

22 February 2018

Ministers

Attached for your consideration is our report, *Building Confidence: Improving the effectiveness of compliance and enforcement systems for the building and construction industry across Australia*.

As stated in the report's Foreword, we have pleasure in recommending to you a national best practice model to strengthen the effective implementation of the National Construction Code. The 24 recommendations that comprise the model's framework derive from our assessment of the effectiveness of the compliance and enforcement systems for the building and construction industry across Australia.

Throughout our inquiry we have been greatly assisted by your guidance, the thoughtful advice of your departmental officials and regulators and the candid views expressed by key industry stakeholders. All of those consulted have focussed on ways to improve the implementation of the National Construction Code. We sense a strong commitment to change.

At present, there is heightened interest in the regulation of the safety of the built environment. It is vital to maintain public confidence in Government oversight of construction activity. Given the degree of interest in our report, we believe there would be value in releasing it publicly, perhaps with your response to its recommendations.

Yours sincerely

Professor Peter Shergold

Ms Bronwyn Weir



Building Confidence

Improving the effectiveness of compliance and enforcement systems for the building and construction industry across Australia

Peter Shergold and Bronwyn Weir

February 2018

About the Authors

Professor Peter Shergold AC

Professor Peter Shergold AC is Chancellor of Western Sydney University. A former Secretary of the Department of the Prime Minister and Cabinet, he now chairs a number of private, public and not-for-profit boards. He has undertaken a number of previous reviews for Commonwealth and state governments on matters as diverse as gambling, vocational education, community services, major project implementation and Medicare card security.

Ms Bronwyn Weir

Bronwyn Weir is a legal practitioner specialising in government regulation. She has had over 20 years' experience advising on building regulation for governments, councils, licensing bodies, fire authorities and building surveyors. Bronwyn was a member of Victoria's Building Regulations Advisory Committee for 12 years. She has also provided advice on regulatory practice in sectors including vocational education, early childhood education, food safety, the racing industry, health care and primary industries. Bronwyn is a director of Weir Legal and Consulting Pty Ltd.

Contents

Foreword	1
Executive Summary	3
Summary of Recommendations	5
Background	6
The Terms of Reference	6
Consultation	6
Review of previous reports and other material	6
Terminology used in this report	7
Introduction	9
A performance-based approach to building regulation	9
Modern construction practices for multi-storey residential buildings	10
The role of the private building surveyor	11
The responsibility of builders	13
The question of cladding	13
A better system of harmonisation	14
Recommendations	15
Recommendation 1—Registration of building practitioners	15
Recommendation 2—Consistent requirements for registration	17
Recommendation 3—Continuing Professional Development	18
Recommendation 4—Career paths for building surveyors	19
Recommendation 5—Improving collaboration between regulators	19
Recommendation 6—Effective regulatory powers	21
Recommendation 7—Strategy for the proactive regulation of Commercial buildings	21
Recommendation 8—Collaboration with fire authorities in the development of fire safety design	23
Recommendation 9—Integrity of private building surveyors	24
Recommendation 10—Codes of conduct for building surveyors	25
Recommendation 11—Role of building surveyors in enforcement	26
Recommendation 12—Collecting and sharing data and intelligence	27
Recommendation 13—Responsibility of design practitioners	28
Recommendation 14—Adequate documentation for performance solutions	30
Recommendation 15—Approval of performance solutions for constructed building work	30
Recommendation 16—Approval of documentation throughout the construction process	31
Recommendation 17—Independent third party review	32
Recommendation 18—Mandatory inspections	33
Recommendation 19—Inspection and certification of fire safety system installation	34
Recommendation 20—A building manual for Commercial buildings	35
Recommendation 21—Building product safety	36
Recommendation 22—Dictionary of terminology	37
Recommendation 23—Implementation of the recommendations	37
Recommendation 24—Implementation plan	38
Attachment A—List of recommendations	39
Attachment B—Terms of Reference	42
Attachment C—Consultations	43
Attachment D—Submissions	45
Submissions	45
Supplementary submissions	45

Foreword

Ministers

We have pleasure in providing you with our observations on the compliance and enforcement systems for the building and construction industry. It includes our recommendations for a national best practice model which will strengthen the effective implementation of the National Construction Code.

You commissioned our expert advice in August 2017. Throughout the process, you engaged with us openly. So did your regulators and departmental officials. Industry, too, has been candid in sharing with us its views and suggestions for better systems.

It is our considered view that the nature and extent of the problems put to us are significant and concerning. They are likely to undermine public trust in the health and safety of buildings if they are not addressed in a comprehensive manner.

Many governments are already taking remedial action. Continuing collaborative work will be required by all jurisdictions, however, in order to deliver the reforms that we propose.

We recognise with sincere thanks the support that a range of stakeholders have provided to us during the course of our inquiry. We also acknowledge the capable support provided by our secretariat team and sincerely thank them for their input, responsiveness and dedication: Mr Alan Coleman, Ms Kate Maher, Ms Caroline Pulis and Mrs Kathleen Streat.

Peter Shergold

Bronwyn Weir

Executive Summary

In mid-2017 the Building Ministers' Forum (BMF) asked us to undertake an assessment of the effectiveness of compliance and enforcement systems for the building and construction industry across Australia. Whilst our assessment has been thorough, this report focusses in a succinct way on shortcomings in the implementation of the National Construction Code (NCC). They will not come as a surprise to the BMF or building industry stakeholders as most have been considered in detail in a number recent government reports. We are confident that, assisted by this report, jurisdictions, working cooperatively, can address these shortcomings.

Our goal is to enhance public trust through effective implementation of building and construction standards that protect the interests of those who own, work, live, or conduct their business in Australian buildings. We make 24 recommendations. We believe that compliance and enforcement systems that incorporate our recommendations represent a national best practice model that will strengthen the effective implementation of the NCC.

A wide range of problems were set out in the Terms of Reference for us to examine, namely:

- a. roles, responsibilities and accountabilities of different parties;
- b. education and training;
- c. licensing and accreditation;
- d. accuracy of design and documentation;
- e. quality control and assurance;
- f. competencies of practitioners;
- g. integrity of private certification;
- h. inspection regimes;
- i. auditing and enforcement practices; and
- j. product importation and chain of custody.

We were asked to assess the compliance and enforcement systems in place across Australia having regard to these problems. In doing so, we have given careful consideration to the opinions of various experts that have undertaken reviews of the building and construction industry on behalf of state and territory governments in recent years.

Our work was commissioned by the BMF. The BMF is the group of Australian Government, State and Territory Ministers that has responsibility for building and construction. The BMF is created under a series of intergovernmental agreements that establish and maintain the Australian Building Codes Board (ABCB) which is responsible for the development of the NCC.

The NCC contains the technical requirements and standards for the construction of buildings and for plumbing work. The NCC is adopted by each jurisdiction in its own building legislation. The goal is to have nationally consistent technical standards applying across Australia. Whilst our country has a national technical standard for buildings, our federation provides for each state and territory to have its own laws governing the implementation of the NCC.

Jurisdictions have been very open in identifying the growing challenges they have faced in ensuring effective compliance with, and enforcement of, the NCC. So have industry bodies. Criticisms have been delivered in a constructive manner with an emphasis on finding solutions.

After having examined the matters put to us, we have concluded that their nature and extent are significant and concerning. The problems have led to diminishing public confidence that the building and construction industry can deliver compliant, safe buildings which will perform to the expected standards over the long term.

We have read numerous reports which identify the prevalence of serious compliance failures in recently constructed buildings. These include non-compliant cladding, water ingress leading to mould and structural compromise, structurally unsound roof construction and poorly constructed fire resisting elements.

We have heard suggestions that large numbers of practitioners operating in the industry either lack competence, do not properly understand the NCC and/or have never had proper training on its implementation.

We have consistently heard that the adequacy of design documentation is generally poor and that, on occasion, builders improvise, making decisions on matters which affect safety without independent oversight. This exacerbates disputes about the quality and compliance of building work. It also results in inadequate information to guide the future maintenance of safety systems in buildings. These issues undermine public accountability in building approvals processes.

We have been told that oversight by licensing bodies, state and territory regulators and local governments can be weak due either to inadequate funding or a lack of skills and resources to undertake effective enforcement. We found that, until relatively recently, there has been almost no effective regulatory oversight of the commercial building industry by regulators. Those involved in high-rise construction have been left largely to their own devices. Where there has been supervision, this has generally been by private building surveyors whom critics argue are not independent from builders and/or designers.

The compliance and enforcement systems have not been adequate to prevent these problems from emerging and they need to change as a matter of priority. There is no panacea or 'silver bullet' to resolve these problems. Our 24 recommendations are intended to operate as a suite of solutions which will address weaknesses in a comprehensive manner. We have taken a pragmatic, risk-based approach to formulate a package of recommendations. Together they address the issues of highest priority that jurisdictions should focus on over the short to medium term.

In formulating the recommendations, we have been keenly aware of the significant effort that is being expended by each jurisdiction to continue to improve their enforcement and compliance systems. We have been encouraged by the strong recognition of the need for change. Many of our recommendations are informed by the work already underway.

We do not espouse a one-size-fits-all approach to regulation. Each jurisdiction can meet its governance responsibilities in its own manner, under the cooperative oversight of the BMF. Jurisdictions should work in partnership to reach agreement on how best to implement our proposed framework. We envisage the BMF taking collective responsibility for its implementation and, in the process, strengthening its collaborative resolve and capability.

Some jurisdictions already have in place some of the things that we recommend. But all jurisdictions will have work to do to deliver the national best practice model proposed. That work program will include legislative reform, but perhaps the more challenging task will be to make changes that can shift industry culture and improve regulatory practice.

The work required to bring positive change cannot be done by governments alone. Industry has a keen self-awareness of the problems that exist. Whilst there are many participants who display competency and integrity, this is not universal. The building and construction industry needs to actively participate in lifting standards, competency and integrity if it is to produce safe and reliable buildings and continue to be an important driver of infrastructure development and economic growth.

Our recommendations represent an ambitious package, but we believe that the required shift can be achieved with a cooperative approach to change.

Of course, change takes time. We are not proposing that each jurisdiction adopt the recommendations overnight. Realistically, the recommendations should be implemented over a three year period. Resources will need to be dedicated to oversight that task by the BMF. Transparency is crucial. We believe that public confidence will be enhanced by annual reports being issued on progress with those recommendations that are accepted, in full or in part, by the BMF.

Summary of Recommendations

Recommendations 1 to 4 focus on the **registration and training of practitioners**.

We recommend a nationally consistent approach to the registration of certain categories of building practitioners and compulsory Continuing Professional Development, which includes mandatory hours/units dedicated to training on the NCC and the establishment of supervised training schemes which provide better defined career paths for building surveyors.

Recommendations 5 to 7 address the **roles and responsibilities of regulators**.

We recommend a focus on collaboration between state and local government and (where applicable) private building surveyors to improve regulatory oversight. We also recommend the provision of broad powers to audit building work and take effective compliance and enforcement action. We recommend that each jurisdiction implement a proactive audit strategy for regulatory oversight of the Commercial building sector.

Recommendation 8 goes to the **role of fire authorities** in the building design and approvals process.

We recommend that, consistent with the International Fire Engineering Guidelines, jurisdictions require early engagement with fire authorities on designs which include performance solutions on fire safety matters.

Recommendations 9 to 11 focus on the **integrity of private building surveyors**.

We recommend minimum statutory requirements for the engagement, and role, of private building surveyors, a code of conduct with legislative status and enhanced supervisory powers and reporting obligations.

Recommendation 12 addresses the issue of **collecting and sharing building information and intelligence**.

We recommend the creation of a central database by each jurisdiction and collaboration to develop a platform that can provide for information sharing to inform regulatory activities and the work of the BMF. Information in the databases would also be accessible as appropriate, by authorised persons including owners or purchasers of buildings.

Recommendations 13 to 17 focus on the issues of **adequacy of documentation and record keeping**.

We recommend that there be a statutory duty on design practitioners to prepare documentation that demonstrates that proposed buildings will comply with the NCC. We recommend a more robust approach to third party review of designs and to the documentation and approval of performance solutions and variations.

Recommendations 18 to 19 emphasise the importance of **inspection regimes**.

We recommend that jurisdictions require on-site inspections for all building works and that there be greater oversight of the installation and certification of fire safety systems in Commercial buildings.

Recommendation 20 addresses the issue of **post-construction information management**.

We recommend that for Commercial buildings, a comprehensive digital building manual be created for owners which can be passed on to successive owners. This would include all relevant documents for the ongoing management of the building, such as as-built construction documentation, fire safety system details and maintenance requirements.

Recommendation 21 relates to **building product safety**.

We recommend that the BMF agrees its position on the establishment of a compulsory product certification system for high-risk building products.

Recommendations 22 to 24 deal with **the implementation of the recommendations** laid out above.

We recommend commitment to a three year timetable for the implementation of the recommendations. We recommend that the BMF establish a plan for implementation which is reported against by each jurisdiction annually. We also recommend that, to deal with the issue of differing terminology across jurisdictions, the BMF develops a national dictionary of terminology.

A consolidated list of the recommendations is set out in [Attachment A](#).

Background

The Terms of Reference

On 30 June 2017, the BMF agreed to commission an independent expert examination of the broader compliance and enforcement problems within the building and construction systems affecting the implementation of the NCC. On 24 August 2017, Professor Peter Shergold AC and Ms Bronwyn Weir were appointed as the independent experts to undertake the inquiry.

Based on the outcome of the Assessment, Professor Shergold and Ms Weir were asked to consider strategies for improving compliance and enforcement practices and to make recommendations for a national best practice model for compliance and enforcement to strengthen the effective implementation of the NCC.

The Terms of Reference for our inquiry is at [Attachment B](#).

Consultation

Professor Shergold and Ms Weir were asked to consult with the Commonwealth, state and territory governments, the ABCB and key industry stakeholders.

Consultation has occurred with Ministers, departmental officials and regulators in all jurisdictions. The BMF was briefed on progress on two occasions. Separate meetings were conducted with each building Minister, their advisors and/or their senior public servants. Meetings were also held with key industry bodies and other stakeholders.

A total of 55 consultation meetings were held (see [Attachment C](#)). Interested parties were encouraged to provide brief written submissions to the Assessment by 15 December 2017. Twelve submissions and two supplementary submissions were received (see Attachment D). Documentary material was also provided at a number of the meetings. Unless otherwise stated, the quotations highlighted in this report are taken from submissions received.

Review of previous reports and other material

We were asked to take into account the impact of recent building regulatory reviews and reforms undertaken and implemented by state and territory governments, some of which are identified in the Terms of Reference. We also considered numerous reports, news articles and submissions to other inquiries and reviews.

Regard was had to reports that considered the benefits of harmonising building regulation such as the report on the 1991 Model Building Act, the 2004 Productivity Commission report and the 2012 report by The Centre for International Economics.¹ These reports have concluded that greater harmonisation of building regulation across Australia can bring significant productivity gains to the sector and economic benefit to the community.

Most jurisdictions have commissioned reviews of their building regulation systems, undertaken reforms or have been the subject of review by Auditors-General. The Assessment looked at the more recent of these including the 2014 Wallace Report, the 2015 Lambert Report, and two pertinent Victorian Auditor-General reports.² Beyond findings specific to each jurisdiction's systems, these reports identified similar overarching problems and made similar recommendations for reform.

In 2017, the Senate Economics References Committee Inquiry released its interim report on aluminium composite cladding. Queensland also released updates to its building plan and new legislation relating to non-conforming building products. NSW and Tasmania have also made laws relating to high-risk building products. The Victorian Cladding Taskforce released its interim report in 2017 and the Tasmanian Aluminium Composite Panel Audit report was released in 2018.³

1 L. Dix and K. Lovegrove, *Model Legislative Provisions and Commentary*, Sydney, Federation Press, 1991; Productivity Commission 2004, *Reform of Building Regulation*, Research Report, Productivity Commission, November; The Centre for International Economics, *Benefits of building regulation reform*, Canberra, The Centre for International Economics, 2012.

2 A. Wallace, *Review of the Building Act 1975 and building certification in Queensland*, Brisbane, Queensland Building and Construction Commission, 2014; M. Lambert, *Independent Review of the Building Professionals Act 2005-Final Report*, Sydney, NSW Government, 2015; Victorian Auditor-General, *Compliance with Building Permits*, Melbourne, Victorian Government Printer, 2011; Victorian Auditor-General, *Victoria's Consumer Protection Framework for Building Construction*, Melbourne, Victorian Government Printer, 2015.

3 The Senate Economics References Committee, *Non-conforming building products/Interim Report: aluminium composite cladding*, Canberra, Senate Printing Unit, 2017; Department of Housing and Public Works, *Queensland Building Plan 2017*, Brisbane, Queensland Government, 2017; *Building and Construction Legislation (Non-conforming Building Products—Chain of Responsibility and Other Matters) Amendment Act 2017* (Qld); *Building Products (Safety) Act 2017* (NSW); *Building Act 2016 Director's Determination – Building Product Accreditation – High Risk Building Products 2017* (Tas); Victorian Cladding Taskforce, *Interim Report*, Melbourne, Department of Environment, Land, Water and Planning, 2017; Consumer, Building and Occupational Services, *Tasmanian Aluminium Composite Panel Audit Summary: Regulatory Compliance*, Hobart, Tasmanian Government, 2018.

Across the globe, in the wake of the Grenfell Tower fire, the UK is undertaking a review of its building regulation system. In December 2017, Dame Judith Hackitt released an interim report of her independent review of building regulations and fire safety.⁴ She found “that the whole [UK] system of regulation, covering what is written down and the way in which it is enacted in practice, is not fit for purpose, leaving room for those who want to take shortcuts to do so”.⁵

Some of the problems addressed by Dame Judith are strikingly similar to those in the Australian building and construction industry. She identified ineffective enforcement, low levels of competency across the sector, lack of clear accountability and inadequate documentation throughout the building approvals process worsened by poor change control and quality assurance. She concluded that these manifold deficiencies have contributed to a mindset which is willing to do things as cheaply as possible and pass on responsibility for problems and shortcomings to others.

Terminology used in this report

Throughout the report a distinction is made between Commercial and Domestic buildings. These are defined as follows:

‘Commercial buildings’ refers to class 2–9 buildings, which includes **multi-storey residential buildings** and **public buildings**.⁶ The term captures both public and privately-owned buildings, including those intended to be occupied by vulnerable people, such as **aged care facilities, hospitals, childcare centres and low-cost accommodation**.

‘Domestic buildings’ refers to class 1 and 10 buildings which includes **dwelling**s, whether detached or attached (such as **terrace houses** and **villas**), **sheds, swimming pools and other non-habitable structures**.

It is appreciated that in the implementation of the recommendations, jurisdictions will decide that for some matters, the appropriate distinction between the types of buildings should be more nuanced, such as considering building heights and floor areas.

As the report makes clear, one of the challenges for implementation of the NCC is that different jurisdictions use different terminology in their building legislation. To avoid ambiguity, it is important to be clear on the language that is used in this report.

The terms ‘registration’, ‘licensing’ and ‘accreditation’ are used across jurisdictions in relation to occupational licensing regimes. Whilst there are differences in the meaning of these terms, for simplicity, this report uses the term **‘registration’**.

This report uses the term **‘building surveyors’**, rather than ‘building certifiers’.

When using the term **‘private certification’** the report refers to a statutory process for certification by privately appointed building surveyors. Under this process, a private building surveyor is appointed to review documentation and/or building work and determine whether it is compliant with the NCC and any other legislative requirements present in each jurisdiction.

For building approvals, such as building permits, certificates of construction and the like, the report uses the terms **‘building approvals’** or **‘building approvals process’**.

For occupancy permits, occupancy certificates, certificates of occupancy and the like, the report uses the term **‘occupancy certificate’**.

When using the term **‘third party review’**, the report refers to the review of a proposed design, in particular a design which includes performance solutions, by a peer or specialist. Third party review might be required by statute or might be requested by a building surveyor or other authority. A third party review can also be recommended by the designer or proactively undertaken for complex designs as part of good design practice.

A number of acronyms, abbreviations and contractions are used in this report. A glossary of key terms follows:

ABCB Intergovernmental Agreement (ABCB IGA) is *An Agreement between the Governments of Commonwealth of Australia, the States and the Territories to continue in existence and provide for the operation of the Australian Building Codes Board 2017*.

Australian Building Codes Board (ABCB) is a standards writing body that is responsible for the development of the NCC. It is established by the ABCB Intergovernmental Agreement (ABCB IGA).

⁴ Dame Judith Hackitt, *Building a Safer Future—Independent Review of Building Regulations and Fire Safety: Interim Report*, London, Controller of Her Majesty's Stationery Office, 2017.

⁵ Hackitt, *Building a Safer Future*, p. 5.

⁶ Building classifications are prescribed in the NCC—Class 2 to 9 buildings are mostly covered by Volume One of the NCC and Class 1 and 10 buildings are mostly covered by Volume Two, <https://www.abcb.gov.au/-/media/Files/Resources/.../Building-classifications.pdf>, (accessed 9 February 2018).

Building Code of Australia (BCA) comprises Volumes One and Two of the NCC and prescribes the technical provisions for the design and construction of buildings and other structures.

Building Ministers' Forum (BMF) comprises the group of Australian Government, State and Territory Ministers with responsibility for building and construction. It sets the strategic direction for the ABCB, SOG and BRF.

Building Regulators' Forum (BRF) comprises the senior building regulator or their delegate from each jurisdiction and a senior representative from the Australian Government. The BRF provides an intergovernmental forum for state and territory building regulators to work cooperatively and efficiently on regulatory responses to issues of national significance impacting building and construction in Australia.

Continuing Professional Development (CPD) involves maintaining and enhancing the knowledge, skills and experience related to professional activities following completion of formal training.

Council of Australian Governments (COAG) is the peak intergovernmental forum in Australia. It comprises the Prime Minister, state and territory First Ministers and the President of the Australian Local Government Association.

National Construction Code (NCC) comprises the Building Code of Australia (Volumes One and Two), the Plumbing Code of Australia (Volume Three) and other on-site construction requirements as directed by the BMF.

Senior Officers' Group (SOG) comprises two senior building and construction policy officers from each jurisdiction and a senior representative from the Commonwealth. It supports the BMF by providing enhanced national policy development, collaboration and coordination amongst jurisdictions.

Introduction

A performance-based approach to building regulation

The NCC is one of the most important initiatives of the Council of Australian Governments (COAG). Many have described it as world-class. It sets minimum requirements for the design, construction and performance of buildings throughout Australia. It incorporates on-site construction standards in a systematic way. It is intended to enable all those involved in building and its regulation to understand the minimum requirements for health, safety and amenity in buildings.

The minimum requirements are based on a performance-based approach to building design and construction. Rather than set out how a building is to be constructed, the NCC states how a building or building element is required to perform. The code sets out explicit objectives, listed as a hierarchy of requirements. It is not intended to be overly prescriptive. Designers and builders have the capacity to find creative solutions to meet the performance requirements.

This is to be contrasted with traditional prescribed building codes that mandate specific construction practices. There are clear economic and aesthetic benefits to a performance-based approach: new techniques can be introduced to increase productivity; new products and innovative technologies can be applied to reduce costs or widen choice; and new creative architectural design is encouraged.

Since its adoption, there have been several reports which have identified the positive impacts of the introduction of the NCC, most notably the PC report in 2004 and the CIE report in 2012.⁷ Others have argued that there is a need for a greater level of prescription in the articulation of the NCC.

“...our building regulatory regime has rushed headlong into embracing a performance based paradigm, whilst at the same time propping up and promoting a prescriptive based building administration eco-system.”

Building Products Innovation Council.

There seems to be agreement that the NCC requires continual review and improvement and that the capability of industry to apply the code is a work in progress. Nevertheless, there is a strongly held industry view that the benefits of the NCC have outweighed any negative impacts.

It is apparent to us that deriving the maximum benefit from a performance-based approach to building regulation depends on two fundamental requirements. First, there needs to be a high level of awareness and understanding across the building and construction industry of how compliance can be achieved by incorporating the performance requirements within the design process. Second, there needs to be strong public trust that the performance requirements are being met and, in particular, that health and safety is assured. At present, as this report elaborates, neither of these requirements are being fully met.

Without clear, visible and accountable compliance procedures, public confidence in the ability of governments to oversee a performance-based building and construction industry will be eroded. People need to be persuaded that the NCC is being administered to a high standard. Effective implementation is crucial. That, in essence, is what the recommendations in the report seek to address. Acceptance of the recommendations will require not just the collaborative commitment of all governments to harmonising a strengthened regulatory environment but also the active participation of all sectors of the building and construction industry.

The NCC has the capacity to instil public faith in government oversight of building activity. But this will require the public (including building owners and occupiers) to be assured that it is being effectively implemented by each jurisdiction, working harmoniously. The public is entitled to a presumption that the buildings in which they live, work and receive services are safe.

That level of trust depends upon transparency. The great American litigator and jurist, Louis Brandeis, writing in 1913 on how banks use other people's money, mused that “Sunlight is said to be the best of disinfectants”.⁸ If the actions of individuals, organisations or government are visible, then pro-social behaviours are more assured and the need for legal or regulatory intervention is lessened.

⁷ Productivity Commission, *Reform of Building Regulation*, Research Paper, Canberra, Productivity Commission, 2004; The Centre for International Economics, 2012, *Benefits of building regulation reform*, Canberra.

⁸ L.D. Brandeis, “What Publicity Can Do”, *Harper's Weekly*, 20 December 1913, p. 10.

We strongly espouse that ethos. Confidence in the NCC requires an effective disclosure regime. It needs to incorporate a number of elements. The public should be able to see how governments enforce the NCC. Decisions made during the design and construction of a building need to become an accessible record. Scrutiny is vital to public accountability. Those responsible for making and certifying decisions under the NCC need to be identified so that they can be held accountable for their decisions.

People require assurance that the products used in a building are appropriate and that they are employed to an agreed performance standard. They need to know that those who are registered to certify the standards are suitably trained and qualified, that they perform their tasks diligently during the process of construction and they cannot be perceived to have any conflict of interest with developers, builders or owners.

“The “Deemed to Satisfy” provisions of the Code have long been standard practice. However, in the “Performance Based” solutions provisions there is great latitude and propensity for misunderstanding and the divergence of opinions on what is meant and what are acceptable alternatives. This requires much clarification.”

Australian Construction Industry Forum.

There is ongoing debate about the best ways to improve the NCC. During our consultations, many expressed the view that the content of the NCC lacks clarity and that this should be acknowledged as a barrier to effective implementation. At the request of the BMF, the ABCB is well progressed on its ‘Improved Usability’ project which is intended to simplify the NCC. It also has a project on ‘Performance’ which includes the quantification of performance requirements to improve productivity and building outcomes. Industry continues to offer feedback on these projects.

We have not been asked to make recommendations about the NCC itself. We fully support the work that the ABCB has been tasked with and are confident that the BMF is aware of the issues that have been raised. However, the effectiveness of the implementation of the NCC will at least, in part, depend on it being a document that is able to be understood and its intentions comprehended by practitioners across the sector. The code needs to be easy to access and written in language that is readily comprehensible. Those who use it need to be able to receive clear advice from sources of authority on matters of interpretive ambiguity.

Modern construction practices for multi-storey residential buildings

A significant change in the building and construction industry over the past 30 years has been the increase in construction of multi-storey buildings, particularly for residential living. According to the Australian Bureau of Statistics the number of apartments being built in high-rise buildings (that is, buildings of four or more storeys) in Australia each year has almost tripled in less than a decade.⁹ In 2007, 30,000 apartments were built in high-rise buildings, increasing to almost 90,000 in 2015. By comparison, the number of apartments being constructed in low-rise and semi-detached dwellings over the same period was steady with approximately 10,000 new apartments in low-rise buildings and 20,000 new apartments in semi-detached buildings per year.

Contractual arrangements for multi-storey projects differ, but commonly developers engage a builder to undertake a design-and-construct project. This means the builder is responsible both for the development of the design and the construction of the building. Whilst the developer might initially engage architects and engineers to prepare early designs to obtain planning approvals, these consultants then become subcontractors. It is the builder who is responsible for the delivery of a completed building at an agreed price. Once contracted, the builder will work to find efficiencies and cost savings in the development of the design and construction of the building.

A significant percentage of apartments are sold off the plan to fund the development. However, purchasers of apartments have no rights to oversee the construction phase of the project. They must rely on the regulatory controls and competence of practitioners to deliver a compliant, safe building.

Although building approvals are required, the nature of a design-and-construct project means that many aspects of the design change after the initial approval is obtained. This often leads to just-in-time supply of documentation and squeezes the compliance checking processes.

Staged building approvals are contemplated in most building approvals systems. They are intended to allow for ongoing approvals as the design is developed and before work commences. However, regulatory controls over this process are often very limited. As a consequence, there is often a significant difference between the as-designed building documentation and the as-built building.

9 Australian Bureau of Statistics, 8752.0 *Building Activity*, Australia, 2017.

Some, but not all, jurisdictions require lodgement of as-built plans. Where as-built plans are lodged there are consistent reports that the adequacy of documentation is poor. In practice, building surveyors insist, to different degrees, on amended plans when the building work has departed from the approved plans. However, many approve, allow, or are not aware of, variations that have been made. The result is that changes to approved design occur frequently, at the discretion of the builder, project manager and/or contractors and without independent certification.

The implementation of NCC has failed to keep pace with these developments. Most compliance and enforcement systems do not account for the modern construction practices described above.

It is for that reason that several of the recommendations seek to address the issue of adequacy of documentation (Recommendations 13, 14 and 17), ongoing approval of design by independent certification (Recommendations 16, 18 and 19) and increased auditing and regulatory oversight by the state or territory regulator (Recommendations 5, 6 and 7). Each jurisdiction will need to look critically at their legislation to determine whether the statutory controls recommended are strong enough. They will also need to develop effective enforcement programs to overcome the culture of complacency that has emerged as a result of the modern construction practices described above.

“...our current system is nationally fragmented, needlessly complex and based on an old regulatory model which is increasingly incapable of dealing with modern industry issues and rapid change. It often fails to facilitate identification of defective work, fails to hold to account those responsible for building defects where these are detected, and fails to support innocent victims who inherit responsibility for resolving defective work.”

Building Products Innovation Council.

The role of the private building surveyor

Contemporary building and construction laws derive from the 1991 Model Building Act (MB Act), elements of which have since been variously adopted by the states and territories.¹⁰ A number of major reforms were embodied in the MB Act, including:

- providing a choice of either engaging a private building surveyor to certify all aspects of construction requiring approval (including the issue of an occupancy certificate) or to opt for the ‘traditional’ route in which approval was facilitated by the local authority;
- mandating professional indemnity cover for prescribed classes of building practitioners (such as engineers, architects and surveyors);
- providing for the setting of minimum qualifications for building practitioners;
- providing certainty in respect of time limitations for law suits;
- requiring judges to apportion liability for damages so that a party found liable for a given proportion of the total amount of the damages for economic loss and rectification costs resulting from the defective work would need to pay no more than the given proportion; and
- providing for “one-stop-shops” for resolving building approval disagreements.

For liability reasons, the model proposed did not have a role for local government if a private surveyor was engaged, other than to perform a document registry function. In four jurisdictions (including three with the highest volumes of building and construction work) this model has been adopted. In the other four jurisdictions, variations on the model have been adopted. In each case the private building surveyors have a certification role and either the local or territory government can accept their certification without the need to form their own opinion or take on liability for the work of the private building surveyor.

In short, in all jurisdictions across Australia private certification now occurs as part of the vast majority of building approvals process. The increase in private certification has resulted in a significant decline in the resources and capacity of most local government building authorities.

A building regulatory model that includes private certification carries with it an inherent potential for conflict of interest. That is not to say that a model where only a government official certifies building design and construction is entirely free from potential conflict. There is evidence that government processes can be open to poor practices. However, the private certification model will always have a significant potential for conflict of interest given the commercial relationship that must necessarily exist between the designer/builder and building surveyor. Even if the building surveyor is appointed by the owner, this appointment will be influenced by the builder and/or designer.

¹⁰ Dix and Lovegrove, *Model Legislative Provisions and Commentary*.

“The private building surveyor regime has led to a culture of complacency and an element of not rocking the boat or biting the hand that feeds you. The level of independence we originally had with municipal building surveyors has been lost.”¹¹

FM Global

In the face of the shift to private certification across the country since 1993, regulatory oversight of the role of private surveyors by governments around the country has been patchy. Most of the regulators we consulted advised us that proactive audits of private building surveyors were not done or had only commenced in the past three or four years. In most jurisdictions, to the extent that auditing is undertaken, these audits are largely administrative, although there is work presently underway to develop more substantive audit programs. Intervention is rare. State licensing bodies have cancelled the registration of a relatively small number of private building surveyors in only two jurisdictions. In many jurisdictions there have been very few disciplinary inquiries into the conduct of private building surveyors.

A common complaint from local government associations around the country is that they are expected to undertake enforcement related to the poor practices of private building surveyors without being adequately resourced. They also argue that state and territory licensing bodies have been ineffective in dealing with incompetent and unprofessional practitioners. For example, the Local Government NSW has argued that the Building Professionals Board (NSW) is slow to act on non-compliance matters, requiring councils having to take on a greater enforcement role.¹²

There are two sides to this story. From private building surveyors we heard that sometimes when they try to undertake enforcement and refer unresolved matters to the state, territory or local government, they are ignored. Worse, on occasion, attention turns to their own conduct and they find themselves the subject of complaint and criticism.

Notwithstanding the very strongly and consistently held perception that private certification is tainted with conflicts of interest and poor practice, a range of stakeholders expressed sympathy for the difficult role of the private building surveyor. Many private certifiers are individuals of high integrity. They often experience considerable pressure from the conflicting demands they face from their clients, the regulators and the insurers. Too few in the building industry are attracted by a career as a surveyor. The profession is ageing and there are limited pathways or incentives for people to become building surveyors.

Some of those consulted have told us that the move to private certification over the past 25 years has compounded many of the problems that we have been asked to examine. We tend to agree. However, it is not just the conduct of private building surveyors that contributes to the problems but also the lack of regulatory oversight of their conduct and, more importantly, the absence of a cohesive and collaborative relationship between state and local government and private building surveyors. In the building and construction environment that has developed since the early 1990s, the governance of private building surveyors needs to be recalibrated.

There should be a tightening of government oversight of the building approvals process in order to effectively minimise the conflict of interest that is inherent in a privatised building surveying model. Some jurisdictions are considering options such as a ‘cab-rank’ or ‘chocolate-wheel’ model in which government makes the decision on the allocation of private surveyors to projects. Some jurisdictions are considering limiting the involvement of private building surveyors to issuing the building approval or conducting inspections or issuing the occupancy certificate, but not all three. Another model is to allow private building surveyors to perform all three stages of the building approvals process but only for approvals relating to Domestic and lower risk Commercial building work.

The allocation of roles between government and private building surveyors is for each jurisdiction to determine. The recommendations can be implemented regardless of the public versus private certification model in place in any given jurisdiction. They would complement any other restrictions that a jurisdiction might wish to set in place.

Our focus has been to ensure the integrity of private building surveyors. We believe that can be achieved through statutory controls to mitigate conflict of interest (Recommendation 9), a code of conduct (Recommendation 10) and mandatory reporting obligations (Recommendation 11). The recommendations also call for increased collaboration between state and local governments and private surveyors in their enforcement role (Recommendation 5).

Such interventions do not represent imposition of unnecessary red tape or bureaucratic overreach. There is a significant danger that without increased auditing and enforcement, the privatised building approvals process will lead to an ongoing decline in compliance standards. That is why we propose enhanced regulatory oversight. Improved governance of private building surveyors is necessary in order to win over vocal industry critics and, crucially, to restore public confidence that safety is paramount.

¹¹ Comments provided to the BMF Assessment by FM Global.

¹² Local Government NSW, *Submission to the Building Professionals Board Report on “Building Certification and Regulation – Serving a New Planning System for NSW”*, [website], 2014, p.15, <http://www.lgnsw.org.au/files/imce-uploads/127/LGNSW-submission-to-bpb-maltabarow-report-march-2014.pdf>, (accessed 3 February 2018).

The responsibility of builders

The quality of buildings depends heavily on the competency and integrity of builders. There are many builders that have high standards of competency and integrity. However, the rates of disputes, alleged defects and reports of high levels of illegal phoenix activity are evidence that there are shortcomings in the performance of some builders. These need to be addressed.

Independent inspections of building work are required in most jurisdictions as a mechanism for overseeing the work of builders. However, the majority of building work is constructed without oversight. Mandatory inspections are limited in their ability to detect non-compliance. Some of the most important safety elements are hidden from view and a point-in-time inspection cannot properly assess essential construction processes. Whilst inspections during building work have merit, the competency of builders will always be a critical factor in the effective implementation of the NCC.

The recommendations are intended to strengthen the competency of builders by requiring consistent requirements not only for the registration of all builders but also for sub-categories that limit the scope of work that can be performed based on skills and competencies (Recommendations 1 and 2). It is also recommended that builders receive compulsory education on the NCC. The content of that education should be based on intelligence about common forms of non-compliance detected by regulators and insurers (Recommendation 3).

The integrity of private certification has been questioned, largely because of the relationships between builders and private building surveyors. The recommendations provide for a strengthening of the independence between builders and building surveyors (Recommendations 9, 10 and 11). They include placing obligations on private building surveyors to report builders who do the wrong thing. It is imperative that builders play their part in helping to redefine the role of private building surveyors. Builders need to recognise that inappropriate relationships with private building surveyors undermine the whole system.

The recommendations call for improvements to the quality of documentation and to increased controls over design-and-construct approaches to building (Recommendations 13 to 17). These changes should give greater protection to builders. For these changes to be effective, builders must ensure that they build to approved documentation and that where a design is unclear or not practical they call for variations to be documented before proceeding with work. For design-and-construct projects, builders must resist proceeding with work beyond the approved design. When products are being selected or substituted, the builder needs to know when to seek permission from the building surveyor.

The question of cladding

Our appointment to undertake this inquiry was one of several actions taken by the BMF following the tragic deaths of 71 people in the Grenfell Tower fire in London on 14 June 2017. The circumstances of that fire continue to be investigated, but it is widely accepted that a key contributor to the ferocious nature of the fire was the presence of highly combustible polyethylene cladding that had been installed on the external walls of the tower as part of recent refurbishment works.

The BMF was considering the use of cladding containing polyethylene on buildings in Australia before the Grenfell Tower fire. In November 2014, in Melbourne's Docklands, the Lacrosse building caught fire. Over 400 occupants were evacuated as the fire raced up 13 storeys via the external façade of the building within minutes of igniting. The Lacrosse building was completed in 2012 and was clad in combustible aluminium composite cladding containing polyethylene.

Since the Lacrosse building fire, the BMF has taken a number of specific actions including reviewing the NCC and forming the SOG to advise it on issues relating to combustible cladding and building product accreditation generally. Each jurisdiction has commenced work to conduct audits of high-rise buildings. Many have initiated, or are considering, reforms to address the use of aluminium composite cladding and other high-risk building products.

The report does not make recommendations about cladding audits and rectification works. More generally, we do support the BMF seeking to reach a position on the establishment of a compulsory product certification system for high-risk building products (Recommendation 21).

Our Terms of Reference do not specifically refer to the concerns regarding combustible cladding. However, this issue has been a dominant underlying theme of the consultations we have held. As we have developed the recommendations we have asked ourselves a simple question: "would our recommendations significantly reduce the likelihood of the misuse of cladding occurring in the future?". We believe we can answer in the affirmative.

A better system of harmonisation

A common theme in our consultations was the call for greater harmonisation in compliance and enforcement systems. This issue has been raised time and time again. In considering this matter the Productivity Commission concluded that “While there may be benefits from some alignment across jurisdictions of administrative processes, it is not clear that net benefits would arise from harmonisation of all aspects. A progressive approach, advancing harmonisation in those areas with the largest net benefits, may be appropriate. Effective compliance and enforcement is a higher priority than full national consistency at this stage”.¹³ We agree with this finding.

“If there was one area of focus that could be immediately sought to pursue improvement, it should be seeking a commitment to develop a model NCC Administrative Code to harmonise expectations regarding the aspects identified in the terms of reference for this assessment.”

Fire Protection Association Australia.

Our appointment demonstrates a willingness by the BMF to consider consistent ways to achieve the most effective implementation of the NCC across Australia. The recommendations, if adopted by all jurisdictions, will lead to a degree of harmonisation which does not presently exist. Further, because many of the recommendations call for a national approach, the implementation process will continue to strengthen the relationships between jurisdictions and their appreciation for each other’s systems. The dissemination of good practice will be enhanced.

Under the most recent ABCB Intergovernmental Agreement (ABCB IGA), the BMF has further defined the roles of the ABCB and the SOG. The Ministers have also sought assistance on regulatory matters from a forum of building regulators (the Building Regulators’ Forum (BRF)). All three will provide the BMF with support in its work. This new governance arrangement strengthens existing efforts for collaboration and will encourage ongoing partnerships between jurisdictions on a wide range of issues. We strongly support its development.

“AIBS supports a single national legislative approach, or at least for each State and Territory to adopt a model version in its legislative scheme.

AIBS believes that eliminating the differences in administrative provisions would lead to a reduction in compliance cost to industry and therefore to the consumer.”¹⁴

Australian Institute of Building Surveyors

Given this context, we have been mindful to respect the autonomy of each jurisdiction to make their own legislative and administrative arrangements for building and construction compliance and enforcement systems. Crucial elements of the systems such as the public versus private certification model, the role of local government and fire authorities, the interface with planning controls, consumer protection mechanisms and funding models, remain matters for each jurisdiction to determine.

“The NCC must be enforced and policed in a way that is nationally consistent.”

Master Builders Australia.

¹³ Productivity Commission 2004, *Reform of Building Regulation*, p. 243.

¹⁴ Australian Institute of Building Surveyors, *AIBS Policy - Building Regulatory reform in Australia*, Version:001/18-Sep-17, 2017, https://aibs.com.au/Public/Public/AIBS_Policies.aspx, (accessed 13 February 2018), p. 8.

Recommendations

Recommendation 1—Registration of building practitioners

The problem identified

Registration of practitioners is a regulatory mechanism for providing public accountability. Whilst all jurisdictions register building practitioners as part of their compliance and enforcement systems, the categories that are registered differ. This affects the mobility of participants and creates complexity in applying mutual recognition. More importantly, there are gaps in the accountability of practitioners with key responsibilities for compliance with the NCC across Australia.

“All registration systems have the same basic characteristics in that standards must be set, courses accredited, candidates examined or assessed, and a register maintained. Performance must be monitored and failures disciplined. A register has greater effect if supported by licensing arms of government.”

Engineers Australia.

Whilst there is some crossover, the skills required for the design and construction of Commercial buildings differ significantly from the skills required for the design and construction of Domestic buildings. Many practitioners specialise in, or have capabilities limited to, either the commercial or domestic sector. Unfortunately, in many jurisdictions the scope of work that can be performed by some categories of registered practitioner is not limited to the type of design or construction work they have the capability to perform. This results in registered practitioners taking on building work for which they are not fully competent.

Although fire safety systems are a critical component of Commercial buildings and occupy a significant part of the NCC, most jurisdictions do not register the practitioners who have expertise in fire safety system design, installation or maintenance. Similarly, the design of a multi-storey building relies on the expertise of structural engineers, but three jurisdictions do not register that occupation. Builders are responsible for building work and the supervision of contractors but not all jurisdictions register builders for all types of Commercial building work.

Most Commercial buildings include complex fire safety systems that require maintenance and testing to ensure that they will operate as intended in the event of fire. Many key stakeholders believe that the standard of maintenance of fire safety systems post-occupancy is poor. However, most jurisdictions do not require fire safety system maintenance contractors to be registered.

Recommendation 1:

That each jurisdiction requires the registration of the following categories of building practitioners involved in the design, construction and maintenance of buildings:

- Builder
- Site or Project Manager
- Building Surveyor
- Building Inspector
- Architect
- Engineer
- Designer/Draftsperson
- Plumber
- Fire Safety Practitioner

Implementing the recommendation

Each jurisdiction will need to have complementary provisions which provide that only registered practitioners can perform the work for which they hold registration. This should extend to ensuring that only appropriately qualified and registered practitioners can prepare performance solutions. Exemptions for owner-builders performing building work on Domestic buildings may be appropriate.

It is important that each category of regulation have defined sub-categories which limit the scope of work that can be performed by reference to classifications of buildings and/or building heights and floor areas. At a minimum, sub-categories referable to Commercial and Domestic buildings should be applied to each category.

For the categories of Engineers, Plumbers and Fire Safety Practitioners, there should be categories for various disciplines. The following are proposed:

- Engineers
 - civil
 - structural
 - hydraulic
 - mechanical
 - geotechnical
- Plumbers
 - water
 - drainage
 - sanitary
 - gas
- Fire safety system installers
 - fire safety engineers
 - fire protection system engineers
 - fire safety system installers
 - fire safety system maintenance contractors

Further consultation should be undertaken with industry with a view to reaching agreement on the full range of appropriate disciplines to be included.

Each jurisdiction has specific legislation for the registration of architects. Whilst this need not change, the accountability and regulatory oversight of architects should be consistent with other categories of building practitioner and aligned with the recommendations in this report. This will mean that changes are required to legislation regulating architects to provide for the following:

- the introduction of sub-categories which limit the scope of work that can be performed by architects by reference to classifications or types of buildings (Recommendation 1);
- nationally consistent requirements for registration of architects (Recommendation 2);
- mandatory CPD for architects (Recommendation 3);
- appropriate powers for the architects' licensing bodies to audit the performance of architects (Recommendations 6 and 7); and
- a statutory duty on architects to prepare documentation which demonstrates that proposed buildings will comply with the NCC (Recommendation 13).

Further observations

In identifying the categories referred to in the recommendation, we have had close regard to the Terms of Reference and the fact that the recommendations are to be directed to strengthening the effective implementation of the NCC. Jurisdictions can and do register other practitioners operating within the building and construction industry, such as demolishers and electricians. Registration of such trades can be worthwhile. The recommendation is not intended to exclude other categories of work that jurisdictions may choose to register.

The building and construction industry is evolving fast. As the technology of building construction changes and innovative practices are introduced, new forms of expertise are emerging. There may be justification in the future for other categories of practitioner to be included in a nationally consistent approach if evidence emerges that the work performed is sufficiently complex and relates to areas of high-risk building design, construction or maintenance.

In some jurisdictions, various trade contractors are required to hold registration when contracting directly with owners. These trade contractors do not require registration if they are sub-contracting to a builder. We have not made recommendations for a nationally consistent approach to registration of trade contractors as this is likely to impose a significant regulatory burden on the building and construction industry and on regulators nationally, particularly in smaller jurisdictions. We have been unable to conclude with certainty that such a burden would be warranted. Jurisdictions that do choose to require trade contractor registration as part of their warranty or consumer protection regimes should work together to harmonise the categories of trade contractors they register.

When a builder contracts directly with an owner, it is the role of the builder to undertake building work using employees and subcontractors. It is recommended that the builder remains the primary person accountable for the proper construction of building work. Where necessary, this role should be set out in legislation. An exception to this position is fire safety system installers. The fire safety systems in buildings can be based on complex fire engineering designs and performance solutions. The installation and proper functioning of these systems is a critical building safety feature that warrants registration of specialist contractors.

Recommendation 2—Consistent requirements for registration

The problem identified

Currently, where the same category of practitioner is registered in two or more jurisdictions, there are often different requirements for registration. Nationally consistent training packages are limited. Each jurisdiction recognises different levels of qualification and experience when assessing applications for registration. This makes the operation of mutual recognition burdensome.

“Although the general roles of design, approval of design, installation, approval to occupy and ongoing maintenance exist in every jurisdiction, there is no consistency in terminology or the extent of roles or the subsets within them. This makes accountability difficult as well as mutual recognition of transportable workforces.”

Fire Protection Association Australia.

Some states and territories have been reluctant to register practitioners registered in other jurisdictions on the basis that they believe the registration standards set by other jurisdictions are of a lower level. Unnecessary impediments to the movement of skilled practitioners imposes an economic cost on the industry, limits competition, and reduces choice.

A nationally consistent approach to the requirements for registration of building practitioners (Recommendation 1) would facilitate the development of appropriate training packages for those practitioners. This should lead to nationally recognised qualifications for each category and sub-category of registered practitioner, greater labour mobility and a more comprehensive national market for appropriate insurance products.

The public needs to be assured that practitioners are trained and experienced in applying the NCC. They also need confidence that they are people of integrity and that where possible they are covered by insurance.

Recommendation 2:

That each jurisdiction prescribes consistent requirements for the registration of building practitioners including:

- **certificated training which includes compulsory training on the operation and use of the NCC as it applies to each category of registration;**
- **additional competency and experience requirements;**
- **where it is available, compulsory insurance in the form of professional indemnity and/or warranty insurance together with financial viability requirements where appropriate; and**
- **evidence of practitioner integrity, based on an assessment of fit-and-proper person requirements.**

Implementing the recommendation

A nationally consistent approach to regulating building practitioners is vital. However, these expanded requirements could be implemented progressively based on categories of practitioners. Given the significance of their role, priority should be given to building surveyors.

An essential element of training packages must be training on the NCC and the manner in which it needs to be applied. This is not presently a compulsory unit of study for all qualifications which are required for registration. It should be. Effective implementation of the NCC depends upon it.

Fit-and-proper person requirements are the foundation of public trust in the integrity of practitioners. These include such matters as bankruptcy and criminal checks. In the first instance, financial viability requirements are most relevant for builders. There may be justification for other categories of practitioner to be subject to similar requirements.

Further observations

Presently, some jurisdictions rely on accreditation by industry bodies as a basis for registration. There is merit in this approach. Well-run industry accreditation can ensure that the competencies of practitioners are tailored to their area of work and can alleviate state or territory regulators from the detailed assessment of applications. If this approach is taken, the state or territory licensing body should have clear statutory responsibility for auditing performance and disciplining registered practitioners. Of course, industry associations should still take responsibility for holding their members to account and cancelling accreditation. A collaborative approach to disciplinary oversight would be beneficial.

It is important that as many practitioners as possible hold professional indemnity and/or warranty insurance in order to support accountability. It is acknowledged that insurance is not currently available for the range of practitioners proposed to be registered. This weakness needs to be addressed. There should be ongoing discussion between governments and the insurance industry to ensure that the best possible insurance is available to all categories of registered practitioner.

Recommendation 3—Continuing Professional Development

The problem identified

Building practitioners operate in a dynamic environment. New products, technologies and practices are actively encouraged through the performance-based NCC which, itself, is amended every three years. The introduction of nationally consistent mandatory registration requirements provides a mechanism to ensure currency of competencies. Those already practising need to have up-to-date knowledge of the current edition of the NCC.

“The NCC references over 100 Australian Standards and other technical documents. These documents commonly reference other technical standards (secondary and tertiary references) meaning that through the NCC alone, well over a thousand detailed standards form part of the regulatory requirements that apply to building work. No one person can possibly be required to have a comprehensive understanding of all these requirements, it is not practical or realistic. Governments and the Building Ministers need to acknowledge this reality in forming a view on any future changes to the administration framework for building work.”

Housing Industry Association Limited.

Many stakeholders report that building practitioners across the industry do not have a sufficient understanding of the NCC or its revisions. This has led to non-compliance or poor quality documentation of compliance. Misinterpretation or ignorance of the requirements of the NCC is not uncommon. Indeed, this failure has been offered as one explanation for the prevalence of non-compliant cladding on buildings across Australia.

Recommendation 3:

That each jurisdiction requires all practitioners to undertake compulsory Continuing Professional Development on the National Construction Code.

Implementing the recommendation

Regulators need to have mechanisms to identify common non-compliances which may indicate systemic misunderstanding of the requirements of the NCC. Insurers may also have data they would be willing to share. This intelligence should be collected, shared nationally and fed back to the industry promptly. It should also inform compulsory topics for CPD relevant to each category of registration.

“...CPD must become a mandatory consideration for all state jurisdictions that register building practitioners. This mandatory CPD consideration should ensure that practitioners will maintain a level of currency within their specialist disciplines, which should also promote aspects of consumer confidence in the overall built environment.”

Metropolitan Fire and Emergency Services Board.

Some of those consulted have been critical of CPD. Reservations have been expressed that CPD schemes can leave the content of training up to the discretion of participants which reduces the relevance and effectiveness of learning. Compulsory CPD schemes should provide for targeted learning on topics of genuine relevance to improve the competence of practitioners. Such topics should be focused on improving the understanding of the NCC and ensuring its effective implementation.

Further observations

Industry associations can play a key role in the delivery of CPD provided that there is collaboration with regulators to ensure that the content of training is appropriate. They may be willing to assist with the administrative oversight of CPD schemes through their accreditation schemes.

Governments may wish to consider incentives to support compulsory training on the NCC.

Recommendation 4—Career paths for building surveyors

The problem identified

The role of the building surveyors is critical to the building approvals process. Unfortunately, there may not be an adequate supply to meet future needs. The average age of building surveyors is now over 50 and there are ill-defined and inadequate career pathways to becoming a registered building surveyor.

For many other categories of building practitioner, careers are established through apprenticeships, certificated training or other education pathways. Given the criticality of building surveyors to ensuring NCC compliance, more needs to be done to encourage new entrants to this profession, especially for those who have experience in the building and construction industry.

Recommendation 4:

That each jurisdiction establishes a supervised training scheme which provides a defined pathway for becoming a registered building surveyor.

Implementing the recommendation

A nationally consistent supervised training scheme for building surveyors, designed in collaboration with industry, would be most effective. Such a scheme should provide for comprehensive training on regulatory obligations, ethical conduct and the operation of the NCC.

Further observations

Clarity is needed on the extent to which trainees must be supervised and how trainees can attain experience to achieve the necessary requirements for registration over a set period. The legal requirements for physical supervision of trainees needs to be pragmatic so that it is commercially viable for businesses to invest in trainees.

Governments may wish to consider incentives to support the development of, and/or participation in, a supervised training scheme.

Recommendation 5—Improving collaboration between regulators

The problem identified

In each state, multiple state government bodies and local councils have a role in building regulation. Private building surveyors may also have enforcement powers in relation to building work for which they have been appointed. This results in a fragmented system of regulatory oversight which is prone to duplication, confusion, unclear lines of responsibility and a lack of information sharing. This can be exacerbated in cases if some authorities believe that they have received inadequate funding. To the public, especially when things go wrong, this often looks like a game of buck-passing.

“Proper enforcement requires a full and detailed expression of how the enforcement activities are to be undertaken, when, and by whom.”¹⁵

Australian Institute of Building Surveyors

¹⁵ AIBS, *Building Regulatory Reform*, p. 11.

With the introduction of private certification, some local governments have taken the position that they should no longer have responsibility to respond to complaints about building work because a private building surveyor has been appointed. This can lead to complaints being characterised as a disciplinary issue and referred to the state building regulator. The state regulator might direct the complainant back to local government to use its power to order work (a power which the state may not have). Alternatively, the state might characterise the same matter as a consumer affairs matter and refer it to its dispute resolution body.

In six jurisdictions, private building surveyors have powers to initiate enforcement action. Private building surveyors are sometimes reluctant to use these powers because of their commercial relationship with the builder and/or designer or because they do not receive support from local or state governments when they refer unresolved matters to them for further action.

For there to be effective regulatory oversight, all authorities and private building surveyors with enforcement powers need to collaborate closely on the performance of their functions, the timing and nature of referrals, and the sharing of information.

Recommendation 5:

That each state establishes formal mechanisms for a more collaborative and effective partnership between those with responsibility for regulatory oversight, including relevant state government bodies, local governments and private building surveyors (if they have an enforcement role).

Implementing the recommendation

Our aim is not to prescribe how each jurisdiction should institute these partnerships. Implementation could be achieved through enhancements to an existing panel or committee. Alternatively, a new body could be established which would be dedicated to the task of enhancing regulatory practices. Some jurisdictions may wish to establish a regulatory practice panel.

It is emphasised that the body proposed by the recommendation is not intended to be another advisory committee. Rather, the intention is to have a body that will focus on improving regulatory practice with a view to its members working together to effectively monitor building practitioners and building work. It needs to possess the authority to improve regulatory oversight.

With this in mind, the new or existing body should be made up of representatives from relevant state government bodies, local governments and private surveyors (if they have an enforcement role). It might usefully be chaired by an independent person. The body could be formalised by administrative means or be a statutory body. Either way, it should report to the relevant Minister/s in its jurisdiction. The body should meet regularly to discuss collaborative regulatory practices and procedures.

To support implementation of the recommendation, each jurisdiction will, as a first priority, wish to ensure that its legislation provides clear statements of responsibility for each authority. This will be essential to provide the necessary mandate for participation and to ensure clarity in the roles, responsibility and powers of each of the authorities. Any reforms needed should be developed having regard to how the various authorities will 'together' provide effective oversight of the building and construction regulatory systems.

The body should have terms of reference which include:

- the establishment and maintenance of written information sharing agreements that deal with matters such as:
 - shared risk assessment practices;
 - procedures for referrals; and
 - content and procedures for information sharing;
- monitoring and advising the relevant Minister/s on the effectiveness of the regulatory oversight of the industry and providing advice to the Minister/s as required;
- agreeing on the content of publications or joint websites which give clarity to both the industry and the public on complaint management processes and regulatory practices; and
- mechanisms for engagement with consumers and/or industry associations.

It might also be appropriate for fire authorities and building dispute resolution bodies to be part of the body.

Further observations

The territories work closely with private building surveyors and as there is only one level of government involved, formal structures are unlikely to be necessary. It is a matter for the NT and the ACT to decide whether to implement this recommendation.

Recommendation 6—Effective regulatory powers

The problem identified

Audits of cladding on high-rise buildings have raised wider questions about whether authorities have the necessary powers to require rectification, recall products or issue warnings about products.

Recommendation 6:

That each jurisdiction give regulators a broad suite of powers to monitor buildings and building work so that, as necessary, they can take strong compliance and enforcement action.

Implementing the recommendation

Whilst it is not necessary to have nationally consistent powers, it is envisaged that all jurisdictions will need to have a minimum range of legislated powers, including:

- powers of entry for monitoring compliance;
- powers of entry where there is a reasonable belief of the commission of an offence or grounds for disciplinary inquiry;
- powers to require the production of documents or information;
- powers to investigate following a complaint or proactively;
- powers to seize documents and test and seize materials;
- powers to evacuate, make all necessary orders, or stop works;
- powers to negotiate voluntary undertakings;
- powers to undertake disciplinary processes;
- performance audit powers over all registered practitioners (including architects); and
- infringement notice and prosecution powers.

The question of which authorities (state, territory or local government or private building surveyors) should have which powers is a matter for each individual jurisdiction. However, where the same or similar powers are to be given to more than one regulator, it will be helpful to have a clearly identified lead regulator.

Further observations

Regulation of the building product supply chain is warranted, and product recall and/or prohibition powers should exist for high-risk building products. However, it has not been recommended that all building regulators be given such powers. It is a matter for governments to decide whether such powers should sit with building or consumer affairs regulators. On one matter we are clear: if building regulators are to be given powers to regulate the supply chain, this work should not detract from their primary role.

Recommendation 7—Strategy for the proactive regulation of Commercial buildings

The problem identified

The construction of Commercial buildings is generally commissioned by developers that are in the business of building, even though they are not builders themselves and are not required to be registered. The end users of these buildings will not usually participate in the building process at all. The ability of a purchaser to assess the building's compliance with the NCC is limited. Consumers generally assume that the building regulatory system has delivered a building that is compliant with the NCC. That is not always the case and, as that is recognised, public confidence is undermined.

Building approvals processes across Australia generally provide for a very high level of self-certification of the design and construction of Commercial buildings. Until now there has been very limited proactive auditing by regulatory authorities of building work or of the registered practitioners involved in the construction of Commercial buildings.

“As a result of weak enforcement, parties – especially builders, building surveyors and fire engineers – are incentivised to reduce costs and they take risks doing so. These parties reap the benefits of the risky activity, but without a ‘cop on the beat’ they do not bear the consequences when things go wrong. This creates moral hazard.”

Enright Consulting.

Proactive auditing is imperative to restore public trust. Governments need to be able to detect and regulate inadequate practices. A strategy for the proactive auditing of the construction of Commercial buildings is required in each jurisdiction.

Recommendation 7:

That each jurisdiction makes public its audit strategy for regulatory oversight of the construction of Commercial buildings, with annual reporting on audit findings and outcomes.

Implementing the recommendation

It is essential that each jurisdiction have a public strategy for proactively auditing the design, certification and construction of Commercial buildings with a view to improving regulatory oversight, education and enforcement. State regulators may collaborate with relevant councils for this work, but the responsibility for the strategy should rest with the relevant state or territory regulator in each jurisdiction.

The strategy should include targeted audits of:

- the documentation for Commercial building projects, including the standard of documentation and quality of decision making in relation to performance solutions;
- the conduct of building surveyors to ensure adherence to regulatory requirements intended to mitigate against conflict of interest; and
- the work of builders, including their management of approvals for design development, variations and product substitution.

Statutory powers to support such a strategy should include:

- performance audit powers applying to registered practitioners;
- powers to take immediate disciplinary action in high-risk cases;
- the ability to issue rectification orders or order the appointed building surveyor to take reasonable actions;
- infringement and disciplinary powers including requiring additional training, undertakings, fines, and the suspension or cancellation of registration; and
- the ability to disqualify directors in order to prohibit them from being involved in other building companies.

A public register of any enforcement action taken against any registered practitioners by the state or territory regulator should be established and maintained.

Transparency is essential. Public feedback should be encouraged. To these ends, each jurisdiction should report annually on its strategy and on the outcomes and learnings from its audits. This will enhance public accountability, spread good practice across jurisdictions and encourage collaboration with industry bodies.

Further observations

Whilst the recommendation refers to auditing and oversight of the construction of Commercial buildings, this should not be taken to mean that auditing and oversight of the construction of Domestic buildings is not necessary. The recommendation is intended to prioritise the development of audit programs for Commercial buildings. Auditing might be extended to Domestic buildings in the future.

Recommendation 8—Collaboration with fire authorities in the development of fire safety design

The problem identified

Fire authorities play a role in the building approvals process in all jurisdictions. However, the triggers for their involvement differ. The resourcing of fire authorities to perform their role and approaches to the approvals process differs across jurisdictions. This results in similar buildings in different jurisdictions having different requirements imposed by the fire authorities.

There is consensus that, at a minimum, fire authorities should provide comment on, or consent to, performance solutions that involve fire performance requirements that relate to fire brigade intervention. However, fire authorities will sometimes want to consider, and may object to, broader aspects of the fire engineering design. The mechanisms for fire authorities to object to fire engineering designs differ across jurisdictions. In many, fire authorities have limited or no appeal rights. As a consequence, differences of opinion often remain unresolved.

“A more collaborative and respectful relationship is needed where the fire brigade is proactively sought to comment on areas that relate to their expertise, and designers and approval authorities are forced to consider this and better document and justify their position. ...the fire brigades have an important role to play in the design/approval process.”

Fire Protection Association Australia.

Fire authorities lack confidence that buildings will comply with the minimum fire safety requirements of the NCC. This concern seems justified given the prevalence of non-compliant combustible cladding on Commercial buildings. Measures need to be taken to improve compliance levels and to ensure a suitable level of engagement with fire authorities in the fire engineering design process.

The International Fire Engineering Guidelines (IFEG) has been endorsed by the fire safety industry and is published by the ABCB.¹⁶ It contains best practice for the development of fire engineering designs and includes an obligation to engage with fire authorities as part of the design process. It has been reported to us that if the IFEG was closely followed, the quality of fire engineering designs would improve and fire authorities would be consulted early on all designs involving performance solutions as part of the fire engineering design process. This would help fire authorities gain confidence in the capability of fire safety engineers to design acceptable fire safety solutions. Unfortunately, the IFEG is not consistently followed by fire engineers across Australia and its status is limited given that fire engineers are not registered practitioners in most jurisdictions.

Recommendation 8:

That, consistent with the International Fire Engineering Guidelines, each jurisdiction requires developers, architects, builders, engineers and building surveyors to engage with fire authorities as part of the design process.

Implementing the recommendation

The present edition of the IFEG was published in 2005. However, the IFEG is scheduled to be updated this year. The most effective means of establishing best practice for fire engineers and building surveyors would be to formulate a nationally consistent code of conduct for fire engineers and building surveyors based on the IFEG. A failure to comply with the code would establish a ground for disciplinary inquiry and regulatory oversight would be required to audit compliance. The development of such a code should be undertaken in collaboration with fire authorities and the fire safety industry.

Further observations

As noted above, the role of the fire authorities in building approvals differs across jurisdictions. In some cases, the involvement of fire authorities is a source of frustration because of their lack of resourcing for this role. There are complaints that some fire authorities oppose designs on issues which are beyond their expertise. Furthermore, there is a lack consistency in interpretation of the NCC. These matters impact on the effective implementation of the NCC.

Given the diversity of opinion within the industry, the BMF may wish to consider whether a separate review of the role of fire authorities in building approvals across Australia should be undertaken with a view to addressing the issues raised.

¹⁶ Australian Building Codes Board, *International Fire Engineering Guidelines Edition 2005*, Canberra, ABCB, 2005, <http://abcb.gov.au/Resources/Publications/Education-Training/International-Fire-Engineering-Guidelines>, (accessed on 7 February 2018).

Recommendation 9—Integrity of private building surveyors

The problem identified

Building approval systems in all jurisdictions rely on certification by private building surveyors. Even in jurisdictions in which building approvals are issued by local government, private building surveyors or other registered practitioners can issue certificates. Legally, they can be relied on by local government without the need for substantive review when issuing the final approval.

Consequently, in all jurisdictions, private building surveyors have a direct commercial relationship with designers, owners and builders. They depend on them for their financial viability. This makes them susceptible to the interests of their client in ways which may not always align with the public interest. They make decisions independent of government with limited substantive review. As a result, conflicts of interest are inherent in all compliance and enforcement systems across Australia.

Most jurisdictions have legislated controls to mitigate conflicts of interest. However, there is substantial variation across jurisdictions. In some instances, the controls are open to broad interpretation, making them difficult to enforce.

Some jurisdictions prohibit the appointed building surveyor to issue the building approval from participating in the design process. This is because a building surveyor who has a substantial involvement in the preparation of the design may not be independent in certifying that design. In practice, it is common that a designer will seek the views of a building surveyor about how compliance may be achieved, and it is generally accepted that the building surveyor will assist with those queries. However, the interpretation of how much advice can be given before the surveyor is seen to be participating in the design differs markedly.

Recommendation 9:

That each jurisdiction establishes minimum statutory controls to mitigate conflicts of interest and increase transparency of the engagement and responsibilities of private building surveyors.

Implementing the recommendation

Conflicts of interest need to be addressed comprehensively. The following matters should be legislated as a minimum:

- that it is the who owner appoints a building surveyor personally or through an agent.
- that where an agent is used, the arrangement should be subject to a requirement that the owner be given information throughout the building approvals process;
- that the engagement of a building surveyor be documented, and that termination of that engagement must not occur without the approval of a regulator or unless a mandatory process is followed;
- that the acceptance of an appointment of a building surveyor and the carrying out of any functions be prohibited where:
 - the building surveyor has participated in the design of the building; or
 - there is a direct or indirect pecuniary interest in the designer or builder or work; or
 - the building surveyor is related to a person with any of the above interests;
- that the obligations relating to the acceptance of certificates from other registered practitioners are clearly set out (that is, the checks that the surveyor must make and document when accepting certificates from others);
- that the owner and builder are required to be sent key documents directly from the building surveyor throughout the building approval process including:
 - an approved fact sheet on the role and responsibility of their building surveyor;
 - information about the surveyor's complaints management procedures;
 - all approved documents forming part of the building approvals;
 - any approved variations to documents or new design documents approved during the works;
 - results of all mandatory inspections as they occur;
 - any directions issued following mandatory inspections;
 - any enforcement actions taken by the surveyor;
 - any occupancy certificate or final inspection certificate; and
- that the owner has a right of appeal against decisions of the building surveyor.

Further observations

Not all jurisdictions place a prohibition on building surveyors participating in design and development. Some see it as critical to mitigating perceived conflict of interest. Other jurisdictions have a variety of different controls. Minimum statutory controls need to be clearly defined and applied consistently across Australia. Audit and enforcement of such requirements need to be priorities for regulators. On complex projects, the design team should be required to include a building surveyor who is genuinely independent from the building surveyor appointed to issue the approval. This already happens for some projects. It needs to be universal practice.

“Building surveyors engaged to provide advice during the design stage, particularly on how to achieve compliance, cannot then accept an engagement in a statutory role for the same project without being in conflict because they would essentially be assessing and approving their own design input. ...Once engaged, there should be a legislated process of disengagement. This will ensure that the highest standards of probity are upheld which will, in turn, prevent owners and developers from seeking to corrupt the assessment system.”¹⁷

Australian Institute of Building Surveyors

Recommendation 10—Codes of conduct for building surveyors

The problem identified

The compliance and enforcement systems of five jurisdictions do not have a code of conduct for building surveyors. This is a weakness. Codes of conduct can be an effective means of documenting the clear standards of behaviour expected of professionals who have statutory responsibilities. They also provide a reference against which auditing can be carried out and disciplinary action taken where the code is not met.

Without a clear code of conduct, it is sometimes difficult for regulators to question the behaviour of private building surveyors. As a result, oversight and disciplinary action can be challenging. We found only two jurisdictions in which the licensing bodies had suspended or cancelled the registration of private building surveyors. This suggests that the regulatory oversight of building surveyors across Australia has been limited and ineffective. Unprofessional behaviour needs to be exposed and appropriate action taken.

Recommendation 10:

That each jurisdiction put in place a code of conduct for building surveyors which addresses the key matters which, if contravened, would be a ground for a disciplinary inquiry.

Implementing the recommendation

Although the role of private building surveyors in the building approvals process differs across jurisdictions, the kinds of services they offer are similar as is the inherent potential for conflict of interest. Agreement should be reached on the core content to create a nationally consistent code of conduct.

The code of conduct should have statutory authority. Key issues need to be addressed. At a minimum, each jurisdiction's code of conduct should include the following:

- the primary obligation of the building surveyor is to ensure compliance with legislation and to act in the public interest;
- building surveyors must not prepare performance solutions (but may assess and approve performance solutions prepared by others);
- building surveyors must not participate in the development of the design (the code must set out clearly and unambiguously what this means in practice);
- building surveyors must act within their area of skill and expertise (regardless of the scope of their registration);
- building surveyors must have mechanisms in place to encourage owners to advise of any concerns about non-compliant work; and
- building surveyors must have policies and procedures for the proper management of complaints from owners, adjoining owners, builders and the regulator.

¹⁷ AIBS, *Building Regulatory Reform*, p. 8 and p. 15.

“The message that needs to be continually promoted amongst building certifiers is that they must remain independent and impartial. ...The private certifiers’ clients are the broader...community, not just the person or entities who pay their fees.”

Metropolitan Fire and Emergency Services Board.

Recommendation 11—Role of building surveyors in enforcement

The problem identified

In most jurisdictions, private building surveyors have a statutory responsibility to inspect work during the construction phase and determine whether it accords with the building approvals and the NCC. As part of this oversight role, private building surveyors are well placed to detect fraudulent conduct and non-compliant building work. They scrutinise what is happening on a day-to-day basis and have reliable intelligence on the performance of practitioners. Establishing ways to work with private building surveyors in order to collect this information in a collaborative way would lead to more effective enforcement processes.

When certifying building approval documentation, building surveyors have on occasions been presented with fraudulent documentation to support the proposed use of products. In some instances, products are substituted by builders without notice to the building surveyor. When the building surveyor becomes aware of this, they do not necessarily notify regulators. Whether or not these instances are widespread, there is a general perception that such failures can occur within the existing procedures for checking compliance.

When private building surveyors conduct mandatory inspections and/or issue occupancy certificates, they are sometimes asked to approve work that is inconsistent with the building approval or the NCC. In these situations, it is an essential part of the private building surveyor’s role to issue directions to the builder and to ensure that those directions are complied with. If they are not, the matter should be escalated to a building regulator, the works stopped, and/or the occupancy certificate refused. There needs to be a robust response in these circumstances. Otherwise, non-compliance will remain unresolved, and builders will not be persuaded to improve their practices. Most importantly, the system of oversight would be grievously compromised.

Builders may depart from approved plans or fail to call for inspections as required. Whilst the building surveyor is obliged to take the necessary steps to confirm that the work is compliant, they should also be required to report builders when this behaviour occurs. Regulators who receive this intelligence about builders need to take appropriate risk-based action.

It is consistently reported that many private building surveyors are not inclined to take enforcement action against their ‘clients’. Further, it has been suggested that when a private building surveyor refers an unresolved matter to the government authority, appropriate follow-up action is not taken. Such concerns are routinely expressed in the industry although it is difficult to gauge the prevalence or scale of the behaviours identified. It is imperative that these matters are addressed.

Recommendation 11:

That each jurisdiction provides private building surveyors with enhanced supervisory powers and mandatory reporting obligations.

Implementing the recommendation

It is recommended that:

- where private building surveyors conduct inspections or issue occupancy certificates, they be given powers to issue directions to fix or to stop work where noncompliance is detected. If the directions are not complied with within a fixed timeframe, the building surveyor must refer the matter to the government;
- there be mandatory reporting obligations on building surveyors to report suspicions of fraudulent practices and significant departures from approved documentation to the government;
- there be training, help desks and other support for building surveyors to assist them with drafting directions and notices; and
- a matter referred by a private building surveyor should be prioritised for action by the receiving authority so that a reliable system of regulatory support is given and the matter is resolved.

Further observations

Building surveyors have a duty to ensure that non-compliance is detected and documented. They must give clear directions to the builders for rectification. If the builder does not comply with the directions, the owner should be notified and the matter escalated to a resourced local, state or territory government that can respond expeditiously.

A mandatory reporting regime could include giving private building surveyors the ability to anonymously report problem designers and builders to the regulator or to submit ratings on the performance of the practitioners with whom they engage.

If information about these referrals was sent to a state or territory government, the information would be a source of intelligence about problem practitioners and common non-compliances. It could inform education and audit activity. It would also be easier to detect patterns of non-compliance by particular builders or designers which may support disciplinary action.

Recommendation 12—Collecting and sharing data and intelligence

The problem identified

The building approvals process in each jurisdiction requires documentation to be created before, during and on completion of building work. The systems provide for documentation and other notifications to be lodged with the relevant council or territory at various stages of building work. In some jurisdictions, there is also some form of mandatory reporting to a state or territory authority.

Unfortunately, despite requirements for record creation and keeping, key information is not readily accessible or auditable. The recent cladding audits have demonstrated that the ability to identify buildings for audit and to examine building approvals documentation in a comprehensive manner has been challenging for some jurisdictions.

It is frequently difficult to access all the relevant documents about the construction of a building, especially when the building has been sold. Important assumptions and requirements that underpin the design and performance solutions for the building are not always available to subsequent owners. This has become a bigger issue as the complexity of buildings and their fire safety systems have increased, especially where performance solutions have been used.

The insurance industry suggests that Commercial building owners who have access to, and are able to maintain, detailed building construction and maintenance documentation for buildings are likely to benefit from lower premiums.

If a consistent approach to the recording of information was taken by each jurisdiction, information sharing and data analysis to inform regulatory decision-making would be enabled. This would also enable authorised persons to access key information about the construction and approval of buildings, leading to greater transparency and auditability. It would strengthen public accountability.

Recommendation 12:

That each jurisdiction establishes a building information database that provides a centralised source of building design and construction documentation.

Implementing the recommendation

It is imperative that jurisdictions collaborate with a view to ensuring that their central database enables intelligence sharing. This will inform each other's compliance and enforcement activities and the work of the BMF. At a minimum, there needs to be agreement on the key data points that are congruent across all jurisdictions and upon which reliable information can be shared.

It is proposed that information about the construction of buildings should be lodged on a progressive basis during construction and that post-occupation fire safety system maintenance reports should also be lodged. The databases should have information about all Commercial buildings as a priority but could also contain information about Domestic buildings. Preferably, the information would be collected and stored in a digital form using emerging technologies.

Information collected should include:

- the name of the appointed building surveyor or issuing authority;
- a description of the proposed building work;
- details of all practitioners engaged;
- details of design certificates relied on and any information about third party review;
- details of any performance solutions and any information about third party review;

- inspection records;
- enforcement actions taken;
- final approval information, including details of certificates relied on and fire safety maintenance requirements and any design assumptions that must be maintained or considered in future changes to the building; and
- details of compliance inspections/certificates issued in relation to ongoing maintenance obligations through the life of the building.

A number of the recommendations relate to the relevant documentation that should be included in central databases in order to improve transparency, auditability and accountability (Recommendations 13, 14, 15, 16 and 20).

Further observations

New digital technologies provide efficient ways for collecting and analysing information and providing ready access for regulators and building owners. With developing technology it is now becoming feasible to have all building approvals documentation recorded electronically. Jurisdictions have realised that the lodgement of documents across dozens of local councils is problematic when information is needed for auditing and enforcement actions. Consequently, most jurisdictions are in the process of developing centralised data platforms.

Jurisdictions should collaborate with each other on these projects. They need to reach agreement on the types of information collected so that it can be readily shared and analysed on a national basis in order to inform regulatory activity and the work of the BMF.

To implement this recommendation, further work could usefully be undertaken by the BMF to identify the most appropriate technology to interface with each jurisdiction's data platforms. Emerging technologies, such as blockchain, should be considered for suitability. Potentially, it might provide a virtual ledger of all regulatory 'transactions' in a verifiable and auditable format. It is recommended that further work examine how the Building Information Management (BIM), data procurement frameworks, the Buildoffsite Property Assurance Scheme (BOPAS) and other similar emerging digital solutions could be relevant to the establishment of these databases.

Access to the information in these central databases would need to be limited to authorised persons. The extent of such access would need to take into account considerations of privacy, national security and the protection of intellectual property in design. However, it will be important to give owners and potential purchasers of buildings a suitable level of access to provide a level of transparency about the building approvals process. At a minimum the public needs to be assured that the compliance mechanisms involved in the construction process can easily be accessed and verified by authorised persons.

Recommendation 13—Responsibility of design practitioners

The problem identified

The adequacy of documentation prepared and approved as part of the building approvals process is often poor. The tendency for inadequate documentation to be prepared and accepted by building surveyors at the building approvals stage has increased, in part because of owners and developers endeavouring to minimise costs on documentation. This issue needs to be addressed as a matter of priority.

Documentation to support applications for building approvals is prepared by various practitioners including architects, designers/draftspersons, engineers, builders and owner-builders. There is no nationally consistent registration of design professionals.

In some jurisdictions, the preparation of performance solutions must be done by prescribed registered practitioners but in most there are no express restrictions on who can prepare a performance solution.

Very few jurisdictions expressly state in their legislation that the duty of the designer is to prepare documentation that demonstrates that the proposed building will comply with the NCC. Schemes regulating architects do not expressly require architects to prepare documentation which demonstrates that the proposed building will comply with the NCC.

Poor quality documentation leads to builders improvising or making decisions which may not be compliant with the NCC. Performance solutions can, in some instances, be post facto rationalisations intended to address design that is not in accordance with NCC requirements. Inadequate documentation can also result in hidden costs or allow builders to cut costs without owners being aware of it.

The integrity of documentation for future use is also compromised when the approval documents do not reflect the as-built building, or when they contain insufficient detail to properly inform building risk and maintenance requirements.

“...there has been a steady decline in compliant design and documentation. A lack of clear and complete design documentation increases the potential for disputes and non-compliance on any project.”

Fire Protection Association Australia.

Recommendation 13:

That each jurisdiction requires building approval documentation to be prepared by appropriate categories of registered practitioners, demonstrating that the proposed building complies with the National Construction Code.

Implementing the recommendation

For some jurisdictions this recommendation will present a significant shift in their regulatory systems as they do not currently register all design practitioners and instead rely on the building surveyor to exercise a high level of discretion over the standard of design. In some jurisdictions, the building surveyor is able to participate in the design development and carries the responsibility for competent design. This approach is not consistent with Recommendations 9, 10 and 11 and severely undermines the role of the surveyor as an independent certifier. At a minimum, this recommendation should be implemented in relation to building approvals for higher risk buildings, such as many Commercial buildings.

Each jurisdiction's legislation should expressly state that design documentation presented for building approval must:

- adequately demonstrate compliance with the NCC;
- include any relevant certificates of conformity, accreditations and other prescribed material; and
- require a declaration by each registered practitioner responsible that he/she reasonably believes that documentation demonstrates compliance with the NCC.

This requirement should apply to the work of all registered architects, engineers and designers.

Further observations

Such a declaration would not remove responsibility from the building surveyor to undertake a substantive review of the documentation. It is intended to clarify that designers are accountable for producing an adequate standard of documentation to support the building approvals process. It should also assist designers and building surveyors to resist pressure from owners and builders to prepare less than the bare minimum required.

Some jurisdictions have already taken steps to develop checklists or practice notes on the documentation that must be included for building approvals. Without clear guidance on the documentation required, there is a tendency for documentation to be limited as owners will prefer to reduce costs. Conversely, if the requirements are too high, there will be unnecessary costs imposed and initial approval may take longer. Owners might also be tempted to avoid the building approvals process altogether.

Design development needs to be allowed for during the construction process in order to accommodate innovation and flexibility. The development of guidance on the documentation required to support applications for Domestic building approvals would be beneficial. Even though it may be more difficult, guidance should include Commercial buildings.

In relation to the design of plumbing work, only some jurisdictions require that complex work be documented by a registered engineer before approval. In others, there is no regulatory requirement for documentation. This leaves the plumber responsible for both the design and installation even though they may not have the engineering skills to design the system. This weakness should be addressed in the implementation of this recommendation.

“Certification and compliance of hydraulic design across Australia is inconsistent and not regulated under any jurisdiction, this fragmentation negates the responsibility of hydraulic consultants which forces the plumbing installer to be accountable and responsible for the design concept.”

Master Plumbers Australia.

Recommendation 14—Adequate documentation for performance solutions

The problem identified

It is widely reported that the standard of documentation supporting performance solutions is poor. There is a lack of basic information on matters such as the relevant performance requirements and the assessment methods applied. It is common for the person preparing the performance solution to rely on their own 'expert judgement' that the performance solution complies and on that basis they proceed to self-certify the design.

Performance solutions can, in some instances, be post facto rationalisations made to address design or construction that was not built in accordance with NCC requirements. This is not their purpose. Performance solutions require project stakeholders to collaborate and develop an agreed pathway. Each requires empirical analysis, modelling and/or testing.

Recommendation 14:

That each jurisdiction sets out the information which must be included in performance solutions, specifying in occupancy certificates the circumstances in which performance solutions have been used and for what purpose.

Implementing the recommendation

Several jurisdictions already have legislation consistent with this recommendation. There should be a national best practice guide for documenting performance solutions that could be adopted by jurisdictions and given legislative force.

Recommendation 15—Approval of performance solutions for constructed building work

The problem identified

Performance solutions are sometimes approved in relation to works that are non-compliant with Deemed-to-Satisfy (DtS) provisions. This might occur where the builder has not followed documentation or where documentation has been lacking in detail. For example, performance solutions are currently being offered to justify combustible cladding remaining on buildings.

Where performance solutions are accepted for constructed work on Domestic buildings, the owner of the building may not know that this has occurred. Often their agent, the builder, deals directly with the building surveyor to resolve the issue. The owner may have preferred that the works be rectified to comply with the DtS requirements.

Performance solutions are an essential feature of the NCC. Provided that the process for preparing and assessing the performance solution is sound and that third party review is undertaken as appropriate, the approval of a performance solution for constructed work may be justified. However, the integrity and transparency of the process must be at its highest in these situations to avoid perceptions of conflict of interest and lack of confidence in the systems by the public.

"I have seen many examples of fire engineering alternative solutions being developed in the days leading up to the issue of an Occupancy permit. In other words, problems are found at the last minute and solutions are reverse engineered."

Enright Consulting.

Recommendation 15:

That each jurisdiction provides a transparent and robust process for the approval of performance solutions for constructed building work.

Implementing the recommendation

It is important the flexibility that is allowed through performance solutions be maintained. However, there needs to be a transparent and robust process to understand the basis on which performance solutions have been established.

Requirements should include:

- that the documented performance solution refers to the fact that it was developed in relation to constructed building work and indicates the reason why the performance solution was sought for that work;

- that the building surveyor prepares a written statement of reasons for accepting a performance solution;
- that notification of the request for the approval of a performance solution and the outcome of that request be given to the owner;
- that the owner must consent or have an appeal right if they object to the use of the performance solution; and
- that the occupancy certificate lists all performance solutions relating to the work and the date of their approval.

Further observations

In circumstances in which performance solutions are agreed retrospectively, the justification for third party review is strong. This recommendation is related to Recommendation 17 in that retrospective performance solutions could be a trigger for the requirement for third party review.

Recommendation 16—Approval of documentation throughout the construction process

The problem identified

It is common for Commercial buildings to be constructed under a design-and-construct contract which means that limited documentation is prepared at the time building work commences. Documentation is produced and developed throughout the project, allowing for innovation and flexibility and avoiding the need to amend detailed design documentation as decisions are made during the project. Even for Domestic building work, variations may occur as decisions are made during construction, particularly for renovations.

Various industry bodies have reported that for Commercial buildings, specialist practitioners may be engaged for complex design work early when detailed specifications have not yet been prepared. Often the design will contain assumptions or will be qualified. Later, when products are specified, the original designer may not be consulted to consider their effect.

This shortcoming has been reported in relation to the use of combustible cladding. Fire safety engineers are engaged to prepare a design early in the project when cladding materials have not yet been selected. Their design is subject to cladding being compliant with the NCC. Later, combustible cladding is chosen for use but there is no review of the fire engineering design.

Similarly, architects and engineers have indicated that they may be engaged early in a project to prepare initial documentation but that their engagement then ends. Detailed construction documentation is prepared by others who may not possess the relevant skills. When products specified are substituted, architects, engineers and building surveyors may not be consulted.

The building approval systems in many jurisdictions do not adequately address a design-and-construct approach. Some systems have no clear requirement for building surveyors to approve design development and variations. Others have statutory controls but there is no auditing and enforcement to ensure they are being complied with. Some jurisdictions recognise the use of staged building approvals but it is generally left to the discretion of the building surveyor to manage and document the staged process.

Recommendation 16:

That each jurisdiction provides for a building compliance process which incorporates clear obligations for the approval of amended documentation by the appointed building surveyor throughout a project.

Implementing the recommendation

Design development, variations and product substitutions should be approved by the building surveyor prior to associated work being carried out.

Where a project involves staged building approvals, the application for building approval should set out the proposed stages and the proposed design schedule. Notification points should be agreed to ensure that the design for each stage is properly documented and presented to the building surveyor for approval before any work for that stage commences. There should be offence provisions for builders who do not notify the building surveyor or provide the necessary documentation in advance of building work progressing.

Further observations

In general, building surveyors need to insist on approving proposed variations before they are undertaken. If variations are discovered, building surveyors need to insist on being provided with explanatory documentation promptly.

Building surveyors should have the competence to determine when variations and substitutions might adversely impact on earlier designs and when an appropriate engineer or architect needs to be consulted before work proceeds further.

Documentation lodged with the relevant government authority should reflect what is built rather than what was proposed to be built.

Implementation of this recommendation will be challenging. It requires designers, building surveyors and builders to work to properly documented design and construction specifications. This is the lynchpin of a best practice building approvals system and considerable effort will be required to effectively bring about systemic change in this area.

Recommendation 17—Independent third party review

The problem identified

Building surveyors do not hold expertise in all aspects of building design. They often rely on engineers or other experts to design components of work. Where this occurs, the building surveyor will rely on the work of the engineer or expert as being compliant and no substantive review will be undertaken. This practice is supported in most jurisdictions by providing for statutory certificates to be issued by certain practitioners or persons considered to be technical experts, often engineers. Legislation provides that when issued and relied on in good faith, these certificates provide immunity to the building surveyor. This means that the building surveyor will not substantively review the design or inspect the work.

Except for one jurisdiction, there is no mandatory obligation for independent third party review of any component of the design. It is at the discretion of the building surveyor whether they accept a self-certification or require the design to be independently certified by another qualified practitioner. In many cases, self-certification is accepted, which means that large parts of the design are not substantively reviewed by another qualified practitioner.

Even when third party review is undertaken, many jurisdictions do not require the third party reviewer and the designer to be independent. This does not pass the public interest test.

“Peer review is an important, regular and accepted process associated with many building design disciplines such as structural engineering or energy efficiency. However, nationally there is not a consistent culture of peer review for fire safety performance solutions. This is likely to contribute to the acceptance and implementation of poor design solutions overall.”

Fire Protection Association Australia.

In some jurisdictions, fire authorities conduct the third party reviews of fire engineering designs which provide the necessary independent oversight. However, in many jurisdictions, consultation with the fire authority is limited to seeking comment on fire performance solutions that involve fire brigade intervention. In these circumstances, third party review should be undertaken as a separate requirement.

“Also there has been a tendency for performance solutions (alternative solutions) developed for one project suddenly being replicated for many other projects, sometimes in totally different circumstances that may not be justified. ...Fire Safety Engineering designs for major buildings should undergo the rigor of Peer Review to ensure that critical judgement calls or expert opinions are valid, in line with current guidelines.”¹⁸

FM Global

¹⁸ Comments provided to the BMF Assessment by FM Global.

Recommendation 17:

That each jurisdiction requires genuine independent third party review for specified components of designs and/or certain types of buildings.

Implementing the recommendation

The concept underpinning this recommendation is that legislation would prescribe what types of designs and/or buildings must be subject to independent third party review. Depending on the level of risk, independence should be assured through one of the following mechanisms:

- the third party review being conducted by a panel of experts sitting on a statutory board or panel; or
- the third party reviewer being appointed from a list of approved third party reviewers with the process administered by government; or
- third party review by other registered practitioners in appropriate categories of registration with independence based on guidance (for example in a code of conduct).

Further observations

Many jurisdictions already make use of an expert technical panel. There is considerable merit in this approach.

There may also be value in jurisdictions placing an express prohibition on building surveyors assessing and approving performance solutions on fire safety performance requirements unless they hold requisite qualifications in fire safety performance requirements or unless the design has been approved by the fire authority.

“The challenge with peer reviews is to develop a scheme that adds value without becoming overly burdensome. There would need to be strict protocols around when a peer review would be required. Some issues that will require greater investigation are: who could conduct peer reviews, how the reviews would be conducted, the frequency and timing of reviews, and commercial in confidence arrangements.”

Engineers Australia.

Recommendation 18—Mandatory inspections

The problem identified

All jurisdictions have building compliance and enforcement systems that provide for inspections of some types of building work during construction. The builder is required to notify the building surveyor or council once a prescribed stage is reached. This triggers an inspection or, at least, an opportunity for an inspection.

There are significant differences across jurisdictions in the number of inspections required and the notification stages. In some jurisdictions very few inspections occur and for certain types of buildings there are no inspections required at all. Inspections are carried out by a range of persons. Very few jurisdictions require registration of inspectors. It has been reported that in some jurisdictions, inspections are carried out by builders or unqualified council officers who send photos of works to the building surveyor for review.

Increased requirements for inspections are necessary. Unfortunately, there are doubts about whether there are sufficient numbers of suitably qualified persons to conduct them. Reservations have been expressed about the conflict of interest that arises when the private building surveyor who has certified the building documentation then inspects the building work. Some question whether the inspections will be thorough and whether surveyors will be willing to act if they discover non-compliant building works.

For Commercial buildings, many jurisdictions leave it to the building surveyor to determine what inspections are appropriate. This makes it difficult for regulators to know what level of oversight is occurring and whether it is adequate.

Recommendation 18:

That each jurisdiction requires on-site inspections of building work at identified notification stages.

Implementing the recommendation

A mandatory inspections process must be supported by registration of inspectors and clear directions to building surveyors about what enforcement action is required to be taken where non-compliance is detected. The enforcement actions of building surveyors need to be coordinated with the regulatory powers and functions of the state or territory government and local governments.

Inspection stages need to be proportionate to risk. They should be aligned to checks of work involving structural elements and safety. They should also cover work which would be difficult to view at a later stage, such as in situ reinforcement in footings and framing work.

For Domestic building work the following requirements are suggested:

- minimum mandatory inspections of:
 - in situ reinforcement in footings/slabs;
 - frames, including roof constructions;
 - fire-rated wall systems;
 - pool barriers; and
 - final, post-completion of all work;
- the ability for building surveyors to require additional inspections identified at the time of approval and guidance about when this might occur, such as additional inspections of work which has been the subject of a performance solution;
- in addition, there could be a mandatory notifications process, where the building surveyor is notified at a defined stage of work, and the building surveyor applies a risk-based approach to determining whether to inspect these stages; and
- all on-site inspections should be carried out by, or be under the supervision of, registered surveyors or inspectors or by, or under the supervision of, registered engineers for prescribed types of work.

For Commercial building work the following requirements are suggested:

- provide guidance which must be used by building surveyors to determine inspections required for Commercial buildings. Ideally a national guideline would be issued and called-up in each jurisdiction's legislation as a code of conduct, or the like, with which building surveyors must comply. It would require the surveyor to set out the inspections required at the time of the initial approval and to consult with engineers about appropriate inspections points. Some jurisdictions have already developed guidance on these issues which could be used to create a national document on best practice; and
- on-site inspections to be carried out by, or under the supervision of, building surveyors or inspectors or by, or under the supervision of, registered engineers for prescribed types of works.

Recommendation 19—Inspection and certification of fire safety system installation

The problem identified

The use of performance solutions has led to fire safety systems becoming more complex in Commercial buildings. Active fire protection systems are being favoured over passive fire systems. Proper installation and maintenance of these systems is critical to occupant safety.

For Commercial buildings, fire safety engineers are often engaged to prepare fire safety engineering designs which include complex performance solutions on critical safety matters. Their involvement often ends early in the project before product specifications have been finalised. This may affect their design.

Until very recently, no jurisdiction required a registered fire engineer to inspect building work to ensure that the fire engineering design had been constructed as intended.

Fire safety system installers are not registered in most jurisdictions, but it is recommended that they be so (Recommendation 1).

Although it is common for building surveyors to require commissioning certificates from fire safety installers or the builder, only two jurisdictions mandate that these certificates be provided as part of the final sign-off of a Commercial building.

Controls required over the design, installation and certification of fire safety systems in Commercial buildings are not sufficiently strict.

“...there [should] be mandatory inspections for fire safety in buildings during the construction process, especially where an alternative solution has been provided. Such inspections should be undertaken by registered fire safety engineers.”

Engineers Australia.

Recommendation 19:

That each jurisdiction requires registered fire safety practitioners to design, install and certify the fire safety systems necessary in Commercial buildings.

Implementing the recommendation

The requirements necessary to implement this recommendation would include mandatory certification of the testing and commissioning of fire safety systems by registered fire safety system practitioners. To avoid any conflict of interest, the certification of testing and commissioning should not be performed by the system installer.

Where there are performance solutions on fire safety performance requirements, a registered fire engineer should be required to certify that the work complies with the fire safety engineering design. The registered fire engineer may need to inspect the building at various stages in order to be able to issue a final certificate. At the time that the fire safety engineering design is prepared, the building surveyor should be advised of the required notification stages for inspection by the fire engineer.

Recommendation 20—A building manual for Commercial buildings

The problem identified

A full set of final documents for a Commercial building which includes all relevant documents for the ongoing management of the building is not usually collated and passed on to the owner or subsequent purchaser. This makes it difficult for owners to verify how decisions were made and to adequately ensure that safety systems are properly maintained over the life of the building.

“The often overlooked importance of design and documentation is its role in the life cycle of the building beyond occupancy approval. Poor design documentation makes verification that essential safety systems and equipment continue to perform to the standard expected throughout the life of the building extremely difficult.”

Fire Protection Association Australia.

Recommendation 20:

That each jurisdiction requires that there be a comprehensive building manual for Commercial buildings that should be lodged with the building owners and made available to successive purchasers of the buildings.

Implementing the recommendation

The building manual should be in a digital format and be required to have prescribed information such as:

- as-built construction documentation;
- fire safety system details and maintenance requirements;
- assumptions made in any performance solution (for example, occupant characteristics);
- building product information, including certificates and details of maintenance or safety requirements; and
- conditions of use—such as occupant numbers, loads, replacement of products after certain periods (for example, glass after 25 years).

There should be a requirement for the manual to be provided to successive purchasers of the building.

“Ready access to the history of a building site can be an invaluable information source in all phases of the life cycle of the building.”¹⁹

Australian Institute of Building Surveyors

Recommendation 21—Building product safety

The problem identified

We have heard that there is a high incidence of building products in the market that are not compliant with the standards set out in the NCC, resulting in inferior and sometimes dangerous products being used in the construction of buildings. We have also been told about products being used in a non-compliant manner which can result in unacceptable risks to safety.

There is already a CodeMark certification system for building products. This is a voluntary certification scheme referenced in the NCC. There have been criticisms of the CodeMark system. The BMF has been aware of these issues for some time. Indeed it has already tasked the ABCB with making recommendations to address shortcomings with the CodeMark system.

Building on this work, in July 2015 the BMF tasked the SOG to investigate options for a possible mandatory scheme for high-risk building products with life safety implications. In October 2017, the BMF subsequently tasked the SOG to provide further advice on the introduction of a compulsory third party product certification scheme for high-risk building products, a national register of those products and compulsory labelling for aluminium composite panels with a polyethylene core.

The requirement for labelling of aluminium composite panels has been a priority for the BMF to address reports of product substitution, particularly in the light of cladding audits where it has been difficult to identify the type of aluminium cladding products currently on buildings.

In December 2017, NSW and the Commonwealth announced a pilot program to track the supply and installation of aluminium cladding products with assistance from suppliers and manufacturers, using import data from the Department of Home Affairs.²⁰ The program is intended to improve the capacity of the NSW Government to monitor the future installation of aluminium composite panels.

Moreover, since our assessment commenced, Queensland, NSW and Tasmania have taken steps to enhance powers to prohibit and/or restrict the use of high-risk building products and/or non-conforming building products.

The regulation of building product safety is closely related to existing consumer protection regulation administered by the Australian Competition and Consumer Commission and relevant state and territory consumer affairs regulators. There continues to be considerable dialogue between these authorities and building regulators on the most appropriate way to regulate building product safety. The jurisdictions are tending toward regulating these issues by vesting powers in the building regulator.

The collaboration between jurisdictions on these issues under the direction of the BMF is to be applauded. Further work is encouraged. There is a risk that this will be another area of growing inconsistency between jurisdictions. It is imperative that the respective roles of consumer affairs and building regulators be clarified and consistently applied across jurisdictions. It is hoped that this will lead to the regulation of building product safety consistently across Australia.

Recommendation 21:

That the Building Ministers’ Forum agrees its position on the establishment of a compulsory product certification system for high-risk building products.

Implementing the recommendation

This process is already underway. The BMF has tasked the SOG to report to it on this matter.²¹ The product certification systems will need to include mandatory permanent product labelling and prohibitions against the installation of high-risk building products that are not certified. Once a common position is reached by the BMF, it should make it a priority to implement this through amendments to the NCC and/or through consistent reforms to each jurisdiction’s legislation.

¹⁹ AIBS, *Building Regulatory Reform*, p. 14.

²⁰ Assistant Minister Laundry, Minister Dominello, Minister Kean, Media Release, *Tracking Aluminium Composite Panels across NSW*, 18 December 2017, <http://minister.industry.gov.au/ministers/craiglaundy/media-releases/tracking-aluminium-composite-panels-across-nsw>, (accessed 9 February 2018).

²¹ Senior Officers’ Group, *Implementation Plan: Strategies to address risks related to non-conforming building products*, 2017, <https://industry.gov.au/industry/IndustrySectors/buildingandconstruction/Documents/SOG-Implementation-Plan.pdf>, (accessed 9 February 2018).

Further observations

In relation to plumbing products, the NCC provides for WaterMark, which is a compulsory certification scheme for specified plumbing products. Under the WaterMark scheme, plumbers are prohibited from installing plumbing products which are not WaterMark certified. Queensland has recently amended its legislation to also prohibit the supply of plumbing products which are not certified under the WaterMark scheme. Plumbing industry stakeholders are calling for other states and territories to follow. The BMF tasked the ABCB with reporting to it on the introduction of a prohibition against the supply of plumbing products that are not certified under WaterMark. That work is ongoing and forms part of the ABCB's 2017–2018 work plan.²²

“The biggest challenge from the PPI Group’s perspective is that plumbing and drainage products can be sold regardless of whether or not the product has been certified under Watermark or any other scheme creating significant confusion in the market through the supply chain.”

Plumbing Products Industry Group (PPI Group)

The regulation of supply chains has merit. However, the resourcing required for regulatory oversight is significant and should not detract from core regulatory activities of building regulators.

Recommendation 22—Dictionary of terminology

The problem identified

Each jurisdiction has developed different ways of describing the same or similar terms or processes. This is not just a semantic issue. Different terminology makes it very confusing to understand and compare the legal requirements in each jurisdiction. It also makes it difficult for industry to operate across jurisdictions and for jurisdictions to understand each other's systems when working together at a national level.

Recommendation 22:

That the Building Ministers’ Forum develop a national dictionary of terminology to assist jurisdictions, industry and consumers to understand the range of terminology used to describe the same or similar terms and processes in different jurisdictions.

Implementing the recommendation

The national dictionary of terminology should be published on the ABCB's website. Ideally, the dictionary would identify preferred language based on the most commonly used terms, or some other agreed approach. Harmonisation of language is a crucial part of ensuring that there is a national approach to implementation. It enhances comparative reporting, facilitates the sharing of good practice, and assists those in the building and construction industry who work in a number of jurisdictions. Jurisdictions should then have regard to the dictionary and the preferred terms when considering reforms with a view to adopting more consistent language over time.

Recommendation 23—Implementation of the recommendations

The problem identified

The implementation of the recommendations will require legislative reform and changes to regulatory practice. Each jurisdiction will already have reform priorities in place for building regulation and aligning them with our recommendations will take time. On some matters, jurisdictions will want to undertake further consultation and cost-benefit analysis. Whilst we are mindful that these processes take time, it is important to recommend a timeframe for implementation. Without a clear timetable there is a risk that the impetus for change may fall away and the necessary reforms will not occur.

Recommendation 23:

That the Building Ministers’ Forum acknowledges that the above recommendations are designed to form a coherent package and that they be implemented by all jurisdictions progressively over the next three years.

²² Australian Building Codes Board, *2017–18 Annual Business Plan*, <http://www.abcb.gov.au/ABCB/Business-Plan>, (accessed 9 February 2018).

Implementing the recommendation

The recommendations have been designed to form a holistic and structured framework to improve the compliance and enforcement systems of the NCC across the country. They form a coherent package. They would best be implemented in their entirety.

As a first task, the BMF may wish to identify which recommendations to prioritise at a national level. Of course, every jurisdiction already meets some of these recommendations and thus each would have a different program of reform activity to achieve full implementation.

Further observations

Feedback from jurisdictions has indicated that setting an implementation timetable is essential to ensuring that the recommendations are actioned in an expeditious manner. Most have agreed that a three-year timeframe is ambitious, but possible. All have agreed that significant progress should be able to be made in this period.

Recommendation 24—Implementation plan

The problem identified

In a cross-jurisdictional exercise, in which many senior officials and advisors have a wide range of policy and regulatory responsibilities, good intentions often falter. Actioning the recommendations will require ongoing and committed focus. The history of legislative harmonisation is littered with examples of fine rhetoric on national consistency not being matched by effective action at an administrative level. Implementation of good intentions is often slow.

Recommendation 24:

That the Building Ministers' Forum prioritise the preparation of a plan for the implementation of the recommendations against which each jurisdiction will report annually.

Implementing the recommendation

Transparency is crucial to effective implementation. The preparation of an agreed plan, including prioritisation of effort, will provide the basis against which to measure progress. A full list of agreed actions should be prepared, with jurisdictional performance against each one to be reported annually. This will allow the BMF to monitor achievement. The plan should be flexible enough for it to be amended over time.

It is appropriate that each jurisdiction exercises a significant degree of autonomy on how it will implement the recommendations. However, several recommendations call for jurisdictions to work together to develop a common position and/or the common content of legislation, codes of conduct or guidelines. Further engagement with industry will be necessary for the implementation of other recommendations. This will need to be prioritised and resourced. Each jurisdiction will need to commit to providing input in a timely manner.

We do not think it appropriate to propose governance arrangements for implementation of the recommendations. The BMF has recently formalised improved governance arrangements to support its ongoing work. This has included redefining the roles assigned to the SOG and the BRF. The work to implement our recommendations appears to be consistent with the role of the SOG, but with input from the BRF and ABCB, as appropriate.

Further observations

Jurisdictions made suggestions on how to ensure the recommendations could be implemented nationally in a committed manner. A number provided us with feedback on the most appropriate governance arrangements for the BMF to action the framework. Taking into account those suggestions, matters that the BMF may wish to consider in the preparation of an implementation plan include:

- the establishment of a small dedicated implementation team, at least for the first 12 months;
- the appointment of an independent chair (not representing any one jurisdiction) to oversight the work identified in the implementation plan;
- the setting of priorities for implementation activities to be carried out on behalf of the BMF under the implementation plan;
- allocation of any specified tasks to the SOG, BRF and/or the ABCB;
- an indication from each jurisdiction on the manner in which it intends to proceed with implementation; and
- an intention to seek further independent expert assessment of the effectiveness of compliance and enforcement systems at the end of the implementation period or within another defined period.

Attachment A—List of recommendations

Recommendation 1:

That each jurisdiction requires the registration of the following categories of building practitioners involved in the design, construction and maintenance of buildings:

- Builder
- Site or Project Manager
- Building Surveyor
- Building Inspector
- Architect
- Engineer
- Designer/Draftsperson
- Plumber
- Fire Safety Practitioner

Recommendation 2:

That each jurisdiction prescribes consistent requirements for the registration of building practitioners including:

- certificated training which includes compulsory training on the operation and use of the NCC as it applies to each category of registration;
- additional competency and experience requirements;
- where it is available, compulsory insurance in the form of professional indemnity and/or warranty insurance together with financial viability requirements where appropriate; and
- evidence of practitioner integrity, based on an assessment of fit-and-proper person requirements.

Recommendation 3:

That each jurisdiction requires all practitioners to undertake compulsory Continuing Professional Development on the National Construction Code.

Recommendation 4:

That each jurisdiction establishes a supervised training scheme which provides a defined pathway for becoming a registered building surveyor.

Recommendation 5:

That each state establishes formal mechanisms for a more collaborative and effective partnership between those with responsibility for regulatory oversight, including relevant state government bodies, local governments and private building surveyors (if they have an enforcement role).

Recommendation 6:

That each jurisdiction give regulators a broad suite of powers to monitor buildings and building work so that, as necessary, they can take strong compliance and enforcement action.

Recommendation 7:

That each jurisdiction makes public its audit strategy for regulatory oversight of the construction of Commercial buildings, with annual reporting on audit findings and outcomes.

Recommendation 8:

That, consistent with the International Fire Engineering Guidelines, each jurisdiction requires developers, architects, builders, engineers and building surveyors to engage with fire authorities as part of the design process.

Recommendation 9:

That each jurisdiction establishes minimum statutory controls to mitigate conflicts of interest and increase transparency of the engagement and responsibilities of private building surveyors.

Recommendation 10:

That each jurisdiction put in place a code of conduct for building surveyors which addresses the key matters which, if contravened, would be a ground for a disciplinary inquiry.

Recommendation 11:

That each jurisdiction provides private building surveyors with enhanced supervisory powers and mandatory reporting obligations.

Recommendation 12:

That each jurisdiction establishes a building information database that provides a centralised source of building design and construction documentation.

Recommendation 13:

That each jurisdiction requires building approval documentation to be prepared by appropriate categories of registered practitioners, demonstrating that the proposed building complies with the National Construction Code.

Recommendation 14:

That each jurisdiction sets out the information which must be included in performance solutions, specifying in occupancy certificates the circumstances in which performance solutions have been used and for what purpose.

Recommendation 15:

That each jurisdiction provides a transparent and robust process for the approval of performance solutions for constructed building work.

Recommendation 16:

That each jurisdiction provides for a building compliance process which incorporates clear obligations for the ongoing approval of amended documentation by the appointed building surveyor throughout a project.

Recommendation 17:

That each jurisdiction requires genuine independent third party review for specified components of designs and/or certain types of buildings.

Recommendation 18:

That each jurisdiction requires on-site inspections of building work at identified notification stages.

Recommendation 19:

That each jurisdiction requires registered fire safety practitioners to design, install and certify the fire safety systems necessary in Commercial buildings.

Recommendation 20:

That each jurisdiction requires that there be a comprehensive building manual for Commercial buildings that should be lodged with the building owners and made available to successive purchasers of the building.

Recommendation 21:

That the Building Ministers' Forum agree its position on the establishment of a compulsory product certification system for high-risk building products.

Recommendation 22:

That the Building Ministers' Forum develop a national dictionary of terminology to assist jurisdictions, industry and consumers to understand the range of terminology used to describe the same or similar terms and processes in different jurisdictions.

Recommendation 23:

That the Building Ministers' Forum acknowledges that the above recommendations are designed to form a coherent package and that they be implemented by all jurisdictions progressively over the next three years.

Recommendation 24:

That the Building Ministers' Forum prioritise the preparation of a plan for the implementation of the recommendations against which each jurisdiction will report annually.

Attachment B—Terms of Reference

BUILDING MINISTERS' FORUM

Assessment of the Effectiveness of Compliance and Enforcement Systems for the Building and Construction Industry across Australia

Terms of Reference

The independent experts, Professor Peter Shergold and Ms Bronwyn Weir, have been appointed by the Building Ministers' Forum (BMF) to undertake an external assessment of the compliance and enforcement systems for the Building and Construction Industry across Australia and the potential for further or additional reforms. Professor Shergold and Ms Weir will provide an initial report to the BMF at its meeting in October 2017. A final report will be provided to the BMF as soon as possible after the October 2017 meeting.

Compliance systems are the legislated processes in each jurisdiction intended to ensure that buildings are designed and constructed to comply with the National Construction Code (NCC) and are maintained (as appropriate) in accordance with legislated Australian Standards.

Enforcement systems are the legislated processes in each jurisdiction that allow a regulator to detect and remedy non-compliance with the NCC.

Professor Shergold and Ms Weir are engaged to, in consultation with the Commonwealth, State and Territory Governments, the Australian Building Codes Board and key industry stakeholders:

1. Examine compliance and enforcement problems within the building and construction systems across Australia that are affecting the implementation of the NCC, as they relate to:
 - a. roles, responsibilities and accountabilities of different parties;
 - b. education and training;
 - c. licensing and accreditation;
 - d. accuracy of design and documentation;
 - e. quality control and assurance;
 - f. competencies of practitioners;
 - g. integrity of private certification;
 - h. inspection regimes;
 - i. auditing and enforcement practices; and
 - j. product importation and chain of custody.
2. In undertaking the assessment, Professor Shergold and Ms Weir are to take into account the impact of recent building regulatory reviews and reforms undertaken and implemented by state and territory governments, including but not limited to:
 - a. Australian Capital Territory – Improving the ACT Building Regulatory System Review;
 - b. New South Wales – 2016 Response to the Independent Review of the Buildings Professionals ACT 2005;
 - c. Queensland – 2016 Building Plan Review;
 - d. Tasmania – 2017 Building Regulatory Framework;
 - e. Victoria – 2017 Building Regulations Sunset Review;
 - f. Western Australia – 2016 Auditor General Report on Regulation of Builders and Building Surveyors; and
 - g. Senate Economics Committee Inquiry into Non-Conforming Building Products.
3. Based on the outcome of the assessment, consider strategies for improving compliance and enforcement practices and make recommendations for a national best practice model for compliance and enforcement to strengthen the effective implementation of the NCC.

Attachment C—Consultations

1.	Building Regulators' Forum	13 September 2017
2.	The Hon Richard Wynne MP, Victorian Minister for Planning	14 September 2017
3.	Senior Officers' Group	20 September 2017
4.	The Hon Craig Laundy MP, Commonwealth Minister for Small and Family Business, the Workplace and Deregulation	21 September 2017
5.	The Hon Guy Barnett MP, Tasmanian Minister for Building and Construction	26 September 2017
6.	Mr Mick Gentleman MLA, ACT Minister for Planning and Land Management	26 September 2017
7.	The Hon Nicole Manison MLA, NT Deputy Chief Minister and Minister for Infrastructure, Planning and Logistics	28 September 2017
8.	Workshop: Building Ministers' Forum Secretariat, Building Regulators' Forum Secretariat and the Office of the Australian Building Codes Board	2 October 2017
9.	The Hon Bill Johnston MLA, WA Minister for Mines and Petroleum; Commerce and Industrial Relations; Electoral Affairs; Asian Engagement	3 October 2017
10.	Office of the Hon Matthew Kean, NSW Minister for Innovation and Better Regulation	4 October 2017
11.	Queensland Building and Construction Commission	11 October 2017
12.	Queensland Department of Housing and Public Works	12 October 2017
13.	The Hon Mick de Brenni MP, Minister for Housing and Public Works	12 October 2017
14.	Victorian Department of Environment, Land, Water and Planning	19 October 2017
15.	Victorian Building Authority	19 October 2017
16.	Australian Institute of Building Surveyors	24 October 2017
17.	NSW Fair Trading	25 October 2017
18.	Data 61	25 October 2017
19.	Standards Australia	25 October 2017
20.	Association of Accredited Certifiers	25 October 2017
21.	Master Builders Australia	26 October 2017
22.	Construction, Forestry, Mining and Energy Union	26 October 2017
23.	NSW Department of Planning & Environment	26 October 2017
24.	Insurance Council of Australia	27 October 2017
25.	NT Department of Infrastructure Planning and Logistics	30 October 2017
26.	Dr Brian Ashe, Fire Engineer, ABCB	8 November 2017
27.	Housing Industry Association	8 November 2017
28.	Department of Industry, Innovation and Science	8 November 2017
29.	ACT Environment, Planning and Sustainable Development Directorate	8 November 2017
30.	Engineers Australia	9 November 2017
31.	Fire Protection Association Australia	13 November 2017
32.	Australasian Fire and Emergency Service Authorities Council	13 November 2017
33.	Master Plumbers Australia Ltd	13 November 2017
34.	Australian Institute of Architects	14 November 2017
35.	Australian Local Government Association	14 November 2017
36.	SA Department of Planning, Transport and Infrastructure	15 November 2017
37.	FM Global	16 November 2017

38.	WA Building Commission	16 November 2017
39.	Tasmanian Department of Justice	20 November 2017
40.	Property Council of Australia (ACT Division)	21 November 2017
41.	Australian Building Codes Board	23 November 2017
42.	Professor John Thwaites	5 December 2017
43.	Property Council of Australia	8 December 2017
44.	Australian Local Government Association	18 December 2017
45.	Office of the Hon Matthew Kean MP, NSW Minister for Innovation and Better Regulation	18 December 2017
46.	Office of the Hon Bill Johnston MLA, WA Minister for Mines and Petroleum; Commerce and Industrial Relations; Electoral Affairs; Asian Engagement	9 January 2018
47.	Office of the Hon Nicole Manison MLA, NT Deputy Chief Minister and Minister for Infrastructure, Planning and Logistics	9 January 2018
48.	Mr Mick Gentleman MLA, ACT Minister for Planning and Land Management	9 January 2018
49.	Office of the Hon Richard Wynne MP, Victorian Minister for Planning	11 January 2018
50.	Centre of Smart Modern Construction (c4SMC)	12 January 2018
51.	The Warren Centre for Advanced Engineering Ltd	12 January 2018
52.	Office of the Hon Guy Barnett MP, Tasmanian Minister for Building and Construction	17 January 2018
53.	The Hon John Rau MP, SA Deputy Premier and Minister for Planning	17 January 2018
54.	The Hon Mick de Brenni MP, Queensland Minister for Housing and Public Works	17 January 2018
55.	The Hon Craig Laundy MP, Commonwealth Minister for Small and Family Business, the Workplace and Deregulation	1 February 2018

Attachment D—Submissions

Submissions

1.	The Warren Centre for Advanced Engineering Ltd	24 October 2017
2.	Enright Consulting	8 November 2017
3.	<i>Confidential</i> Submission	24 November 2017
4.	Plumbing Products Industry Group	30 November 2017
5.	Master Plumbers Australia Ltd	11 December 2017
6.	Engineers Australia	12 December 2017
7.	Building Products Innovation Council	15 December 2017
8.	Fire Protection Association Australia	15 December 2017
9.	Master Builders Australia	15 December 2017
10.	Australian Construction Industry Forum	15 December 2017
11.	Housing Industry Association Ltd	15 December 2017
12.	Metropolitan Fire & Emergency Services Board	21 December 2017

Supplementary submissions

1.	Fire Protection Association Australia	8 January 2018
2.	The Warren Centre for Advanced Engineering Ltd	15 January 2018

