

Friday, October 18, 2024

Policy Team
Building Commission NSW

Thank you for the opportunity to participate in the ongoing consultation on building reforms in NSW.

AIRAH is a peak membership body for professionals working in heating, ventilation, air conditioning and refrigeration (HVAC&R) and building services. Given the wide-ranging nature of the consultation, we have focused our comments on the following areas:

- The registration of engineers working in HVAC&R building services
- The regulating of mechanical services and related fire safety systems
- The occupational licensing of air conditioning and refrigeration technicians
- Broader work around the reforms where appropriate.

As an approved assessment entity for professional engineers in Queensland, Victoria and the ACT, AIRAH has a keen interest in the registration (or licensing) of professional engineers. A large percentage of our members also work in NSW, and many of them are already operating under the existing scheme. Accordingly, we have provided feedback on the proposed arrangements and the definition of engineering work in the **Draft Building Bill 2024**.

We have also provided feedback on the **Competency assessments and proposed co-regulation model** discussion paper – which we understand will encompass assessment of professional engineers.

In line with our areas of expertise, we have provided comments on the **Fire safety regulatory framework**, following on from the feedback we have provided in previous conversations on this topic.

Another area of interest for us – and one that the Policy Team has engaged with us in the past – is the occupational licensing of mechanical services work, including air conditioning and refrigeration work, and mechanical services plumbing work. We have commented on the relevant sections of the extract of the **Draft Building (Licensing) Regulation 2024**, while also understanding that the regulations will be finalised in 2025. We look forward to providing input when this process takes place.

Once again, we appreciate the efforts of the Commission in engaging with such an incredibly broad range of stakeholders on these sweeping reforms. If you have any questions about our submission, we would be very pleased to organise a follow-up meeting.

All the best,

Mark Vender
Advocacy and Policy Manager
AIRAH

Draft Building Bill 2024

We note that the Building Bill will repeal the *Design and Building Practitioners Act 2020* (DBP Act), and the *Design and Building Practitioners Regulation 2021*, and that the proposed new framework will establish a single registration system for licence holders, rather than the current system that divides professional engineers and occupational licence holders.

In terms of the licensing of engineers, AIRAH sees the repealing of the Act and Regulation above as an opportunity to address some challenges and unforeseen consequence of the current system, as follows:

Alternative pathways

In New South Wales, engineers require a Washington Accord-accredited degree to become registered.

Due to a lack of tertiary qualifications that deal specifically with HVAC&R building services, many professionals working in this sector do not have a Washington Accord-accredited degree in engineering. Because of this, many established and knowledgeable engineers – including some who sit on committees developing Australian Standards and the National Construction Code – are now unable to obtain registration, which is limiting their opportunity to practice.

The current system is locking expert practitioners out and, in some cases, has already forced experienced and respected members into early retirement. This comes at a time when, according to Engineers Australia, the engineering skills and labour shortage is at its highest level in over a decade. It also appears to run counter to the aim of professional registration: to build consumer trust and confidence in the building and construction sector.

Late last year AIRAH ran a survey to assess how HVAC&R building services engineers are being impacted by the introduction of professional registration schemes.

More than 50 per cent of respondents said their qualifications would not enable them to become professionally registered as an engineer, or they weren't sure. About 85 per cent of respondents had more than 10 years' experience. About a third had more than 30 years' experience. This highlights the depth of knowledge we risk losing.

For these professionals, we believe an alternative transitional pathway to professional registration is vital. The alternative pathway offered in the legislation via Australia's signatory to the Washington Accord does not take into account the nature of the HVAC&R building services industry. It rigidly prescribes study required based on a desk mapping of university courses, without relying on practical assessments conducted by experts in the field, or recognising that some of our most respected engineers gained their qualifications before today's educational structures existed.

AIRAH has been approved as an assessment entity by the ACT government. In this scheme, genuine alternative pathways are available for engineers who do not have Washington Accord degrees. We encourage the NSW government to explore this model. AIRAH would be keen to support this by developing an assessment process conducted by registered engineers in the area of HVAC&R building services.

We note that in the Proposed NSW Building Reforms Webinar shared by Building Commission NSW, there is mention of further consultation on additional licenses for "engineering technologists and associates". AIRAH strongly supports a review of the current set-up under which holders of Sydney and Dublin Accord qualifications would have alternative pathways for becoming fully registered as professional engineers as relevant to their field of work in HVAC&R building services.

Refrigeration engineering

AIRAH would like to highlight an area of confusion around the definition of “professional engineering work”: refrigeration.

Refrigeration systems include supermarket refrigeration and cold rooms that may be part of a building. After reviewing the Draft Building Bill, it is our belief that refrigeration is not considered a "building element", as it is not covered by any of the definitions on page 5. If this assumption is correct, and refrigeration is not defined as a building element, the design and build of refrigeration systems/components does not need to be registered.

AIRAH believes, however, that the design of certain safety critical elements (refrigeration piping, rack design, switchboard design and possibly equipment selection) does need to be done by a registered professional engineer, with the refrigeration contractor to supply a signed self-certifying document to be kept with the as-built documents.

If this interpretation is correct, AIRAH would flag that a significant number of practitioners working in the refrigeration space in NSW would not be able to obtain professional registration. The established pathway into this field is via VET.

In the first instance, we seek from the NSW government a clarification on whether refrigeration is considered “professional engineering work”, and we would be very happy to organise a meeting to discuss this in more detail.

We are also keen to support the establishment of an alternative pathway for those involved in the specialist field of refrigeration engineering.

Expanding licensing requirements to apply to all building classes

AIRAH supports the expansion of professional registration to all building classes; however, it is critical that the issues highlighted above are addressed first.

AIRAH is aware of and in full agreement with the principles of the recent NCAT decision to validate an engineer’s experience across a range of HVAC&R system complexities for the purpose of demonstrating experience relevant to a registration. We encourage NSW to consider accommodating these principles, where they involve HVAC&R systems, in the drafting of the Bill.

Mandatory CPD

AIRAH supports the introduction of mandatory CPD, with some considerations.

The success of any CPD scheme is dependent on the quality and suitability of professional development available to practitioners. Often there is an assumption that because structured learning providers (such as industry bodies) will charge for CPD activities, these will be developed naturally on a cost-recovery basis.

In AIRAH’s experience, however, few CPD activities have a clear business case. If there is uncertainty about covering costs, the learning provider is unlikely to develop the CPD activity. In these cases, funding is needed to support the development of important CPD activities. This should be recognised in the costing of any scheme.

Effective sharing of information between government and industry will also enhance the development of CPD activities. This includes providing effective pathways for practitioners to report non-compliant work, sharing data about non-compliant and sub-standard work, and sharing information on major changes in technology, practice, and regulations, to guide course development.

Rectification and remedial works on older buildings

Our members have noted that the cost and compliance pathways of some rectification and remedial works in older buildings is becoming prohibitive because under the current DBP Act they are generally required to declare compliance of new works with modern-day codes and standards.

AIRAH would support opportunities to better accommodate older buildings. This could take the form of a requirement that any new work must demonstrate improvement in relevant performance requirements for ALL remedial works, with grades of improvement relative to remaining economic life of each building. For example:

- For heritage buildings and buildings more than 50 years old, minimal upgrade would be required. Previous building elements could be restored to remove illegal works, but these cannot be worse than replaced building elements.
- For 1970s buildings etc., these would have to comply with requirements relevant to construction, or any more recent requirement.
- For buildings built under a previous NCC, works would have to be in accordance with that NCC or current NCC.
- For buildings built under the current NCC: works would have to be in accordance with current NCC only.

Competency assessments and proposed co-regulation model discussion paper

In principle, AIRAH supports the proposed compliance and enforcement tools described in the consultation paper. However, the key to a successful system will be in the detail, and we would like to be involved in ongoing discussions.

Based on AIRAH's experience as an accreditation body for professional engineers in Queensland, Victorian and the ACT, we believe regular formal and informal dialogue between Accredited Industry Bodies and the regulator is vital.

Also based on this experience, we would recommend that the Commission and the Industry Bodies carefully consider the resources required to manage an assessment scheme. There is a need to establish procedures and robust IT infrastructure, particularly if the Industry Bodies are required to provide up-to-date regular reports to the Commission. We have found that establishing a pool of assessors can be particularly challenging. This will be especially true for air conditioning and refrigeration, where the assessors may not be employees of the Accredited Industry Bodies (see below).

Although establishing multiple assessment schemes for different professions brings with it the benefit of competition, there is also a risk that applicants will "shop around" for the least rigorous assessment process. For this reason, we recommend that the Commission, in conjunction with industry, develop and mandate one competency assessment for each licence class. Moreover, where different fields of work exist – for example, different areas of engineering – applicants must be assessed by practitioners in the same field of work.

One issue that we foresee for the air conditioning and refrigeration licence class is who will perform the assessments. At the moment, the obvious assessors would be the educators working at RTOs. But as noted in the consultation paper, there is a conflict of interest risk for the RTOs. It's also worth noting that our industry is struggling to recruit and retain educators. For air conditioning and education, we envisage that cooperation may be required across different industry bodies. The model should allow for this.

We have questions about the expected frequency of assessments for different licence holders, and how current licence holders would be transitioned to the new system – would they need to be assessed, or would their licence transfer automatically? Our members would be happy to help work through this process.

We also note that the consultation paper mentions assessments for professional engineers. We would like to better understand how these assessments would sit alongside the current accreditation, renewal and CPD tracking processes in place for professional engineers – in NSW and other jurisdictions.

For the reasons above, AIRAH would welcome further dialogue about establishing a co-regulation model for competency assessments.

Fire safety regulatory framework

We appreciate the ongoing dialogue with the Building Commission team, including the in-person event held in Sydney on August 16, which Brett Fairweather attended on behalf of AIRAH. Brett shared some of AIRAH's DA Manuals around fire safety involving mechanical services, and one of the Building Commission team members subsequently attended AIRAH's Essential Safety Measures course.

AIRAH understands that the reforms presented in the discussion paper will materialise via the regulations accompanying the Building Bill – to be drafted and consulted on in 2025. We are keen to be involved in the ongoing consultations around the regulations.

At this stage we have the following comments on the framework, which we will be happy to provide further consultation on:

- Page 60 – The paper states that mechanical services – plumbing licence holders are expected to play a role in fire safety. We would be interested to know what this role would be, as plumbing systems within mechanical services installations play no part in fire safety. These are different to sprinkler and hydrant systems that are implemented by fire protection (not mechanical) practitioners.
- Page 84 – We would recommend replacing zone smoke control systems (outdated terminology) with zone pressurisation systems (aligned with the NCC and relevant mechanical services standards).
- Page 84 – Fire and smoke dampers have been incorrectly allocated to “passive systems”. While some types of fire dampers (such as intumescent dampers) may be classified as “passive”, most fire dampers and all smoke dampers have moving parts, requiring management of these as “active systems”.

Draft Building (Licensing) Regulation 2024 – extract

AIRAH supports the draft regulation as it applies to air conditioning and refrigeration work. We understand that Building Commission NSW intends to finalise the Regulations to the draft Building Bill in 2025, with further consultation opportunities for industry and community stakeholders to provide feedback. We look forward to being involved in these consultations.

At this stage we would only note the following:

- Part 2: Licences for general building design work lists “unrestricted” building design work. AIRAH has seen some issues arise in Queensland, where the “unlimited” design licence has been interpreted by some practitioners to mean that they are able to do engineering work. Changing the name may help prevent this confusion.
- Some of the standards referenced have either been republished (AS 1668.2-2024) or are in the process of being revised (AS/NZS 3666.1:2011, AS 1851-2012). As such, it would make sense for the regulation to allow for newer versions of referenced standards to be picked up automatically, as we are expecting to see in relevant publications such as the 2025 version of the National Construction Code.