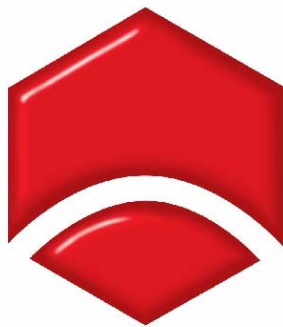


**Comment on**

**Productivity Commission**

**Draft Research Report**

**Reform of Building Regulation**



**ENGINEERS  
AUSTRALIA**

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## **1. Introduction**

Engineers Australia is the peak body for engineering practitioners in Australia and represents all disciplines and branches of engineering. Engineers Australia has around 76,000 members Australia wide and is the largest and most diverse engineering association in Australia. All members are bound by a common commitment to promote engineering and facilitate its practice for the common good. Engineers Australia welcomes the opportunity provided by Productivity Commission to comment on the Draft Research Report into Reform of Building Regulation and offers the following comments.

## **2. Role of Australian Building Codes Board**

The central role of the Australian Building Codes Board (the Board) has been the development and maintenance of a nationally uniform suite of building codes and standards that meet community acceptable requirements. It is the view of Engineers Australia that the Board has been highly successful in achieving its main objective and has successfully consolidated building regulations through the development of a performance based building code. This has been supported by:

- the development and administration of the Australian building products and systems certification scheme;
- reform of fire safety requirements; and
- review of access standards and requirements for people with disabilities.

Engineers Australia fully supports national building regulations that define the minimum levels of public health, safety and amenity for new construction and major renovation. The concept of a national model for building regulation must continue to be based on consistent principles, such as ecological sustainability, and defined economic and social outcomes.

The concept of the Board has been very successful and the continuation of a national forum of this kind is fully supported by Engineers Australia. Consistent building regulation is essential to Australia's growth and the development of a national market and must be pursued rigorously. Deemed to comply provisions and performance based codes are a major step forward. However, the problem of local prescriptive regulations and standards remains and must be a major focus of the Board in the future if industry is to become truly competitive. The focus of the Board must be widened to support a greater convergence by State and Territory governments in building regulatory systems, and to undertake development issues to encourage innovative practices in the building industry.

## **3. Governance and Membership of the Board**

Engineers Australia believes that it is appropriate for the balance of membership of the Board to be weighted in favour of government, with representatives from all States and Territories, and a representative from the Local Government Association.

However, Engineers Australia believes that Board membership could be increased slightly to include further representation from industry. Industry representatives provide valuable input into the decision making of the Board because of their practical experience, which is otherwise unavailable to the Board.

With regard to nominations to the Board from industry, Engineers Australia believes that industry should select and decide on its own representatives to be members of the Board. ACIF, as the peak organisation representing the Australian construction industry, with wide representation from industry organisations, must have a lead role in determining private sector nominees on the Board or any future governing structure.

Engineers Australia also supports draft recommendation 10.2 with regard to the independence of the Chair of the Board.

#### **4. Future Directions for Building Regulation Reform**

##### ***4.1 Promotion of Innovative Practices***

The building process involves participants from a range of industry sectors working together on a project specific basis. Historically, building and construction has been a local activity, where local materials and labour are used, with local firms competing on price rather than quality of technical competence. However, the market for building and construction has broadened its regional focus and is increasingly becoming global. This is evidenced by a dominance of international materials and components suppliers, producing products that are assembled more quickly on site. This shift from more traditional methods to more engineered and assembly methods require a different skill base and a different regulatory environment, which must be taken into account by building codes and regulatory systems.

Government and client attitude is an essential part of promoting innovation. It is apparent that clients not to readily embrace innovation in the building industry, preferring proven products. Developers tend to focus on their core activities, which generally means that they do not have the capacity to innovate for, or invest in, technological change. Clients also focus on price. Clients need to understand the benefits that can be gained from the development of improved technical performance and the use of innovative products. The use of innovative products may increase costs in the construction phase, but can often provide greater benefits in the long term by minimising whole of life costs.

The performance-based approach in the BCA provides a means of achieving more innovative building solutions to a large degree. The Board can play a significant role in changing client attitude by investigating ways to provide a regulatory environment that introduces incentives for clients to accept innovation in products and services. This can also be achieved by educational activities for participants in the building industry.

Governments have a continuing role in creating an environment that stimulates innovation within the building and construction industry. The Board's activities could include further development of regulatory structures and standards that promote an environment of technological competition.

##### ***4.2 Requirements Other than the Building Code***

Although a single building code operates nationally in Australia, an area of particular concern is the many differing rules imposed by planning and building authorities and local governments. While these bodies may believe they are more representative of community views, in some instances, the result is the imposition of onerous and contradictory building rules.

Many engineers operate across jurisdictional borders and are required to be familiar with multiple codes and the specific requirements of local authorities. Building designs that comply in one jurisdiction, do not comply in other jurisdictions. The jurisdictional divide is, in many instances, not State or Territory borders, but rather local authority borders. This creates inefficiencies within the building and construction sector by adding to the cost and complexity of engineering design, which leads to increases in building costs.

Engineers Australia supports draft recommendation 6.9, particularly with regard to a requirement on local authorities to seek approval to apply building requirements that are inconsistent with the BCA.

#### ***4.3 Accreditation of building certifiers and private certification systems***

A key element of the building regulatory system is building certification in accordance with the BCA. Draft finding 7.2 of the report states that the compliance system for building regulation could be improved by establishing more soundly based requirements for licensing, accreditation and audit of building practitioners. Engineers Australia agrees with this finding, but believes that a specific recommendation needs to be made with regard to the accreditation or licensing of building certifiers on a national basis. It is our view that the Board is the appropriate forum to do this.

Engineers Australia is concerned about the differing approach in each jurisdiction to the introduction of private certification. In line with mutual recognition principles and National Competition Policy, it would be highly desirable for each State and Territory to take a similar approach on this issue. The various private certification regimes in each State and Territory create difficulties for practitioners and developers alike. The development of a national private certification system is something that is needed, and should be part of the role of the Board to develop.

At its March 2000 meeting, the Board agreed to a national framework for the accreditation of building certifiers. One of the major concerns of Engineers Australia is the lack of recognition in the framework that there are a range of professionals that are able to undertake building certifications work, despite a view by some that only building surveyors have the necessary knowledge, skills and competencies to undertake building certification activities.

This concept is central to the accreditation framework. The success of the accreditation framework will depend on the development of clear competencies that take into account the different skills bases of all professionals involved in the building certification function, rather than limiting the framework to one particular occupational group.

The initial discussion paper on the national accreditation framework stated quite clearly that the framework was being developed for “building certifiers”, whether building surveyors, architects, or engineers.

Unfortunately, the definition for existing practitioner, while acceptable as a stand alone definition, is still placed within the context of the building surveying profession, and does not recognise building certifiers with different skills and experience.

The requisite qualifications have been framed so that a person must have a tertiary qualification in building surveying. Other degrees, such as engineering, are not considered sufficient to practise at the top of the proposed level of the framework unless a specific course of study has been recognised by a registration body as being sufficient to practice.

By framing the requisite qualifications in the manner suggested, the accreditation framework will not overcome the current problems associated with different standards in different jurisdictions. In some jurisdictions, the registration/accreditation authority recognises an engineering degree (together with appropriate experience) as sufficient to practice, while other jurisdictions do not.

It is highly probable that the requisite qualifications will result in an anti-competitive system because it introduces a monopoly for one occupational grouping, thereby restraining the trade of other practitioners who are more than capable of undertaking the building certification function.

It can only be assumed that there is a view that an engineering degree lacks the detailed application of the BCA to allow graduates to work as a building certifier.

Because of the difference in education and training, professional engineers may well provide a different standard of certification to that presently being provided. For example, a major component of the education and training of professional engineers is a detailed understanding of the principles underlying appropriate codes and standards. This is coupled with training in the detailed application of such codes and standards. The strength of this type of training means that professional engineers know how codes and standards should be applied as well as understanding the underlying scientific bases. For this reason, a very high proportion of professional engineers are members of specialist committees that constantly review the hundreds of Australian standards administered by Standards Australia.

It is well recognised that professional engineers have different skills to those of building surveyors. The case for the educational background of professional engineers being recognised as suitable for the practitioner to act as a building certifier has a major strength. That is, that professional engineers can only approach this status based on being a technical expert in at least one of the disciplines that, together, comprise the necessary range for the successful design and construction of building projects. This technical expertise gives them a sound appreciation of the operational framework of the other practitioners in the industry. It is common practice for a design engineer to be asked to certify that another person's work has been carried out in accordance with the design. Skills such as these are the cornerstone to building certification.

A significant proportion of professional engineers currently practice in the building and construction industry, and deal with the BCA on a regular basis. Many professional engineers practice as project managers for major and minor building projects. Through experience and the successful completion of these projects, there is a clear demonstration that engineers have the ability to successfully coordinate and facilitate the necessary range of skills required.

Historically, professional engineers have made the greatest contribution to public health of all professions in the provision of potable water and the disposal of wastewater, for instance. Currently, they are in the vanguard of addressing public health concerns that relate to the protection of the environment.

In recent decades, there has been a growing appreciation of the need to provide adequate solution and standards for the protection of lives and property in the case of fires in buildings. Again, professional engineers have led the way in applying basic scientific principles to achieve practical solutions that now form the basis of codes of practice and standards in this area.

The effectiveness and success of any national accreditation scheme for building certifiers will be based on the skill, knowledge and standard of the building certifier. It is the nature of these services that most individual consumers are not in a position to judge the quality of those services. It is essential that the consumer be assured of the qualifications and competence of the practitioner providing those services.

The public, as the end users of buildings, deserve the assurance that high standards will be maintained. It is therefore imperative that some limitation be placed on practitioners for the assessment of performance provisions, particularly with respect to fire engineering matters. Only those persons who have a demonstrated competency in this area should be able to undertake certification. If inexperienced practitioners take on that role, there is an enormous potential for harm.

The accreditation framework was developed from the outset on the understanding that national competency standards would underpin the education and qualifications component of the system.

Because building certification involves practitioners other than building surveyors, it is essential that the competency standards recognise this. There can be no national recognition of competency standards without involving competencies held by other practitioners.

Engineers Australia believes that a model building certification system needs to be developed. This model must be inclusive of all competent occupations and be based on a set or sets of national competency standards.