

Monday September 12, 2022

Environment, Planning and Sustainable Development Directorate

ACT Government

Feedback Professional Engineer Registration Scheme

I am writing to convey the support of the Australian Institute of Refrigeration, Air Conditioning and Heating (AIRAH) for the proposed ACT Government Professional Engineer Registration Scheme.

AIRAH is a keen supporter of the Building Minister's Forum's (BMF) call for a nationally harmonised registration scheme for building practitioners, including engineers. This is in line with the Shergold-Weir *Building Confidence* report, which has as its primary aim to "restore community confidence in Australia's building and construction industry".

One of AIRAH's primary aims is to develop the competence and skills of HVAC&R industry practitioners so that they can better meet society's evolving health, safety and environmental demands, and the challenges of a rapidly changing world. AIRAH encourages world's best practice within the industry through continuing professional development, accreditation programs and a wide range of technical publications.

AIRAH is the only body solely focussed on representing Mechanical Engineer HVAC&R Building Services professionals, which has active membership committees in every state and territory in Australia, including the Australian Capital Territory (ACT).

Mechanical Engineer HVAC&R Building Services are those engineering professionals who plan, design, install, commission operate, tune and maintain mechanical machines and systems in the built environment that may include air conditioning plants, ventilation systems, chillers, cooling towers, fire and smoke systems, fans, pumps and control systems.

As part of our commitment to the HVAC&R industry and the engineering profession, AIRAH has launched a professional accreditation scheme specifically designed for engineers operating in the HVAC&R building services industry. The AIRAH Professional Engineer Register (APER) accredits professional engineers in the Mechanical Engineer HVAC&R Building Services discipline.

The APER accreditation has been designed to meet the requirements in Queensland, Victoria and New South Wales, and we believe will also support the proposed scheme in the ACT.

We look forward to being involved in the next steps and restoring community confidence in Australia's building and construction industry.

Regards,



Tony Gleeson, M.AIRAH - AIRAH Chief Executive

About AIRAH

AIRAH has operated since 1920 and is Australia's peak membership body for professionals and practitioners working in the heating, ventilation, air conditioning and refrigeration (HVAC&R) – building services industry, a hidden, yet innovative industry that employs over 298,000 people in Australia, is worth \$38 billion, uses more than 24 per cent of the country's electricity and accounts for 11.5 per cent of our carbon dioxide emissions.

AIRAH's primary aim is to develop the competence and skills of industry practitioners so that they can better meet society's evolving health, safety and environmental demands, and the challenges of a rapidly changing world. AIRAH encourages world's best practice within the industry through continuing professional development, accreditation programs and a wide range of technical publications.

Our submission represents the perspectives of our members, who are predominantly mechanical engineers working in the HVAC&R – building services sector and who will be seeking professional registration when the scheme begins.

Definition of professional engineering services Step 1 of 9

1. Do you foresee any concerns with the definition of professional engineering services proposed to be used in the ACT scheme?

AIRAH has no concerns with the definition. As AIRAH is already a registered assessment entity for mechanical engineers in Victoria and Queensland, we are very supportive of national consistency of this definition proposed by the ACT Government.

Scope of works within each area of engineering Step 2 of 9

2. Do you agree that these are the five initial areas of engineering that should be incorporated into the ACT scheme? If not, what areas do you think should be removed or included instead?

AIRAH is supportive of these areas, noting that our specific sector is made up of engineers in the mechanical services area, which encompasses engineers working in heating, ventilation, air conditioning and refrigeration (HVAC&R) – building services.

HVAC&R – building services is a unique branch of engineering that combines skills from both mechanical and electrical engineering. Equally, HVAC systems incorporate passive smoke and fire control measures that fall into the area of fire safety engineering. For this reason, it is important that the scheme recognises the overlap of work and does not require contractors and practitioners in HVAC&R building services to undertake additional registration under the fire safety area. AIRAH would be happy to support the Department in

defining scopes of work within fire safety that could be included under the mechanical area in HVAC&R building services.

Additionally, we believe specific mention should be made of refrigeration engineers in the area guidelines. Refrigeration systems are often incorporated into buildings – for example, cold stores and supermarkets within mixed use commercial/residential premises. These systems often include elements such as chillers and cooling towers, just like HVAC systems. In other jurisdictions, AIRAH has seen a need for more clarity around whether this class of engineer requires registration.

3. Do you support civil and structural engineering being identified as separate areas of engineering? Do you think structural engineering is more appropriately a sub-set within the area of civil engineering?

AIRAH supports civil and structural engineering being identified as separate areas of engineering as this is consistent with other jurisdictions.

Engineers working in the Building and Construction Industry

Step 3 of 9

4. Do you foresee any difficulties with current engineers being able to meet the outlined qualifications, experience and competency eligibility criteria?

AIRAH does not see any difficulties with current engineers be able to meet the eligibility criteria outlined. We are very supportive of the inclusion of alternative pathways. This is particularly important for engineers working in HVAC&R building services.

Because of a lack of engineering degrees that specifically deal with HVAC&R building services – now and in the past – mechanical engineers working in this sector have over the years obtained widely differing tertiary qualifications. Many leading professionals in this sector – including some who provide input for the National Construction Code and chair Australian Standards committees – do not have a Washington Accord accredited qualification in mechanical engineering. For this reason, AIRAH supports the inclusion of alternative pathways to registration.

As Australia's peak body for HVAC&R building services engineers, AIRAH will be applying to become an assessment entity in the ACT and would seek for the ability to assess engineers to confirm whether an individual has the skills and knowledge required and meets the required competency standard. This could be set in place for a limited period of time while existing practitioners become registered. AIRAH believes new entrants to engineering will meet the Washington Accord requirement.

5. Are there any other qualifications, experience and competency requirements the ACT should consider including in its scheme?

As noted under question 4, AIRAH strongly supports the inclusion of alternative pathways.

6. What alternative pathways should the scheme consider for registration?

As noted above, AIRAH supports the concept of alternative pathways as outlined in the consultation paper.

As Australia's peak body for HVAC&R – building services engineers, AIRAH would be happy to provide input on what qualifications could be considered equivalent.

As previously mentioned, there is a lack of engineering degrees that specifically deal with HVAC&R building services – now and in the past – mechanical engineers working in this sector have over the years obtained widely differing tertiary qualifications. Many leading professionals in this sector – including some who provide input for the National Construction Code and chair Australian Standards committees – do not have a Washington Accord accredited qualification in mechanical engineering. For this reason, AIRAH supports the inclusion of alternative pathways to registration

AIRAH also believes “grandfathering” will be an important issue for many of the industry’s most valuable and experienced practitioners, and that it will be necessary to provide guidelines on acceptability of “grandfathering”.

Fit to practice

Step 4 of 9

7. Is the criteria outlined above appropriate for determining whether an applicant is fit to practice as a registered engineer in the ACT?

AIRAH supports the criteria outlined for determining whether an applicant is fit to practice.

Role of assessment entities

Step 5 of 9

8. Do you support the proposed approach to assessment entities?

Yes, AIRAH is supportive of this approach. AIRAH believes that the criteria set out provides a logical and rigorous pathway for assessment.

AIRAH has launched a professional accreditation scheme specifically designed for engineers operating in HVAC&R – Building Services. The [AIRAH Professional Engineer Register \(APER\)](#)

accredits professional engineers in the mechanical engineer HVAC&R – Building Services discipline.

The APER accreditation program has approved in Victoria and Queensland and New South Wales and will also support the schemes in the ACT. Accordingly, AIRAH will be applying to become an assessment entity in the ACT.

Professional indemnity insurance

Step 6 of 9

9. Do you support the proposed approach to professional indemnity insurance?

No – It is felt that the mandatory holding of professional indemnity insurance gives an additional level of confidence to the public in the registration of engineers, and they should hold PI insurance appropriate to manage the risk, type, size and volume of work they undertake.

A Code of Practice is important, but additional assurance measures are critical to the confidence to the program.

Public Register of Professional Engineers

Step 7 of 9

10. Is there any other information that should be shown on a public register?

AIRAH feels the information outlined in the consultation paper is appropriate.

11. How long do you think information about a former registered engineer should be on the public register?

AIRAH believes that a formerly registered engineer's information should be taken down as soon as they are no longer valid. This will ensure only currently validated engineers are on the register.

The scheme should provide a service so that the public will be able to enquire about previously registered engineers as it will help regarding enquires about work done prior to the engineer not continuing their registration.

Timeframe for implementation of the Scheme

Step 8 of 9

12. Do you have any views on what the phased introduction should look like?

AIRAH supports a phased introduction of the scheme with early promotion of the requirements and final registration dates. We would be happy to help disseminate communications about the scheme to our members and wider audience.

Other comments

Step 9 of 9

13. Are there any other comments you would like to make in relation to the proposed scheme?

AIRAH strongly supports minimum Continuing Professional Development (CPD) requirements for registered engineering practitioners.

CPD is vital for expanding practitioners' knowledge, maintaining up-to-date technical skills and progressing their careers.

AIRAH has launched a professional accreditation scheme specifically designed for engineers operating in HVAC&R – Building Services. The AIRAH Professional Engineer Register accredits professional engineers in the mechanical engineer HVAC&R – Building Services discipline.

The APER accreditation program has been designed to meet the engineer accreditation requirements in Victoria, Queensland and will also support the schemes in the ACT.

Note that the APER accreditation is aligned with the proposed requirements: a minimum of 150 hours over three years.

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