister and Cabinet advises that executive agency status may not be appropriate where:

- the situation requires a board of directors to take direct control and accountability for the actions of the body
- final powers do not remain with the CEO and Minister.

Given the likely transition costs and higher ongoing operating costs, the Commission does not advocate the establishment of an independent statutory agency at this time, especially in light of the success of the ABCB’s current structure. A move to an executive agency model would also involve additional costs, but more importantly the Commission has reservations about the suitability of this approach, given that the office must be accountable to all nine governments, not just the Australian Government.

Some of the immediate concerns about the independence of the ABCB Office might be addressed through administrative arrangements to increase separation. These arrangements could be formalised in a Memorandum of Understanding (MOU) between ITR and the Board. Such an MOU could clearly state:

- that the Office is to have a high degree of separation and autonomy from the Department, including with respect to its physical location;
- expectations and obligations with respect to service provision and accountability; and

-
- strict limitations on ITR's ability to influence the operations of the Office, including in such matters as ABCB strategic objectives, budgets, and staffing decisions.

Box 10.2 **Executive Agencies**

Executive agencies are non-statutory bodies established by the Governor-General, acting on the advice of the Prime Minister, under Part 9 of the *Public Service Act 1999*. The purpose of the executive agency structure is to provide a degree of separation from departmental management where that is appropriate to the functions of the Agency and something less than a statutory authority is warranted.

An executive agency's functions are specified in its establishing instrument, although they may be amended subsequently by the Governor-General as circumstances require.

The provisions of the Public Service Act do not go into detail about the structure of an executive agency so there is considerable flexibility.

The head of an executive agency is appointed by, and is directly accountable to, the Minister responsible for the agency. He or she need not be a public servant prior to the appointment. Other staff of executive agencies are public servants.

The head of an executive agency will have the management and accountability responsibilities of an agency head under the Public Service Act. Full separation of accounting and financial reporting can be achieved where the body is made a prescribed agency under the *Financial Management and Accountability Act 1997* (the FMA Act).

Examples of Executive Agencies, include:

- the National Oceans Office;
- the Bureau of Meteorology;
- National Archives of Australia; and
- the Australian Greenhouse Office.

Source: Australian Government Department of the Prime Minister and Cabinet, pers. comm., 6 July 2004.

It may be appropriate, as a first step, to implement an MOU and then conduct a review of its effectiveness after a suitable period of operation, say two years. If such a review found that the MOU had not been successful in achieving the necessary degree of autonomy, other options could be examined in some detail. Any such review should provide an opportunity for all stakeholders to submit their views.

The Commission seeks further input from interested parties on the desirability of an MOU between the ABCB and the Department of Industry, Tourism and Resources and whether such a mechanism would adequately address concerns about the independence of the Office.

DRAFT FINDING 10.4

Overall, current institutional arrangements for pursuing building regulation reform have been reasonably effective. However, there is scope for some refinements to structures and processes to further improve effectiveness and efficiency.

Refinements to the ABCB structure are considered further in chapter 11.

11 Assessment and new IGA

This chapter draws together the various conclusions of earlier chapters and puts forward a proposed new Intergovernmental Agreement (IGA) to empower the Australian Building Codes Board (ABCB) or its replacement to implement many of this study's recommendations.

Section 11.1 summarises the Commission's assessment of the ABCB's performance against its ten objectives. Sections 11.2 and 11.3, respectively assess whether the mission statement and the objectives contained in the IGA should be amended. The Commission has also made recommendations concerning the future work agenda for and the support functions provided by the Board (or its replacement) in sections 11.4 and 11.5 respectively. Section 11.6 proposes the new IGA.

11.1 Past performance

Are objectives being achieved?

The ABCB has made considerable but varied progress against the 10 objectives with which it was tasked by the IGA. Here, each is taken in turn, to present the Commission's consolidated assessment. While it is important to identify areas where objectives have not been fully met, it is also important to be realistic that resource constraints inevitably mean that the ABCB has had to prioritise across competing demands.

Objective 1

Establish codes, standards and regulatory systems that are, as far as practicable:

- consistent between States and Territories;
- cost-effective;
- performance based; and
- based on modern and efficient building practices.

Codes and standards

The ABCB has successfully pursued greater **consistency** in the codes and standards across the States and Territories since its inception. Some recent expansions to the Code, notably the development of energy-efficiency standards, have proven more challenging to the drive towards consistency because jurisdictions have elected to pursue separate and varied agendas. Further work is needed in reducing differences across jurisdictions.

The ABCB significantly advanced the development of the Building Code of Australia (BCA) by creating the structure on which to introduce **‘performance-based’ standards**. As a short-term measure, the Board initially put in place what are, in fact, ‘principle-based’ standards, with the intention of converting these into measurable performance-based standards. Unfortunately, the Board has not progressed very far with the second-stage conversion of the Code. This has created uncertainty about requirements in some areas, particularly for certain elements in Class 1A (freestanding) buildings.

While the ‘performance-based’ methodology of the Code has brought a number of benefits, it has been suggested that the deemed-to-satisfy solutions have not been updated frequently enough, and thus, they may not continue to embody up-to-date building practices.

The ABCB’s fulfilment of cost effectiveness and **modern and efficient practices** is largely reliant on the performance of other Code-based objectives. For example, efficiency is an overriding objective pursued via a number of strategies including some other objectives — all efficient practices will also be cost-effective.

Regulatory systems

The area in which the least progress has been made by the Board is in establishing effective and nationally consistent regulatory systems (one exception being the development of national competency standards for certifiers). The ABCB Office suggested that this area of work was complex and required significant resources, and that the demand on State and Territory resources from other major reform work, such as disability access, was slowing progress.

Interested parties indicated that they would like more national consistency in the administration of building regulation. However, there appears to be much greater commitment to achieving uniformity in the technical requirements of the Code than uniformity in its administration across the jurisdictions.

National product certification

The ABCB developed the *Australian Building Products and Systems Certification Scheme* as a mechanism for products and systems to be certified as compliant against specific provisions of the BCA. The Board aimed to replace the State and Territory product certification schemes, considering a national approach would achieve consistency, eliminate duplication and reduce enforcement costs. However, the System was disbanded last year, because of the difficulties inherent in getting approval in all Australian jurisdictions. It appears that some State and Territory Administrations want to retain the right of veto over the acceptance of new building products and systems, despite the cost savings and gains to industry from a national approach.

In response, the ABCB is currently in the process of developing a new third party building products and systems certification scheme, CodeMark, to assess and certify products and systems against provisions of the Code.

Objective 2

Base building requirements on minimum, least-cost solutions which address the regulatory objectives of safety, health and amenity.

Appropriately, the Board has addressed the regulatory objectives of safety and health more fully than that of amenity. While the focus has been on minimum, least-cost solutions, this has not always been the outcome, such as when certain ‘best practice’ standards developed by Standards Australia International (SAI), have been adopted.

On the other hand, it appears that some standards have been set below what the community may expect or be prepared to pay for. For example, until amendments were made to the Code in 2003, complaints were common concerning the sound insulation of multi-dwelling buildings. Sound insulation standards referenced in the Code were below equivalent standards set by other developed countries. And even with SAI standards, the Campbell Report indicated poor outcomes using its waterproofing standard.

It appears that there are differing views on the success of the Code in meeting community expectations. These differences may reflect confusion about the objective of the Code (to reflect minimum acceptable standards rather than best-practice standards) and about the appropriate coverage of the Code.

Objective 3

Investigate and promote opportunities for deregulation.

There has been limited pursuit of opportunities for deregulation and the Board has not looked to improve training of building practitioners and insurance, both of which are major complementary pathways to achieve efficient outcomes in building. This is largely because it may currently be considered to be beyond its remit.

Objective 4

Undertake and promote research which offers innovative and cost efficient solutions.

The ABCB research program covers a broad agenda, including projects on: the efficacy of technical solutions; areas for further development of the BCA; and the development of national administrative processes.

Important areas of research covered to date, include fire codes, disabled access, weather tightness, energy efficiency, aged care facilities, timber framed construction in low rise apartment buildings, structural steelwork in car parks, a guideline for building professionals in the use of fire safety engineering solutions and the resolution of State and Territory variations from the Code. A large focus of the research is on finding cost-effective solutions.

Participants expressed qualified satisfaction with the quality and relevance of the research undertaken under the oversight of the Board. Reflecting the current work priorities of the Board, recently research has been diverted to focus on energy-efficiency and disabled access standards at the cost of more traditional core areas of the Code,.

Objective 5

Consult and liaise with industry to achieve transparency in the reform process.

The Board consults extensively with industry to achieve transparency in the reform process.

While it is not explicitly required in an objective of the IGA, the preparation of Regulation Impact Statements (RISs) is also a prime vehicle by which the ABCB

achieves transparency in the reform process. This is in compliance with the requirements stipulated in COAG's *Principles and Guidelines for National Standard Setting and Regulatory Action by Ministerial Councils and Standard-Setting Bodies*. The Australian Government Office of Regulation Review reports that the ABCB has a good record of compliance with the COAG Principles and Guidelines over many years. In general, the ABCB's consultative processes have been praised for being open and transparent. Within the RIS framework, the Board has not only consulted with industry, building professionals and industry peak bodies, as required by Objective 5, but also with Australian, State, Territory and Local Governments, research communities, special interest groups, and the wider community.

The Commission considers that the best practice model for impact analysis is not always applied, in particular where proposals for changes to the Code are based on new or amended Australian standards. Rather, the RIS is often prepared relatively late in the process. SAI typically does not formally apply a RIS framework during the early consideration of the standards. Yet, it is at this earlier stage where there is the greatest opportunity to identify feasible alternatives — including non-regulatory options, or different regulatory approaches. With current practice, by the time a RIS is prepared it effectively becomes an assessment of whether or not to adopt a specific well-developed proposal for which a substantial level of commitment already exists.

Objective 6

Simplify the wording of building requirements to achieve user friendliness and plain language style.

Objective 6 directly impacts on transparent communication, relating to the language of the Code. It appears that while skilled building practitioners, such as engineers and architects, are generally happy with the clarity of the standards, many builders and tradesmen complain that the language is not user friendly for them.

Objective 7

Coordinate and integrate reform activities with those of other agencies to ensure consistency of approach and to encourage consolidation into the BCA of all mandatory requirements affecting buildings.

Significant work has been put into consolidating mandatory requirements relating to energy efficiency and disabled access into the Code, although a number of jurisdictions are implementing their own minimum energy performance requirements for buildings, leading to substantial variations. The areas most needing to be addressed include:

- the mismatch between the requirements of the BCA and those applied by fire protection authorities for the protection of assets for most types of buildings;
- the erosion of a national approach by actions of local governments that impact on building;
- determining the best way to handle proposals for incorporating environmental objectives (including energy efficiency) in the BCA.

Further work also remains with respect to on-site services and occupational health and safety.

The delays created by following the due process required to bring about agreement across all jurisdictions, sometimes means that States, Territories and Local Governments, impatient to bring about change, will implement their own changes before national agreement has been reached. While there may have been scope to better expedite processes, delays are an almost inevitable aspect of ensuring rigorous and transparent consultation and impact analysis across the nine jurisdictions.

Objective 8

Create an efficient regulatory environment to encourage an internationally competitive building industry.

Progress has been made towards creating an efficient regulatory environment through the adoption of consistent performance standards, however, administrative differences can restrict competition amongst the jurisdictions and the limited adoption of international standards in the BCA could inhibit international competition.

The Board is involved in various international liaison activities. While the Commission recognises that the ABCB's pursuit of overseas linkages has generated benefits, it is surprising that this has not resulted in wider inclusion of international standards in the Code. The priority assigned to these activities may need to be reviewed in light of more pressing demands for resources in other areas.

Objective 9

Matters ancillary to its objectives: consulting, training, Action Agenda, conferences and meetings.

and

Objective 10

Undertake education and marketing activities to promote the work of the Board, to increase awareness of building regulatory reform and to increase use of Board publications and products.

Objectives 9 and 10 are more appropriately assessed together as to some extent they overlap and both concern awareness and understanding of the Code. The Board has undertaken education and marketing activities to promote its work, including trialling ways to increase the accessibility of its publications and providing training to ensure large changes, such as with energy efficiency, are understood. The Board has maintained a program of activities supportive of its objectives, although the wide lack of knowledge and use of the Code amongst builders and trades people indicates training could be improved.

The Laver Review made a number of recommendations directed toward improving take-up and awareness of the Code. Many of these (for example, a searchable web-based BCA and online answers to frequently asked questions) have now been implemented by the Board.

However, views presented to the Commission, suggest that some concerns remain about the adequacy of the Board's education and awareness activities. As well as a low level of awareness and take-up of the Code amongst small and regional builders and tradesmen, there is a general lack of awareness amongst consumers.

DRAFT FINDING 11.1

The ABCB has made considerable but varied progress against the 10 objectives with which it was tasked by the IGA. In general, the Board has prioritised well and made reasonable progress. However, there have been some shortfalls and performance can be improved.

11.2 New mission statement

Currently the Board's mission statement is:

To provide for efficiency and cost effectiveness in meeting community expectations for health, safety and amenity in the design, construction and use of buildings through the creation of nationally consistent building codes, standards, regulatory building requirements and regulatory systems.

This mission statement does not provide clear guidance on the overall goals of the Board and the priorities to be given to them. Instead, the Commission considers that the mission statement should be reworded as recommended in draft recommendation 11.1.

The Commission proposes that the focus should be on identifying regulatory interventions that address clear and significant market failure to improve the efficiency of the economy. It is also proposed that it is only in the areas of health, safety, amenity and the environment that there are likely to be significant market failures requiring regulatory action. Any proposed regulation should also take account of other existing mechanisms available to consumers to get the product/service they are willing to pay for and the potential for 'government failure'.

The **environment** has been added to the list of appropriate regulatory areas to reflect the reality that: (1) adverse environmental impacts can be an important source of market failure especially when combined with information gaps; and (2) as long as taxation or tradeable emission permits are not being used to reduce greenhouse gas emissions (and other pollutants), then there may be an efficiency-enhancing role for standards set via the BCA. For example, the Board has recently developed minimum energy-efficiency standards, to fulfil part of the Australian Government's greenhouse gas commitments. The Board uses the term 'sustainability' to refer to environmental issues. This potentially introduces some uncertainty: sustainability is hard to define and is harder to relate to market failures than is the concept of adverse environmental impact.

While **national consistency** is the most significant national reform objective, it is not universally appropriate: the Code enables variations by regions with different characteristics, such as cyclone risks. In addition, the pursuit of a national compliance system may not be warranted at this stage. Rather the focus should be on making enforcement effective, where the benefits are justified by the costs.

Any regulation that is **efficient** is also **cost-effective**, hence, there is no need to include the latter in the mission statement.

The mission statement for the ABCB (or its replacement) should be amended to:

In addressing issues relating to health, safety, amenity and the environment, to provide for efficiency in the design, construction and use of buildings through the creation of nationally consistent building codes and standards and effective regulatory systems.

This mission statement should set the overall guidance for the Board's pursuit of objectives.

11.3 Revised objectives

The appropriate reform agenda for building regulation for the period ahead is wider than that of the last ten years. To reflect observations made throughout the report, the Commission proposes that the objectives be revised to remove any overlap or conflicts and clarify means and ends. The objectives of the IGA should be reworded as outlined in recommendation 11.2.

The objectives of the ABCB (or its replacement) should be amended to:

Proposed Objective 1

Establish building codes and standards that are the minimum necessary to address efficiently relevant health, safety, amenity and environmental concerns.

In determining the area of regulation and the level of the requirements, the Board should ensure that:

- ***there is a rigorously tested rationale for the regulation;***
- ***the regulation would generate benefits to the community greater than the costs (ie net benefits);***
- ***there is no regulatory or non-regulatory alternative (whether available to the Board or not) that would generate higher net benefits.***

Proposed Objective 2

Ensure that, to the extent practicable, mandatory requirements are:

- ***consistent across the States and Territories***
- ***performance based***

-
- *based on international standards*
 - *expressed in plain language.*

Proposed Objective 3

Identify and seek implementation of improvements to compliance and enforcement systems for building regulation.

Proposed Objective 4

Identify and seek to implement ways to reduce reliance on regulation by exploring alternative mechanisms for delivering outcomes, including:

- *non-mandatory guidelines*
- *training to increase skill levels of building practitioners and certifiers.*

11.4 Future work agenda

The core elements of the regulatory reform strategy to date have been to:

- update the BCA;
- achieve consistent adoption of the BCA by all States and Territories;
- introduce performance-based standards;
- seek consolidation of other mandatory requirements impacting on building into the Code; and
- achieve a rationalisation of the administration of building.

While the responsibilities of the ABCB or its replacement should extend beyond that of ‘keeper of the Code’, this should still remain its prime role. The BCA is a ‘living document’. It needs regular updating to reflect ongoing innovation in building technologies and practices.

The Commission considers that the Board has given insufficient attention to maintenance and updating of the Code. For example, the Housing Provisions are not being developed to keep pace with evolving industry practices and innovative building materials coming on to the market. Also, the development of the next version of the BCA (BCA 21 project) should have provided the opportunity to review and update provisions in the BCA, however, work in this area has slipped, as higher priority was given to the development of provisions for disabled access and energy efficiency over recent years.

Much greater focus must be given to making the requirements of the performance standards measurable and ensuring compatibility between the objectives of the deemed-to-satisfy solutions and performance requirements. More generally, the short-term solution of transferring the prescriptive building requirements of earlier codes into the new Code (BCA96) as deemed-to-satisfy solutions needs to be corrected. As intended, the BCA should be rewritten from the top down, starting with the broad functional statements, objectives and performance requirements and then determining appropriate deemed-to-satisfy requirements.

The Commission considers the future work program should have the following elements:

- attend to maintaining and updating the BCA
 - revising deemed-to-satisfy solutions to ensure they embody up-to-date building practices
 - ensuring deemed-to-satisfy solutions and performance requirements aim to achieve equivalent levels of performance;
- consistency
 - continue work on reducing regulatory variations across jurisdictions;
- performance based
 - improve the clarity of ‘performance’ standards, including for most adding measurable levels of performance
 - address issues about ‘performance’ standards allowing costs to be shifted from the construction of a building to the maintenance phase
 - address concerns about the expertise of designers and certifiers to devise and assess alternative solutions
 - address problems with insurers being unable to accurately assess the risks associated with alternative designs and the resulting higher premiums for alternative solutions;
- consolidation
 - work to incorporate, into the BCA, mandatory requirements, originating from other legislation but affecting buildings or, where this is not possible, work to remove conflicts in objectives and make them transparent to the industry;
- administration and compliance
 - address concerns about poor building outcomes due to non-compliance with the BCA and the operation of different administrative systems across jurisdictions, such as those identified by the Campbell Report (2002)

-
- assess the possible underlying causes of these problems and whether there is a role for cooperative action by all States and Territories in relation to any
 - assess whether there is a case for the ABCB or its replacement to take on the issue of greater consistency in the regulatory framework for building;
 - disabled access
 - continue on amending the BCA to ensure that compliance with the Building Code would also ensure compliance with regulations under the *Disability Discrimination Act 1992 (Cwlth)*;
 - plumbing and gas
 - work with the eight plumbing associations to identify and resolve differences between the BCA and the Plumbing Code of Australia and on-site gas requirements;
 - address the question of property protection against fire
 - address the disconnect between the objectives of the fire safety provisions of the BCA and those of State and Territory legislation on fire brigade services, regarding the fire protection of property (mainly commercial buildings)
 - consult with interested parties (especially fire authorities) to increase the asset protection objective of the BCA for buildings other than stand-alone residential housing;
 - Local Government requirements on building
 - address the growing inconsistencies between building requirements across local council jurisdictions, by progressing the following options:
 - ... subjecting changes to a suitably rigorous justification process involving impact analysis, via the State or Territory from which it originates
 - ... maintain a register of State RISs undertaken for local government building regulations, to help inform Board discussions
 - ... establish national agreement over a delineation between regulation-making powers relating to planning and building
 - ... require any Local Government requirement that is inconsistent with the BCA to be approved by the responsible State Minister (similar to the Victorian approach, where local council changes to the planning scheme must be approved by the Minister for Planning under an over-arching State policy framework and strategic plan);
 - sustainability and energy-efficiency
 - instead of dwelling further on defining ‘sustainability’, identify the constituent environmental impacts of sustainability and analyse the nature of

-
- the associated market failure in each case, if any, and whether this would justify some form of government intervention
- establish whether inclusion of standards in the BCA are the appropriate form of government intervention, in the context of currently limited use of market mechanisms, such as subsidies, taxes and permit trading to address environmental externalities
 - determine which elements of positive or adverse environmental impact should be addressed via the Code, if any, and determine what will constitute the minimum effective regulation;
 - electrical installation and telecommunications
 - continue to identify and resolve differences between the BCA and on-site electrical installation and telecommunications requirements;
 - occupational health and safety
 - address the overlap between the BCA and OHS requirements
 - work towards removing inconsistencies between occupational health and safety legislation and the BCA and incorporating relevant OH&S requirements that impact on building into the Code
 - in particular, identify conflicts between prescriptive OHS-based legislation for lifts (as reflected in the Australian elevator standard) and other state-based regulations and the provision for performance-based standards in the Code, in order to remove the resultant difficulties and inefficiencies caused by the multitude of regulations;
 - plain language
 - continue to improve the clarity of the Code, particularly for builders and tradespeople;
 - quality and durability of housing
 - explore the implications of addressing consumer requests for the Code to meet community expectations with regard to quality and durability of housing in order to assess its advisability
 - explore the scope for and feasibility of establishing star rating systems to bridge the information gap for consumers for a range of desired features, such as sound proofing and weather proofing, not just energy efficiency — without mandating a particular standard or level of performance.

11.5 Support functions

As currently specified in the objectives, the ABCB carries out a number of functions which support its core work. These should continue to be carried out by the Board (or its replacement) and be identified in a new intergovernmental agreement. However, they should not be contained in the objectives, as they are means rather than ends.

Provide useful technical information to building practitioners

In addition to the information provided in the BCA and in technical non-mandatory guidelines, as anticipated in proposed objective 4, the Board should generally provide useful information for builders. Given the highly disaggregated nature of the building industry many practitioners cannot conduct their own research or spend time updating their knowledge of recent research. The Board can help to fill in these gaps and provide information that is accessible and useful to building practitioners.

Transparency in the reform process

Especially with industry representation on the Board, it is important that all interested parties, not just industry, are given the opportunity to comment on proposals. There are a number of changes that should be made to improve participation by all interested parties, including: better use of the internet for electronic dissemination of material for comment and for transmitting feedback; access to submissions on the Board's website; longer consultation periods for major reforms; and earlier consultation with non-industry stakeholders.

Economic evaluation and impact analysis

The Board's existing regulatory impact analysis is relatively robust and provides a strong framework. Some adjustments (chapter 8) would further increase the likelihood of finding solutions which address the public interest. In particular, while regulation impact analysis already requires assessment of all relevant impacts, the ABCB should have a list of impacts that are particularly relevant to building reform and all RISs should address these:

- impacts on consistency;
- assessment of available international standards including a comparison of the impacts between a proposed local standard and that of the closest

international standard, to demonstrate that the local standard provides a higher net benefit;

- compliance costs;
- life-cycle costs and benefits, including impact on maintenance; and
- impacts on users and buyers.

This building specific list of impact assessment requirements could be included in the ABCB's tailored Economic Evaluation Model.

Coordinate and promote research

The ABCB (or its replacement) should coordinate and promote research which offers efficient solutions that address significant market failures. While the ABCB's research program is generally regarded as being successful, the role of the Board should focus on coordinating and promoting rather than conducting research. Research efforts should also be prioritised in line with the Board's work program.

Given its national configuration, the Board could also collect data for the entire nation to better inform regulatory reform efforts. For example, the Australasian Fire Authorities Council argued that there is a critical need for a national repository of fire-related data in order to support the development of evidence-based building regulatory reform.

Knowledge of the Code

The ABCB or its replacement should address the training requirements of the industry and administrators of building regulation, to ensure building practitioners and certifiers have adequate knowledge of the BCA. This issue is distinct from the broader question of the skill levels of building practitioners, as addressed through proposed objective 4.

Promote awareness and increased use of the Code

In addition to providing training on the BCA, it is important that the building industry is aware of recent developments with the Code, and is able to respond to them. Also, consumers and the general public should know about the existence of the BCA. The Board (or its replacement) should promote awareness and increased use of the Code and related materials and services. Reducing the outlays involved in getting a copy of the Code will also improve awareness of its purpose and content.

Achieving the objectives by the ABCB would be assisted by the Board (or its replacement):

- *providing useful technical information to building practitioners*
- *consulting and liaising with all interested parties to achieve transparency in the reform process*
- *conducting economic analysis of impacts, which thoroughly identifies all significant effects of proposed changes, to determine the best regulatory solution*
- *coordinating and promoting research*
- *addressing the training requirements of the industry and administrators of building regulation, to ensure building practitioners and certifiers have adequate knowledge of the Code and the capacities necessary to implement and assess performance-based solutions*
- *promoting awareness and increased use of the Code and related materials and services.*

11.6 New IGA

Implementing the recommendations of this study would widen the mandate of the Board. Rather than solely being the ‘keeper of the Code’, the ABCB (or its replacement) would undertake wider involvement in regulatory quality. It would provide the framework in which the building market would be free to work well, supported by efficient and effective regulations, and efficient and effective compliance and administrative arrangements. In this light, the Board’s name should be changed from the Australian Building Codes Board to the Australian Building Regulation Board (ABRB).

The ABCB’s name should be changed to the Australian Building Regulation Board (ABRB), to better reflect its proposed wider responsibilities and future work agenda.

A new IGA agreed by the Australian, State and Territory Governments would be the mechanism for implementing the proposals in this study and to take forward the continuing process of building regulation reform.

In addition, the new IGA should further re-confirm the commitment to implementing national consistency and other reforms. The IGA should clearly state the presumption of automatic adoption of the Code, along with a requirement to give reasons if a jurisdiction diverges from an agreed regulation or other reform. As well, the Board or its replacement should establish a process for regular monitoring and reporting on the progress with implementation of the Code and other agreed reforms, including reporting on any divergence from such reforms.

DRAFT RECOMMENDATION 11.4

A new Intergovernmental Agreement should be negotiated by all nine governments, so as to implement many of this study's recommendations:

- ***establish the Australian Building Regulation Board (ABRB) in place of the ABCB***
- ***clarify the ABRB's mission statement and objectives***
- ***agree to shared funding and removal of charges for the BCA***
- ***re-confirm the commitment to national consistency***
- ***strengthen the use of regulatory impact statements to enhance rigour for mandatory regulations***
- ***outline the future work program, as proposed.***

While the ABCB has funding from the Australian Government up until end June 2005, the current IGA is due to run until June 2006. Hence, an interim arrangement for funding would need to be put in place to cover the intervening year before the proposed new IGA is established. The current funding arrangements and formula should continue, including the relative proportions and amounts and continued use of charges for the BCA, until the new IGA is in place and alternative funding issues have been resolved.

A Submissions and meetings

Submissions

<i>Participant</i>	<i>Submission no.</i>	<i>Date received</i>
ABCB Chairman	4	30 April 04
	42	24 June 04
ABCB Office	50	23 June 04
Airconditioning & Mechanical Contractors' Association	16	5 May 04
Alliance for Fire & Smoke Containment	31	7 June 04
Arup Fire	15	5 May 04
Association of Consulting Engineers Australia	46	8 July 04
Attorney-General's Department — Civil Justice Division	10	30 April 04
Attorney-General's Department — Emergency Management Australia	43	24 June 04
Australasian Fire Authorities Council	28	28 May 04
Australian & New Zealand Solar Energy Society Ltd, The	1	28 April 04
Australian Capital Territory Government	48	27 July 04
Australian Elevator Association Limited	44	29 June 04
Australian Local Government Association	45	30 June 04
Australian Network for Universal Housing Design	2	29 April 04
Australian Sustainable Built Environment Council	22	17 May 04
Blind Citizens Australia	20	14 May 04
Builders Collective of Australia, The	39	16 June 04
Building Products Innovation Council	23	17 April 04
Disability Council of NSW	26	21 May 04
Fire Protection Association Australia	19	13 May 04
	47	12 July 04
Fire Protection Association Australia (Tasmanian Branch)	35	9 June 04
Green Building Council of Australia	11	30 April 04

Continued on next page

Submissions (continued)

<i>Participant</i>	<i>Submission no.</i>	<i>Date received</i>
Hilti (Aust.) Pty Ltd	7	30 April 04
Housing Industry Association	6	30 April 04
Human Rights and Equal Opportunity Commission	13	3 May 04
Insurance Council of Australia	38	16 June 04
Leifer, Dr David	34	8 June 04
Lilley, Mr Nigel — Builders Registration Board of WA	40	11 June 04
Local Government Association of Tasmania	32	7 June 04
Lyons, K., Cottrell, E., Davies, K.	21	15 May 04
Master Builders Association of Western Australia	8	30 April 04
Master Builders Australia Inc	24	18 May 04
National Electrical and Communications Association	9	30 April 04
National Fire Industry Association	3	30 April 04
New South Wales Building Regulations Advisory Council — Industry Members	25	19 May 04
New South Wales Department of Housing	33	7 June 04
New Zealand Ministry of Economic Development	5	30 April 04
Northern Territory, Minister for Lands and Planning	30	4 June 04
Pitt & Sherry	37	11 June 04
Property Council of Australia	52	10 August 04
Queensland Government	41	22 June 04
Reddaway, Mr Lawrence	17	10 May 04
Society of Fire Safety	49	27 July 04
South Australian Government	36	11 June 04
Standards Australia	27	24 May 04
Swane, Mr Ronald A, AM	12	3 May 04
Tasmanian Building Regulation Advisory Committee	29	31 May 04
Victorian Government	51	9 August 04
Wentworth-Walsh, Ms Dorothy	18	12 May 04
Western Australian Department of Housing and Works	14	4 May 04

Consultations with organisations and individuals

Australian Capital Territory

Australian Building Codes Board
Australian Greenhouse Office
ACT Planning and Land Authority
Australian Construction Industry Forum
Australian Procurement & Construction Council
Building Products Innovation Council
Department of Environment and Heritage (Australian)
Department of Industry, Tourism and Resources (Australian)
Department of Finance and Administration (Australian)
Development Assessment Forum
Engineers Australia
Hood, Mr David A
Housing Industry Association
Master Builders Australia
National Occupational Health and Safety Commission
Royal Australian Institute of Architects
Service, Mr J.G.

New South Wales

Advanced Consulting Services Pty Ltd
Alliance for Fire & Smoke Containment
Australian Institute of Building
Australian & New Zealand Solar Energy Society Ltd
Australian Elevator Association Limited
Boral Limited
Building and Construction Council
Building Designers Association of Australia
Cabinet Office
Department of Commerce (Office of Fair Trading)

Department of Energy, Utilities and Sustainability (Sustainable Energy Development Authority)

Department of Infrastructure, Planning and Natural Resources

Green Building Council Australia

Human Rights and Equal Opportunity Commission (Australian)

Insurance Council of Australia

James, Ms Carolynne

John Holland Pty Ltd

Marrickville Council

Munich Reinsurance Group

People with Disability Australia

Phillips Building Consultants and Inspectors Pty Ltd

Property Council of Australia

Standards Australia

Sydney City Council

Walter Homes Pty Ltd

Northern Territory

Barclay Mowlem

Building Appeals Board

Building Practitioners Board

Department of Business, Industry and Resource Development

Department of Infrastructure, Planning and Environment

Engineers Australia, Northern Division

Northern Territory Fire and Rescue Service

Property Council

Territory Construction Association

Queensland

Arup Fire

Brisbane City Council

Consolidated Properties

Devine Homes

Herron Todd White
Local Government Association of Queensland
Master Plumbers Association of Queensland
Queensland Fire Rescue

South Australia

Adelaide City Council
Association of Wall & Ceiling Industries of SA Inc
Australian Institute of Building Surveyors
Building Industry Specialist Contractors Association of SA, Inc
Department for Administrative and Information Services (Building Management, Workplace Services)
Department for Environment and Heritage (Office of Sustainability)
Department for Transport and Urban Planning (Planning SA)
Federation of Wall and Ceiling Industries of Australia and New Zealand
Royal Australian Institute of Architects
Sheppard, Assoc Prof Lorraine
Urban Ecology Australia

Tasmania

Building Regulation Advisory Committee
Department of Infrastructure, Energy and Resources
Local Government Association of Tasmania
Tasmania Fire Service

Victoria

ABCB Chairman
Alternative Technology Association
Architects Registration Board
Arup Fire, Risk and Security
Australian Business Council for Sustainable Energy
Australian Council of Building Design Professionals
Australian Fire Authorities Council

Building Commission

Department for Victorian Communities (Local Government Victoria)

Department of Human Services (Office of Housing)

Department of Premier and Cabinet

Department of Sustainability and Environment

Department of Treasury and Finance

Fire Protection Association of Australia

FM Global Insurance

Heritage Victoria

Master Plumbers and Mechanical Services Association

Municipal Association of Victoria

National Electrical and Communications Association

National Transport Commission

Plumbing Industry Commission

Victorian Competition and Efficiency Commission (Office of Regulation Reform)

Western Australia

Builders Registration Board of Western Australia

Rawlinsons (WA)

Office of Energy (Sustainable Energy Development Office)

Department of Housing and Works

Department of Health

Department for Planning & Infrastructure

Western Australian Local Government Association

Western Australian Planning Commission

B Inter Government Agreement

This appendix contains:

- the Agreement between the Commonwealth of Australia, the States and the Territories to establish the Australian Building Codes Board (March 1994); and
- the variation of Agreement between the Commonwealth of Australia, the States and the Territories in relation to the Inter Government Agreement to establish the Australian Building Codes Board (July 2001).

An agreement

between

The Commonwealth of Australia

The States

and

The Territories

to establish

THE AUSTRALIAN BUILDING CODES BOARD

March 1994

An Agreement made this first day of March, one thousand, nine hundred and ninety-four to establish the Australian Building Codes Board.

SIGNATORIES

Senator the Hon Peter Cook
Minister for Industry, Technology & Regional Development

The Hon Garry West, MP
Minister for Local Government & Co-operatives
New South Wales

The Hon Rob Maclellan, MLA
Minister for Planning
Victoria

The Hon Terence Mackenroth, MLA
Minister for Housing, Local Government & Planning
Queensland

The Hon John Oswald, MP
Minister for Housing, Urban Development and Local Government Relations
South Australia

The Hon Paul Omodei, MLA
Minister for Local Government
Western Australia

The Hon Thomas John Cleary, MLA
Minister for Local Government
Tasmania

The Hon Steve Hatton, MLA
Minister for Lands, Housing & Local Government
Northern Territory

The Hon Bill Wood, MLA
Minister for the Environment, Land & Planning
Australian Capital Territory

AN AGREEMENT made this first day of March, one thousand nine hundred and ninety-four between — THE COMMONWEALTH OF AUSTRALIA (in this Agreement called ‘the Commonwealth’),

THE STATES OF NEW SOUTH WALES, VICTORIA, QUEENSLAND, SOUTH AUSTRALIA, WESTERN AUSTRALIA and TASMANIA (in this agreement called individually a ‘State’ and collectively ‘the States’) and

THE NORTHERN TERRITORY AND THE AUSTRALIAN CAPITAL TERRITORY (in this agreement called individually a ‘Territory’ and collectively ‘the Territories’).

(A) The respective Ministers of the Commonwealth, the States and the Territories, meeting in a national council known as the Planning, Housing and Local Government Ministerial Council (‘the Council’), have determined that a nationally consistent regulatory framework should be developed, and in particular that:-

- (i) building regulation be as uniform as possible between the States and Territories and that the technical source of such regulation be the Building Code of Australia (‘BCA’) as varied from time to time, or its replacement;
- (ii) additions or variations of technical provisions of the BCA by the States and Territories be limited, so far as is possible;
- (iii) more efficient and simplified building regulatory systems be developed; and
- (iv) national acceptance and adoption of technology be encouraged and supported;

and have further agreed to establish a representative Board to be known as the Australian Building Codes Board (‘the Board’), or such other name as determined by the Council, with a mission to provide for efficiency and cost effectiveness in meeting community expectations for health, safety and amenity in the design, construction and use of buildings through the creation of nationally consistent building codes, standards, regulatory requirements and regulatory systems;

(B) The objectives to which the proceedings and operations of the Board are to be directed (‘the Objectives’) are:-

-
- (i) to establish codes, standards and regulatory systems that are, as far as practicable:-
- consistent between States and Territories, cost-effective;
 - performance-based; and
 - incorporate modern and efficient building practices;
- (ii) to ensure that building requirements are based on minimum, least-cost solutions commensurate with regulatory objectives of health, safety and amenity;
- (iii) to examine and promote opportunities for deregulation wherever possible;
- (iv) to undertake research to ensure that solutions are soundly based with particular emphasis on innovations and lowering costs;
- (v) to undertake effective consultation and liaison with industry to achieve transparency in the reform process;
- (vi) to simplify the wording of building requirements to achieve user friendliness and plain language style;
- (vii) to co-ordinate and integrate reform activities with those of other agencies to ensure consistency of approach and to encourage consolidation into the BCA of all mandatory requirements affecting buildings;
- (viii) to create an efficient regulatory environment to encourage an internationally competitive building and construction industry; and
- (ix) to perform such other matters ancillary or incidental to such objects as the Board shall from time to time deem fit.
- (C) The provisions of this Agreement are not intended to create legally binding or enforceable arrangements between the parties or to derogate from the rights and powers of the Commonwealth, States or Territories or any of their respective agencies or authorities.
- (D) The Council has established Standing Orders providing for the administration of the Board and implementation of the Objectives;
- (E) The Commonwealth, the States and the Territories are prepared to contribute towards the cost of maintaining and operating the Board in accordance with the

provisions of this Agreement and of the Standing Orders from time to time so established.

- (F) Subject to Recital (C) the Commonwealth, the States and the Territories wish to make a formal agreement in order to give effect to agreements and arrangements relating to the formation of the Board and its operations.

Now it is hereby agreed as follows -

PART 1 — Preliminary

- 1.1 This Agreement shall come into force when it has been executed by all of the parties ('the commencement date').
- 1.2 The proceedings, decisions or actions taken by any interim Board established by all the parties in advance of this Agreement are adopted and confirmed as proceedings, decisions or actions taken by the Board established by this Agreement.

PART II — Interpretation

- 2.1 A reference in this Agreement to a Minister includes:-
- (a) a Minister or other member of the Federal Executive Council;
 - (b) a Minister of the relevant State or Territory; or
 - (c) a person nominated by a Minister as his or her representative from time to time.
- 2.2 A reference in this Agreement to 'Administration' shall mean the Department of State or other Statutory Body responsible for building regulatory matters for the Commonwealth and each of the States and Territories.

PART III — Establishment of Board

- 3.1 The proceedings and operations of the Board established by this Agreement shall be directed to the achievement of the Objectives set out in Recital (B) of this Agreement.
- 3.2 Subject to the availability of funds, the Board may deal with such matters or arrange for the performance of such tasks related to the Objectives as the Board may, from time to time, deem necessary.

3.3 The Board shall consist of the following members:-

- (a) the principal officer of each Administration;
- (b) a representative of the Australian Local Government Association; and
- (c) three representatives of the building and construction industry as appointed by the Council.

3.4 A member of the Board may appoint a deputy.

3.5 The responsibilities, proceedings and conduct of the Board shall be as laid down by Standing Orders.

PART IV — Financial Arrangements

4.1 The financial arrangements set out in this Part shall be based upon annual budgets approved by the Council.

4.2 The monies of the Board ('funds') shall consist of contributions by all of the parties in accordance with this Part and other monies arising from the operations of the Board.

4.3 Available funds may be applied only under the authority of the Board and for the purposes of the achievement of the Objectives of the Board as set out in this Agreement.

4.4 The amount of funds agreed in this Part to be contributed shall be allocated among the parties as follows:-

- (a) the Commonwealth contribution shall be one half of the amount; and
- (b) the States and the Territories shall contribute one half of the amount in proportions according to the values of their respective total building approvals for the financial year two years preceding the determination. The values of building approvals shall be as determined by the Australian Bureau of Statistics.

4.5 Contributions of funds by members shall be payable as soon as practicable after the commencement of the relevant financial year.

4.6 The financial arrangements set out in this Part shall not prevent the Board developing forward programs for regulatory reform.

PART V — Administrative Arrangements

- 5.1 An Executive Director ('the ED') shall be appointed by the Board to co-ordinate the activities of the Board, carry out and manage the implementation of Board directives and decisions, and to manage and implement the reform program in accordance with the functions in Standing Orders.
- 5.2 The parties shall, through their respective administrations, facilitate the work of the Board as set out in Standing Orders.
- 5.3 There shall be a Building Codes Committee ('the Committee') the composition of which shall be as determined by Standing Orders.
- 5.4 The Board may delegate such of its functions and authorities in such a manner as it considers appropriate. The provisions of this Clause shall not extend to its power of delegation.
- 5.5 Administrations on behalf of and in accordance with the determinations of the Board, may engage consultants or staff, or second staff, to carry out tasks associated with the functions of the Board.

PART VI — General

- 6.1 The operations of the Board and the administration of this Agreement shall be reviewed within five years from the commencement date of this Agreement.

PART VII — Standing Orders

- 7.1 The Standing Orders provided in this Agreement shall be determined by the Council and shall be applicable, as at the commencement date, for the purposes of the operation and implementation of the provisions of this Agreement.
- 7.2 The Standing Orders may be varied from time to time by the Council and references in this Agreement to Standing Orders are to be read as references to those Standing Orders as for the time being so varied.



VARIATION OF AGREEMENT

between

THE COMMONWEALTH OF AUSTRALIA

and

THE STATES

and

THE TERRITORIES

In relation to the Inter Government Agreement to
Establish the Australian Building Codes Board

Australian Government Solicitor

200 Queen Street
Melbourne Vic 3000
Our Ref: 1300022183

Telephone: (03) 9242 1339
Facsimile: (03) 9242 1149

VARIATION OF AGREEMENT is made on the 27 day of July 2001

SIGNATORIES

Senator the Hon Nick Minchin
Minister for Industry, Science & Resources

The Hon Dr Andrew Refshauge MP
Minister for Urban Affairs & Planning
New South Wales

The Hon John Thwaites MLA
Minister for Planning
Victoria

The Hon Nita Cunningham MP
Minister for Local Government & Planning
Queensland

The Hon Diana Laidlaw MLC
Minister for Transport & Urban Planning
South Australia

The Hon Michelle Roberts MLA
Minister for Local Government
Western Australia

The Hon Paul Lennon MHA
Minister for Infrastructure, Energy & Resources
Tasmania

The Hon Tim Baldwin MLA
Minister for Lands, Planning & Environment
Northern Territory

Mr Brendan Smyth MLA
Minister for Urban Services
Australian Capital Territory

PARTIES

The Commonwealth of Australia ('the Commonwealth')

AND

The States of New South Wales, Victoria, Queensland, South Australia, Western Australia and Tasmania ('the States')

AND

The Northern Territory and the Australian Capital Territory ('the Territories')

INTRODUCTION:

- A. This Variation of Agreement is supplemental to an agreement entered into in March 1994 by the Commonwealth, the States and Territories to establish the Australian Building Codes Board ('the Agreement') a copy of which is annexed to this Variation of Agreement. The Agreement also annexed the Australian Building Codes Board Standing Orders ('the Standing Orders')
- B. Under paragraph 6.1 of the Agreement the operations of the Board and the administration of the Agreement are to be reviewed within five years from the commencement date of the Agreement
- C. The parties have agreed to amend the Agreement (including the Standing Orders) on the terms and conditions contained in this Variation of Agreement.

OPERATIVE PART:

The parties agree to amend the agreement as follows:

Substitution of the word 'Council' with 'Minister(s)'

- 1. Recital A (at page 3) be amended as follows:
 - (a) the phrase 'meeting in a national council known as the Planning, Housing and Local Government Ministerial Council ('the Council'),' be deleted so that Recital A now reads:

'The respective Ministers of the Commonwealth, the States and the Territories responsible for building regulations, have determined that a nationally consistent regulatory framework should be developed, and in particular that...'
 - (b) the word 'Council' at the third line of the second paragraph of Recital A be deleted and the word 'Ministers' inserted.

-
2. Recital D (at page 5) be amended by deleting the words ‘Council has’ and inserting the words ‘Ministers have’ so that Recital D now reads:

‘The Ministers have established Standing Orders providing for the administration of the Board and implementation of the Objectives’

3. Paragraph 7.1 (at page 8) be amended by deleting the word ‘Council’ and inserting the word ‘Ministers’.
4. Paragraph 7.2 (at page 8) be amended by deleting the word ‘Council’ and inserting the word ‘Ministers’.

Objectives

5. A new subparagraph (x) be inserted at Recital B (at page 5) which shall read as follows:

‘(x) to undertake education and marketing activities to promote the work of the Board, to increase awareness of building regulatory reform and to increase use of Board publications and products.’

Part III — Establishment of Board

6. Subparagraph 3.3(c) (at page 6) be deleted and the following inserted:

‘(c) four representatives of the building and construction industry.’

Part IV — Financial Arrangements

7. Paragraph 4.1 (at page 6) be amended by deleting the word ‘Council’ and inserting the word ‘Board’.

Part VI — General

8. Paragraph 6.1 (at page 8) be deleted and the following paragraph inserted:

‘The operations of the Board and the administration of this Agreement shall be reviewed within 5 years of the date of execution of the Variation of Agreement in accordance with both the objectives of the Agreement and performance indicators developed as part of the Board's annual business plans.’

The Standing Orders

Substitution of the word ‘Council’ with ‘Minister(s)’

9. Subparagraph (A)(b)(i) (at page 1) be amended by deleting the word ‘Council’ and inserting the word ‘Ministers’.
10. Subparagraph (A)(d)(ii) (at page 2) be amended by deleting the word ‘Council’ and inserting the word ‘Ministers’.
11. Subparagraph (B)(c)(ii) (at page 4) be amended by deleting the word ‘Council’ and inserting the word ‘Ministers’.
12. Subparagraph (C)(a)(iii) (at page 5) be amended by deleting the word ‘Council’ and inserting the word ‘Ministers’.

Chair

13. Paragraph (A)(c) (at page 2) be amended as follows:

- a) subparagraphs (c)(i)-(iv) be deleted and the following subparagraphs be inserted:

- ‘(i) The Commonwealth Minister shall provide the State and Territory Ministers a list of persons recommended by the Australian Construction Industry Forum (ACIF) (‘the recommended persons’) for selection as Chair of the Board.
- (ii) The Commonwealth Minister shall nominate a person either from the list of recommended persons provided by ACIF or any other person as his or her preferred candidate for the position of Chair of the Board and shall advise the State and Territory Ministers of the nomination.
- (iii) In the event a State or Territory Minister disagrees with the Commonwealth Minister's preferred candidate, the State or Territory Minister may nominate another person (including a person from the list of recommended persons) and shall advise the Commonwealth Minister of the nomination.
- (iv) Where a majority of Ministers agree on a candidate as Chair, that person shall be appointed by the Commonwealth Minister as Chair of the Board.
- (v) In the event a majority of Ministers are unable to agree, the process described at sub paragraphs (ii) to (iv) above shall be repeated until a person is appointed as Chair of the Board.’

- b) A new subparagraph (c)(vi) be inserted immediately following the new subparagraph (c)(v) which shall read as follows:

- ‘(vi) Subject to subparagraph (c)(iv), the Commonwealth Minister shall appoint a person to be Chair of the Australian Building Codes Board for a period of four years.’

Membership

14. Subparagraph (d)(ii) be renumbered as subparagraph (d)(vii).
15. New subparagraphs (d)(ii), (iii), (iv), (v) and (vi) be inserted which shall read as follows:
 - (ii) 'The Commonwealth Minister shall provide to the State and Territory Ministers a list of persons recommended by the ACIF for selection as members of the Board.
 - (iii) Pursuant to paragraph 3.3(c) of this Agreement, the Commonwealth Minister shall nominate a person, or persons, from a list of names provided by the ACIF for selection of membership to the Board ('the list') and shall advise the State and Territory Ministers of the nomination(s).
 - (iv) Where a majority of Ministers agree on a candidate, that person shall be appointed to the Board.
 - (v) In the event that a majority of Ministers are unable to agree, the process described at subparagraphs (iii) to (v) above shall be repeated until the required number of persons are appointed.
 - (vi) The terms for the three representatives of the building and construction industry to be appointed, or re-appointed, to the Board in the year 2001 are to be one, two and three years, with one representative being replaced every year. All subsequent appointments of existing or new building and construction representatives are to be for four years.'

Quorum

16. Subparagraph (f)(i) (at page 3) be amended by deleting the words 'eight members' and inserting the words 'two-thirds of Board membership' so that subparagraph (f)(i) shall read as follows:
 - (i) The quorum for a meeting shall be two-thirds of Board membership.'

Funds

17. Subparagraph (E)(a)(i) (at page 6) be deleted and a new subparagraph (E)(a)(i) be inserted which shall be read as follows:

'The annual contributions of the Administrations determined in accordance with Part IV of the Agreement and any other payments made to the Board, in respect of the affairs of the Board, will form a fund to be known as the Australian Building Codes Board Fund ('the Fund') and will be paid into the Australian Building Codes Board Account ('the Account') which shall be a Special Account under section 20 of the Financial Management and Accountability Act 1997 (Cth).'

DELEGATIONS AND AUTHORISATIONS

Financial Delegations

18. Delete subparagraph (I)(a)(i) and renumber sub paragraphs (ii), (iii) and (iv) to sub paragraphs (i), (ii) and (iii) respectively.
19. The new subparagraph (I)(a)(i) (formerly sub paragraph (I)(a)(ii) (at page 8) be amended by including reference to the relevant provisions of the *Financial Management and Accountability Act 1997* and deleting the words ‘one hundred thousand dollars (\$100,000)’ and inserting the following words ‘five hundred thousand dollars (\$500,000)’ so that subparagraph (I)(a)(i) shall now read as follows:

‘(i) The ED shall have the power, subject to clause 4.3 of the Agreement and the relevant provisions of the Financial Management and Accountability Act 1997 (Cth), without prior approval of the Board to expend up to \$500,000 or such higher amounts as determined by the Board, in any one instance upon commissioning reports, initiating research investigations or other such actions as deemed necessary for the achievement of the Objectives of the Board.’

Part II — Interpretation

20. A new paragraph 2.3 be inserted (at page 6) immediately after paragraph 2.2 which shall be read as follows:

‘2.3 The Intellectual Property and Indemnity Deeds entered into by the Commonwealth, the States and the Territories on 11 October 1996 and 7 November 2000 respectively form part of this Agreement and are to be read in accordance with this Agreement.’
21. Except as set out in this Variation of Agreement, all other provisions of the Agreement remain unchanged.

C ABCB Membership

Table C.1 **ABCB Membership**
(as at August 2004)

<i>Name</i>	<i>Represents</i>	<i>Position/Organisation</i>
Peter Laver	ABCB	Chair, Australian Building Codes Board
Alice Spizzo	New South Wales	Executive Director, Office of the Director General, Department of Infrastructure Planning and Natural Resources, NSW
Tony Arnel	Victoria	Commissioner, Building Commission, Victoria
Dr Ted Campbell	Queensland	Director General, Dept of Local Government & Planning, QLD
Peter Gow	Western Australia	Executive Director, Office of Policy and Planning, WA
Bronwyn Halliday	South Australia	Executive Director, Planning SA
Graeme Hunt	Tasmania	Manager, Building Standards and Regulation, Dept of Infrastructure, Energy and Resources, Tasmania
Neil Savery	ACT	Chief Planning Executive, Planning and Land Authority, Australian Capital Territory
John Gronow	Northern Territory	Executive Director, Planning and Building, Department of Infrastructure, Planning and Environment, NT
Ken Pettifer	Australian Government	Head of Division, Manufacturing, Engineering and Construction division, Australian Government Department of Industry Tourism and Resources
Cr John Chandler	Local Government	Australian Local Government Association
Peter Carter	Industry	Director, Carter Building and Design Pty Ltd
John McCarthy	Industry	Group Property Executive, AEH Property Group
Caroline Pidcock	Industry	President, NSW Chapter of the RAIA

Source: ABCB web page — see http://www.abcb.gov.au/index.cfm?fuseaction=CommitteeView&Committee=Committee_Australian_Building_Codes_Board

D BCA Objectives

This appendix provides more detail on the objectives set out in the Building Code of Australia (BCA). As noted in chapter 2, the objectives form the highest level in the BCA hierarchy and represent what the community expectation (and aim of the regulation) is in relation to each area of building performance. Overall, they provide an indicative outline of the present coverage of the BCA. The functional statements, performance requirements and deemed-to-satisfy solutions are the subsequent levels of the BCA (see chapter 2).

Tables D.1 and D.2 show the objectives of each section of volume one and volume two of the BCA respectively. The first section of each volume (section A — not shown in the table) outlines the broad structure and administrative arrangements of the BCA including: the application and structure of the BCA, interpretation of the BCA, acceptance of design and construction methods (including suitability of materials), and the classification of buildings and structures (see box 1.1).

Table D.1 Coverage of Volume One

<i>Section</i>	<i>Part</i>	<i>Objective</i>
Structure (Section B)	Structural Provisions (Objective BO1)	• safeguard people from injury caused by structural failure. • safeguard people from loss of amenity caused by structural behaviour. • protect other property from physical damage caused by structural failure.
Fire Resistance (Section C)	Fire Resistance (Objective C01)	• safeguard people from illness or injury due to a fire in a building. • safeguard occupants from illness or injury while evacuating a building during a fire. • facilitate the activities of emergency services personnel. • avoid the spread of fire between buildings. • protect <i>other property</i> from physical damage caused by structural failure of a building as a result of fire.
Access and Egress (Section D)	Access and Egress (Objective D01)	• provide as far as reasonable, people with safe, equitable and dignified access to: (i) a building; and (ii) the services and facilities within a building. • safeguard occupants from illness or injury while evacuating in an emergency.

Continued on next page

Table D.1 (continued)

Section	Part	Objective
Services and Equipment (Section E)	Fire Fighting Equipment (Objective E01)	• safeguard occupants from illness or injury while evacuating during a fire. • provide facilities for occupants and the fire brigade to undertake fire-fighting operations. • prevent the spread of fire between buildings.
	Smoke hazard management (EO2)	• safeguard occupants from illness or injury by warning them of a fire so that they may safely evacuate. • safeguard occupants from illness or injury while evacuating during a fire.
	Lift Installations (EO3)	• facilitate the safe movement of occupants. • facilitate access for emergency services personnel to carry out emergency procedures and assist in the evacuation of occupants.
	Emergency Lighting, Exit Signs and Warning Systems (EO4)	in case of an emergency, to safeguard occupants from injury by: (i) having adequate lighting; (ii) having adequate identification of exits and paths of travel to exits; and (iii) being made aware of the emergency.
Health and Amenity (Section F)	Damp and Weatherproofing (Objective F01)	• safeguard occupants from illness or injury and protect the building from damage caused by: (i) surface water; (ii) external moisture entering a building; and (iii) the accumulation of internal moisture in a building • protect other property from damage caused by redirected surface water.
	Sanitary and Other Facilities (FO2)	• safeguard occupants from illness caused by infection. • safeguard occupants from loss of amenity arising from the absence of adequate personnel hygiene facilities. • enable occupants to carry out laundering. • provide for facilities to enable food preparation. • enable unconscious occupants of sanitary compartments to be removed from the compartment.
	Room Sizes (FO3)	safeguard occupants from injury or loss of amenity caused by inadequate height of room or space.
	Light and Ventilation (FO4)	• safeguard occupants from injury, illness or loss of amenity due to: (i) isolation from natural light (ii) lack of adequate artificial lighting • safeguard occupants from illness or loss of amenity due to lack of air freshness.
	Sound Transmission and Insulation (FO5)	safeguard occupants from illness or loss of amenity as a result of undue sound being transmitted: (i) between adjoining sole-occupancy units; and (ii) from common spaces to sole-occupancy units.

Continued on next page

Table D.1 (continued)

Section	Part	Objective
Ancillary Provisions (Section G)	Minor Structures and Components (Objective G01)	• safeguard people from illness caused by the discharge of swimming pool waste water. • protect other property from damage caused by the discharge of swimming pool water. • safeguard young children from drowning or injury in a swimming pool. • safeguard occupants from illness or injury resulting from being accidentally locked inside spaces which are designed to be entered for short spaces of time only and in which occupation for longer periods may be hazardous.
	Heating Appliances, Fireplaces, Chimneys and Flues (GO2)	• safeguard occupants from injury or illness caused by: (i) fire from combustion appliances installed within a building; and (ii) malfunction of a pressure vessel installed within a building. • protect a building from damage caused by the malfunction of a pressure vessel installed within.
	Construction in Alpine Areas (GO4)	• safeguard the occupants in alpine areas from illness or injury from an emergency while evacuating a building.
	Construction in Bushfire Prone Areas (GO5)	• safeguard occupants from injury. • protect buildings from the effects of a bushfire.
Special Use Buildings (Section H)	Theatres Stages and Public Buildings	This section contains additional deemed-to-satisfy measures for Theatres, Stages and Public Halls.
Maintenance (Section I)	Equipment and Safety Installations (Objective I01)	ensure that people are protected from illness, injury and loss of amenity throughout the life of a building.

Source: BCA96 vol. one.

Table D.2 Coverage of Volume Two

<i>Part</i>	<i>Sub-Part</i>	<i>Objective</i>
Structure (Objective O2.1)		• safeguard people from injury caused by structural failure. • safeguard people from loss of amenity caused by structural behaviour. • protect other property from physical damage caused by structural failure.
Damp and weather-proofing (Objective O2.2)		• safeguard occupants from illness or injury and protect the building from damage caused by: (i) surface water; (ii) external moisture entering a building; (iii) the accumulation of internal moisture in a building; and (iv) discharge of swimming pool waste water. • protect other property from damage caused by: (i) redirected surface water; and (ii) the discharge of swimming pool waste water.
Fire Safety (Objective O2.3)		• safeguard the occupants from illness or injury: (i) by alerting them of a fire in the building so that they may safely evacuate; (ii) caused by fire from heating appliances installed within the building; and (iii) in alpine areas, from an emergency while evacuating the building. • avoid the spread of fire. • protect a building from the effects of a bushfire.
Health and Amenity	Wet Areas (Objective O2.4.1)	safeguard the occupants from illness or injury and protect the building from damage caused by the accumulation of internal moisture arising from the use of <i>wet areas</i> in a building.
	Room Heights (Objective O2.4.2)	safeguard the occupants from injury or loss of amenity caused by inadequate height of a room or space.
	Facilities (Objective O2.4.3)	• safeguard occupants from illness caused by infection. • safeguard occupants from loss of amenity arising from the absence of adequate personal hygiene facilities. • enable occupants to carry out laundering. • provide for facilities to enable food preparation. • enable unconscious occupants of sanitary compartments to be removed from the compartment.
	Light (Objective O2.4.4)	safeguard occupants from injury, illness or loss of amenity due to— (i) isolation from natural light; and (ii) lack of adequate artificial lighting.
	Ventilation (Objective O2.4.5)	safeguard occupants from illness or loss of amenity due to lack of air freshness.
	Sound Insulation (Objective O2.4.6)	safeguard occupants from illness or loss of amenity as a result of undue sound being transmitted between adjoining dwellings.

Table D.2 (continued)

<i>Part</i>	<i>Sub-Part</i>	<i>Objective</i>
Safe Movement and Access (Objective O2.5)		• provide people with safe access to and within a building; and • safeguard young children from drowning or injury in a swimming pool.
Energy Efficiency (Objective O2.6)		reduce greenhouse gas emissions by efficiently using energy.

Source: BCA96 vol. two.

E Building industry

E.1 Scope of the Industry

In accordance with the focus of this study, this appendix provides information about Australia's residential and non-residential building sectors, but not engineering construction.¹ In addition to buildings themselves, discussion of the industry can encompass its inputs — namely building materials (such as cement, timber, paint, steel and glass), as well as the services of selected professionals such as architects, surveyors and engineers. Discussion of these inputs is included where it is relevant to the analysis in this appendix.

E.2 Output

Size of the industry

The building industry is a significant component of the Australian economy. In 2002-03, building work done — residential and non-residential — totalled \$47.1 billion, or 6.3 per cent of GDP. This sector's cyclical nature broadly reflects the wider economic cycle. However, as shown in figure E.1, over the last 20 years, the industry's share has varied from a high of 7.9 per cent during 1989-90 to a low of 5 per cent in 2000-01. This low followed the introduction of the GST in June 2000, which had brought forward many construction projects to avoid the application of the new tax. This, combined with the effect of building projects completed in time for the Sydney Olympics (held in September 2000), created a visible spike in building activity immediately before the introduction of the tax and a slump in new building immediately afterwards.

The recovery of the industry following this slump was led by the dominant residential sector, shown in figure E.2. At present, residential building accounts for approximately two thirds (67.9 per cent by value) of the work done in the industry.

¹In terms of ANZSIC classifications, this appendix will cover Division E (Construction), specifically 411 (Building Construction) and 42 (Construction Trade Services), but not 412 (Non-Building Construction).

The recovery was prompted not only by general economic conditions, but also by sustained low interest rates and a moderate ‘pull forward’ effect from the introduction of the First Home Owners Scheme by the Australian Government.² Additionally, changes in the taxation of housing led to an increased demand for investment properties:

Clearly, the 1999 change in the basis for levying CGT [Capital Gains Tax], being more or less coincident with the decline in returns from equities, has added to the recent housing price boom by encouraging investors to reduce current income in favour of longer term capital gains (PC 2004b, p. 118)

These effects contributed to a booming property market and resulted in associated growth in the construction of new housing.

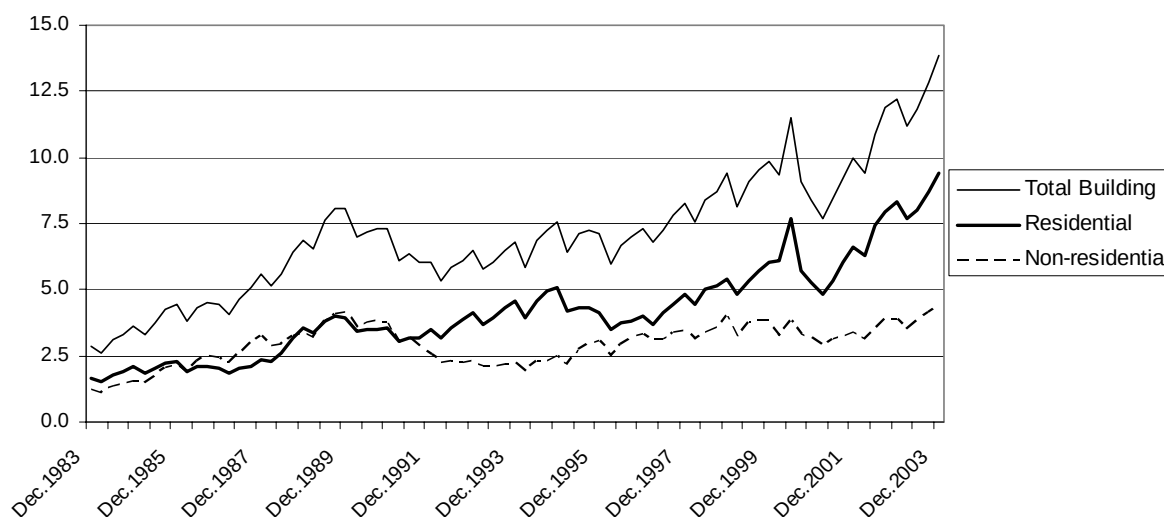
Figure E.1 **Contribution of building work done, 1982-83 to 2002-03**
Percentage of GDP



Data source: ABS(*Building Activity, Australia*, Cat. No. 8752.0, *Australian System of National Accounts*, Cat. No. 5204.0).

² See, for example, PC 2004b: “...Participants generally supported the view that the main effect of the FHOS has been to pull forward home purchases by those already capable of achieving home ownership in the *short term*, rather than significantly increasing the number of households with a realistic prospect of becoming home owners.” (p. 217)

Figure E.2 Value of building work done by quarter, Australia 1983-2003
Residential, non-residential and total building, current prices, \$ billions



Data source: ABS (*Building Activity, Australia*, Cat. No. 8752.0).

Geographic distribution

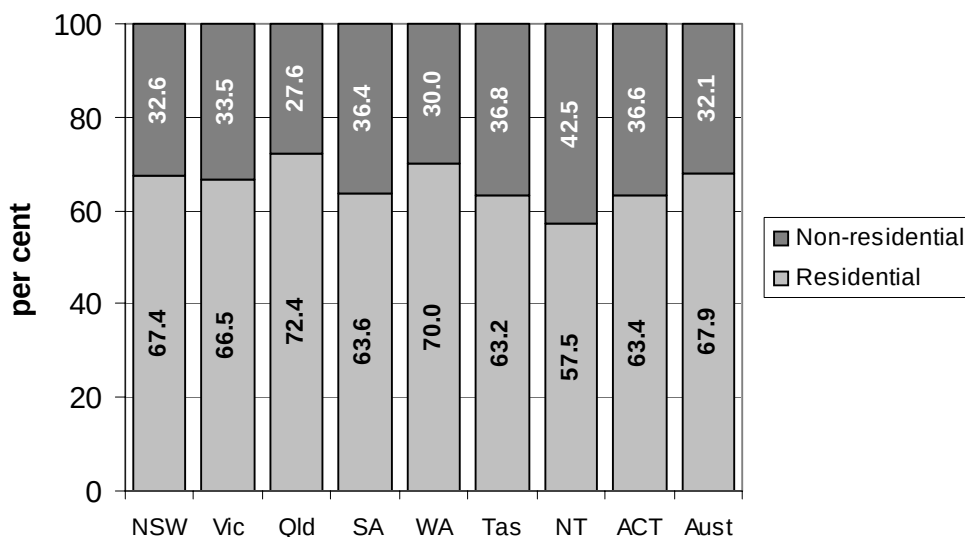
The building industry's presence varies across jurisdictions. Most States and Territories have a similar mix of residential and non-residential work, ranging from a mix of 57.5 per cent residential and 42.5 per cent non-residential in the Northern Territory to a 72.4 per cent and 27.6 per cent mix in Queensland (see figure E.3).

As figure E.4 shows, the industry output is naturally dominated by the larger states, with New South Wales accounting for the biggest share, closely followed by Victoria. New South Wales, Victoria and Queensland together accounted for 82 per cent of building activity in Australia in 2002-03.

Recently, Victoria has accounted for a larger share of activity than in the past. However, as figure E.5 indicates, this is more reflective of a large downturn in New South Wales following the completion of buildings before the Sydney Olympics in September 2000. This left New South Wales with a large stock of new buildings (for example, hotels), resulting in a subsequent diminished demand for new building work.

Figure E.3 Share of residential and non-residential building by jurisdiction, 2002-03

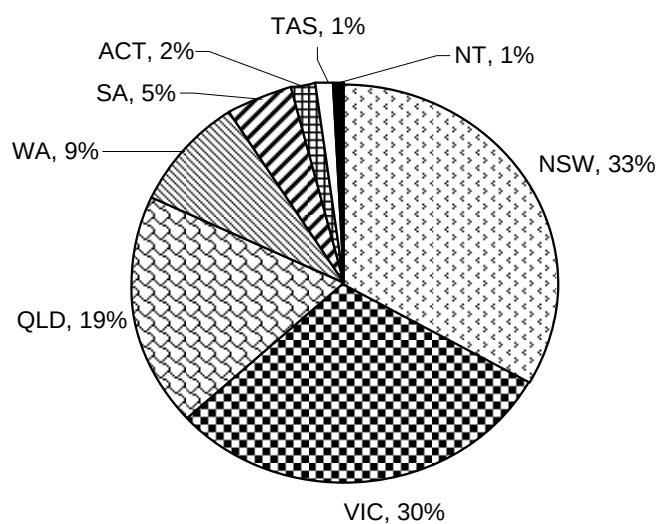
Percentage of building work done



Data source: ABS (Building Activity, Australia, Cat. No. 8752.0).

Figure E.4 Value of building work done, by State and Territory, 2002-03

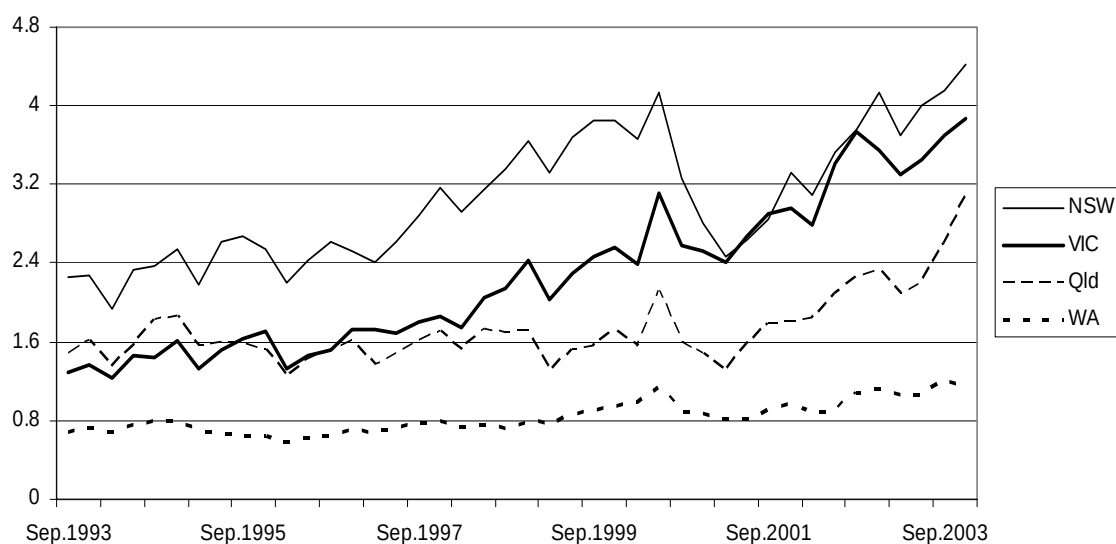
Percentage share



Data source: : ABS (Building Activity, Australia, Cat. No. 8752.0).

Figure E.5 **Building work done by quarter, selected States (New South Wales, Victoria, Queensland and Western Australia)**

\$ billions, current prices



Data source: : ABS (*Building Activity, Australia*, Cat. No. 8752.0).

E.3 Employment

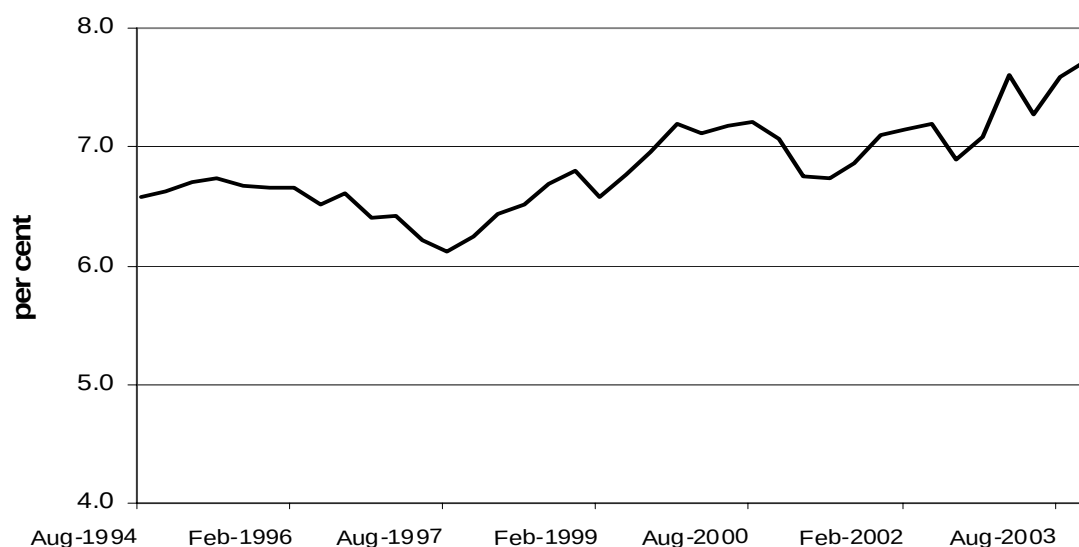
As with output, employment in the building industry represents a significant share of the total. As shown in figure E.6, employment in the industry displays a similar, though less pronounced, cyclical nature to output, varying from 6.1 per cent of total employed persons in 1997 to a high of 7.7 per cent at the end of 2003. The use of contractors and sub-contractors in the building industry provides flexibility by allowing small groups of workers to be brought on to complete sections of a job, but not necessarily for the entire course of the project.

Small firms dominate the building industry. In 1996-97, in the construction industry (including engineering construction), firms employing fewer than 5 people accounted for almost 94 per cent of businesses and 69 per cent of employed persons. At the same time, less than 1 per cent of firms employed more than 20 people. Despite their small number, these firms employed a large number of people — an average of 553 per firm — accounting for nearly 14 per cent of employed persons in the industry. The dominance of small firms in the industry is highlighted by the fact that, for the industry as a whole, an average of 3.9 people are employed

per firm.³ This measure includes engineering construction, a sector characterised by larger firms, and as such, could overstate the average for the building industry. For example, within residential construction, an average of 2.3 people are employed per firm.⁴

Figure E.6 **Building employment as a share of total employed persons, 1994 - 2003**

Percentage share



Data source: ABS (*Labour Force, Australia, Detailed*, Cat. No. 6291.0.55.001).

E.4 International trade in building

In addition to servicing the domestic market, the building industry is involved in international trade. This trade encompasses both the products associated with buildings (inputs such as steel and heating systems) and the services required to design and build them (for example, contractors, architects and engineers).

Trade in goods

Broadly, there are three types of products associated with building (building manufactures) that are internationally traded:

³ ABS (*Private Sector Construction Industry, 1996-97: Australia*, Cat. No. 8772.0), Royal Commission into the Building and Construction Industry 2002a, p. 22.

⁴ ABS (*Private Sector Construction Industry, 1996-97: Australia*, Cat. No. 8772.0)

-
- Building materials: these are primarily raw materials needed for construction, such as iron and steel, cement, bricks, paint, glass, etc.
 - Building products: mostly altered raw materials, such as wood products, plastics, pre-fabricated metal buildings, wood structures, floor coverings, etc.
 - Building equipment and systems: these are the systems needed for buildings, such as electric cables, wires, lights and signs, commercial heating and cooling equipment, etc.

Exports of building-related goods increased over the 1990s, going from \$1.7 billion in 1989-90 to \$3.8 billion in 1997-98, before declining to \$3.0 billion, in 2001-02. This represented 2.5 per cent of total merchandise exports in 2001-02, 4.4 per cent in 1997-98 and 3.4 per cent in 1989-90. Of the total figure, building materials (raw materials such as steel and cement) dominated exports at \$1.5 billion in 2001-02. Exports of building products (altered raw materials such as wood structures and pre-fabricated metal buildings) were at \$1.2 billion in 2001-02, while exports of building systems (finished goods such as heating and cooling systems) were \$0.3 billion. Within building materials, basic iron and steel is the largest export, making up nearly 55 per cent of exports, amounting to more than \$0.8 billion in 2001-02.⁵

However, there are difficulties in identifying the extent to which these materials are destined for use in the building industry overseas. Building exports, particularly materials, can also be utilised as inputs into other industries. An example of this is the use of iron or steel in the manufacture of automobiles as well as buildings. For products used within Australia, Input-Output tables can be used to determine the end use of intermediate goods (such as building products). To accurately measure the end use of exported building products presents significant difficulties as it would require the use of Input-Output tables (or a like statistical measure) in every destination market.

While an exact measure may not be possible, an estimate can be made by applying data from the Global Trade Analysis Project (GTAP) version 5 database. These data contain a usage pattern for each of its 57 internationally traded products. Assuming that Australian exports are used in the same fashion as the destination country's own domestic goods provides the basis on which to estimate the end use of those exports. For example, in 2001-02, Australia exported \$125.9 million of wood products, of which 36.5 per cent (\$45.9 million) are estimated to be destined for use in construction industry. Similarly, 59.7 per cent (\$198.3 million) of non-metallic mineral products (which includes glass, cement, bricks and concrete products) are estimated to be used in the construction industry. While only 11.5 per cent (\$111.7

⁵ ABS (*International Merchandise Trade, Australia, 1989-90-2001-02*, Cat. no. 5422.0, unpublished data).

million) of Australian iron and steel⁶ exports in 2001-02 were direct inputs into the construction industry, the largest single destination industry was the iron and steel industry itself, using 35.2 per cent (\$341.8 million) of iron and steel, indicating that the exported product may undergo further processing in destination countries before it is used as an input in other industries.⁷

Imports of building-related goods consistently increased over the 1990s and into 2001-02, going from \$5.7 billion in 1989-90 to \$11.1 billion in 2001-02. Building products recorded the largest level of imports in 2001-02 (nearly \$5.0 billion), while building systems recorded the lowest (almost \$1.7 billion).

As table E.1 shows, while all imports increased in all sub-categories since 1989-90, the rate of increase has differed across the sub-categories, with imports of building systems growing the fastest, although they have remained at levels significantly below both building materials and products.

Table E.1 Trade in building manufactures, 1989-90 – 2001-02
\$ million, current prices

<i>Year</i>	<i>Category</i>	<i>Exports</i>	<i>Imports</i>
1989-90	Building materials	1121.9	2876.1
	Building products	476.2	2352.4
	Building systems	73.5	486.1
	Total building manufactures	1671.6	5714.6
1995-96	Building materials	2319.1	3349.4
	Building products	1120.2	3305.0
	Building systems	318.7	847.4
	Total building manufactures	3758.0	7501.8
2001-02	Building materials	1493.2	4478.8
	Building products	1205.6	4964.6
	Building systems	324.6	1661.3
	Total building manufactures	3023.4	11 104.8

Trade in services

While trade in services can take several forms, this section focuses on the provision of services by Australian-based firms to consumers in other countries (known as ‘cross-border provision’). In general, trade in services tends to be smaller than trade in goods. This is due to the method of delivery for services, often requiring the

⁶ This measure covers ANZSIC 271, including basic iron and steel, iron and steel casting and forging and steel pipes and tubes.

⁷ Usage percentages derived from: GTAP version 5 database (accessed 27 July 2004)

presence of the service provider in the receiving jurisdiction. Additionally, firms engaged in service provision tend to be smaller than other sectors and often focused on meeting local needs. Advances in technology have gone some way to overcoming this — digital photography, video-conferencing and the internet may allow designs to be created, analysed and delivered without a designer or an architect leaving their home jurisdiction.

Total exports of building and construction services (a combination of construction, architectural, engineering and other technical services) generally grew over the 1990s, increasing from \$336 million in 1991-92, to a high of \$723 million in 1999-00, before slowing and stabilising over the last three years, with exports at \$667 million in 2002-03. These exports accounted for 2 per cent of total services exports in 2002-03.⁸

In 2002-03, construction services exports (which includes residential and non-residential building construction) made up 12.7 per cent of total building and construction services exports, up from a low of 4 per cent in 1998-99.⁹ This represented 0.3 per cent of total services exports in 2002-03 and less than 0.1 per cent in 1998-99. Construction services exports are not only small, but volatile, reaching a high of \$105 million in 1994-95 before falling to \$18 million in 1998-99 and recovering to be at \$85 million in 2002-03. This volatility is affected by both international and domestic conditions:

This volatility reflects the extent to which exports are effected by the cycles of domestic and international construction activity, the ‘Asian Crisis’ and the fact that there is still a significant extent to which exports are seen as a marginal activity which is indulged only when there is excess capacity/low demand in the domestic market. (CSES 2000, p. 47)

The strong performance of the domestic construction market in 1999 (see figures E.1 and E.2, above) would have absorbed most production capacity in the industry, contributing to a low export performance in 1998-99. Despite the small volume of exports, there is some scope for expansion in trade in residential construction services:

Engineering and non-residential building construction have been the major areas of international activity, but there are increasing opportunities to expand housing construction activities overseas – especially in Asia where urbanisation, rapidly growing populations and increasing wealth are feeding demand for urban housing developments. (CSES 2000, p. 44)

⁸ABS (*Balance of Payments and International Investment Position, Australia*, Cat. no. 5302.0).

⁹ABS (*Balance of Payments and International Investment Position, Australia*, Cat. no. 5302.0).

In 1999, as part of the building industry Action Agenda process, the (then) Department of Industry, Science and Resources (ISR) identified several challenges that the building sector faced in international trade. With respect to trade in services, these included restrictions on practitioner licensing as well as commercial requirements such as the use of local professionals or local joint venture partners. In order to improve the industry's capacity to trade, ISR recommended further alignment with international standards and further work be done to both inform the industry of opportunities available and to continue linkages with countries such as Japan.¹⁰

As with exports, imports of building and construction services increased over the 1990s, going from \$235 million in 1991-92 to a high of \$559 million in 1999-2000, before slowing to be at \$334 million in 2002-03.¹¹ There were no recorded imports for construction services from 1991-92 to the present.

E.5 How do we compare internationally?

Comparing the Australian building industry with its overseas counterparts is not straightforward. As noted by Langston and Best (1999, p. 4), the construction industry generally has non-standard products, which are complex and combine a sophisticated range of inputs. There are a number of methodological and measurement problems that make international comparisons difficult:

- different countries may include or exclude different groups of labour in their statistics, which may work to under or overestimate a country's relative performance;
- techniques for determining value added differ across countries, as do adjustments for quality;
- different levels of training and R&D, and the stage of the business cycle in each country, also complicate comparisons; and
- the use of labour productivity as a basis for comparison may give a distorted picture. Relatively capital-intensive countries will tend to appear more productive in terms of labour productivity, but would fare less well in multifactor productivity measures that include capital inputs. (Unisearch 2002, pp. 4–5, 8)

This section attempts to collate evidence from a variety of sources, to present a picture of the Australian building industry in comparison to its overseas

¹⁰ ISR 1999, pp. 69 – 71.

¹¹ ABS (*Balance of Payments and International Investment Position, Australia*, Cat. no. 5302.0).

counterparts. Given the methodological difficulties, the evidence can only be regarded as indicative.

Crowley (2002) noted that construction costs are an important consideration when firms make decisions on the location of their facilities, with lower costs increasing the desirability and competitiveness of the location. He suggested there was room for improvement in the Australian construction industry:

... Australia is regarded as one of the most attractive locations in the world for investment in minerals processing activities. ... However, there are some concerns with construction cost levels in Australia compared to overseas ... Any improvement in productivity can be expected to significantly improve the financial viability of a large number of projects currently under consideration in the minerals processing and energy sectors. (2002, pp. 3–4)

Unisearch's 2002 discussion paper for the Royal Commission into the Building and Construction Industry drew together research evidence on the Australian building and construction industry's performance against four measures — productivity, cost, time and quality. The paper focused on comparisons with Canada, France, Germany, Japan, the UK, the USA and Singapore and found:

- Australia is on a par with Japan and Germany in value added per hour — slightly better than France and the UK but lagging the US, Canada and Singapore. The results are similar for value added per employee, with Australia on a par with Japan, better than the UK, Germany and France, and lagging the US, Canada and Singapore (p. 2);
- Australia rated highly in terms of cost performance in international research comparisons and published series on construction costs (such as the OECD's construction cost PPP index). The most common ranking for Australia was second, with Australia falling within the group of countries with a clear competitive advantage in most of the studies (p. 2); and
- Time and quality were difficult to assess, with Australia featuring in only two studies that attempted to analyse time to completion or time overruns, and not at all in studies of quality in construction (pp. 21–2). However, the report suggested that the UK and Singapore were further advanced in the development of systematic quality assessment systems (p. 3).

Some of the specific findings from the research reports used by Unisearch are included in box E.1.

Interested parties generally believed Australia compared well with its overseas counterparts. For example, the MBA said:

Australia's building and construction industry has been judged to be one of the most productive in the world. Our productivity has been well regarded overseas and our

practices have been actively sought out by many countries for replication. (sub. 24, p. 3)

Box E.1 International comparisons – research findings

Pilat (1996) found Australian building and construction labour productivity in 1990 was above the US, Japan and all European nations, with only Canada recording a higher building and construction output per person. The author noted, however, that output and productivity in the building sector was quite cyclical and productivity differences may be due to the position of countries in their business cycles.

Lewis et al (1996) asserted that Australia's labour productivity in the building and construction industry was at 95 per cent of best practice, just behind the US and on a par with Germany, and that costs were lower than for the US, France, Germany, Sweden and Japan.

Langston and de Valence (1999) evaluated construction costs across seven standard projects (a hotel, office, factory, stadium, highway, railway and petrochemical facility) and found Australia in fifth place behind Germany, the United Kingdom, the US and Singapore. This was based on a comparison of local country costs, with a purchasing power parity (PPP) adjustment and some weighting of contextual factors such as climate, regulatory standards and site safety. Unisearch noted that the validity of the authors' approach to PPP adjustments was debatable (2002, p 10).

Langston and Best (1999) found Australia was a mid-range performer in the construction of high rise commercial office buildings, along with Singapore and Hong Kong. China, Malaysia and the Philippines demonstrated projects of high performance, while Japan and the United Kingdom were relatively poor performers. The concept of performance was based on an index of 'productivity' (square metres/month) and resource consumption (cost/square metre), with some weighting for the scope, extent of siteworks, standard of finish, energy efficiency, foundation material and internal fit-out. However, the study noted that, despite these adjustments, project costs still reflected some differences in local requirements, standards and expectations, so that comparisons were not strictly 'like with like'. The authors also noted some criticisms of their methodology for converting construction costs into comparable units.

F State & Territory regulatory systems for building

The Commission sought information from the State and Territory governments as to the administration of their building regulatory systems. The responses received were collated, as shown in tables F1-F10 below, as follows:

- Core regulatory activities:
 - Planning approval (table F.1)
 - Approval to commence building (table F.2)
 - Inspections of building work (table F.3)
 - Enforcement of building notices/orders etc (table F.4)
 - Occupancy approval (table F.5)
 - Essential services maintenance (table F.6)
- Supporting regulatory activities:
 - Practitioner licensing (table F.7)
 - Accreditation and audit of certifiers (table F.8)
 - Insurance (home building warranty, professional indemnity etc) (table F.9)
 - Dispute resolution (table F.10).

South Australia and Queensland operate integrated development approval processes that consolidate planning and building consents. This appendix therefore, because of how it is collated, may appear to show separate functions that are in fact done as one process. This may also appear to be the case where a record is kept throughout the building process, from the building approval, through inspections and occupancy approval, as is the case with records of building permits kept by the Building Advisory Services Branch, Department of Infrastructure, Planning and Environment in the Northern Territory.

Table F.1 Planning approval

<i>Key Institutions</i>	<i>Responsibilities</i>	<i>Processes</i>	<i>Key documents</i>
Victoria			
Local Council	Determine use of land and approval of land use within its Municipality.	Applicant makes application to the Council for a Planning approval. Usually the proposal is advertised and the affected neighbours are notified and given an opportunity to object. After set period of advertising the proposal is assessed by the Council Officers and a report is provided to council. At the council meeting the application is heard/determined. The next court of appeal is the Victorian Civil Administration Tribunal (VCAT). New processes are being introduced to enable some streamlining of process, however this is only to ensure all relevant information has been provided with the application.	• Planning Act and Planning Schemes formulated and administered by Local Councils. • Res Code
Department of Planning	Develop statewide and regional land use policy within the Victorian planning system. It is also responsible for planning legislation and land development information and planning business systems.		
Queensland			
Department of Local Government, Planning, Sport and Recreation	Administer the Integrated Planning Act (IPA) to integrate State and local government planning and development. Ensure development assessment is integrated under IPA and is managed in a way that is ecologically sustainable. Ensure State interests are reflected in	IDAS (Integrated development assessment system).	• <i>Integrated Planning Act 1997</i>(IPA)

	schemes.		
Local government	Prepare and implement planning schemes and decide development applications under IDAS incorporating State and local government interests.	IDAS (Integrated development assessment system)	• <i>Integrated Planning Act 1997</i> • State planning policies • State legislation relevant to the development application
Building certifier	Assess and decide the building work component of a development application under the IPA against the Building Act. Ensure all necessary development permits and preliminary approvals are effective for other assessable development related to the development. (i.e. other local and State approvals have been issued) Ensure the building application is consistent with earlier approvals required by the legislation.	To ensure the building application is consistent with IPA and planing schemes.	• <i>Integrated Planning Act 1997</i> • Local planning scheme

South Australia

Planning SA	Monitor and amend legislation governing control of development.	Single development process consolidating planning and building consents.	• Development Act and Regulations 1993
Local Councils	Assessment of development application for compliance with planning regulations. Granting of Building Rules consents.^a	Applicants submit plans to council, assessment carried out within 2 weeks if complying development and 8 weeks otherwise. Assessment carried out within 4 weeks or 12 weeks.	• Development application form • Building Rules consent • Builder's certificate of indemnity insurance for construction of dwellings • Construction Industry Training Board levy form • Form 1 Schedule 16 (schedule of Essential Safety Provisions)

continued on next page

Table F.1 continued

<i>Key Institutions</i>	<i>Responsibilities</i>	<i>Processes</i>	<i>Key documents</i>
South Australia (continued)			
Building Rules Assessment Commission (BRAC)	To provide concurrence on applications to vary the Performance Requirements of the BCA.	Building /Rules certifier must obtain concurrence from BRAC before granting a consent for work that is at variance with the Performance Requirements of the BCA.	• BRAC Forms A(1) and A(2)
Private certifiers	Granting of Building Rules consents^a where engaged by developer or owner. Assess development applications for compliance with SA Building Rules and BCA.	Applicants submit plans to private certifier, assessment carried out within 4 weeks or 12 weeks. Private certifier issues building consent, consent taken to council for purposes of issuing development approval.	• Development application form • Building Rules consent • Builder's certificate of indemnity insurance for construction of dwellings • Construction Industry Training Board levy form • Form 1 Schedule 16 (schedule of Essential Safety Provisions)
	Certification of compliance with Building Rules for Major Developments.	Applicants submit plans to private certifier for assessment, assessment carried out within 4 weeks or 12 weeks. Certification of compliance sent to Minister, Minister sends copy of approval and approved documents to council.	• Development application form • Certificate of Compliance with the Building Rules • Construction Industry Training Board levy form • Form 4 Schedule 16 (schedule of Essential Safety Provisions)
Development Assessment Commission (DAC)	Development authorisation for Out of Council areas and referred developments. Building Rules consents for Out of Council areas.	Applicants submit plans to council, assessment carried out within 2 weeks if complying development and 8 weeks otherwise. Applicants submit plans to DAC, assessment carried out within 4 weeks or 12 weeks.	• Development application form
The Governor	Development authorisation for Major Developments.	Applicants submit plans to the Minister for assessment and processing.	• Development application form

Western Australia

Department of Planning and Infrastructure	Planning legislation and policy.		• <i>WA Planning Commission Act 1985</i> • <i>Metropolitan Region Town Planning Scheme Act 1959</i> • <i>Town Planning and Development Act 1928.</i> • Current proposals to consolidate legislation are underway (Planning and Development Bill 2004)
Local Councils	Assess development applications and grant planning approval.	Where required, a developer must submit an application for planning approval. May require Council approval or approval may be delegated to a Council officer.	• Development Application • Residential Design Codes (R-Codes) – prepared by WAPC and provide a comprehensive basis for the control, through local government, of residential development
Western Australian Planning Commission (WAPC)	Planning appeals.	Hears and determines appeals against refusal to issue planning approval.	

Tasmania

Resource Planning and Development Commission	Overseeing the State's Planning System, State of the Environment reporting and assesses public land use issues and projects of State significance.	The Commission has five principle functions: • to assess and approve local government planning schemes and planning scheme amendments; • to assess projects of State significance;	Prescribed under the following Acts: • <i>Land Use Planning and Approvals Act 1993</i> • <i>Public Land (Administration and Forests) Act 1991</i>

continued on next page

Table F.1 continued

<i>Key Institutions</i>	<i>Responsibilities</i>	<i>Processes</i>	<i>Key documents</i>
Tasmania (continued)			
		• to assess Draft State Policies; • to prepare the Tasmanian State of the Environment Report; and • to conduct inquiries into the use of public land.	• <i>State Policies and Projects Act 1993</i>
Local Council	Enforcement and observance of Planning Schemes and Issuing Planning Permits.	If Council Planning Scheme requires a Planning Permit for a use or development, an owner must apply to the Council for the Permit before using or undertaking the development.	• Planning Scheme • Planning Permit
Northern Territory			
Minister for Lands and Planning	“Consent Authority” where a Division of the Development Consent Authority (DCA) is not established in relation to an area of land. Consent Authority unless otherwise delegated to DCA or other officer.	Development application is assessed by Development Assessment Services (DAS) and report with recommendation and service authority comments submitted to Minister for determination.	• Conditional or Unconditional Development Permit • Notice of Refusal • Interim Development Control Order • Variation Permit • Certificate of Compliance
Development Consent Authority	Established under the NT Planning Act. Members appointed by Minister for Lands and Planning. Minister establishes Divisions where DCA is the “Consent Authority” and has delegation to determine development applications.	Development Application or Variation to Development Application assessed by DAS and report with recommendation and service authority comments submitted to relevant Division of Development Consent Authority for determination.	• Conditional or Unconditional Development Permit • Variation Permit • Notice of Refusal • Certificate of Compliance
Development Assessment Services, Department of Infrastructure, Planning & Environment (DIPE)	Administrative arm which provides support to DCA.	Planners assess Development Applications against set criteria and the NT Planning Scheme and evaluate comments received from other NT Government Service Authorities (PowerWater, Department of Health and Community Services etc), prepare report with recommendation to the Development Consent Authority.	• Assessment Report

Lands and Mining Tribunal	Appeal Body for the purposes of the NT <i>Planning Act</i> established under NT <i>Lands and Mining Tribunal Act</i> .	An applicant has right to appeal against any determination of the DCA (i.e. refusal to issue permit, if DCA does not determine application, refusal to extend period of permit, against a condition or alteration imposed, refusal to refund or remit contribution to service authority, against variation of condition placed on permit). Notice of Appeal must be lodged with Registrar within 28 days of date of determination. There is no right of appeal against determinations of the Minister for Lands & Planning.	• Determination of Appeal

Australian Capital Territory

ACT Planning and Land Authority. (The function is not privatised).	Administration of ACT planning laws, which apply where NCA does not have jurisdiction.	Proponent applies to Authority. Authority examines documentation, and consults as required with interested Government agencies and neighbouring landowners, and makes a decision. Authority grants or refuse to grant development approval.	• Development application forms available from Authority • Development plans • Approval documents including any conditions of approval • Consultation submissions.
Other interested agencies, eg health, environment, etc	Administration of relevant laws and to consult with the Authority on development applications.	Authority circulates development plans to agencies for comment.	• Development plans, documented advice from agencies.
National Capital Authority (NCA) (the function is not privatised).	Administration of Commonwealth planning laws where they have ACT jurisdiction.	Proponent applies to NCA. NCA examines documentation, and makes a decision. NCA grants or refuses to grant development approval.	• Development plans and approval documentation.

^a all building **applications** must be assessed by people accredited as Building Surveyors, Assistant Building Surveyors or Building Surveying Technicians. Granting of **consent** must be done by registered certifier, council or someone exercising delegated authority from council.

Table F.2 **Approval to commence building**

<i>Key Institutions</i>	<i>Responsibilities</i>	<i>Processes</i>	<i>Key documents</i>
Victoria			
Building Commission	Oversight of building regulations relating to inspections.		• <i>Building Act 1993, Building Regulations 1994,</i> • Building Code of Australia.
Local councils	Where local council has been appointed to issue the building permit, the Relevant Building Surveyor has obligations to ensure that the documentation complies with the <i>Building Act 1993, Building Regulations 1994</i> , the BCA and that the permit is consistent with the relevant planning permit.	Owner or duly authorised agent of the owner makes building application for Building approval. Part of the Building Permit requirements may include obtaining approval from some other authorities, e.g. the Metropolitan Fire and Emergency Services Board (MFSEB).	• <i>Building Act 1993, Building Regulations 1994,</i> • Building Code of Australia.
Private Certifiers (Relevant Building Surveyors)	As above	As above	As Above.
Queensland			
Department of Local Government, Planning, Sport and Recreation	Oversee building codes and regulations relating to approvals for building work to ensure the quality, structural integrity and safety of public and private building works and infrastructure.		• Integrated Planning Act 1997 • Building Act 1975 • Standard Building Regulation 1993 • Queensland Development Code
Local government	A local government must appoint building certifiers to assess and decide building applications.	Assess building application for compliance with the legislation including: site investigation, other development approvals, consistency with earlier approvals, other approvals required by planning schemes, amenity and aesthetics, sewerage and water supply, code applications.	Owner receives approval documents. Archive building approval documents

		Building referral agency responses required. Further information required from applicant. Accepting certification from competent persons. Issue a decision notice and development permit. Application refused or not satisfied with approval conditions, appeal to Building and Development Tribunal.	
Private Certifiers	Assess and decide building approval.	Assess building application for compliance with the legislation including: site investigation, other development approvals, consistency with earlier approvals, other approvals required by planning schemes, amenity and aesthetics, sewerage and water supply, code applications. Building referral agency responses required. Further information required from applicant. Accepting certification from competent persons. Issue a decision notice and development permit. Application refused or not satisfied with approval conditions, appeal to Building and Development Tribunal.	Certifier lodges notice of engagement within 5 days Owner informed private certifier is engaged and given details of certifier's responsibilities. Owner receives building approval documents. Council receives building approval documents for archiving

South Australia

Planning SA	<i>Development Act and Regulations 1993</i>	Single development process consolidating planning and building consents.	
Councils	Local government issues development approval.	Construction can commence when development approval has been issued, but one day's notice of commencement must be given to council. Both planning and building consents must be in place and be consistent with each other and then the development approval must be issued within 5 days.	• Development approval

continued on next page

Table F.2 (continued)

<i>Key Institutions</i>	<i>Responsibilities</i>	<i>Processes</i>	<i>Key documents</i>
Western Australia			
Department of Housing and Works	Administer building standards, regulations and building legislation.		• <i>Local Government (Miscellaneous Provisions) Act</i> • Building Regulations • Building Code of Australia
Local Government Authorities	Assess applications for building licences Check design compliance with the BCA Check other statutory approvals are in place Issue building licences	Builder submits application for building licence along with plans and specifications. LGA checks design compliance with the BCA. “Deemed to satisfy” solutions are checked by the LGA building surveyor – where performance solutions are utilised in the design the LGA may seek specialist certification from relevant building industry professionals that the design complies with the BCA. Once satisfied the design complies with the BCA, and all other statutory approvals are in place (planning, health etc.), the building licence can be issued. The building licence may specify certain conditions (e.g. the Local Authority may require inspections to be carried out at certain stages of construction).	• Building Licence Application • Building Licence – may specify conditions • Approved plans and specifications – details the building that is approved to be erected.

Building Professionals (architects, engineers, etc.) – only architects have a legislated registration system The provision of certification services by building professionals is not currently regulated	May certify design compliance with the BCA in their specialty areas.	Where specifically requested, building professionals assess the submitted design against the BCA in the appropriate aspect of design. This is an informal and completely unregulated process – it is up to the LGA Building Surveyor whether or not to obtain this certification to be satisfied the design complies with the BCA. There is no requirement to do so.	Compliance Certificate (may be issued); or Plans may simply be signed (to signify BCA compliance certified by relevant professional)

Tasmania

Building Surveyor (BS) (Can be private or working in a Council)	Issuing Certificate of Likely Compliance (Compliance with the BCA).	Owner applies to BS for Certificate of Likely Compliance. BS obtains report from Reporting Authority if required. (CO & EHO). BS issues Certificate of Likely Compliance if proposed building work in compliance with BCA.	• Chief Officers (CO) Report • Environmental Health Officers (EHO) Report • Certificate of Likely Compliance
Permit Authority (PA) (Appointed by Local Council)	Issuing Building Permits.	Owner submits Certificate Of Likely Compliance with application and any other required documents to PA for Building Permit. PA issues Building Permit.	• Application for Building Permit • Building Permit

continued on next page

Table F.2 continued

<i>Key Institutions</i>	<i>Responsibilities</i>	<i>Processes</i>	<i>Key documents</i>
Northern Territory			
Building Advisory Committee	Established under the NT <i>Building Act 1993</i> to advise the Minister on the administration of the Act.	Direct dialogue with Minister for Lands and Planning.	Ministerial Correspondence
Director Building Control	Public Sector employee appointed by the Minister for Lands and Planning to advise Minister on all matters relating to building in the Territory and to administer the Act.		
Private Building Certifier (PBC)	Building Practitioner registered with the Building Practitioners Board. Function of private building certifier is to grant building permits under and in accordance with NT <i>Building Act 1993</i> and Regulations.	Building owner applies to private building certifier for a building permit submitting all relevant drawings etc. PBC reserves building permit number from Building Advisory Services Branch. Assesses drawings for compliance with <i>Building Act</i> and regulations and issues Building Permit. PBC must submit all documentation to Building Advisory Services Branch within 7 days of issue of permit.	• Building Permit
Building Appeals Board	Established under the NT <i>Building Act 1993</i> . Members appointed by Minister for Lands and Planning who have experience in building industry or matters connected with building industry. Functions are: 1. to determine appeals relating to disputes about effect of Building Regulations or the manner in which the Building Regulations are to be or have been complied with; 2. to determine appeals relating to the application of the Building Regulations to land, buildings or building work.	Building owner or agent (PBC, Architect or other practitioner) makes application for a modification to the application of a Building Regulation and submits all drawings and evidence for their case. Board considers application and either requests further information or makes determination.	• Letter of Approval • Letter of Refusal

Building Advisory Services Branch, (BASB)	Maintains a Building Permit Register.	Holds a record of all documentation with regard to building permit issued on relevant building record.	• Building Record

Australian Capital Territory

Building surveyor (ACT Government does not compete against building surveyors).	Comply with relevant laws regulating building approval and commencement.	Landowner appoints certifier (a building surveyor) and licensed builder. Landowner applies to certifier for building approval. Builder applies to certifier for commencement notice. Certifier grants or refuses to grant building approval and / or commencement notice.	Authority provides forms for building approval application. Building approval (approved construction plans) is stamped on and / or attached to plans.

Table F.3 **Inspections of building work**

<i>Key Institutions</i>	<i>Responsibilities</i>	<i>Processes</i>	<i>Key documents</i>
Victoria			
Building Commission	Oversight of building regulations relating to inspections		• <i>Building Act 1993, Building Regulations 1994</i>
Local councils	Where local council has issued the building permit, to undertake the following mandatory inspections as noted in the Building regulations and can be inspected at any stage whether or not a mandatory inspection stage.	Builder must notify council when works have been completed for mandatory inspection stage. The mandatory inspection stages are: prior to placing of footing, prior to pouring of insitu reinforced concrete, completion of framework, final — upon completion of all building work. Or variations of the above by the relevant building surveyor (RBS).	• Certificate of Final Inspection; or • Certificate of Occupancy.
Private certifiers	As per Local Councils	As per Local Councils	• Certificate of compliance
Queensland			
Department of Local Government, Planning, Sport and Recreation	Oversee building codes and regulations relating to inspections of building work.		• <i>Building Act 1975</i> • <i>Standard Building Regulation 1993</i>
Local government	Council building certifiers undertake mandatory inspections as per Standard Building Regulation 1993.	Builder must notify council when inspection required. Building certifier inspects the work or accepts a certificate from a competent person for compliance with the legislation.	• <i>Standard Building Regulation 1993</i> • Written notice by certifier that inspected work complies.
Private certifier	Private certifier undertakes mandatory inspections as per Standard Building Regulation 1993.	Private certifier inspects building work when requested by builder or accepts a certificate from a competent person. Building certifier must do final stage inspection.	• <i>Standard Building Regulation 1993</i> • Written notice by certifier that inspected work complies.

South Australia

Planning SA	Oversight of building regulations.		• <i>Development Act and Development Regulations 1993</i>
Local councils	Undertake inspections as set out in Councils' inspection policies for compliance with development approval (compliance with both planning and building consents). Authorised officers have powers to enter and inspect building work.	Council must have an inspection policy and have responsibility for on-going safety of buildings in their area. They manage this according to risk and resources. Builder must notify council at mandatory notification stages. Council may or may not inspect. Builder/owner issue Statement of Compliance on completion to council or private certifier (all buildings). Council or certifier issues certificate of occupancy for Class 2 to 9 buildings based on Statement of Compliance. If issued by private certifier, must be forwarded to local council.	• Council inspection policies • Enforcement notices • Statement of compliance. • Certificate of Occupancy
Private certifiers	If consent granted by private certifier, then Statement of Compliance must be sent to private certifier, who then sends a copy to the local council. Owner builders must get a private certifier or a licensed building work supervisor to sign part of the Statement of Compliance on completion of work.	Private certifiers must forward copies of Statements of Compliance to the local council. Private certifiers may issue Certificate of Occupancy on receipt of Statement of Compliance and relevant documentation.	• Statement of Compliance • Certificate of Occupancy

continued on next page

Table F.3 continued

<i>Key Institutions</i>	<i>Responsibilities</i>	<i>Processes</i>	<i>Key documents</i>
Western Australia			
Department of Housing and Works	Administer building standards, regulations and building legislation.		• Local Government (Miscellaneous Provisions) Act • Building Regulations • Building Code of Australia
Local Government Authorities – typically through person appointed to office of Building Surveyor	Has discretionary power to conduct independent building inspections. May inspect building works, but inspections are not mandatory under current legislation.	Inspections or conditions are specified on the building licence. Building surveyor may inspect construction at certain stages for compliance with approved plans.	
Tasmania			
Building Surveyor (BS) (Can be private or working in a Council)	Overseeing compliance of the building work with the Building Permit and BCA.	Builder advises BS before starting work. BS determines mandatory notification stages. Builder advises BS when the building work reaches mandatory notification stage. BS may inspect. BS can issue a written direction to builder after inspection if required. Builder may continue 1 day after mandatory notification stage passes. BS issues Certificate of Final Inspection. (To include reasons for non-inspection or alternative on Certificate where inspections not undertaken).	• Building Start Work Notice. • Building Inspection Direction. • Certificate of Final Inspection
Permit Authority (PA) (Appointed by Local Council)	Issuing Completion Certificates.	Owner applies to PA for Completion Certificate. PA issues Certificate if: • Occupancy Certificate issued • Certificate of Final Inspection provided • All conditions of Permit have been met.	• Certificate of Completion (Building Work)

Northern Territory

Private Building Certifier (PBC)	Responsible for notifying person carrying out building work of inspection stages. Responsible for on-site inspection of building work at particular stages. PBC may also inspect building work at any time, whether or not an inspection stage has been completed with the owner's consent. PBC may, after inspection work, direct the person carrying building work to carry out work so that the work complies with the relevant building permit, the Act or Regulations as the case requires.	Before building work commences, the private building certifier who granted the building permit, notifies in writing, the person who is carrying out the building work, the inspection stages, if any, of the building work. PBC inspects stage upon notification by the owner or person carrying out building work of completion of that particular stage. No building work is to proceed until directed to do so by building certifier.	• Inspection Reports
Building Advisory Services Branch (BASB)	Maintains a Building Record.	Holds a copy of Inspection List undertaken by Building Certifier relevant to the Building Permit.	• Building Record

Australian Capital Territory

Certifier (non-ACT-Government in all but exceptional cases).	Comply with laws regulating: building work inspection at mandatory inspection stages (footings, certain concrete elements, frames, final completion).	Licensee in charge of work is prohibited from building beyond mandatory stages unless certifier notified, work inspected and certified by certifier as compliant with requirements and certifier gives permission to proceed. Certifier required to advise on how to bring non-compliant work into compliance.	• Building approval • Certificates relied on by certifier (eg engineer's certification) • Certifier's inspection record • Certifier's advice on how to achieve compliance (if applicable) • Certifier's compliance certification and permission to proceed.

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Table F.3 (continued)

<i>Key Institutions</i>	<i>Responsibilities</i>	<i>Processes</i>	<i>Key documents</i>
Australian Capital Territory (continued)			
ACT Government certifier (only in exceptional cases where the appointed certifier and no other certifier will provide service and building work has commenced but is incomplete).	As for certifier above.	As for certifier above.	As for certifier above.

Table F.4 **Enforcement of building notices/orders etc**

<i>Key Institutions</i>	<i>Responsibilities</i>	<i>Processes</i>	<i>Key documents</i>
Victoria			
Local Council	Has ultimate responsibility for administering the <i>Building Act 1993</i> , within its municipality. It can issue notices and orders and also take legal action.	Either through the inspection process the council becomes aware of problems or complaint from community, the council can investigate and issue the appropriate notices or orders. Dependant upon the nature of the issue Council can process through the Courts or in extreme cases can take action to make safe and charge costs to the site.	• <i>Building Act 1993</i> • <i>Building Regulations 1994</i>
Private Certifier (Relevant Building Surveyor (RBS))	Has responsibility for administering the <i>Building Act 1993</i> , only for Building Permits they have issued. It can issue notices and orders. If there is no action then the RBS can refer it to the Commission.	Either through the inspection process the RBS becomes aware of problems or complaint from adjoining property. The RBS can investigate and issue the appropriate notices or orders. If the orders are not addressed then the RBS can refer to the Building Commission.	• <i>Building Act 1993</i> • <i>Building Regulations 1994</i>
Building Commission	The Commission issues orders that have been referred to it from the Private Surveyors. If those orders are not met then they are pursued in the law courts.	The Private Building Surveyor or the public provide details to the Commission.	• Building Act 1993 • Building Regulations 1994
Queensland			
Department of Local Government, Planning, Sport and Recreation	Oversee building codes and regulations relating to enforcement action for building work.		• <i>Integrated Planning Act 1997</i> • <i>Building Act 1975</i> • <i>Standard Building Regulation 1993</i>

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Table F.4 continued

<i>Key Institutions</i>	<i>Responsibilities</i>	<i>Processes</i>	<i>Key documents</i>
Queensland (continued)			
Local government	Council may take enforcement action for non-compliance with building approval.	Council issues show cause or enforcement notice for non-compliance of work. May prosecute in court. Council may complain to Building Services Authority (BSA) about the conduct of a private certifier or take a complaint directly to the Commercial and Consumer Tribunal.	• <i>Integrated Planning Act 1997</i> • <i>Building Act 1975</i>
Private certifier	Certifier may take enforcement action for non-compliance with building approval.	Certifier issues show cause or enforcement notice for non-compliance of work. Local government may take over for prosecution. Owner may complain to BSA about the performance of a private certifier. Appeal against the decision by the BSA of professional misconduct to the Commercial and Consumer Tribunal.	• <i>Integrated Planning Act 1997</i> • <i>Building Act 1975</i> • <i>Commercial and Consumer Tribunal Act 2003</i>
South Australia			
Councils	Councils have responsibility for on-going safety of buildings in their area and for addressing breaches of the Act.	Council authorised officers may issue notices to remedy breaches of the Act, non-compliance with approved documents and other safety risks.	• <i>Development Act and Regulations 1993</i> • s84 notices may be issued
Environment, Resources and Development Court	Enforcement orders, disputes and appeals relating to planning consents, building consents, development approval, Certificates of Occupancy and enforcement notices.	Any person can apply to the Court for rectification of a Breach of the Act. Councils can apply to the Court to have enforcement orders issued. Hears appeals with respect to development approvals, consents and enforcement notices, as per Development Act & Regulations. No appeal against decision of Commissioner in building matters on decision of fact.	• Forms available from the Court Registrar – fees payable to Court. • Rules of the Court • <i>Development Act and Regulations 1993</i> • Court can issue orders

Western Australia

Department of Housing and Works	Administer building standards, regulations and building legislation.		• Local Government (Miscellaneous Provisions) Act • Building Regulations • Building Code of Australia
Local Government Authorities (LGA)- typically through person appointed to office of Building Surveyor	May enforce compliance for failure to comply with licence conditions/follow approved drawings. May enforce building notices/orders.	Each Local Government Authority may enforce for buildings in its locality.	• Building Notice/Order (non-compliance/stop work)
Local Government Authorities - typically through person appointed to office of Building Surveyor	Police and manage unauthorised building activity Enforce current building standards.	LGA may issue notice to demolish or alter unauthorised buildings. If satisfied building work meets the relevant standards the LGA may withdraw a notice to demolish or alter illegal buildings.	• Notice to demolish or regularise - Demolition or Removal Notice
Builders Registration Board	Prosecution for illegal building works (constructing without a building licence). Prosecution of unregistered persons for construction of works valued over \$12,000.	Prosecution for illegal building work.	• Court documents for prosecution

Tasmania

Building Surveyor (BS) (Can be private or working in a Council)	Issuing Building Notices and Building Orders for work he has been engaged to assess which does not comply with Permit or Act.	BS issues Building Notice to show cause why (amongst other things) specific work should not be carried out. A person may make representations and BS can revoke Notice. If Building Notice not revoked BS to issues Building Order requiring the work to be carried out. A person must not fail to comply with a Building Order.	• Building Notice • Building Order

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Table F.4 continued

Key Institutions	Responsibilities	Processes	Key documents
Tasmania (continued)			
General Manager of Council	Ensuring that proceedings are taken against persons failing to comply with Act where: • threat to life may results from the condition of existing buildings; or • building work is undertaken without a building permit or a building is used in contravention of the Act or is not maintained in accordance with Regulations.	In undertaking the normal governance role, Council officers would take action under the <i>Building Act 2000</i> to issue the relevant Notice or Order.	• Emergency Order • Building Notice • Fire Upgrading Report • Fire upgrading Notice • Building Orders
Northern Territory			
Director Building Control	Responsible for enforcement of safety and building standards. Director may serve a building notice on an owner of a building or the owner's agent, if the Director is of the opinion that: • building work has been carried out on the building without a building permit or in contravention of the Act; • the building's use contravenes the Act; • the building is unfit for use or occupation; or • it is a danger to its users or the users of adjoining properties or streets. Director may make a Building Order after the time allowed for making representations has expired. Director may make a Building Order without a Building Notice if he deems the building work required to be sufficiently minor.	Building Notice may require owner or agent to show cause within set period specified by Director Building Control why occupation of the building or its use for public assembly should not be prohibited. The owner or agent has specified period to make representations to the Director. Building Order may prohibit occupation of a building or its use or require owner or agent to evacuate, to stop work or to carry out building work or to comply with any other direction as specified within 28 days.	• Building Notice • Building Order • Emergency Order

Where in the opinion of the Director it is necessary to do so because of a threat to life arising out of the condition, use or conduct of a public assembly, of a building, the Director may make an emergency order.

Private Building Certifier

After an inspection, a person carrying out building work fails to comply with a direction to carry out building work, so as to make it comply with the building permit or Act, shall be served with a building notice.

Building Certifier may make Building Order also.

Building Certifier who makes a building order must provide a copy of the order within 2 days to the Director Building Control.

Building Advisory Services Branch (BASB)

Maintains a Building Record.

Maintains a Register of Building Orders.

Holds a separate record of all documentation with regard to building notices and orders issued on relevant property record.

- Building Record
- Building Orders Register

Australian Capital Territory

ACT Planning and Land Authority

To administer key laws regulating construction.

Authority issues notices and takes compliance action or initiates DPP prosecution for failure to comply.

Notices or orders under various laws.

Certifiers

To consider issuing notices prohibiting further building work being carried out (Stop Work Notices).

Certifier has discretion to issue notice under building law in respect of building work certifier is appointed for where certifier believes grounds exist for notice. Alternatively, certifier can request Authority to issue order.

Inspection records and Stop Work Notices.

Table F.5 **Occupancy approval**

<i>Key Institutions</i>	<i>Responsibilities</i>	<i>Processes</i>	<i>Key documents</i>
Victoria			
Local councils	Where local council has been appointed to issue the Occupancy Permit (OP), the Relevant Building Surveyor has obligations to ensure that the documentation complies with the <i>Building Act 1993</i>, <i>Building Regulations 1994</i> and the BCA and that the premises are suitable for occupation. Note: 1. OP for Temporary structures can only be issued by the Commission. 2. For some Places of Public Entertainment (POPE) that are nominated, the OP can only be issued by the Commission.	Owner or duly authorised agent of the owner makes application for OP. Part of the OP requirements may include obtaining approval from some other authorities, e.g. the MFSEB.	• <i>Building Act 1993</i>, <i>Building Regulations 1994</i>, • Building Code of Australia. • Other relevant Acts
Private Certifiers (Relevant Building Surveyors)	As above Note: Private Surveyors cannot issue OP for POPE or for Temporary Structures.	As above	As above
Building Commission	For Temporary Structures and designated POPE's the BC assess suitability of application for OP ensuring compliance with relevant Acts, Regulations. Issue the OP for designated venues and for Temporary Structures.	An application is made under the Building Regulations. The application is assessed and an OP is issued if suitable.	• <i>Building Act 1993</i> • <i>Building Regulations 1994</i>
Local government	Issue a certificate of classification for buildings other than for single detached class 1a and 10. Final inspection certificate for single detached class 1a and 10.	Owner receives certificate of classification. Cannot use building until certificate issued.	• Certificate of classification • Final inspection certificate

Private certifier	Issue a certificate of classification for buildings other than for single detached class 1a and 10 buildings. Final inspection certificate for single detached class 1a and 10.	Owner receives certificate of classification. Cannot use building until certificate is issued. Certifier lodges copy of certificate of classification and inspection within 5 days after all building work is inspected.	• Certificate of classification • Final inspection certificate

South Australia

Local councils	To monitor that buildings are not illegally occupied and issue Certificates of Occupancy when sought.	On application, issue Certificate of Occupancy once Statement of Compliance received.	• Application for Certificate of Occupancy • Certificate of Occupancy
Private certifiers	To issue Certificates of Occupancy when sought.	On application, issue Certificate of Occupancy once Statement of Compliance received and send a copy to the council.	• Application for Certificate of Occupancy • Certificate of Occupancy
Installers of safety items	Issue certificate stating essential safety provisions have been installed in accordance with approval.	Required to be submitted as part of Statement of Compliance for Certificate of Occupancy.	• Form 2, Schedule 16
Building owner	Not to occupy a building without a Certificate of Occupancy or in contravention of a Statement of Compliance. Must issue annual certificate verifying maintenance of essential safety provisions – failure to provide can be grounds for council to revoke Certificate of Occupancy.		• Certificate of Occupancy • Form 3, Schedule 16

continued on next page

Table F.5 **continued**

<i>Key Institutions</i>	<i>Responsibilities</i>	<i>Processes</i>	<i>Key documents</i>
Western Australia			
Department of Housing and Works	Administers building standards, regulations and building legislation.		• Local Government (Miscellaneous Provisions) Act • Building Regulations • Building Code of Australia
Local Government Authorities	Issue Certificates of Classification for Class 2 – 9 Buildings. No certificates are issued for other classes of building.	Once satisfied the construction meets the requirements for that particular class of building, the relevant Local Government Authority issues a Certificate of Classification. Building cannot be occupied until certificate has been issued.	Certificate of Classification – specifies construction meets the requirements for that particular class of building and allows building to be used for purpose specified.
Tasmania			
Building Surveyor (BS) (Can be private or working in a Council)	Issuing Occupancy Permits.	Owner applies to BS for Occupancy Permit. BS obtains report from Reporting Authority if required (Chief Officers (CO) & Environmental Health Officers (EHO)). BS issues Occupancy Permit if satisfied building or part of building suitable for occupation. New Occupancy Permit required for change of use.	• Chief Officers Report • Environmental Health Officers Report • Occupancy Permit
General Manager (GM) of Council	Issuing Temporary Occupancy Permits for buildings (not covered by normal Occupancy Permit) and temporary structures.	Owner applies to GM for Temporary Occupancy Permit. GM takes into account various matters in Regulations including a Certificate of Suitability for Temporary Occupation for a building or a Certificate of Likely Compliance of the Temporary Structure with the BCA. Both from a BS. GM issues Temporary Occupancy Permit if satisfied building or temporary structure suitable for occupation.	• Application for Temporary Occupancy Permit • Certificate of Suitability for Temporary Occupation • Certificate of Likely Compliance • Temporary Occupancy Permit

Northern Territory

Private Building Certifier (PBC)	Function of PBC is to grant Occupancy Permit under and in accordance with the NT <i>Building Act 1993</i> and Regulations. Illegal to occupy a building without an occupancy permit or approval to occupy on temporary basis.	Applications are made by building owner or agent to PBC in writing. Application must be accompanied by a declaration stating that the building work to which it relates has been carried out in accordance with the building permit.	• Occupancy Permit • Builders' Declaration
Building Advisory Services Branch (BASB)	Maintains a Register of Building Files.	Holds a record of all documentation with regard to occupancy permits issued on relevant building file.	• Building File

Australian Capital Territory

ACT Planning and Land Authority (function is not privatised).	Administer ACT building occupancy law. Authority issues or refuses to issue certificate of occupancy or use.	Land owner applies to authority for occupancy certificate. Authority checks for certifier's final compliance certificate recommending issue of occupancy certificate and for electrical and plumbing clearances.	• Authority provides a combined form for occupancy certificate application and certifier's compliance certificate and recommendation. • Authority provides forms for electrical and plumbing clearances. • Certificate of occupancy or use.
Commonwealth Government	Administer relevant Commonwealth laws and land interest agreements.	Certain Commonwealth land parcels in the ACT may have specific occupancy approval process requirements eg Canberra International Airport.	

Table F.6 **Essential services maintenance**

<i>Key Institutions</i>	<i>Responsibilities</i>	<i>Processes</i>	<i>Key documents</i>
Victoria			
Building Commission	Oversight of building regulations relating to maintenance of essential services.		• <i>Building Act 1993</i> • <i>Building Regulations 1994</i> • Practice Note 23
Local Councils	If appointed as the Relevant Building Surveyor for the issue of the Occupancy Permit, the RBS must determine the essential services within the building, their level of efficacy, their frequency and their maintenance requirements. This is issued as a condition of OP or determination with the CoFI.	RBS determines and lists the essential services, their frequency and maintenance requirements to be adhered to.	• <i>Building Act 1993</i> • <i>Building Regulations 1994</i> • Practice Note No. 23
Private Certifier	As above	As above	As above
Owner	To maintain essential services, keep records and produce an annual report. The record keeping provisions are only spelt out for the Division 1 buildings (ie post July 1994).	Process as specified on conditions to OP or determination on CoFI.	As above
Queensland			
Queensland Fire Rescue	Inspection of some classes of structures.	Refer QFRS.	
South Australia			
Certifiers	When issuing building consent, must identify essential safety provisions in building that require ongoing maintenance (as per Ministers Specification SA76).	Form 1 filled out and issued to applicant as part of building rules consent. Receive Form 2 with Statement of Compliance prior to issuing Cert of Occupancy.	

Councils	When issuing building consent, must identify essential safety provisions in building that require ongoing maintenance (as per Ministers Specification SA76).	Form 4 filled out and issued to applicant as part of building rules consent. Receive Form 2 with Statement of Compliance prior to issuing Cert of Occupancy.	• Form 4, schedule 16 • Form 2, schedule 16
	Ensure annual certification of safety items. Failure to issue certificate can be basis for rescinding Certificate of Occupancy.	Form 3 filled out and returned annually to council by owner.	• Form 3, schedule 16
Building owner	To maintain all essential safety provisions in original condition.	Form 3 filled out annually and forwarded to council.	• Form 3, schedule 16

Western Australia

Currently there are no requirements for essential services maintenance.

Tasmania

Building Surveyor (BS) (can be private or working in a Council)	Determining the essential safety and health features and essential safety and health measures appropriate to the building for which maintenance is required.	BS to attach schedule of essential safety and health features and measures to the Occupancy Permit having regard to details provided with application for CoLC, the BCA and Regulations. If alterations or additions occur BS to update to one consolidated Schedule.	• Schedule of Essential Safety and Health Features and Measures
Owners	Displaying an annual statement that essential safety and health features and measures are performing to the standard to which they were originally designed. As far as is reasonably practicable ensuring that building maintained for its intended purpose and sufficient information supplied to next owner to maintain building.	Owner to have the Schedule of Essential Safety and Health Features and Measures items maintained by appropriately qualified person. Owner to complete an Annual Maintenance Statement and display adjacent to Occupancy Permit. Owners to keep all maintenance records for last 10 years.	• Schedule of Essential Safety and Health Features and Measures • Annual Maintenance Statement
Builder	As far as is reasonably practicable ensuring that sufficient information is supplied to an owner for the owner to maintain the building.		

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Table F.6 continued

<i>Key Institutions</i>	<i>Responsibilities</i>	<i>Processes</i>	<i>Key documents</i>
Tasmania (continued)			
Councils	As far as is reasonably practicable ensuring that the owners of property are informed of their duties under the Act in maintaining their buildings.		
General Manager (GM) of Council	Issuing Building Notices to owners if essential health and safety features of the building not maintained in accordance with Regulations.	Refer to Table F4	Refer to Table F4
Northern Territory			
Director Building Control (DBC)	Has no specific responsibilities under the current NT <i>Building Act 1993</i>. However, this Act is now under review and it is proposed to introduce legislative provisions to ensure the maintenance of essential safety measures in commercial and public buildings. The legislative requirements will need to address building permits, approval obligations, reporting requirements of various parties, certification requirements, inspections and responsibilities.	The objectives of the legislation will be to: • require the installer of essential safety measures in commercial and public buildings to certify their compliance before a building can be occupied; • require a building owner to obtain and display proof each year that the required maintenance has been carried out; • require a building owner to keep records of maintenance carried out on essential safety features; and • give the DBC authority to enter and audit maintenance records.	• Certificate of Compliance (proposed) • Maintenance of Essential Safety Measures Record
Building Advisory Services Branch (BASB)	Maintains a Building Record.	Relevant documentation on the maintenance of essential safety measures will be kept on the relevant Building Record.	• Building Record.
Australian Capital Territory			
Nil			

Table F.7 Practitioner licensing

<i>Practitioner</i>	<i>Key Institutions</i>	<i>Requirements</i>	<i>Processes</i>
Victoria			
Building Surveyor Building Inspector Engineer Builder Demolisher Quantity Surveyor	Due to the complexity of the registration requirements the Victorian Building Commission directs interested parties to the Building Commission web site. (http://www.buildingcommission.com.au)		
Queensland			
Building Services Authority	Issue licences to practitioners as building certifiers.	Annual Licence.	<i>Standard Building Regulation 1993.</i>
Australian Institute of Building Surveyors		Level of accreditation to reflect the level of education.	Determined by Australian Institute of Building Surveyors, education and experience as to the level of accreditation granted.
South Australia			
Architects	Planning SA.	Licensing under Architects Act.	Apply to the Architects Registration Board.
Building Surveyors, Assistant Building Surveyors and Building Surveying Technicians	Planning SA (legislation). Australian Institute of Building Surveyors (Accreditation).	Accreditation by authorised body under the Development Act.	Application and fee to AIBS, must maintain continuing professional development points for re-accreditation assessment every 3 yrs.
	Office of Consumer and Business Affairs.	Licensing under Building Work Contractors Act for all building work contractors and building work supervisors.	Apply to OCBA.

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Table F.7 continued

<i>Practitioner</i>	<i>Key Institutions</i>	<i>Requirements</i>	<i>Processes</i>
Plumbers, gas fitters and electricians	Office of Consumer and Business Affairs (OCBA).	Licensing under the Plumbers, Gas fitters and Electricians Act.	Apply to OCBA.
Private certifier	Building Advisory Committee as registration authority.	See Table F.8.	Application to Building Advisory Committee (BAC).
Western Australia			
Architects	Architects Board of WA.		Registered under <i>Architects Act</i>
Builders	Builders Registration Board.		Registered under <i>Builders Registration Act</i>
Building Surveyors	Department of Housing and Works.		Certificate under <i>Local Government (Miscellaneous Provisions) Act</i>
Tasmania			
Engineers – <i>Structural, Building Services, Energy Management, Environment, Geo-technical, Civil, Acoustic, Fire Safety</i> Building Service Designers – <i>Mechanical, Electrical, Hydraulic, Fire</i> Architects Building Designers – <i>Architectural</i> Builder – <i>Commercial, Domestic, Project Manager, Fire Protection Services, Demolisher</i> Building Surveyors Assistant Building Surveyors	Authorised Bodies appointed by the Minister.	Category and class of building practitioner and their levels and scope of work in accordance with Minister's <i>Guidelines for Schemes for the Accreditation of Building Practitioners in Tasmania</i> .	In accordance with Guidelines and Scheme of Authorised Body.

Northern Territory

Building Surveyor Certifying Structural Engineer Certifying Civil Engineer Certifying Mechanical Engineer Certifying Plumber and Drainer Certifying Architect	Building Practitioners Board.	Application must demonstrate applicant satisfies eligibility criteria prescribed in law.	Applicant makes written application to the Board who assesses application against set criteria or mutual recognition. Applicant shows proof of current and relevant professional indemnity insurance cover. Building practitioners Board has powers to discipline practitioners who are registered by the Board. The Board may cancel or suspend the registration of a building practitioner if it is satisfied that – - the registration was obtained by fraud ; - the practitioner has been found guilty of an offence punishable by imprisonment for a term exceeding 12 mths - the practitioner has been found guilty of an offence against the NT <i>Building Act 1993</i> or Regs;

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Table F.7 **continued**

<i>Practitioner</i>	<i>Key Institutions</i>	<i>Requirements</i>	<i>Processes</i>
Northern Territory (continued)			
Plumbers Plumbing Contractors Journeyman	Plumbers and Drainers Licensing Board.	Application must demonstrate applicant satisfies eligibility criteria prescribed in law.	d. the building practitioner has been negligent as a practitioner; e. a practitioner has been guilty of fraudulent conduct as a practitioner or f. a practitioner has not complied with a prescribed condition relating to his or her registration as a practitioner. Written applications for license are processed by Registrar of the Board and then endorsed by Board. Plumbers and Drainers Licensing Board has power to cancel or suspend registration card or license.
Electricians Electrical Contractors	Electrical Workers and Contractors Licensing Board.	Application must demonstrate applicant satisfies eligibility criteria prescribed in law.	Written applications for license are processed by Registrar of the Board and then endorsed by Board. Electrical Workers and Contractors Licensing Board has power to cancel, suspend, vary conditions of license, fine license holder, admonish the holder and endorse license to that effect or any combination of above.

Registrars	Building Advisory Services Branch, Department of Infrastructure, Planning and Environment (BASB)		Provide administrative support to all Boards.
Architects	NT Architects Board.	Application must demonstrate applicant satisfies eligibility criteria prescribed in law.	Qualified Architects apply to the NT Architects Board for registration. Board has power to cancel registration on grounds of obtaining registration by fraud, if the applicants degree, diploma or other is withdrawn or cancelled by Institution conferred, if applicant is convicted of an indictable offence or any other offence which renders him unfit to practise.

Australian Capital Territory

Builder Electrician Drainer Plumber Gasfitter	ACT Planning and Land Authority	Application must demonstrate applicant satisfies eligibility criteria prescribed in law, including qualifications and experience.	Applicant applies to Authority. Authority determines application and grants licence or refuse to grant licence.
Building surveyor Plumbing plan certifier	ACT Planning and Land Authority	Application must demonstrate applicant satisfies eligibility criteria prescribed in law, including insurance, qualifications and experience.	Applicant applies to Authority. Authority determines application and grants licence or refuse to grant licence.

Table F.8 Accreditation and audit of certifiers

<i>Type of certifier</i>	<i>Key Institutions</i>	<i>Requirements</i>	<i>Processes</i>
Victoria			
Building Surveyor	Building Commission	See practitioner requirements	The Building Commission has the authority to investigate and audit building practitioners, and take necessary action. The investigations process is usually through a complaint basis. See practitioner requirements.
Building Inspector	Building Commission	As Above	As above.
Queensland			
Building Services Authority	Ensure building certifiers are audited on a regular basis	Audit Technical and procedures	Random
Australian Institute of Building Surveyors (AIBS)		Level of accreditation to reflect the level of education	Determined by AIBS, education and experience as to the level of accreditation granted.
South Australia			
Private certifier	Building Advisory Committee (BAC)	Registration – requires accreditation as building surveyor, 8 years experience in industry and necessary professional indemnity insurance.	Apply to BAC with evidence of meeting requirements and pay fee.
All certifiers	Minister of Urban Planning & Development	Complaints investigation provisions in Development Act.	Lodge complaint, investigation undertaken, with remedies/penalties able to be imposed.

Western Australia

Building Surveyors	Department of Housing and Works Municipal Building Surveyors Qualifications Committee

Tasmania

Building Surveyor	Authorised Bodies appointed by the Minister	In accordance with National Framework and Minister's <i>Guidelines for Schemes for the Accreditation of Building Practitioners in Tasmania.</i>	In accordance with Guidelines and Scheme of Authorised Body.
Assistant Building Surveyor	Authorised Bodies appointed by the Minister	In accordance with National Framework and Minister's <i>Guidelines for Schemes for the Accreditation of Building Practitioners in Tasmania.</i>	In accordance with Guidelines and Scheme of Authorised Body.

Northern Territory

Certifying building practitioners Certifying Engineers Certifying Architects Building Surveyors Certifying Plumbers and Drainers	Director Building Control	Ensures compliance with the NT <i>Building Act 1993</i> and Regulations.
	Building Advisory Services Branch, Department of Infrastructure, Planning and Environment	Technical expertise to conduct 5% desk-top audits of documentation submitted by PBC to ensure compliance with Act and Regulations.

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Table F.8 continued

<i>Type of certifier</i>	<i>Key Institutions</i>	<i>Requirements</i>	<i>Processes</i>
Northern Territory (continued)			
	Building Practitioners Board	Determines qualifications held by building practitioners and courses of instruction to be undertaken from time to time; Registers persons as building practitioners; and Monitors performance of practitioners.	
	Local Court	Appeals body	Practitioner may appeal with 28 days of a decision of the Building Practitioners Board.
Australian Capital Territory			
General building surveyor (limited to certain small and medium-scale developments).	ACT Planning and Land Authority	See licensing above. Licence eligibility relies on demonstrating relevant AIBS accreditation at assistant building surveyor level. Authority audits a percentage of all certifier's paperwork.	Nominally, 10 per cent of a certifier's number of projects receive a paperwork audit for compliances with law requirements, by the Authority. May lead to occasional building site audit or certifier's office audit.
Principle building surveyor (not limited in scope of project).	ACT Planning and Land Authority	See licensing above. Licence eligibility relies on demonstrating relevant AIBS accreditation at building surveyor level. Authority audits a percentage of all certifier's paperwork.	Nominally, 10 per cent of a certifier's number of projects receive a paperwork audit for compliances with law requirements, by the Authority. May lead to occasional building site audit or certifier's office audit.

Table F.9 Insurance (home building warranty, professional indemnity etc)

Type of insurance	Key Institutions	Responsibilities	Processes
Victoria			
Home Building Warranty, Professional indemnity, Structural Indemnity	Minister for Planning	To determine the appropriate insurance required for the registration of Building Practitioners.	<i>Building Act 1993, Building Regulation 1994, Ministerial Order.</i>
	Building Commission	To provide recommendations to the Minister of the appropriate insurance.	
Note this is tied into the registration process and we refer you to our web site (www.buildingcommission.com.au).			
Queensland			
Building Contractor	Building Services Authority	<i>Building Services Authority Act 1991</i>	Payment of premium prior to issuing approval by the Private Certifier (warranty type insurances)
Private certifier	Building Services Authority	<i>Integrated Planning Act 1997</i>	1. Evidence of the of premium at time of annual renewal, required as a condition of licensing under <i>Integrated Planning Act 1997</i>; and 2. The Private Certifier must site BSA insurance premium prior to issuing of approval <i>Integrated Planning Act 1997</i>.
South Australia			
Building indemnity insurance	Building work Contractors Act and Development Regulations	Person undertaking Building Rules assessment must sight certificate of building indemnity insurance	Certificate of building indemnity insurance for domestic building work to be submitted with application.
Professional indemnity insurance	Development Act and Regulations	Private certifiers must have current PI cover for registration	Submit copy of certificate with application for renewal of registration.

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Table F.9 continued

<i>Type of insurance</i>	<i>Key Institutions</i>	<i>Responsibilities</i>	<i>Processes</i>
Western Australia			
Home Indemnity Insurance	Builders Registration Board Department of Consumer and Employment Protection Local Government Authorities	Builder must provide insurance for prescribed class of building. Local Authority cannot issue building licence without evidence of insurance.	
Tasmania			
Building Surveyors – Professional Indemnity (PI) Assistant Building Surveyors – PI Engineers – PI Building Service Designers – PI Architects - PI Building Designers – Architectural – PI or Housing Indemnity Builder – Commercial – Defects and Public Liability (PL) Builder – Domestic – Defects or Housing Indemnity and PL Builder – Fire Protection Services - PI Builder – Demolisher - PL Builder – Construction Manager – PI and Housing Indemnity	Authorised Bodies appointed by the Minister	All building practitioners required to have insurance before granted accreditation.	In accordance with <i>Ministerial Order for Required Insurance for Building Practitioners and Building Act 2000</i>

Northern Territory

Professional Indemnity Insurance	Various private providers	Must meet various levels of indemnity as stated in Regulations.	Certifying Plumbers and Drainers who are unable to obtain PI insurance are required to contribute to the Home Building Certification Fund (see below).
Home Building Certification Fund	Owned by Northern Territory Government, managed by Territory Insurance Office (TIO)	This fund provides 10 year first resort cover to the building owner and successor/s in title for matters of non-compliance found after the completion of the building work. Cover is from issue of Occupancy Permit.	Builder pays a premium into fund (A). Amount depends on value of building work being covered. Building owner also pays a premium into fund (B) for the same project. Owner/Builders pay into fund (A) and (B). Certifying Plumbers and Drainers pay into fund (A).
	Building Advisory Services Branch, Department of Infrastructure, Planning and Environment	Provides TIO with technical expertise and support and assesses whether claims are valid under the terms of the fund.	Claim is submitted to the TIO by claimant. TIO forwards details of claim to Building Advisory Services for verification of claim status. TIO processes claim and correspondence with claimant.

Australian Capital Territory

Building warranty insurance	Private sector insurance providers	Provide coverage that complies with building law.	Builder applies to insurer, insurer's agent or insurance broker. Is a statutory prerequisite to a building work commencement notice (either insurance or a fidelity fund certificate).

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Table F.9 **continued**

<i>Type of insurance</i>	<i>Key Institutions</i>	<i>Responsibilities</i>	<i>Processes</i>
Australian Capital Territory (continued)			
Fidelity fund certificate (is not "insurance" but provides similar coverage).	Fidelity fund schemes	Provide coverage that complies with building law.	Builder applies to scheme or scheme's agent. Is a statutory prerequisite to a building work commencement notice (either insurance or a fidelity fund certificate).
Professional indemnity	Private sector insurance providers	Provide coverage that complies with construction law.	Building surveyor applies to insurer, insurer's agent or insurance broker. PI insurance is an eligibility criteria for licensing.
Building warranty insurance	ACT Planning and Land Authority	Approve insurer and monitor certain aspects of operation.	Insurer applies to Authority. Approved insurer require to periodically report to Authority operational statistics.
Fidelity fund certificate (is not "insurance" but provides similar coverage).	ACT Planning and Land Authority	Approve fidelity fund scheme and monitor certain aspects of operation.	Scheme applies to Authority. Approved scheme require to periodically report to Authority operational statistics.

Table F.10 **Dispute resolution**

<i>Type of dispute</i>	<i>Key Institutions</i>	<i>Responsibilities</i>	<i>Processes</i>
Victoria			
Appeals on builder registration, enforcement of notices, protection of adjoining property.	Building Appeals Board (BAB) established under the <i>Building Act 1993</i>	Hears appeals with respect to building licences and enforcement notices, as per Building Regulations.	Forms available from Building Commission and on Building Commission web site.
Appeals on determination of Relevant Building Surveyor (RBS), decision of Local Council on siting issues for single house on single allotment. Modifications of regulations.	BAB established under the <i>Building Act 1993</i>	Hears and determines appeals with respect to determination of RBS, siting issues and modifications of building regulations.	Applicant makes application to the BAB. Details available on the Building Commission web site.
Dispute on Building Work for domestic construction as a result of a dispute on site.	Building Advice and Conciliation Victoria. This is an inter-departmental arrangement with Consumer Affairs Victoria (CAV), Building Commission, VCAT.	Provide advice on contractual issues, provide telephone- based conciliation, provide technical advice on disputes, undertake site inspection and report, and undertake site conciliation. The above processes are voluntary. Either party can elect to go direct to VCAT.	Initial point of resolution is to CAV through telephone, if not resolved then to BC for resolution of technical issue through on site report and conciliation. If that is not successful then to VCAT.
Queensland			
Appeal of decision	Department of Local Government, Planning, Sport and Recreation Building and Development Tribunal		Applicant can appeal decision to tribunal.

Continued on next page

Table F.10 **continued**

<i>Type of dispute</i>	<i>Key Institutions</i>	<i>Responsibilities</i>	<i>Processes</i>
Queensland (continued)			
Defective and incomplete work	Dispute Resolution – Building Services Authority	Core function of the Building Services Authority – Disputes Division (Building Contractor related).	The investigation of Defective and Incomplete Building Work.
Consumer protection issues.	Commercial and Consumer Tribunal	Ensure the requirements of defect resolution is met in accordance with <i>QBSA Act 1991</i> <i>Commercial and Consumer Tribunal Act 2003</i>	
South Australia			
Alternative Solutions	Building Rules Assessment Commission	Providing opinion from panel of experienced technical experts.	Independent review, non-binding.
Appeal against decision of certifier	Environment, Resource and Development Court	Building Commissioners conduct hearing.	Apply to Court and pay relevant fees. Commissioners review and make judgement.
Western Australia			
Appeals on building licences	Department of Housing and Works (DHW) Minister for Housing and Works	Minister upholds or denies appeals against: • Conditions on building licence • Refusal to issue building licence	DHW prepares information and briefing on appeals for the Minister. Minister determines whether or not to uphold appeal. Notices subject to dismissed appeals can be withdrawn or enforced by Local Government Authorities.

Appeals on building notices	Department of Housing and Works Minister for Housing and Works	Minister upholds or denies appeals against: • Notice to comply with approved drawings • Notice to stop work • Notice to demolish or regularise unauthorised building • Notice to cease unauthorised use of building • Notice to demolish or rectify unsafe buildings	DHW prepares information and briefing on appeals for the Minister. Minister determines whether or not to uphold appeal. Dismissed appeals can be withdrawn or enforced by Local Government Authorities.

Tasmania

Building Practitioner Appeals	Authorised Bodies Building Appeal Board (BAB) Magistrates Court (Administrative Appeal Division)	To review application decisions in relation to accreditation where requested by an aggrieved applicant Hears appeals on accreditation, practitioner complaints, and decisions of Authorised Bodies To review decisions of the BAB as above.	In accordance with the Authorised Scheme. In accordance with <i>Building Act 2000</i> (s26, s32, s40) In accordance with <i>Building Act 2000</i> (s46, s47)
Protection of Adjoining Property	BAB	To hear and determine costs incurred by an adjoining owner where no agreement obtained with owner. To hear and determine compensation for loss and damage suffered by adjoining owner. To hear any differences arising between an owner and adjoining owner over protection work or party walls or structures	In accordance with <i>Building Act 2000</i> (s136) In accordance with <i>Building Act 2000</i> (s137) In accordance with <i>Building Act 2000</i> (Part 9 Divisions 2 & 3)

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Table F.10 continued

<i>Type of dispute</i>	<i>Key Institutions</i>	<i>Responsibilities</i>	<i>Processes</i>
Tasmania (continued)			
Appeals or Disputes	Building Appeal Board	To hear and determine appeals relating to: - building, occupancy and temporary occupancy permits. - Orders. - Building Surveyors and Permit Authorities exercise of or failure to exercise any power. - Change of Building Surveyor. - Fire Regulations. - Decisions under Regulations	In accordance with <i>Building Act 2000</i> (Part 12) In accordance with <i>Building Regulations 2004</i>
Applications for determination	Building Appeal Board	To hear and determine whether any provision of BCA applies or may be modified	In accordance with <i>Building Act 2000</i> (s218 and Division 3).
Northern Territory			
Building Dispute	Local Court	Normal Local Court jurisdiction in Civil matters	Civil litigation processes
Contract Dispute	Local Court	Normal Local Court jurisdiction in Civil matters	Civil litigation processes.
Licensing Dispute (Plumbers and Drainers, Plumbing Contractors, Journeymen, Electricians, and Electrical Contractors)	Local Court	Local Court is able to conduct a hearing into the grounds of the Board's decision; has all the powers, duties, functions of the Board in relation to the subject matter of the appeal; and shall determine the appeal by • confirming the decision of the Board;	A person may request a review of a decision made by the Plumbers and Drainers Licensing Board by the Local Court. A person aggrieved of a decision by the Electrical Workers and Contractors Licensing Board may appeal to the Local Court.

		• varying the decision of the Board; • disallowing the decision of the Board.	
Registration Dispute (Building practitioners, Architects)	Local Court Supreme Court	As above	A person aggrieved by an action of the Practitioners Board within 30 days after being notified of the action, may appeal to the Local Court. Decision of Local Court is final. Person aggrieved by an action of the NT Architects Board may appeal to the Supreme Court.

Australian Capital Territory

Breach of consumer protection law	ACT Office of Fair Trading	Administer consumer protection laws	Public contacts Office for assistance. Office assists and makes referrals but does not formally mediate.
Breach of construction law	ACT Planning and Land Authority	Administer construction laws	Public may make complaint to Authority. Authority required to examine complaint and take compliance action where warranted. Authority may impose licence sanctions and / or issue enforceable rectification orders on delinquent licensees or former licensees, requiring substandard work to be brought into compliance. Authority may fix substandard work at delinquent party's cost if rectification order breached.

Continued on next page

Table F.10 **continued**

<i>Type of dispute</i>	<i>Key Institutions</i>	<i>Responsibilities</i>	<i>Processes</i>
Australian Capital Territory (continued)			
Appealable decision by ACT Government under ACT planning or construction law. Includes licensing, notices and development approvals.	ACT Administrative Appeals Tribunal (ACTAAT), and from there the ACT Supreme Court	ACTAAT: administer ACTAAT laws, reviews appealable decisions. ACT Supreme Court: administer ACT Supreme Court laws, reviews certain decisions of the ACTAAT.	Aggrieved party may lodge appeal or apply to court. ACTAAT and ACT Supreme court have power to remake decisions including affirming, varying, setting aside, and substituting decisions.
Appealable decision by Australian Government under Commonwealth planning law that has ACT jurisdiction.	Commonwealth Administrative Appeals Tribunal (Comm AAT), and from there the Federal Court.	Comm AAT: administer Comm AAT laws, reviews appealable decisions. Federal Court: administer Federal Court laws, reviews certain decisions of the Comm AAT.	Aggrieved party may lodge appeal or apply to court. AAT and court have power to remake decisions including affirming, varying, setting aside, and substituting decisions.
Stop Work Notices	ACT Planning and Land Authority	Administer relevant law	Public may apply for cancellation of Stop Work Notice. Authority may cancel, or refuse to cancel, the notice.



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