

REBUILDING CONFIDENCE:

An Action Plan for Building Regulatory Reform



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The member organisations of BPIC and other industry contributors may not necessarily have policy positions on all the issues contained in this paper, which is a collection of contributions designed to stimulate a thoughtful dialogue on potential areas of reform and improvement in our building regulatory system.

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Action Plan - Summary

The current operating environment for Australia's building and construction industry

Australia's building and construction industry, is facing a problem of national significance that has adverse implications for the industry's competitiveness, and potentially, for the health and safety of the community.

Australia's building regulatory framework underpins approximately ten percent of Australia's gross domestic product and nearly ten percent of Australia's workforce. Yet, the framework under which this major sector of the Australian economy operates is fragmented, needlessly complex and is proving unable to ensure that new buildings provide the levels of health, safety and amenity intended by Governments in legislation and expected by the community.

The existing building regulatory framework is increasingly incapable of dealing with modern industry issues and rapid change in the design and procurement of buildings and building and plumbing products. It often fails to facilitate early identification of defective work, fails to hold to account those responsible for building or building product defects when detected, and fails to support building owners who unwittingly inherit responsibility for unresolved defective work.

Exacerbating these regulatory problems has been the rapid expansion in the multi-unit housing market reaching unparalleled levels with half of all new Australian housing production being in this form in 2016. Multi-unit apartment buildings are large and complex projects, requiring careful design and governance when compared to other forms of housing. They often utilise non-traditional building methods and access new forms of building products. However in many jurisdictions, they are permitted to be overseen and/or built by non-licensed builders or developers with little or no prior experience in large building projects.

Industry is concerned that the current building regulatory framework is no longer fit for purpose to prevent a major catastrophic disaster such as the 2017 Grenfell Tower fire which broke out in Central London causing 71 deaths and over 70 injuries. Failure to act now could expose the community to life safety and building performance

deficiencies and, inevitably, focus on a perceived failure of government and industry to act in a timely and comprehensive way.

The reforms that established our present national administrative framework for building regulation were led three decades ago by a national economic reform initiative and a Special Premiers' Conference. The new framework was first implemented in the 1993 Building Acts of the Northern Territory and Victoria. Subsequently, all other States including the ACT have enacted variants of this administrative framework. Those changes have been recognised as having delivered significant economic benefits by creating competition in the delivery of building approvals and inspections. Yet the role of government in the ongoing management of this framework, in particular in guidance and enforcement, appears to have reduced over this time.

In 2004, the Productivity Commission conducted an Inquiry into the contribution that national reform of building regulation had made to the productivity of the building industry and to economic activity. The Productivity Commission made wide-ranging recommendations regarding the building code and the focus and operation of the Australian Building Codes Board, most of which were fully implemented.

In 2012, the Productivity Commission's review was supplemented by a report by the Centre for International Economics, which concluded that building reform to that point in time had delivered \$1.1 billion per annum in benefits and that a further \$1.1 billion remained untapped.

Fourteen years after the Commission's review, the community is still experiencing similar problems to those identified by that review. It is now apparent that major weaknesses in Australia's building regulatory framework persist.

Industry response

This Action Plan is the outcome of a two-day Building Regulatory Reform Summit (BRRS) held in Canberra from February 21-22, 2018. The Summit was facilitated by the Building Products Innovation Council (BPIC) on behalf of the wider building industry. The Summit explored the views and concerns of over 40 government, industry and community organisations involved with or affected by the building control system. The content of this document has been principally drawn from the presentations, workshop discussions and ensuing industry dialogue and collaboration resulting from the Summit. This Action Plan:

- Identifies particular failures of Australia's current framework for building regulation.
- Proposes a set of principles to guide a 21st century framework for building regulation.
- Proposes possible government and market solutions for a future framework.
- Calls for a collaborative industry-government reform agenda.

The recommendations are focused on reducing complexity, improving the efficiency and effectiveness of the system, as well as future-proofing the system to meet the changing processes and products that will continue to emerge over future decades.

Rather than being a definitive list of issues, the Action Plan is intended to demonstrate industry support for the efforts of other inquiries including those made by the Senate Economics Reference Committee, the Shergold and Weir review, Lambert and Wallace.

Industry's view is that it is time to acknowledge that the underlying causes of non-compliance lie outside the National Construction Code (NCC) as a technical document and are primarily within the building regulatory framework that oversees the administration of the NCC. It is also necessary to consider the finance and property development systems that provide a fertile setting for substandard building practices and non-complying buildings.

A comprehensive review of our current building regulatory framework (direction-setting, policy development, legislation, regulation, administration, code and insurance) is needed, not only in response to the

recent building failures, but to realise the substantial community and economic benefits that have been identified as possible with an effective framework. By taking action now, governments can ensure that the next thirty years of building work in Australia is well managed and meets the community's expectations for quality and compliant buildings of all types.

Objective

The objective of this Action Plan is to propose a way forward for building regulation reform to improve the future standard of building compliance.

Strategy proposed

Industry calls for the Building Ministers' Forum to develop a National Discussion Paper, incorporating the insights of this Action Plan and the recommendations from the Shergold and Weir review, to lead a public discussion and allow industry consultation on the ways to improve Australia's building regulatory framework. The Discussion Paper would be a report on government-considered proposals and published to elicit input and discussion. It would include specific details of the issues found, identify possible courses of policy action and market mechanisms that address these issues.

The discussion paper should be followed and supported by a national summit of all interested parties to assist in mapping out an agreed program of national reform for the framework of building regulations and its administration.

Conclusion

This paper exposes an impoverishment in the systems of construction and development that have led to a litany of regulatory failures besetting our national building control regime. The paper proposes possible solutions to reset the current building regulatory framework in Australia to ensure that the building regulatory policies, legislation, regulations, codes and standards that govern our industry are appropriate so that in future our buildings:

- Will more certainly and more comprehensively comply with building control requirements.
- Will be fit-for-purpose.
- Will deliver more positive outcomes for building owners and the community.

1.0 – Identified Problems

This paper is concerned with all parts of the regulatory framework applicable to the delivery of buildings in Australia as well as those elements that facilitate the delivery of buildings, such as finance and insurance.

Estimates of the industry's size and character vary, but according to the Australian Bureau of Statistics (ABS), Australia's building industry contributes about ten percent of gross domestic product and almost ten percent of employment.

This large industry consists mainly of small and medium sized businesses, and is characterised by fierce competition as well as a wide diversity in its base of education and competency, capitalisation, market focus, project focus, attitude and ambition.

As the Australian Constitution does not mention matters regarding the safety, health and amenity of people in buildings, or land use planning and development, responsibility for building (and planning) rests with the state and territory governments.

This means that we have eight competing sovereignties where there are requirements in one jurisdiction that do not have corresponding requirements in another, and there are similar requirements in jurisdictions that are achieved by different processes, means and costs. For example, each Australian jurisdiction requires that building construction cannot lawfully commence without a statutory approval, but the thresholds for approval, the identity of the approval authority, the method of obtaining approval, the cost of the approval and the name of the approval all differ. Whilst similar in nature, the

enforcement powers of the state and territory building regulators vary between jurisdictions as do the enforcement roles of local government and private enterprise authorities.

The reform that established the present legislative framework for building regulation, was led three decades ago by a Commonwealth Government economic reform initiative and a Special Premiers Conference. The initiative delivered the Model Building Act, which was first implemented in the 1993 Building Acts of the Northern Territory and Victoria. All other states and territories have since enacted variants of this framework.

A parallel major reform was undertaken in 1994 when the responsible Commonwealth, State and Territory Governments signed the first Inter-Government Agreement (IGA) to establish the Australian Building Codes Board (ABCB) and tasked it with maintaining and improving the Building Code of Australia now known as the National Construction Code (NCC). This same agreement also committed the Commonwealth, States, Territories and local government to deliver a national administrative framework for building, a task that has yet to be executed. As a result, we have a *“National Construction Code (NCC) with variations, which is legislated in no less than eleven different ways by the eight States and Territories and the Commonwealth Departments of Defence and Federal Airports.”* (AIBS 2017)

Each state and territory has a consistent legislative framework for adoption of the NCC as illustrated below.

Figure 1: Australia’s building regulatory framework for the adoption of the NCC for new building work

Enabling Legislation

e.g.. Vic Building Act 1993,
NSW Environmental Planning
and Assessment Act 1979, etc.

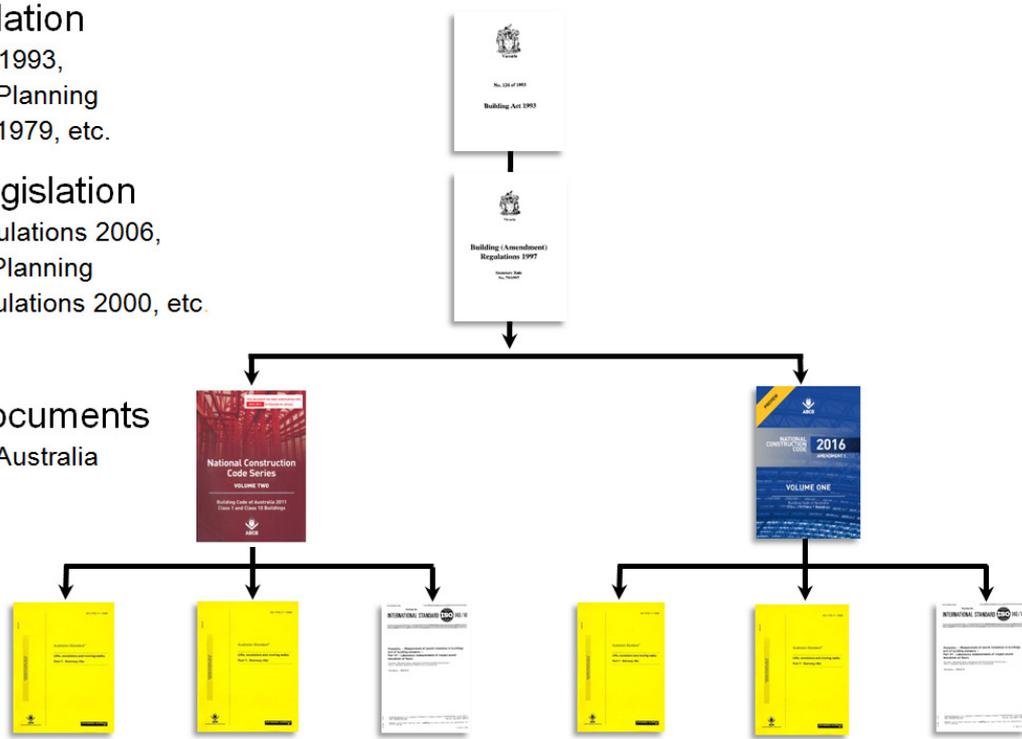
Subordinate Legislation

e.g.. Vic Building Regulations 2006,
NSW Environmental Planning
and Assessment Regulations 2000, etc

Incorporated documents

e.g. Building Code of Australia
& State Appendices

Australian Standards,
Codes of practice etc.



Courtesy: Stephen Kipp

Over two decades on, both major and minor disruptive influences have changed the manner in which buildings are designed and delivered, how risk is allocated and how regulators administer the legislative framework. Even if national consistency of administration had been achieved, these external influences would still likely have led industry and government to ask the question as to whether the administration of building work today remains effective and relevant.

Whether or not the building regulatory framework is creating appropriate outcomes for the community is another question that needs to be asked.

Building materials are no longer predominantly Australian made and supply chains have diversified in response to the pressures of globalisation and new communications technology. The range of professionals involved in the design and construction of buildings has become more diverse. The way that buildings are financed and constructed is also changing rapidly. There is a growing depletion of the skill base through ageing of technical professionals and skilled trades. It is appropriate in these circumstances that building compliance and control is now the subject of scrutiny.

Further complicating the issue is the fact that despite each jurisdiction setting procedures for the use of the performance based elements of the NCC, they have not taken a position to know where and how performance-based approvals are being granted and what informal performance-based decisions might be being made, before or after construction occurs. There is no consolidated record or database of performance-based approvals and even if there were such a database, it is considered that most applications of the performance-based mechanism are ad-hoc and too poorly documented to be meaningfully captured in a repository.

This position is a significant departure from Government intentions in 1994 to introduce a performance-based building code. It is assumed that Governments intended that performance-based approvals would be based on documented analysis proportionate to the project, precede construction, and would contribute to a consolidated body of knowledge. Poor administration by each jurisdiction has left industry with an uncharted morass of escalating building costs, increased risk and latent defects awaiting discovery.

This deficit was recently highlighted by the inability of regulators to quickly identify buildings with aluminium composite panel cladding. The same problem would arise in respect of most other issues about building approvals, completed building works and the administration of the construction process. Australia's building regulators should be well placed to develop evidence-based policy to improve the regulatory framework and to use factual data to inform enforcement activity. Yet the ongoing lack of approval and construction data collection by both state and local government means this opportunity is currently being lost.

Presenters at BPIC's Building Regulatory Reform Summit in their capacity as building inspection and dispute resolution experts, were of the opinion that many performance-based compliance solutions had been the cause of, manifest non-compliance related to building water ingress and fire risk.

In the opinion of these presenters, inadequate administration and enforcement of performance-based solutions has not only led to the current combustible cladding crisis, but is also responsible for an impending 'leaky building' syndrome (water ingress that leads to mould and rot that can render a building unfit to live in and/or structurally unsound) to rival that which occurred in New Zealand. In that country the leaky home crisis brought down the New Zealand Building Industry Authority and arguably the government of the day. The crisis reduced the long-term market value of affected homes and other buildings, even though they have since been repaired. The Canadian province of British Columbia experienced a similar leaky condo crisis in the 1980s for similar reasons.

Australia's building regulatory framework has much in common with the building system of the United Kingdom. In the wake of the recent Grenfell Tower apartment fire Dame Judith Hackitt observed in her interim report into the tragedy: *"As the review has progressed, it has become clear that the whole 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."* Her words are as applicable to Australia's building regulatory system as they are to that in England.

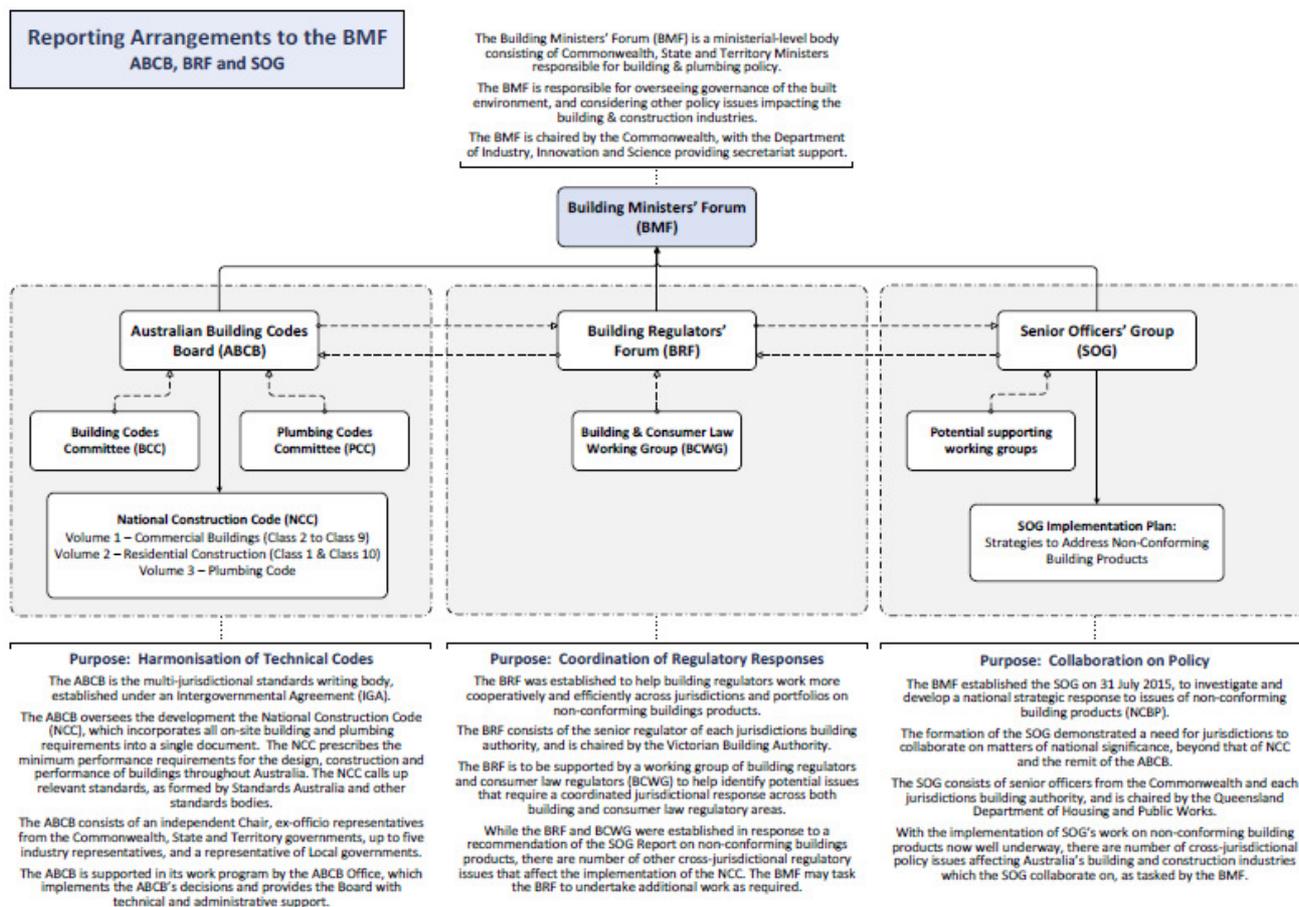
1.1 Governance of the framework for building regulation

In Australia, the Building Ministers Forum (BMF) is ideally positioned to lead coordinated reform of building regulation.

The BMF is the body consisting of Commonwealth, State and Territory Ministers responsible for building and plumbing policy and for overseeing governance of the built environment, and considering other policy issues impacting the building and construction industries.

Under the most recently endorsed IGA (2017), the BMF provides strategic policy direction to the preparation of the National Construction Code (NCC) by the Australian Building Code Board (ABCB). It directs the Senior Officers Group (BMF-SOG) to perform functions other than those of the ABCB and directs the Building Regulators Forum (BRF) to help building regulators work more cooperatively and efficiently across jurisdictions and portfolios on non-conforming buildings products.

Figure 2: Reporting Arrangements to the BMF, ABCB, BRF and SOG



Source: <https://industry.gov.au/industry/IndustrySectors/buildingandconstruction/Pages/Building-Ministers-Forum.aspx>

The NCC is a joint initiative of the Commonwealth, States and Territories, administered by the ABCB under the 2017 Inter-Governmental Agreement (IGA). The ABCB produces and maintains the Code:

- **Composition:** The ABCB Board consists of ten to sixteen members including an independent Chair, ex officio representatives of each Commonwealth, State and Territory Administrations responsible for building matters, up to five industry representatives, and a representative of the Australian Local Government Association.
- **Mandate:** ABCB updates and maintains the NCC, as well as providing educational support for users of the NCC. The ABCB facilitates regulatory impact assessments where required for significant amendments to the NCC in accordance with COAG's best practice regulatory principles.

- **Limitation of mandate:** The ABCB is responsible to the Building Ministers Forum, which it may make recommendations to and takes policy direction from. The ABCB is not a regulatory body and has no statutory powers. It does not have the power to set the administrative processes around the application of the NCC in state and territory building systems.

1.1.1 Deficient guiding principles

Although the objectives stated in the 2017 IGA include strengthening reforms to building and construction nationally, adopting the NCC nationally, encouraging increased administrative harmonisation and encouraging increased compliance and information sharing between governments, these objectives have not delivered harmonisation of administration in any meaningful way. They have also not always delivered national solutions (continuing to allow State variations to the NCC) and they have consistently not delivered conformity and/or compliance with the standards set in the NCC.

The IGA also establishes that the BMF will implement the IGA by taking into account societal needs and expectations, but it is unclear when or how such determinations have been, or are to be made. Furthermore it is unclear if the IGA objectives, which are similar to those in place for over twenty years, have ever been subjected to a rigorous public consultation to determine if they are indeed what the community and the industry believe are appropriate.

Critical concepts in the 2017 IGA to deliver reform and facilitate industry development are, in part, aspirations not commitments. This is, particularly so in respect to adoption of the NCC and harmonisation. The IGA also does not talk about the objectives going any deeper into the building control system than the adoption and application of the NCC, so state and territory legislation is left largely unbounded by the imperatives articulated in the agreement.

The lack of outcomes against the IGA objectives and the lack of a pathway forward, means that confusion and misinterpretation can occur within the regulatory system, that policy decisions and legislation are not tied to long-term objectives, and that the industry is unclear about the trajectory of building regulatory improvement.

For manufacturers this puts a brake on innovation, stifles economies of scale and deters investment in product development and manufacture. The lack of a widely agreed upon and overarching regulatory improvement pathway also means that jurisdictions can busy themselves with the minutiae of managing the regulatory process without effectively addressing bigger issues such as industry competitive advantage and innovation, or creating positive outcomes for the community with regard to building quality, performance and durability.

These problems in the system need to be addressed.

There are no guiding principles for the building control process to augment the high level framework set out in the IGA. Section 2.0 of this paper, outlines a possible set of building control principles that address the need for:

- Positive community outcomes.
- Acceptable building practices and behaviour.
- Building insurability and investment security.
- Acceptable building performance.

1.1.2 Lack of holistic approach

Many regulatory changes have been made across jurisdictions without full consideration for the whole system. The result has been knock-on effects and unintended consequences.

For example, the industry and the community are exposed to adverse outcomes arising from:

- Private certification without mandatory auditing.
- Implementation of a performance based code and building solutions without guidelines for leading practices, in supporting practitioner education, administrative processes and regulatory requirements for the use of performance.
- Proportionate liability without mandatory insurance and compulsory registration of all principal construction players.

As Lovegrove, noted in 2013, *“Best practice building regulation is akin to a holistic jigsaw puzzle. All components of the puzzle have to be incorporated to generate a cohesive best practice regulatory landscape. If any component of the puzzle is lacking, it can generate dysfunctional regulation and dysfunctional outcomes.”*

1.1.3 Transparency and engagement concerns

The industry is looking for leadership from the BMF. It has a critical national role to play in turning things around.

Feedback from a recent BPIC industry survey indicated a high level of ignorance within the building industry regarding the very existence of the BMF. Those who were aware of the BMF noted that the forum seems to provide very little public information on the issues it is working to address. Where the BMF has provided information, there appears to be no process for alerting/updating interested industry parties or the public. Where public statements of actions to be taken have been made, mechanisms for feedback also seem to be lacking. A further complication is that the building industry and the public have no direct engagement opportunities with the BMF. As an example it would have been beneficial for the industry and consumers to have been party to the development of the 2017 IGA.

1.1.4 State political expediency creating national disharmony

Time and again over the last 20 years since the IGA was conceived, various jurisdictions have deviated from a national approach to building policy, or have not been able to agree on a national approach to issues, resulting in significant state/territory variations to the NCC as well as disparate building acts and regulatory procedures across the country. The pressure on each jurisdiction to attract investment and population growth encourages them to make regulatory decisions that are favourable to that state/territory, but not necessarily to the national interest (e.g. energy efficiency, universal housing, etc). This issue creates barriers to trade between jurisdictions and reduces construction industry productivity even further than the historic lows it has achieved compared to other industry sectors such as retail and manufacturing (McKinsey Group 2017).

1.1.5 Consensus decision-making concerns

The industry is concerned that consensus-based processes mean issues that are most amendable to agreement (e.g. combustible cladding) may be resolved leaving other important issues unresolved (e.g. national licencing of building practitioners). Also, in trying to reach consensus, there is a strong temptation to adopt 'motherhood' statements and vague assertions to avoid conflict within the forum. But this can have the effect of creating policy that is either too broad, too weak to achieve intended outcomes, or sets up impossible-to-achieve regulatory processes. Another effect of the consensus process is that the conversation and ultimately the decisions can be hijacked by those who either have the most to lose from a decision or who want the least done (Meacham 2017).

In the case of the IGA 2017 it is necessary that "*The BMF will operate by consensus of those present at the meeting*", so it is possible to imagine a scenario where say two ministers attend a BMF meeting and reach a consensus decision that the other ministers who were not in attendance are required to go along with. Unlikely as this situation is to occur, it serves to highlight a lack of effective rule-making processes to cover possible contingencies and expected community outcomes.

1.2 Jurisdictions

States and Territories are responsible for adopting the NCC through building legislation and managing its application and enforcement generally in reliance on local government authorities. Each jurisdiction has the ability to create variations to the technical requirements of the NCC based on specific criteria set out in the IGA.

1.2.1 Lack of appetite and resources for enforcement

One of the major criticisms of the current building control regime in Australia is the ever-decreasing appetite and resource allocation for the effective enforcement of building codes and regulations. As has been pointed out by many experts, good legislation and strong regulation is useless without adequate enforcement. This is a multi-jurisdictional problem where no-one seems willing to take responsibility (or has the necessary allocated resources) for building conformity and compliance. As pointed out by recent high-level government investigations in Queensland, New South Wales and Victoria, building regulators have not been auditing approval authorities and design professionals, nor have they been conducting a host of other compliance and enforcement processes. There are considerable variations between jurisdictions regarding the penalties (if any) for non-compliance and the respective empowerment of relevant bodies to enforce compliance. In the rush to construct as many houses and buildings as possible to boost economic activity (as well as house a rapidly growing population), jurisdictions appear to have turned a blind eye to all manner of building non-compliance. By doing so, jurisdictions have traded away building compliance and quality in favour of lowest cost options, speed and volume of buildings completed.

1.2.2 Too much responsibility placed at the end of the construction process

A cursory check of the various building acts in each jurisdiction will show that, aside from the generic warranties as to due care and skill, good and suitable materials etc that are placed onto developers and builders in the home building legislation and the responsibilities of

the building certifier or surveyor with respect to occupation certification, there is little consideration given to others in building supply chain in terms of specific responsibility for the compliance of building work. The absence of a clear and codified 'duty of care' for the different participants in the building supply chain creates a lack of a legally enforceable regime of responsibility for compliance. The focus on occupation certification as the only clear means of compliance checking is problematic, as it leaves the primary inspection responsibility and the checking of projects until the final stage of construction. The result is significant risk because by that time, non-conforming building products and non-compliant practices are often hidden away inside the structure. In addition to the difficulty in locating non-compliances, the cost of rectification is highest at the end of construction or after completion.

1.2.3 Fragmented jurisdictional legislation related to buildings.

In each jurisdiction, building control measures are scattered amongst a range of legislative vehicles e.g. Building Acts, Planning Acts, Strata Acts, Conveyancing and so forth. There are also, in many jurisdictions, a multiplicity of bodies handling different areas which necessarily overlap. By way of example, in NSW rectification orders can be given by the Department of Fair Trading to builders, but only Local Councils or certifiers have the ability to issue similar orders to owners under the Environmental Planning and Assessment Act. A single port of call with respect to building defect issues, empowered with suitable authority to issue rectification orders to different parties, would be an improvement and would streamline the system. Any review of the building regulatory framework must incorporate all the related legislative requirements that impact on the construction of buildings in each jurisdiction.

1.2.4 Poor administration of performance-based approach may exacerbate non-compliance

It has been the universal experience of each country that has adopted a performance based building code, that performance based building solutions are intrinsically more complex and may:

- Increase insurance costs while reducing underwriting options due to higher risk profiles presented by performance-based solutions.

- Introduce a need for increased competence of practitioners involved in design through to implementation of designs in order to achieve compliance.
- Increase the risk of non-compliance as contractors need to deliver 'one off' bespoke or custom variants for which they may have insufficient training or incomplete design guidance – most building industry training is aimed at mastering standardised construction techniques and installation approaches.
- Result in owners being unlikely to have awareness of the impact of performance-based designs and may be oblivious to requirements that could impact their legal obligations and ongoing building operating costs.

Much of this down-side risk associated with a performance based code and building solutions would disappear if the correct supporting administrative processes and regulatory environment were in place through the application of state and territory building legislation. Australia's building regulatory framework has embraced a performance based paradigm, whilst at the same maintaining a prescriptive based (Deemed to Satisfy) building administration system. Although performance and prescriptive regimes are not mutually exclusive, they have enough differences for serious compliance issues to manifest if the right supporting frameworks are not in place or are not effectively administered.

1.2.5 Lack of appetite for changes to existing jurisdictional legislation hampering national harmonisation

The industry notes that changes to the NCC that might otherwise achieve a national approach to some issue or requirement, have sometimes been thwarted by either one or more jurisdictions being unwilling to change their existing regulatory documentation. This is especially the case where jurisdictions have made reference to specific clauses and provisions of the NCC, Australian Standards or protocols (e.g. energy efficiency) in legislative instruments, rather than a requirement to comply with the NCC generally. In these cases, jurisdictions that have embedded specific normative clauses and requirements in their legislation, are further hampered by the fact that their legislation rapidly gets out-of-date as the original normative documents change and evolve, which may perpetuate obsolete building practices long past the time when these should have been expunged from the regulatory process.

1.2.6 Impending brain drain

All regulators will be faced with a 'brain drain' as up to 80% of existing building regulatory officials retire in the next 15 years. What will happen to institutional memory (the understanding of the 'why' behind provisions in our codes and standards) and what are jurisdictions doing to foster the next generation of technical and regulatory expertise? There is an urgent need to identifying and attract new professionals into the building regulatory field and provide them with the understanding behind specific requirements so they don't succumb to a 'cut-and-paste' mentality, or forget learnings from the past.

1.2.7 Lack of effective legislative mechanisms for prosecution

Those jurisdictions that have building commissions or a building commissioner are struggling to hold to account, those in the building supply chain over which they have oversight. While there are many examples where they have worked with or directed builders to rectify non-conforming and non-complying products, the recent Victorian experience shows that there are real limits to the enforcement powers of those bodies (see *LU Simon Builders Pty Ltd v Victorian Building Authority* [2017] VRC 805). These legal failures seem to stem from legislation that precludes regulators from ordering any direction to fix once a building is 'handed over'. In other words, their power only extends to the construction phase. In instances of non-conforming building products like sub-standard electrical cabling or non-compliant building products like combustible cladding, such ineffective legislation means that those responsible cannot be issued with a 'direction to fix' these problems. In fact these regulators cannot even compel builders to rectify 'usual defects', such as poor workmanship, product substitution, leaks, etc.

1.3 Standards and Product Certification

Product certification is reliant on standards and approval processes. Standards must be: clear and unambiguous; accessible; have testing requirements in context of application; be in Plain English with standardised descriptions and functions; have separation of test methods and acceptance criteria and conformity assessment methodology.

1.3.1 Standards struggling to keep up with pace of change

The current pace of building technology change is so rapid that it is overwhelming the standards development process. The problem is only going to get worse with an ageing technical workforce soon to retire and little or no incentive for young people to be involved with standards development. Although the federal government provides funding for international standards development activity, there is minimal state government investment in standards development in Australia despite standards being referenced documents in the NCC and an essential component of performance based solutions under the NCC in each jurisdiction.

1.3.2 Gaming of building product standards

One of the most common ways to game the product certification system is through 'type testing' or 'golden sampling' where an initial conforming product (or perhaps a prototype) is submitted for testing but the mass-produced item does not reach this same standard, or where a conforming product is submitted for testing out of a range of similar product lines that do not reach this same standard, but which appear to be identical or closely resemble the compliant product, or where a manufacturer tests the performance of a product against a narrow set of the criteria in a standard then simply extrapolates the performance of the product for the rest of the criteria in the standard.

1.3.3 Reluctance to retest products

Maintaining product tolerances and performance requires producers to constantly modify their production processes to ensure that raw product changes, manufacturing tolerance creep, inevitable wear and tear of production machinery and manufacturing process alterations do not diminish the performance of their finished products. Some do not bother with this effort and instead allow their products to deviate over time from what was initially tested. The most prominent recent example being Infinity Cables which resulted in 4,000 kilometres of faulty cable being supplied across the country, much of it still not located or replaced.

1.3.4 Testing in isolation

There are concerns regarding the appropriateness of product test data when related to 'as-built' performance. Products and materials are generally tested in isolation, as individual components, not as systems or fabric assemblies constructed on site. Whilst testing materials in isolation provides a logical and level comparison between products, it does not allow for dynamic effects, or build tolerances when different products are fixed together into systems (except for concrete and concrete component materials that must necessarily be tested in isolation).

1.3.5 Non-compliance with standards

A number of factors have converged to undermine the integrity of the standards compliance process. Firstly, multiple standards apply to buildings that are difficult to follow or understand. Secondly, they are not being used in context, for example mixing up the cyclonic versus normal load requirements for windows in walls. Thirdly, products lacking evidence of conformity can be legally sold alongside fully conforming products with price usually the only differentiating factor apparent to purchasers. No jurisdiction has implemented tough product conformance policing. The exception being Queensland where the new legislation means building products must be accompanied by required information on product compliance as well as new enforcement powers for the regulator.

1.3.6 Proliferation of standards to be considered

The trend over the last few years has been to increase reliance on referenced standards within the NCC, and there has been a significant reduction in the development of acceptable construction practices. The increasing complexity of building methods and materials has meant that there are simply more standards that practitioners need to be aware of and comply with. For example, lightweight cladding used to be tested against Australian Standard 1530, now it must also be tested against a completely new standard, AS 5113. As the increased use of performance-based building solutions continues to be promoted, the need for practitioners to consider relevant standards has not gone away. Even with the increased quantification of the performance requirements as a means of articulating the compliance targets within the NCC, many practitioners will fall back on the use of relevant standards to demonstrate a consistent and industry-accepted methodology for compliance with said targets.

1.4 Professional Practices and Oversight

"Building design and construction rely heavily on the expertise of designers and contractors, especially for more complex, higher-risk buildings where the design follows performance-based rather than prescriptive codes. In the past 10 to 15 years, building controls in reforming countries have been shifting from old-fashioned public-enforcement policies (centered on public building authorities) toward strategies that rely on private practitioners for enforcement." (The World Bank, 2013)

1.4.1 Lack of clarity regarding roles and responsibilities

The building sector is being hamstrung by the problem of practitioners being unsure of their responsibilities. Current regulatory instruments in each jurisdiction often do not clearly articulate the roles and responsibilities of parties within the system and there is no framework to ensure effective collaboration and transfer of information between parties in the building supply chain. This results in a lack of accountability by each party and creates an easy means to shift responsibilities elsewhere. Furthermore the vagueness around who is supposed to do what and when, makes the application of proportionate liability far more complex than it should be, increasing costs significantly for all parties in any building dispute.

1.4.2 Highly variable levels of education outcome

The current vocational education system and even tertiary education in the building sector is producing practitioners with unacceptably varied levels of education. This means that someone doing a qualification from one RTO or university can have a radically different level of knowledge and understanding to someone from a different RTO or university doing the same qualification. The situation is further complicated by there being no inter-jurisdictional recognition of qualifications – a person appropriately qualified in one state may not have their expertise recognised in another jurisdiction.

1.4.3 Continuing Professional Development (CPD) schemes not as effective as they should be

As has been demonstrated through the NatHERS (Nationwide House Energy Rating Scheme) and in other professional settings, ongoing provision of CPD is no guarantee of skill improvement, behaviour change or knowledge retention by practitioners. Regardless of what CPD training has been provided and supposedly completed, many practitioners rely steadfastly on what they were initially taught when they entered the industry. If they picked up bad habits, poor behaviours or compromised integrity along the way, CPD delivery on its own will not identify this, nor will it rectify the problem.

1.4.4 Abrogation of jurisdictional oversight of professional standards

With jurisdictions withdrawing funding and resources from professional oversight bodies (such as building professions boards) there is an increasing burden being placed on organisations to ensure their members maintain high professional standards. Most professional and trade organisations with practitioner accreditation systems rely on an initial exam or panel assessment to verify the expertise of members, combined with ongoing accreditation conditional upon the payment of annual membership fees, compliance with a Code of Conduct and undertaking of CPD. There are also many excellent professional and trade accreditation schemes that require performance audits of members, apply punitive measures for poor performance, provide remediation processes, and have effective suspension/expulsion mechanisms for wrongdoers.

However, there are also professional and trade organisations that lack the internal resources and membership income to support full audit/remediation/punitive processes. This is especially the case in parts of the building supply chain where there are relatively small cohorts of people (and therefore a small membership pool) providing specialised or niche services. Also, there are tens of thousands of building professionals who are not members of any association and without effective professional oversight of some form, it is impossible to ascertain what level of knowledge, skills or expertise they may have.

1.4.5 Technical compliance trumps fitness for purpose

Many building practitioners focus narrowly on issues of technical compliance with the NCC and regulations while overlooking or ignoring their wider responsibility to ensure fitness for purpose on buildings. In fact, fitness for purpose is seen exclusively as the building designer/specifier's responsibility in response to the developer or building owner's brief, with those further along the supply chain content simply to ensure that the right boxes get ticked and the right forms submitted. Even if those in the supply chain are concerned about the fitness for purpose of the buildings they are involved with, their primary responsibility is to deliver what they have been contracted to deliver.

1.4.6 Limited barriers to entry

Qualifications required to enter the building industry are most consistent and occupational licensing requirements are inconsistent across jurisdictions. As a result unqualified and inexperienced parties can enter the building supply chain for certain classes of building work in some jurisdictions. For example, in New South Wales commercial and high rise residential developers are able to control or construct multi-apartment projects without a requirement to hold specific building qualification, competency or license. By contrast, builders in that state undertaking domestic and smaller residential building projects are required to hold an occupational and business licence. Other jurisdictions all require some form of occupational licence for builders intending to undertake building work that requires a statutory approval.

1.5 Building Approval and Construction Process

Plan approval processes are intended to ensure that buildings are designed and constructed to comply with the NCC. But these processes vary significantly from jurisdiction to jurisdiction and are defined in their individual building legislation. Construction approval, the process intended to allow regulators to detect and remedy non-compliance with the NCC before work commences, also varies from jurisdiction to jurisdiction.

1.5.1 Building approval process is opaque

The building approval process is opaque to everybody in the supply chain other than the original building owner/developer and the building surveyor. This means that design and construction decisions can often be made that are not within the scope of an approval simply because there is a lack of information and communication from the owner or the building surveyor about what was approved. Once the building approval process has been completed, there is no collection of that data into a single repository within each jurisdiction or nationally. As a result, no jurisdiction has a clear or detailed understanding about what has been built, who it has been built by and whether any of it is compliant. This lack of transparency through the building approval process is having major negative consequences in the effort to identify buildings with potentially combustible cladding. In NSW the lack of control, data and oversight over the building approval process is so extreme that this jurisdiction is now compelling building owners through legislation, to report on the fire safety of their building.

1.5.2 Institutionalised liability gap

With building acts and regulations placing the final sign off for buildings in the hands of building surveyors, these intended controls have created a 'liability gap' where builders, designers and other building professions often seek to absolve themselves of core responsibility by placing undue reliance on the certifier and the certification regime for identifying or not identifying non-compliances. Given the propensity for insolvency in the building industry and the widespread practice of "phoenixing" shelf companies (by developers and builders), certifiers (and their insurers) are often the last one standing and are understandable targets for aggrieved owners shouldering the burden of non-compliant buildings.

1.5.3 Failure to protect consumers

A final certificate issued on completion of a building (generally an Occupation Certificate or Certificate of Occupancy) does not verify the quality of the building work (good workmanship and use of fit-for-purpose materials) and this misleads customers. It creates false and/or unrealistic expectations about what is being delivered. Consumers are generally unaware that the compliance process focuses on design compliance not necessarily 'as-built' compliance. A final certificate only

checks that the necessary conditions to make the building habitable have been fulfilled. It does not certify that all the things required to meet a building owners expectations have been done and built in accordance with good industry practice. Contrary to widespread public understanding, it has nothing to do with the statutory warranties in home building regulations and owners are left to enforce their rights in the ordinary way against builders and developers who may have breached those warranties.

To illustrate the issue, Occupancy Permits in Victoria contain a disclaimer that states - *"An occupancy permit is not evidence that the building complies with the provisions of the Act and the Regulations."*

In 2015 the Victorian Auditor-General's Office examined the performance of Victorian Building Authority (VBA), Building Practitioners Board (BPB), Consumer Affairs Victoria (CAV) and Victorian Managed Insurance Authority (VMIA). The audit found that *"the existing consumer protection framework for domestic building does not adequately protect consumers who experience problems and there is a pressing need to improve consumer awareness and understanding of the framework. The registration system does not ensure that the only practitioners who are registered are those who are qualified, competent and of good character. The current disciplinary system is not operating effectively to protect consumers, and the sanctions are ineffective in deterring practitioner misconduct."*

1.5.4 Insufficient and inconsistent third-party review

There is insufficient third-party review of building design and construction as well a wide variability in the methodologies adopted, where a technical expert independent of the developer, building designer, or contractor (usually the building surveyor) reviews the building plans and carries out inspections during and after construction. *"The role of the building surveyor is largely misunderstood by the public, not only because of the inconsistencies in the terminology government uses for licensed / registered / accredited building surveyors who are often referred to as certifiers but also because of the vastly differing requirements of the legislation which govern the activities of building surveyors across the eight national jurisdictions."* (AIBS 2017)

1.5.5 Failure to deliver quality (good workmanship, sound construction solutions and use of fit-for-purpose materials)

No part of the current building regulatory process places building quality as a primary goal for everyone in the supply chain. Or to be more precise, regulatory definitions of quality are not the same as customer expectations and whilst there may be overarching warranties for fair and merchantable quality, care and skill built into the Building Acts and Sale of Goods legislation, there are no quality assurance processes mandated or referenced to in building acts and regulations. Nowhere is there the express imperative to build it right the first time, so very few new buildings are produced without defects. This has resulted in a regulatory process that has embedded costly rectification measures in place of delivering value (or what it promises) to consumers.

1.6 Liability, Insurance and Investment

“Liability and insurance regimes are crucial in the construction sector because they ensure the accountability of practitioners and enforcement agencies themselves. Available insurance systems also contribute to a restitution mechanism for an aggrieved party or plaintiff.”
(The World Bank, 2013)

1.6.1 Insurance delays and confusion

Australia’s fragmented jurisdictional approach to liability for negligent or defective work, is poorly aligned with insurance coverage, and often poorly understood. This creates delays and confusion and tends to increase costs in the industry.

1.6.2 Proportionate liability drives up the costs of restitution

Australia’s proportionate liability system introduced in the early 1990s with the Northern Territory Building Act and then the Victorian Building Act, has allowed the country to maintain a working insurance and liability regime, but it is far from efficient and fails to capture all parties involved in building work that may be responsible for a defect. Significant time and cost is involved with disputing parties needing to agree on (or prosecute): a comprehensive list

of ‘concurrent wrongdoers’; the facts regarding the case; and apportionment of damages. Furthermore it entrenches an adversarial culture of claims and cross-claims and consumes valuable court time. It also leads to very different losses and damages in each case (from building to building) making it impossible for insurers to develop standardised risk profiles or for the courts to develop consistent responses to building disputes.

1.6.3 Finance mechanisms distort residential building outcomes

The need for developers to gain pre-sales and pre-commitments from potential buyers before banks will lend them the finance to build has significantly distorted the building supply chain. In this environment buyers turn up to temporary ‘display offices’ and sign a building contract based on what they are shown in the brochures, concept plans and swatch boards available. But the developer is under no obligation to provide the level of building performance, finishes and features originally displayed. All this leads to buyers invariably not getting what they originally thought they were getting and what they paid for (a hidden but significant form of building non-compliance).

1.6.4 Breakdown in oversight processes across finance, property development, design and construction

Over the past six decades there has been a gradual devolution of responsibility for construction and development away from experienced and professional organisations to a situation where almost anyone can finance and construct a building. Mezzanine funding practices, bridge the gap between the common practice of the DIY developer providing limited equity and the parent debt provided by the bank. This practice leads to easy entry into the market place along with the practice of optioning land with uneducated land owners. This arrangement suits individuals and companies that are often just investment bankers acting in the guise of property developers. As a result, many DIY developers know little of the professional practices of design and their conjunction with construction and certification. The situation is compounded by the building regulatory system not holding DIY developers accountable for their ignorance which can lead to poor and even dangerous construction processes and outcomes.

Figure 3: A Short History of Australia’s Property Development System

	1950s	1960s	1970s	1980s	1990s	2000s
Development	Institutions	Private Developers	Lend Lease Model	Tycoons - Skase, Bond, etc.	Fall out and regrouping	Anyone can be a Developer
Finance	Anchor Tenant Finance	Developer Finance	Developer Finance	Property Trusts	Development Trust, Presales	Mezzanine Finance
Design	Master Architect	Master Architect	Architect	Design & Attendance	Design & Document	Design & Document
Construction	Master Builder	Master Builder	Design & Construct	Delivery Systems	Developer Builder	Developer DIY - Private Certification

Courtesy: Jonathan Drane

1.6.5 Ineffective conflict resolution mechanisms

Conflict resolution and appeal mechanisms should provide straightforward remedies and pathways to resolution for persons or firms that consider themselves adversely affected by building defects, product non-conformance and so forth. But in most cases these issues are dealt with by recourse to long-winded processes run by the consumer affairs departments and domestic building tribunals (along with courts for larger value claims) in each jurisdiction. This has created a thriving building dispute industry.

Improving efficiency, removing bottlenecks, enhancing access and information and reducing fragmentation in systems and processes should be a priority for governments. Contractors and developers have become accustomed to fast-track adjudication of payment disputes under Security of Payment legislation, but there is nothing equivalent for the resolution of defect claims. Contrast this to the much broader system of adjudication of general building disputes in the UK. Such alternatives are worthy of investigation.

1.7 National Building Code

The goal of the NCC is to enable the achievement of nationally consistent, minimum necessary standards of relevant safety, health, amenity, accessibility and sustainability for all new building work throughout Australia. It is comprised of the Building Code of Australia (BCA) Volumes 1 and 2 and the Plumbing Code of Australia (Volume 3). The NCC is a model building code that is given

legal effect through State or Territory building legislation. States and Territories can choose to apply these provisions with or without amendments.

1.7.1 Lack of effective jurisdictional feedback mechanisms

The primary means of technical revision of the NCC is via the Proposal for Change (PFC) process, whereby individuals and/or the industry can propose changes to the NCC for consideration. Feedback about the market/industry outcomes of NCC requirements also comes from information from the States and Territories. When it occurs, this jurisdictional feedback can be patchy and it may have limited applicability. State and territory building or consumer affairs administrations obtain information about building defects and about the compliance and professional performance of practitioners and entities in the industry. This information is not collected systematically and shared as nationally uniform data that should inform the development of the NCC.

1.7.2 Decreased customer support to the industry

The substantially disjointed nature between the development of the NCC (by the ABCB) and its implementation and administration (by jurisdictions) means that due to professional liability restrictions and jurisdictional arrangements, ABCB staff cannot give technical advice on specific projects. While it is assumed that in a private certification regime, all professionals will know their job and provide professional advice to clients, there is still the need to seek code clarification in many cases. States and territories provide limited guidance and

advice on interpretation of the code and in recent years, have even deferred industry and consumers onto industry associations to provide such advice.

1.7.3 Lack of accommodation of changing user expectations

The NCC is written primarily from the point of view of how buildings should be constructed and makes no accommodation for what type and level of usage requirements people expect. It does not articulate community expectations in regard to the design aspects of buildings (e.g. minimum room sizes, amenities, ceiling heights, safety barriers to prevent falling from height and so forth).

1.7.4 Lack of maintenance requirements

The NCC is written from the standpoint that materials and products will be installed in a structure in a set-and-forget manner, ignoring repair and maintenance issues (e.g. post-construction access and inspection). Industry has for many years suggested a supplementary building code for existing buildings and building maintenance. The ABCB has investigated this in the past but to date no direction has been given by Ministers to pursue this aspect of building control.

2.0 - Guiding Principles

As identified in Section 1.1.1 “Deficient guiding principles”, industry believes there are serious problems with the principles and objectives that currently drive our building regulatory framework. These problems are contributing to building non-compliance, a lack of guidance for the industry and confusion for building owners.

Under the 2017 IGA, the objectives of the Board include to develop and maintain codes and standards that are the minimum necessary to efficiently achieve:

- Safety and health.
- Amenity and Accessibility.
- Sustainability.

The details and implications of these minimum standards are explained in the Guide to the BCA, but it is reasonable to assume that few people other than building surveyors and building surveying students, read the Guide.

As an example, many people in the community might reasonably but incorrectly, think that the fire provisions in the NCC are intended to actually prevent fires or manage fires in order to save buildings and their contents. But it is unlikely that building occupants appreciate that the NCC’s fire safety provisions intend only that:

- Building occupants and people in the vicinity of a building are unlikely to suffer serious health effects, injury or death as a result of a fire in the building.
- The fire is unlikely to spread to adjoining or other buildings.

In another example, it appears from reported observations of building defects that many builders and tradespersons do not understand that the NCC’s waterproofing provisions intend that rainwater will be unlikely to leak into or accumulate within a building causing musty, damp and unhealthy conditions or damaging building elements.

Furthermore these instances relate only to the building and what it should or should not do. What about the people and institutions that are integral to the development, design, specification, building and commissioning of buildings? *“In the developed world, regulatory capacity has evolved in parallel with a complex*

mix, or “ecology,” of supporting institutions. These institutions have provided legal and financial mechanisms as well as certified technical competence required to achieve regulatory compliance. Key elements of this regulatory ecology include the general conditions for commercial development, the rule of law, security of tenure, and functioning building finance and insurance mechanisms.” [GFDRR 2015]

Similar lack of clarity is present in the administration of building regulation, where the boundary between consumer protection and minimum standards is not always clear. Can a building authority engage with a situation where a builder has constructed a building feature that meets minimum regulated standards but departs from an approved document, or is that a situation for a consumer affairs administration?

These examples of differences in what the community or industry might reasonably expect and what the regulatory system delivers, confusion over who within the regulatory system is supposed to do what, as well as a lack of direction about where the building regulatory system is heading, fly in the face of good and responsible government.

The Inter-jurisdictional Regulatory Collaboration Committee (IRCC) in its 2010 report, *Performance-based building regulatory systems – principles and experiences*, describes building regulations as follows:

“Building regulations are legal instruments intended to ensure that buildings, when constructed and used in accordance with the regulations, provide socially acceptable performance with respect to the building and the welfare of its occupants and the community in which the building is located.”

In Australia we now have a situation where not only do Ministers, regulators and the industry not know precisely what level of building performance is socially acceptable, but we have a regulatory system that has failed to adequately articulate to the building supply chain and the community, the key objectives and future direction of that system.

2.1 - Possible guiding principles for building regulation

The following possible building control guiding principles are intended to be used in the IGA and would apply to the whole building regulatory system including the setting of building control policy by the BMF, as well as the jurisdictional legislation and regulations that flow from these.

An effective and efficient building regulatory system should:

- **Create positive outcomes for the community:**
 - Protect life, health and safety of building occupants as well as the wider public and emergency services personnel.
 - Prevent damage to neighbouring buildings and/or infrastructure.
 - Protect property.
 - Conduct regular consultation with the community and industry to determine if all levels of the system are meeting minimum necessary requirements.
 - Manage the design aspects of buildings. E.g. minimum room sizes, amenities, ceiling heights, safety barriers to prevent falling from height and so forth.
 - Establish effective consumer safety nets where there is construction failure or practitioner negligence / recalcitrance within a swift, efficient, affordable and well considered dispute resolution process.
- **Create acceptable building practices and behaviour:**
 - Create an imperative for building quality and building it right the first time.
 - Mitigate and discourage fraud, uphold written agreements.
 - Maintain strong disincentives and/or penalties for non-compliance.
 - Not create or tolerate conflicts of interest between parties in the building supply chain.
 - Make all parties in the building supply chain bear appropriate responsibility for the integrity, performance and conformity of their work.
- Ensure all building practitioners are certified as competent to undertake specific tasks for which they are permitted to undertake, and regularly audit to ensure they are keeping up with changing professional, technology and regulatory requirements.
- Establish mechanisms that prevent tradespeople or professions from doing work that diminishes the integrity or performance of existing work on or for a building.
- Establish mechanisms that foster an acceptable level of behaviour and business practices from all parties in the building supply chain.
- Ensure that no trade or profession is able to undertake important or significant performance-based work on a building unless they have received adequate training to do such work and can demonstrate competence in its application.
- **Create building insurability and investment security:**
 - Recognise 'As-Built' compliance as well as 'As-Designed' compliance.
 - Set and enforce the design working life of buildings.
 - Establish mechanisms that allow planning and construction processes to proceed efficiently and swiftly without compromising the construction integrity of the 'as built' product.
 - Use available and proven technologies or combinations of technologies to increase the jurisdictional administration efficiency and efficacy of all code, standards and regulatory compliance processes.
 - Ensure that all regulatory language is in Plain English and that the intent of all requirements are legally clear and concise.
 - Ensure that all building products and materials are fit for purpose and able to demonstrate conformity.

- **Create acceptable building performance:**

- Structural stability - Provisions to safeguard people from injury and loss of amenity, and protect other property from physical damage due to structural failure. It also includes durability provisions to ensure that a building will remain durable for the design working life of the structure.
- Fire safety - Ensure the likelihood of fire from a combustion source is reduced, there is adequate time and protection for people to escape a building and carry out fire rescue operations, there is adequate protection of other property, and there is reduction of significant quantities of hazardous substances released into the environment. A building is required to remain structurally stable to ensure the above provisions are satisfied.
- Access – Management of access routes into and within buildings and safety around the use of mechanical installations such as lifts, escalators and moving walks. Also includes universal design principles, signage and way-finding.
- Moisture control - Provision of sufficient disposal of surface water, providing adequate protection from external moisture entering the building and accumulation of internal moisture that may cause dampness related contaminants.
- Safety and health of users – Management of the use and construction of buildings including

hazardous agents on a building site, building materials, and hazardous substances and processes. Safeguarding people from injury or illness due to falling, inadequate lighting, lack of awareness of an emergency, and inadequate identification of escape routes, hazards, directions, or accessible routes for people with disabilities.

- Services and facilities – Management of spaces and facilities for personal hygiene, laundering, and food preparation and prevention of contamination. Ensure buildings have appropriate and economic ventilation, interior environments, noise control, natural and artificial light, electricity and gas, piped services, water supplies, and foul water and solid waste control.
- Energy and resource efficiency – Management of efficiency in modifying temperature or humidity, providing hot water and providing artificial lighting.
- Noise control – Management of the design of walls and floors of dwellings to resist airborne and impact sound transmission.
- Sustainability - Require buildings to adopt environmental measures and achieve a minimum environmental sustainability standard.
- Commissioning, repair, maintenance – Require construction methods, building products and equipment to accommodate commissioning, repair and maintenance requirements.

3.0 - Possible Solutions

“To move forward, several steps are needed. First, there needs to be a shift in thinking from viewing buildings as a collection of independent systems, to viewing buildings – and building regulatory systems – as complex systems with strong interrelationships between subsystems and overall building performance.....Viewing the problem as being a complex systems problem is not new, but thus far a true shift in thinking has not occurred, and the ‘silo’ based approach to regulatory development and implementation is creating new hazards and risks as it tries to mitigate others.” [Meacham 2017]

Much of the regulatory failure documented in this action plan can be traced back to poor or partial implementation of initiatives, coupled with naiveté about how commercial pressures can skew human behaviour away from acceptable norms. For example implementation of private certification without supporting mechanisms (education, certification, auditing) and lack of processes in place to prevent conflict of interest situations.

The underlining assumption regarding performance based codes is that while they might foster greater flexibility, innovation, and less red tape, they also increase technological, performance and contractual risk and a greater divergence in approaches. As a result, they require a more comprehensive regulatory effort to administer than the former prescriptive model.

Yet at the same time as a performance based code has been deployed in Australia, jurisdictions have set about reducing their capacity to oversee the system and enforce it. The drive to reduced ‘red tape’, the need to ensure economic growth via the construction sector, and the aversion to resource the ‘hard tasks’ of enforcement, has all come at a cost. And the cost is poor building outcomes, building owners not getting what they believe they are paying for, skyrocketing insurance premiums, audits into combustible cladding, public inquiries into non-

conforming products, leaky building syndrome, buildings unable to last for the life of their mortgage, and so on.

There are many ways one could approach building regulatory reform from creating more and ‘better’ codes and regulations to imposing more and ‘significant’ penalties for wrongdoing. Determining the best approach is a case of considering what is realistic and effective within the current and expected Australian building market, what capacity governments have to perform additional administrative functions and to promote acceptable behaviour within the building supply chain.

Therefore this paper will propose ideas that:

- Are able to work within expected jurisdictional political and budgetary constraints.
- Are ubiquitous and self sustaining.
- Cannot be easily sidestepped or gamed.
- Use existing and readily available professional/trade resources.
- Significantly reduce litigation and risk.
- Are treated as just a normal cost of doing business and not unnecessary red tape.

At the same time they will attempt to promote adaptability, market-based approaches and evolution of the building code within the existing system.

In proposing the following possible solutions, we are cognisant that others in the industry have also called for building regulatory reforms and it is hoped that these combined calls for change, will encourage a respectful and open dialogue between government, industry and the public. Establishing robust solutions will require significant collaboration and the following should be viewed merely as suggestions and signposts to answers, rather than definitive or unilaterally agreed solutions in themselves.

3.1 Governance of the framework for building regulation

3.1.1 PROBLEM: *Deficient guiding principles*

POSSIBLE SOLUTION: Building on the existing IGA high level policy framework, create a set of Guiding Principles as proposed in Section 2.0 of this Action Plan that apply to the whole building regulatory system including the setting of building control policy by the BMF, as well as the jurisdictional legislation and regulations that flow from these.

ENABLERS + SAFEGUARDS: Hold workshops or forums comprising Building Ministers, officials, regulators, and all major building industry, professional and consumer groups affected by the regulatory system.

3.1.2 PROBLEM: *Lack of holistic approach*

POSSIBLE SOLUTION: All jurisdictions to undertake a joint (national) systematic 'blue sky' review of overlapping and conflicting federal, state, local and city codes and standards and regulations and establish a blueprint for a holistic system. The review should focus on the whole building supply chain and supporting eco-system including contractual processes, finance mechanisms, insurance regimes and consumer dispute resolution processes.

ENABLERS: Review must include all major building industry, professional and consumer groups affected by the regulatory system.

3.1.3 PROBLEM: *Transparency and engagement concerns*

POSSIBLE SOLUTION: BMF to schedule regular meetings (at least 3 per year with timetable set at least 6 months in advance) and hold a stakeholder forum prior to each meeting to gauge industry and consumer concerns, discuss intended plans, policies and actions.

ENABLERS + SAFEGUARDS: Willingness by the BMF to genuinely engage with the building industry, professional and consumer groups and keep them abreast of decisions and outcomes of meetings on an ongoing basis.

3.1.4 PROBLEM: *State political expediency creating national disharmony*

POSSIBLE SOLUTION: Subject all existing and proposed NCC variations by each jurisdiction to a mandatory and suitably rigorous justification process involving impact analysis (e.g. Regulatory Impact Statement [RIS]) at that jurisdiction's cost. The impact analysis should take into account not only the impacts of the variation on the particular jurisdiction proposing the variation, but on all the other states and territories and the nation as a whole.

ENABLERS + SAFEGUARDS: Only those NCC variations that can be justified through a RIS should be considered by the BMF with no guarantee that they will be allowed to proceed as variations to the NCC.

3.1.5 PROBLEM: *Consensus decision-making concerns*

POSSIBLE SOLUTION: The BMF should question 'consensus' as a restraint on decision-making as well as the fall-back to majority vote if consensus cannot be reached, and investigate other participatory means of developing decisions across the building regulatory system. Such examples include negotiated rulemaking, where to avoid litigated conflict, government officials need not fully satisfy all the interests of all affected individuals and organizations, but rather design policy that those affected are willing to 'live with.'

ENABLERS + SAFEGUARDS: Consult existing research findings regarding world's best practice decision-making processes.

3.2 Jurisdictions

3.2.1 **PROBLEM:** *Lack of appetite and resources for enforcement*

POSSIBLE SOLUTION 1: Building Ministers and their administrations need to reinforce the message that compliance enforcement is not and never has been ‘red tape’, nor is it a cost burden on the public purse, because it helps prevent expensive building dispute litigation, rectification costs across the sector and other costs to the public.

POSSIBLE SOLUTION 2: Jurisdictions need to work collaboratively with industry and the community to develop building compliance processes that are economical and effective while being able to deal with increased levels of construction activity. We need to provide for greater enforcement through legislative reform, i.e. create bodies (or empower existing bodies) to investigate defects to buildings (new and existing) and compel rectification.

3.2.2 **PROBLEM:** *Too much responsibility placed at the end of the construction process*

POSSIBLE SOLUTION: Jurisdictions should consider adopting standardised national building product conformity ‘chain of responsibility’ legislation (such as that enacted by the Queensland Parliament in 2017) and in addition, use a standardised national model, modify their building codes to impose an express warranty (rather than existing implied warranty) on all parties in the building supply chain (not just the building surveyor or the builder or developer) along with unambiguous definitions of roles and responsibilities, to ensure product and practitioner building conformity with the NCC and appropriate ‘risk-sharing’.

3.2.3 **PROBLEM:** *Fragmented jurisdictional legislation related to buildings*

POSSIBLE SOLUTION: All jurisdictions to undertake a joint (national) systematic ‘blue sky’ review of overlapping and conflicting federal, state, local and city codes and standards and regulations and establish a blueprint for a holistic system. The review should focus on the whole building supply chain and supporting eco-system including contractual processes, finance mechanisms, insurance regimes and consumer dispute resolution processes.

ENABLERS + SAFEGUARDS: Review must include all major building industry, professional and consumer groups affected by the regulatory system.

3.2.4 **PROBLEM:** *Poor administration of performance-based approach may exacerbate non-compliance*

POSSIBLE SOLUTION 1: Jurisdictions to instigate supporting policies, administrative processes, regulatory environment, training and education to ensure compliant performance-based building designs, approvals and construction.

ENABLERS + SAFEGUARDS FOR SOLUTION 1:

- Jurisdictions to ensure competence of practitioners involved in performance-based solutions and enable them to achieve mastery of non-standardised construction techniques and installation approaches.
- Jurisdictions to undertake an ‘awareness’ campaign to alert prospective owners of performance-based buildings that could impact their legal obligations and ongoing building running costs.
- Jurisdictions to ensure a level playing field for manufacturers by affording existing suppliers the same freedoms as those extended to new products by way of amendments to codes and standards designed to accelerate innovation.

POSSIBLE SOLUTION 2: For builders and developers that want to make minor modifications to Deemed-To-Satisfy (DTS) compliance provisions that are not related to fire safety, provide an additional compliance pathway option before a full performance solution.

ENABLERS + SAFEGUARDS FOR SOLUTION 2:

- Establish a panel of experts that can decide if a performance solution can be accepted similar to DTS (like a building appeals board).
- Capture data on performance design requests to identify systemic issues, common acceptable practices and regulatory changes that may be required and make decisions publicly available which will provide much-needed guidance to practitioners on what may or may not be considered acceptable as a performance-based solution.

3.2.5 **PROBLEM:** *Lack of appetite for changes to existing jurisdictional legislation hampering national harmonisation*

POSSIBLE SOLUTION: Jurisdictions to refrain from embedding specific NCC clauses and requirements in their regulatory documentation, audit their documentation to identify current instances where this has occurred and take immediate steps to delete these references from regulatory instruments.

3.2.6 **PROBLEM:** *Impending brain drain*

POSSIBLE SOLUTION: Jurisdictions should be providing funding to train and support a technical workforce that can take over regulatory tasks from retiring departmental colleagues.

ENABLERS + SAFEGUARDS:

- Scholarships and subsidised technical and building regulatory training.
- Secondment programs where young technical career aspirants can work in building product research and test labs or with seasoned building surveyors to develop the skills necessary to undertake building/technical roles.

3.2.7 **PROBLEM:** *Lack of effective legislative mechanisms for prosecution*

POSSIBLE SOLUTION: Jurisdictions to engage appropriate legal expertise to determine why recent regulatory prosecutions have failed and what modifications to legislation, regulation and rule-making need to be made to close these loop-holes.

3.3 Standards and Product Certification

3.3.1 **PROBLEM:** *Standards development struggling to keep up with pace of change*

POSSIBLE SOLUTION: Without compromising the independence and integrity of the Australian standards development process, governments should be providing funding to train and support a technical workforce that can deal with the increased volume and pace of change required in standards development and effectively contribute to their writing.

ENABLERS + SAFEGUARDS:

- Scholarships and subsidised technical and building regulatory training.
- Secondment programs where young technical career aspirants can work in building product research and test labs or with seasoned building surveyors to develop the skills necessary to undertake building/technical roles.

3.3.2 **PROBLEM:** *Gaming of building product standards*

POSSIBLE SOLUTION: Nationally harmonised jurisdictional legislation that establishes business rules or controls for fraud detection and prevention, a schedule of penalties, personal fines and criminal convictions where appropriate (as used in safety legislation) for manufacturers or importers of NCBPs.

ENABLERS + SAFEGUARDS:

- A requirement for all manufacturers that have their products tested regardless of the place of manufacture, to publicly publish a free, standard-format 'Summary Information Report' on those tests (that documents salient results but protects manufacturer IP) and/or provide links to appropriate online registers that make this information available
- Introduction of standardised product labels/receipts required for all overseas and local product suppliers to identify manufacturing date (and batch number if applicable).
- All testing or certification bodies should be organisations able to demonstrate both product-specific technical capacity and testing or certification competence relevant to the product being assessed and consistency/comparability of results with similar

or competing bodies. Such capacity and competence should be able to be independently confirmed.

- Proceeds from fines distributed to those entities that have invested in identifying and pursuing manufacturers or suppliers of NCBPs enabling investigative cost-recovery.

3.3.3 PROBLEM: *Reluctance to retest products*

POSSIBLE SOLUTION: Nationally harmonised jurisdictional legislation that establishes a requirement for product and material suppliers to demonstrate ongoing conformity testing of products.

ENABLERS + SAFEGUARDS:

- For mass-produced products – Regular independent sample auditing and/or testing is recommended in accordance with relevant Australian Standards (such as ISO IEC AS/NZS 17065) to ensure that production/manufacturing changes have not diminished the performance of the finished products compared to the original tested product.
- For custom/site-specific products - Effective field screening tests are recommended.

3.3.4 PROBLEM: *Testing in isolation*

POSSIBLE SOLUTION: Nationally harmonised jurisdictional legislation that establishes a requirement for manufacturers of products and materials used in high-risk applications (fire, structural, waterproofing, seismic, marine, cyclonic, etc) to undertake in-situ product and sub-assembly testing (with adjustments to allow for reasonable site tolerances and conditions) to confirm that the ‘as-built’ performance of products match or exceed their performance when tested in isolation.

3.3.5 PROBLEM: *Non-compliance with standards*

POSSIBLE SOLUTION 1: Introduce a ‘conformity excise’ on imported and domestic building products. Products and materials that cannot demonstrate an appropriate level of conformity to Australian Standards and NCC requirements would be subject to a 100% excise recoverable via the same mechanisms that apply to tobacco, alcohol, oil and gas product sales.

ENABLERS + SAFEGUARDS FOR SOLUTION 1: World Trade Organisation agreements allow for countries to impose restrictions on trade to enable “*prevention of deceptive practices and protection of human health or safety*” (Article 2.2). Procedures for conformity assessment shall be applied to products imported from other WTO members “*in a manner no less favourable than that accorded to like products of national origin and to like products originating in any other country*” (Article 5.1.1).

POSSIBLE SOLUTION 2: All Australian Standards needed as part of the compliance requirements of the NCC to be made freely available online or at minimal cost.

ENABLERS + SAFEGUARDS FOR SOLUTION 2:

- Standards Australia needs to explore new and or alternative business models (e.g. Mobike, Uber, etc) that will offset the cost of generating and publishing standards.
- Australian federal and state governments to provide appropriate funding to enable Australian Standards to be developed and made freely available.

POSSIBLE SOLUTION 3: Introduce nationally harmonised jurisdictional legislation that establishes product conformity ‘chain of responsibility’ requirements on manufacturers and suppliers.

3.3.6 PROBLEM: *Proliferation of standards to be considered*

POSSIBLE SOLUTION: All Australian Standards needed as part of the compliance requirements of the NCC to be made freely available online or at minimal cost.

ENABLERS + SAFEGUARDS:

- Standards Australia needs to explore new and or alternative business models (e.g. Mobike, Uber, etc) that will offset the cost of generating and publishing standards.
- Australian federal and state governments to provide appropriate funding to enable Australian Standards to be developed and made freely available.

3.4 Professional Practices and Oversight

3.4.1 PROBLEM: *Lack of clarity regarding roles and responsibilities*

POSSIBLE SOLUTION: Using a standardised national approach, jurisdictions need to modify their building legislation to create unambiguous definitions of roles and responsibilities between state government, local government and private building practitioners, to ensure building design, approvals, construction oversight and compliance enforcement responsibility are clear.

3.4.2 PROBLEM: *Highly variable levels of education outcome*

POSSIBLE SOLUTION: Using a standardised national approach, jurisdictions need to ensure via the Australian Skills Quality Authority, that Construction, Plumbing and Services - Industry Reference Committee training package material is delivered by RTO's across the country in a consistent manner and that the same rigour is applied to tertiary institutions such that professionals enter the building supply chain with the requisite knowledge (e.g. graduate architects should know how to comply with the NCC, undertake technical drafting and Building Information Management tasks as well as building design).

ENABLERS + SAFEGUARDS:

- Develop a standardised nationally consistent knowledge and skills framework that spans from trade to professional practitioners (e.g. APCC / ACIF - BIM Knowledge and Skills Framework).
- Secure vocational and tertiary education providers' agreement to create course content and teach students in accordance with the relevant knowledge and skills framework.
- Develop a simple and cost effective assessment process that measures existing practitioners against the relevant knowledge and skills framework so training and knowledge gaps can be identified and rectified (e.g. buildingSMART Australasia – BIMcreds Assessment Platform).

3.4.3 PROBLEM: *Continuing Professional Development (CPD) schemes not as effective as they should be*

POSSIBLE SOLUTION 1: Jurisdictions need to ensure that trade and professional associations with existing CPD schemes increase the amount of mandatory CPD (Continuing Professional Development) opportunities they offer practitioners, with topics split between technical and business CPD, targeted to the specific license class and defined by agreement between industry associations and the relevant regulator.

ENABLERS + SAFEGUARDS FOR SOLUTION 1:

- CPD should be combined with annual audits of individual professionals against their license requirements, including actioning of complaints raised against practitioners.
- Licencing processes should also include auditing of financial accounts when licences are renewed, in order for the regulator and practitioner association to assess the financial wellbeing of licensees.
- The best way to deliver CPD is via face-to-face delivery. We understand this may have implications for regional and remote areas, but it is important to learn from the issues identified in the National White Card Review. The review found significant issues with identity verification of the person undertaking the study. It is critically important that the actual license holder is the person undertaking the CPD activity.
- The loophole for those becoming licensed by way of mutual recognition and therefore not being required to undertake CPD must be closed.

POSSIBLE SOLUTION 2: Jurisdictions need to ensure that tradespeople and professionals who are not members of a representative organisation undertake CPD training combined with annual audits of individuals against their license requirements.

ENABLERS + SAFEGUARDS FOR SOLUTION 2:

- Licencing processes should also include auditing of financial accounts when licences are renewed, in order for the regulator to assess the financial wellbeing of licensees.
- The best way to deliver CPD is via face-to-face delivery. We understand this may have implications for regional and remote areas, but it is important to

learn from the issues identified in the National White Card Review. The review found significant issues with identity verification of the person undertaking the study. It is critically important that the actual license holder is the person undertaking the CPD activity.

- The loophole for those becoming licensed by way of mutual recognition and therefore not being required to undertake CPD must be closed.

3.4.4 **PROBLEM: Abrogated of jurisdictional oversight of professional standards**

POSSIBLE SOLUTION: Jurisdictions to implement a standardised national licensing and accreditation scheme (including mandatory annual auditing) through a user pays approach similar to that required of lawyers and accountants, for all trades and professionals including property developers, involved in the building supply chain. Such a regime would identify recalcitrance early, rather than maintaining the complaint-driven status quo that only finds expression when the damage is done.

ENABLERS + SAFEGUARDS: Licensing register to be maintained by a federal oversight body/agency or a state-based body acting for and on behalf of other jurisdictions. Oversight body/agency would monitor accreditation schemes established and run by trade and professional bodies as well as individuals not affiliated with any representative body. The scheme would work in a similar manner to Registered Company Auditors who must demonstrate to the Australian Securities & Investments Commission (ASIC) that they meet the requirements of the Corporations Act 2001 by being certified by either of the three membership bodies, Chartered Accountants ANZ, CPA Australia and the Institute of Public Accountants. Jurisdictions would need to ensure that building practitioners are not able to operate without accreditation or licencing, that is they cannot defect from an accredited scheme and still continue to practice. The oversight body/agency would ensure that trade and professional bodies as well as independent operators, all conform to the same scheme requirements by having an appropriate level of control over practitioners via:

- Commitment Agreements that combine a Code of Practice and Statutory Declaration into a legally enforceable contract so practitioners abide by all rules and regulations of the scheme and agree to accept any lost business revenue if proceedings are brought against them or they are suspended/expelled.

- Ongoing and regular QA audits of practitioner knowledge, skill and work output.
- Ongoing and regular financial audits of practitioners at time of licence renewal.
- Processes that eliminate the occurrence of non-qualified practitioners working under/for those that are accredited.
- Effective remedial and punitive processes in place for those found to be sub-standard professionally.
- Procedure manuals and practice guides that standardise the level of 'professional judgement' exercised by practitioners in a scheme.
- Requiring all practitioners to carry appropriate insurance cover for public liability and professional indemnity claims.
- Requiring all practitioners that are installers to undergo recognised and manufacturer-approved installer training, especially for practitioners that undertake custom/site-specific or performance-based building solutions.
- A feedback mechanism that alerts insurers to practitioners who have had their licence or accreditation suspended.

3.4.5 **PROBLEM: Technical compliance trumps fitness for purpose**

POSSIBLE SOLUTION: Jurisdictions should adopt standardised national building product conformity 'chain of responsibility' legislation (e.g. Queensland Parliament 2017) and in addition, use a standardised national model, modify their building codes to impose an express warranty (rather than existing implied warranty) on all parties in the building supply chain (not just the building surveyor) along with unambiguous definitions of roles and responsibilities, to ensure product and practitioner building conformity with the NCC. Having a panel of experts adjudicate decisions (similar to the Victorian Building Appeals Board) on applications of these principles alongside performance criteria and publish decisions would assist in developing awareness and prominence of these 'overarching principles' of fitness for purpose and safety.

3.4.6 PROBLEM: *Limited barriers to entry*

POSSIBLE SOLUTION: Implement a standardised national licensing and accreditation scheme for all trades and professionals involved in the building supply chain.

ENABLERS + SAFEGUARDS: Licensing register to be maintained by a federal oversight body/agency or a state-based body acting for and on behalf of other jurisdictions. Jurisdictions would need to ensure that building practitioners are not able to operate without accreditation or licencing, that is they cannot defect from an accredited scheme and still continue to practice. The oversight body/agency would ensure that trades and professionals involved in the building supply chain, all conform to the same scheme requirements by having an appropriate level of control over practitioners.

3.5 Building Approval and Construction Process

3.5.1 PROBLEM: *Building approval process is opaque*

POSSIBLE SOLUTION 1: A cloud based ‘application’ or an Electronic Building Passport (pitt&sherry & Queensland University of Technology 2015) or online building logbook, which starts at the Development Application submission and builds as data is added, with drop down menus which could be completed by various subcontractors to make it easier for building surveyors to see the pathway to compliance and for anyone involved in the building’s construction to see relevant compliance documentation.

ENABLERS + SAFEGUARDS FOR SOLUTION 1:

- Well regulated system that enables building practitioners and other people involved in providing building services to seek authorised access to the digital data contained in the Electronic Building Passport.
- Electronic Building Passport possibly integrated with land titles offices in each jurisdiction

POSSIBLE SOLUTION 2: Making compliance visible to the consumer and the public via a NABERS-style rating system that checks the ‘as-built’ building for compliance, issues a corresponding rating and requires that rating to be made publicly visible on the building and in all advertising, legal and conveyancing documentation, and possibly integrated with property services like Domain.com.au and Realestate.com.au.

3.5.2 PROBLEM: *Institutionalised liability gap*

POSSIBLE SOLUTION: Jurisdictions should adopt standardised national building product conformity ‘chain of responsibility’ legislation (e.g. Queensland Parliament 2017) and in addition, use a standardised national model, modify their building codes to impose an express warranty (rather than existing implied warranty) on all parties in the building supply chain (not just the building surveyor or developers and builders) along with unambiguous definitions of roles and responsibilities, to ensure product and practitioner building conformity with the NCC.

3.5.3 PROBLEM: *Failure to protect consumers*

POSSIBLE SOLUTION 1: Certificate of Occupancy should only be granted when a building is fully completed (and not before), and take into account the level of workmanship and use of fit-for-purpose materials in the building as well as compliance with the NCC and all regulations.

ENABLERS + SAFEGUARDS FOR SOLUTION 1: Jurisdictions to undertake enforcement blitzes on non-issuance of Occupation Certificates and impose tough fines/penalties on those responsible for allowing buildings to be occupied without the required certification.

POSSIBLE SOLUTION 2: Review the building regulatory system to extend a construction compliance duty of care to all subsequent building owners in the same way that manufacturer warranties apply to cars and appliances regardless of who owns them and for how long.

3.5.4 PROBLEM: *Insufficient and inconsistent third-party review*

POSSIBLE SOLUTION 1: A system to establish a nationally consistent protocol of what products or building methods need to be inspected and at what stage in the building process (e.g. for windows and doors, an inspection is necessary to confirm flashing and/or cavity waterproofing before the products are installed – once in the walling is finished it is impossible to verify compliance). The system would include a national and standardised ‘as-built’ inspection checklist that all certifiers must use, such as the one developed and successfully piloted across twenty Councils by the National Energy Efficient Building Project (State of South Australia 2015).

ENABLERS + SAFEGUARDS FOR SOLUTION 1:

- The system also should require certifiers to physically attend mandatory inspections. As part of the design of such a scheme the wording needs to be such that ‘physically’ means at the actual point and specific time where the work is to be inspected (i.e. mere physical presence on the site, drive-by, or drone over-flight will not suffice). The wording should also ensure that if the inspections are delegated by the certifier that an appropriately qualified/licenced person undertakes the delegated work. Wording should also encourage certifiers to adopt digital technologies such as barcode/RFID scanning of products/packaging/delivery documents on-site to ensure products are as specified in the bill of quantities.
- The system should ensure that “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.” (AIBS 2017)

POSSIBLE SOLUTION 2: Jurisdictions invest in automated compliance checking using expert systems and Artificial Intelligence (e.g. AEC3 and Data61), while promoting the widespread adoption of BIM (Building Information Modelling) that allow these systems to automatically check building design and construction for code, standards, contract, and other legal and performance compliance both prior to, during and after construction.

3.5.5 PROBLEM: *Failure to deliver quality (good workmanship, sound construction solutions and use of fit-for-purpose materials)*

POSSIBLE SOLUTION: BMF to articulate requirements for building quality and the imperative to build it right the first time as a primary goal for everyone in the supply chain and embed quality assurance processes in the NCC, building acts and regulations.

3.6 Liability, Insurance and Investment

3.6.1 PROBLEM: *Insurance delays and confusion*

POSSIBLE SOLUTION: All jurisdictions to undertake a joint (national) systematic ‘blue sky’ review of overlapping and conflicting federal, state, local and city codes and standards and regulations and establish a blueprint for a holistic system. The review should focus on the whole building supply chain and supporting eco-system including contractual processes, finance mechanisms, insurance regimes and consumer dispute resolution processes.

ENABLERS: Review must include all major building industry, professional and consumer groups affected by the regulatory system.

3.6.2 PROBLEM: *Proportionate liability drives up the costs of restitution*

POSSIBLE SOLUTION: Jurisdictions should consider adopting standardised national building product conformity ‘chain of responsibility’ legislation (such as that enacted by the Queensland Parliament 2017) and in addition, using a standardised national model, modify their building codes to impose an express warranty on all parties in the building supply chain (not just the building surveyor or the builder or developer) along with unambiguous definitions of roles and responsibilities, to ensure product and practitioner building conformity with the NCC and appropriate ‘risk-sharing’. Jurisdictions should also establish expert/panel determination for proportional liability instead of leaving determination up to court, tribunal or disputing parties

3.6.3 **PROBLEM:** *Finance mechanisms distort residential building outcomes*

POSSIBLE SOLUTION: Introduce a contractual system that crosses development, finance, design, supervision and construction combined with a regulatory requirement to ensure certain terms are included in contracts, such that off-the-plan sales process can only proceed after the development of detailed design plans or certificate of design intent from independent qualified professional that forms part of the final 'as-built' compliance requirement.

3.6.4 **PROBLEM:** *Breakdown in oversight processes across finance, property development, design and construction*

POSSIBLE SOLUTION: Implement a standardised national licensing and accreditation scheme for all trades and professionals (including property developers) involved in the building supply chain.

3.6.5 **PROBLEM:** *Ineffective conflict resolution mechanisms*

POSSIBLE SOLUTION 1: Jurisdictions to introduce legislation that compels standard industry building contracts to have a compulsory mediation clause where parties must engage an independent, government panel accredited mediator to mediate before a matter can find its way to a conflict resolution tribunal. Parties would nominally pay mediators 50/50 to ensure no cost to government and process impartiality.

POSSIBLE SOLUTION 2: If a matter can't be resolved at mediation the matter can then proceed to the relevant court or tribunal. At the outset there would need to be a directions hearing and the tribunal would appoint an independent technical expert to inspect and determine cause of and cost of rectifying defect. This would eliminate the adversarial battles between the plaintiff's and defendant's experts. Further, it would precisely cut the cost of expert testimony by half as the court appointed experts would be required to be remunerated on 50/50 basis. This process would lessen the length of trials, since there would be no cross examination of adversarial expert testimony due to the fact that there would be no contrary expert opinions. Upon conclusion of the trial the loser of the case would be required to reimburse the victor, their 50% share of the cost of the court appointed expert.

3.7 National Building Code

3.7.1 **PROBLEM:** *Lack of effective jurisdictional feedback mechanisms*

POSSIBLE SOLUTION: Jurisdictions to make available all relevant building-related information to inform NCC development.

ENABLERS + SAFEGUARDS: Jurisdictions to provide consumer affairs data (specifically building defects), practitioner licencing information, building dispute resolution data, building site health & safety data, and all other relevant state/territory building information to the ABCB.

3.7.2 **PROBLEM:** *Decreased customer support to the industry*

POSSIBLE SOLUTION: Jurisdictions to create a building regulation and NCC hotline to provide advice to practitioners and the public.

3.7.3 **PROBLEM:** *Lack of accommodation of changing user expectations*

POSSIBLE SOLUTION: Introduce standardised national building design policies/requirements into the NCC with jurisdictions enforcing building design legislation and the existing NCC construction methods modified from time to time to accommodate changing building user expectations.

ENABLERS + SAFEGUARDS: Building design policies/requirements (e.g. the NSW State Environmental Plan Policy No. 65 [SEPP 65]) derived from extensive community and industry input to reflect community expectations in regard to access, amenity, sustainability and affordability. Policies should seek to strike a realistic balance between the need for commercial return on investment by developers, and the desire for good design and amenity for owners and occupiers at an affordable price-point, while at the same time providing clear guidance for development approval authorities.

3.7.4 **PROBLEM:** *Lack of maintenance requirements*

POSSIBLE SOLUTION: Reintroduce 'Section I – Maintenance' into the NCC with nationally agreed construction methods to accommodate repair and maintenance requirements of building products and equipment.

4.0 - Call for a collaborative Industry-Government reform agenda

Industry calls for the Building Ministers' Forum to develop a National Discussion Paper, incorporating the insights of this Action Plan and the recommendations from the Shergold and Weir review, to lead a public discussion and allow industry consultation on the ways to improve Australia's building regulatory framework.

The Discussion Paper would be a report on government-considered proposals and published to elicit input and discussion. It would include specific details of the issues found, identify possible courses of policy action and market mechanisms that address these issues.

The discussion paper should be followed and supported by a national summit of all interested parties to assist in mapping out an agreed program of national reform for the framework of building regulations and its administration.

Practitioners, industry experts, community groups and industry representative bodies share broad concerns about the present framework for building regulation but these concerns. This paper strongly recommend that the BMF leads a process to set in place a new framework for building regulation that will be fit for purpose for the coming thirty years.

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