

Contractors at the Frontline of Fire Protection







Submission to the

NSW Government | Building and Construction Policy Team | Better Regulation Division | Department of Customer Service

Design & Building Practitioners Regulation 2020

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Introduction

In addition to the human risk, there is also a substantial financial cost to the community due to building fires. Fire costs Australian business millions of dollars due to property damage, fines, compensation, and insurance premiums. Many businesses find that they are not able to recover from the effects of a fire.

The Australian Fire Protection Industry

Fire protection in Australia is typically achieved via three means:

- Active fire protection (fire sprinklers, fire hydrants and fire alarm systems);
- Passive fire protection (fire rated walls, floors and ceilings and fire sealing); and
- Education.

The Fire Protection Services industry contributes over \$2.4 billion to the Australian economy every year. Over 2000 businesses pay nearly \$700 million in wages each year and industry revenue is projected to increase at a compound annual growth rate of 3.4% over the five years through 2022-23, to reach \$2.8 billion.

The IBISWorld Industry Report OD5424 Fire Protection Services in Australia (February 2018), claims that despite the presence of vertically integrated multinational giants, the industry has a low level of market share concentration as the top four players are estimated to account for about 27.4% of industry revenue. The two major companies have a combined market share of only 20% and are both part of large multinational companies operating globally across several related industries. Twenty years ago, the two major companies are estimated to have had 80% of the market.

There are now a large number of State, regional and local players that construct, install and service fire protection systems to small, medium and major buildings across the full scope of class 2 to 9 buildings as well as higher risk facilities such as fuel depots, harbours and similar developments. Over half the industry enterprises employ between one and 19 people (53.1% in 2014-15) and a further 44.4% have no directly employed labour. As the minor players have increased their share of the total market, the industry has become more diverse, while also growing substantially.





Where twenty years ago, the two major companies offered a form of institutionalised but limited "industry" training to their people, it could be argued that the industry was less in need of regulation. However, as the industry has grown substantially and its make-up evolved it is now predominately made up of many more, smaller independent contracting companies. That market growth and diversification has provided customers with better contractor choices, better outcomes and better pricing but, at the same time, raised the need for more over-arching regulation.

The National Fire Industry Association (NFIA)

The National Fire Industry Association (NFIA) is an Australia-wide community of commercial fire protection contractors, their people, suppliers and industry stakeholders representing a wide and varied membership from the smallest subcontractor through to large Australia-wide construction and service businesses. Our members work at the frontline of fire protection with an estimated 80 per cent of the commercial fire protection work undertaken in Australia is completed by members of NFIA.



NFIA members carry out almost 100% of work in Tier 1 commercial buildings which anecdotally do not have the types of non-compliance issues which have plagued the apartment sector. This work is mostly carried out by the smaller tier 2 and 3 contractors.

NFIA partners with and utilises the resources of other Australian and International industry organisations and associations.

NFIA is committed to the delivery of quality fire protection practitioners across all aspects of fire protection safety. To this end, NFIA has sponsored and supported the growth of the world leading fire industry Registered Training Organisation, Fire Industry Training, which now delivers fire industry required training for all of Australia at its campuses in Brisbane, Melbourne and Sydney.

NFIA believes that an appropriate regulatory framework should be one that protects the safety of the community and property, provides adequate consumer protection, recognises and accommodates industry practice and standards, requires registration of practitioners and is linked to the national training package framework.



Submission

The NSW State Government has requested responses to a series of questions. Below we provide a response to those questions where we believe we can provide the most value as engaged stakeholders. We have provided our responses in blue.

Regulatory Impact Statement (RIS)

Scope of reforms

- Do you think the reforms should be expanded to other types of buildings over time? Why/Why not? If so, which types of buildings do you think should be next? Yes. The reforms should be expanded to include all classes of building, with the exception of Class 1. The industry has needed these reforms for decades and the sooner they are introduced the better. The priority order should be Class 3, 5 & 6, and then 'the rest'.
- 2. Do you agree that the reforms should only apply to existing arrangements where the Complying Development Certificate or Construction Certificate has been applied for on or after 1 July 2021? Why/Why not?

Yes. We believe that the industry would struggle with applying the reforms retrospectively to projects that are already underway prior to 1 July 2021 while also applying the requirements of the reforms to the new projects which commence after that date. Although we would like to see the reforms implemented as soon as possible, we believe that this is a pragmatic timeline for its implementation.

Regulated design

3. Are the proposed exclusions from 'building work' appropriate? Why/Why not?

Yes. We support the exclusion of "repair, renovation or protective treatment of a fire safety system for the purposes of maintaining a component of a fire safety system". This coincides with our belief that it would be inappropriate for the "like-for-like" replacement or repair of a component of a fire system to trigger the need for declared drawings to be provided, especially since the declared drawings would not comply with the latest provisions of the BCA.

That said, we have some suggestions in relation to some of the clauses in Division 3, as follows:



Clause 13 (1) (d):

We submit that the proposed clause should also include the words "replacement of a component of a fire safety system". In many cases a fire system component (such as a pump, pressure reducing valve etc) would be <u>replaced</u> "like-for-like" and we are not sure that this scenario is captured by the current clause. That said, we understand that clause 13(2) appears to redefine maintenance to also include the replacement of a component, but we suggest that the issue would be better served by including the word "replacement" in clause (1)(d).

Clause 13 (1) (c) parts (i), (ii) and (iii):

We may have a misunderstanding of the impact of the proposed exemption of the work outlined in subclauses (i) – (iii), but if the effect of these clauses means that a design for a relevant fire safety system with a 164B or 187 exemption is excluded from the need to provide a declared design then we do not support this exemption.

A 164B exemption for example may allow the modification or extension of a relevant fire safety system to comply with the original base building standard of performance, but it should still be subject to the need for a registered designer to provide a declared design. This will not be especially relevant in Class 2 buildings, but it will be very relevant in any class 5 portions of a class 2 building, especially as time progresses and will represent a large portion of building work when the scheme is eventually expanded to include all class 5 and 6 buildings.

In relation to 164B exemptions we note that the obligations for the design of relevant fire safety systems to be endorsed by an accredited practitioner (fire safety) under the EP&A Regulation provides a degree of integrity at the initial design stage, but no design integrity at the completion of the project. The EP&A Regulation has no requirement for the endorsed drawings to be updated during the course of the works and even if this is implied in the Regulation, we can advise that it is not happening.

NFIA believes that one of the biggest improvements under the D&BP Regulation will come from the need for declared "as-installed" designs to be provided at the conclusion of the works and for those designs to be lodged into the system. We note that the EP&A Regulation does not have this requirement.



An exclusion for 164B exemptions under the D&BP Regulation will mean that this will not happen for a very significant proportion of work on relevant fire safety systems, especially in relation to class 5 work.

We would welcome an opportunity to discuss this further with the Department.

4. Are there other works that should be exempted? Please provide the basis for the exemption and when the exemption should be effective (for example, a description of the works or threshold of the value including the reason for that value). Our suggestions relating to the <u>replacement</u> of a component of a fire system are as per item 3 above but we would like to provide some suggestions in relation to <u>Clause 13 (2)</u>.

It would appear from the example provided that it is believed that a fire safety system may be composed of a number of different "essential fire safety measures" (to use the EP&A terminology). In the example you have mentioned a fire safety system which is composed of a mechanical ducted smoke control system and fire rated doors.

We don't believe that anyone in the fire protection industry thinks of a fire system being anything but a separate standalone system (sprinkler system, hydrant system, detection system, system of fire rated doors etc.).

We believe that the premise of the exemption is to allow a component of a sprinkler or hydrant system (for example) to be replaced or repaired (like-for-like) without being captured by the regulation. Assuming that this is the case, then we suggest that a better example would be something like:

Example 1 – If a component of a sprinkler system or hydrant system (such as a pressure reducing valve or pipe fitting) is replaced then that work would not constitute building work under the Regulation, but if the entire sprinkler system is replaced then that work is not excluded from being building work.



Example 2 – If a fire door within a building needs to be replaced "like-for-like" then this would be treated under the regulation as the replacement of a component of the system of fire doors and the work would therefore be excluded from being building work.

There is another important issue that we believe also needs to be addressed.

If the definition of an allowable exemption is whether a system is replaced <u>in its entirety</u> then this will allow the majority of fire system upgrade works, modifications and extensions to avoid being captured by the Regulation.

For example, many buildings, including many class 2 buildings, are the subject of fire orders to upgrade the hydrant system to the performance requirements of the latest BCA. In most cases elements of the existing system are retained and incorporated into the new building work.

We would prefer that this work is captured by the Regulation, whereas under the current proposed wording of clause 13(2) it may not be.

We would appreciate the opportunity to discuss the issue and work further with the Department on this issue.

Registration of Compliance Declaration practitioners

- Do you support the proposed classes of Design Practitioner? Why or why not?
 We agree with the proposed fire protection related design practitioner classes as follows:
 - Fire safety engineering.
 - Fire systems (detection and alarm systems)
 - Fire systems (fire sprinklers)
 - Fire systems (fire hydrants and hose reels)
 - Fire systems (mechanical smoke control)

We are also comfortable with the other proposed design classes, but we will limit our comments to the classes relevant to our area of specialty.



We agree with the Regulation which will require the passive elements (fire compartmentation, smoke doors, fire doors, fire sealing of penetrations etc) to be captured under the architectural and building design practitioner classes.

<u>Please note</u> that there is a class of "wet" fire system where the hydrants and sprinklers are combined in the one system. These are now utilized almost exclusively in major buildings and comply in most cases with AS2118.6-2012, referred to in the industry as a "Part 6" system. It should be necessary for a registered designer for this type of system to have both the sprinkler and hydrant & hose reel registrations.

It is our belief that this should be dealt with by including a note within the Regulation and/or practice guide.

6. Are there other types of Design Practitioners that should be included or any that should be removed? If so, what are they and why?

With the exception of the note above in relation to Part 6 systems, we do not believe that there needs to be any additional design practitioner classes for fire protection systems.

7. Do you support the proposed qualification, skills, knowledge and experience requirements for each class of practitioner? Why or why not? Please make suggestions for additional or alternative requirements.

We agree in principle with the proposed qualifications, skills, knowledge and experience with the following minor exceptions:

- <u>Design practitioner fire safety engineering</u>
 No further comment
- Design practitioner fire systems (detection and alarm systems), fire systems (fire sprinkler), fire systems (fire hydrants and hose reels) and mechanical engineering:

Our comment is the same for all of these design categories.

We support the proposed qualifications for each of these design categories and the items listed in the knowledge and skills sections.



We believe however that the Regulation should also include the need for a designer in each of these categories to have the knowledge and skill to understand and apply the requirements detailed in a "Performance Solution Report".

We realise that Skills item (i) may be able to be interpreted to include both DTS and performance-based designs, since they are both technically a relevant requirement of the BCA, but we suggest that item (i) could be reworded as follows to overcome any ambiguity:

"interpret, apply and assess compliance with the relevant deemed to satisfy and performance-based requirements of the Building Code of Australia."

We also suggest that skills items (c) (iii) & (iv) require more attention. We support the view that the fundamental role of a fire systems designer is to design fire safety systems to protect people and their environment from the consequences of fire (clause (c)(iii)) and perhaps to anticipate the behavior of materials, structures, machines, apparatus and processes when exposed to fire (clause (c)(iv)).

The most fundamental role of a fire systems designer however is to design a fire system in accordance with the standard of performance nominated by one of the following:

- The deemed to satisfy requirements of the BCA and associated reference standards.
- The standards of performance and specifications referenced in a performance solution report.
- The standards of performance referenced under a 164B or 187 exemption.
- or a combination of two or more of the above.

The fundamental role of a fire system designer is to design a fire system in accordance with the design requirements of the applicable standards of performance for the works and we suggest that this be included under the "skills" and perhaps "knowledge" sections for each of the fire system design categories.



- Other than qualifications, skills, knowledge and experience requirements, are there any other eligibility criteria that applicants should meet to be eligible for registration?
 No. Subject to our response to item 7 we are comfortable with the proposed eligibility criteria.
- **9.** Do you agree that practitioners should be required to have 5 years of recent and relevant practical experience?

Yes. We believe that a qualification is not enough, practical experience is necessary. We believe that 5 years of "recent" and "relevant" experience is the right balance. The words "recent" and "relevant" are important and we are pleased to see them included.

10. Some classes of practitioner have been proposed with authority to work on low and medium rise buildings? Do you support this approach?

We note that it is not proposed for the fire system design categories to differentiate between low and high rise building, and we support this.

The end goal of a qualification pathway which will require the diploma of fire systems design along with 5-years relevant experience will produce the standard that the industry needs.

The issue will be in the manner in which the existing (currently unqualified) designers are introduced into the registration scheme under the proposed transition arrangements. We have some concerns in relation to this. We would welcome the opportunity of discussing the interim arrangements with the Department in due course.

Registration of Professional Engineers

- 11. Are there any other areas of engineering that should be captured for the purposes of designing or constructing a class 2 building, or a building containing a class 2 part? No
- 12. Do you support a co-regulatory approach for the registration of engineers? Yes



- 13. Pathway 1 will require an engineer to satisfy certain qualifications, skills, knowledge and experience requirements. Are there any other eligibility criteria that engineers should meet before being registered?
 No comment
- 14. The Regulation proposes recognition of Washington Accord accredited qualifications. Do you think this is appropriate? If not, what alternative approach do you suggest? No comment
- 15. Under Pathway 2 what criteria do you think the professional engineering body should satisfy to be eligible to perform their function? No comment
- 16. Would you be supportive of professional bodies developing a PSS for Pathway 3 to be available? Yes
- 17. Do you agree that Professional Engineers should be required to have 5 years of recent and relevant practical experience? Yes
- 18. Do you support the proposed generic list of skills and knowledge requirements for all classes of engineering (excluding fire safety)? If not, please outline what you think the specific skills and knowledge for each class of engineer should be. Yes

Compliance Declaration Scheme: practitioner requirements

19. Do you support the proposal that all construction issued regulated designs must be lodged before any building work can commence? Why or why not?Yes. Providing the interpretation of this clause is that the building work relates to the work

associated with the regulated design, ie: it would not be expected that regulated design drawings would be available for the building services before ANY building work of any type could commence on the site.



If this proposal would require regulated design drawings of building services to be provided before any work can commence on the site (including early works, footings etc) then we do not support the proposal. We believe that this scenario would lead to wasted design effort and cost.

- 20. Do you support the Building Practitioner being primarily responsible for lodging regulated designs on the NSW Planning Portal? Why or why not? If not, who do you think should be responsible at the different lodgement points? Please explain your answer. Yes
- **21.** Do you support the matters covered in the Design Compliance Declaration? Why or why not?

We believe that the premise of the declaration is correct but still requires refinement. Some suggestions are included in item 22 below.

22. Do you consider any other matters should be included in the Design Compliance Declaration?

Our suggestions are as follows:

Part 2 Declaration matters - one regulated design

We believe it would be advantageous for the response to item 2 to also nominate the standard of performance of the design.

The declaration could say:

"The regulated design complies with the requirements of the Building Code of Australia – Clause _____, Specification _____, Australian Standard _____, Performance Solution Report _____."

This would remove any ambiguity in relation to the standards of performance that have been adopted for the works and would be an important reference.

This would also allow the same declaration form to be used for works with a 164B or 187 exemption and would better serve the intent of the legislation.



We understand that this change may not suit the standardized form when used for other regulated design classes. If this is problematic, we would suggest that you consider an option where forms are easily modified to suit the different classes.

23. Do you support the proposed title block? Are there any other matters that should be included in the title block?

In Part 1 Details we suggest you add a section that will indicate if a drawing is the original submitted design drawing or a resubmission.

We also suggest that the date of the revision (as referenced on the drawing) is also noted.

- 24. Do you support the title block being available in a .dwg format? Yes
- 25. Do you support the proposal that varied regulated designs be lodged within 1 day of the building work being commenced? Why or why not?Yes. Providing the building work that we are referring to is the work associated with the regulated design.
- 26. Do you support the proposal that the Building Compliance Declaration, regulated designs and variation statements be lodged prior to the application for the Occupation Certificate? Why or why not?

Yes, otherwise there is little value in the Regulation?

- 27. Are there further matters that should be included in the Building Compliance Declaration? If so, what are they?
- 28. Are there further matters that should be included in the Principal Compliance Declaration? If so, what are they? No



Insurance

- 29. Do you support the approach proposed for insurance requirements for Design Practitioners and Professional Engineers? Why or why not? Yes
- 30. Do you consider additional insurance requirements should be prescribed for Design Practitioners and Professional Engineers? If so, what?No
- 31. Do you support the proposed transitional arrangements that exempt Building Practitioners from being insured for issuing Building Compliance Declarations? Why or why not?

Yes

Continuing professional development (CPD)

- 32. Do you support the proposed CPD requirements for Design and Building Practitioners? Why or why not?Yes
- **33.** What types of training, education or topic areas would be relevant for the functions carried out by Design and Building Practitioners?

Updates to the BCA, codes and standards. Applicable legislation. Innovations and materials, service and maintenance standards and legislation.

- 34. Do you support the proposed CPD requirements for engineers under pathway 1? No comment
- 35. Do you support the mandatory CPD topic areas? Why/why not? Please make any suggestions for amendments and explain why they are necessary. No comment



Penalty notice offences

36. Do you support the proposed penalty notice offences and amounts proposed in Appendix1? Why or why not?

Yes

37. Do you think the proposed penalty notice offences and amounts are fair and reasonable? Yes

Fees

38. Do you support the reasons for the proposed fees? Why or why not?

Yes

39. What do you think NSW Fair Trading should consider in determining the fees? It will be incumbent on fire designers to have accreditation under the EP&A Reg. as well as registration under the D&BP Reg. as well as registration in a number of other states as applicable. The total cost should be considered when determining the fees under the D&BP Reg.

We believe, however, that the penalties should provide a deterrent.

40. Are you interested in being involved in targeted stakeholder consultation on fees? Yes