8 December 2025

Dr Gillian Hirth
Chief Executive Officer
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NATIONAL WORKFORCE COMPETENCY FRAMEWORK FOR THE SAFE USE OF RADIATION SOURCES

Dear Dr Hirth,

At its 5-6 March 2025 meeting, you agreed to the Radiation Health Committee (RHC) proposal to establish a joint working group with the Radiation Health and Safety Advisory Council ("the Council") on a national competency-based framework for the safe use of radiation sources.

RHC had previously undertaken work to develop a suite of competencies for the safe use of radiation sources, culminating in their incorporation into the Australian Qualifications Framework (AQF) in 2016. In accordance with the National Strategy for Radiation Safety, the Standing Committee on Environmental Health (enHealth) Strategic Plan (2024-27) included this objective:

> *Develop a national competency framework to ensure a consistent level of qualification to use radiation sources.*

In March 2025 enHealth referred this item back to RHC to consider for delivery. RHC agreed there remains a need for a national competency-based framework, for consistent qualifications to use radiation sources. However, the RHC noted the need for reconsideration of its previous work given changes in the contemporary operating landscape.

The Council at its 26-27 March 2025 meeting, discussed RHC's proposal and the importance of a common approach to radiation safety and risk and acknowledged overlapping competency frameworks in established industries such as mining or the Australian Defence Forces. The Council agreed to a joint working group with RHC on radiation protection national competencies. The following terms of reference were endorsed at subsequent meetings of both RHC and Council:

Working Group Terms of Reference

1. Describe what a national competency framework would deliver.
2. Describe briefly the current relevant competencies.
3. Identify key drivers and barriers to implement a national competency framework.
4. Identify gaps in existing national competency frameworks.
5. Consider what **methods or mechanisms could be used to implement** a national competency framework to fill any identified gaps.

Key Working Group Findings

The working group broadened its original considerations to examine competencies related to safe use of radiation beyond the initial suite of competencies developed by RHC in order to understand the evolving context impacting workforce dynamics now and in the future. It was hoped to identify synergies and potential alliances for the development and provision of competencies, in addition to identifying gaps to be addressed.

There is general agreement that national competencies for the safe use of radiation sources underpin automatic recognition for workers moving between jurisdictions. More importantly, such competencies, if effective, should ensure protection of the public, radiation workers and the environment. Key drivers for the establishment of a national competency framework include:

- Workforce challenges due to population growth and emergence of new industries and technologies;
- Productivity improvement due to increased workforce mobility, avoidance of unnecessary barriers to entry, and changes to scope of practice;
- Maintaining resilient radiation protection in the context of disruptive events and accelerating transformation; and
- National uniformity.

It is recognised that earlier attempts at establishing national competencies were not widely adopted because of resourcing issues in maintaining currency of competency units, and the expense to providers of delivering courses with poor uptake. This applies regardless of whether the competencies are included in the National Training Register under the Australian Qualifications Framework.

The working group noted that there is no comprehensive national record of the existing licensing prerequisites concerning competence required by jurisdictional radiation regulators. This is a necessary step in identifying whether there are existing gaps that need to be addressed. Further, there are formal and informal methods applied by jurisdictional regulators in identifying appropriate competencies, recording these objectively, assessing course content, and approving course providers and trainers. Informal advice indicated that some regulators may lack the confidence, required level of education or training expertise to undertake this activity without additional support.

A national framework requires a single source of truth, central documentation of the relevant standards and requirements, which is periodically reviewed for currency and updated accordingly. Potential options would include inclusion of competencies in the Radiation Protection Series (RPS) documents, or in the National Directory for Radiation Protection (NDRP). This is consistent with internal advice received regarding the powers of the CEO under the Australian Radiation Protection and Nuclear Safety Act 1998 (the Act). However, the documentation is not an endpoint. A national framework must be supported by a system of development, maintenance and review.

Any **proposed national competency framework** for the safe use of radiation sources:

- Must have provision for the ongoing management of the currency of the competencies to ensure that they remain fit for purpose. This is a key resourcing issue irrespective of whether the Australian Qualifications Framework is used, or another independent system is applied.
- Needs to be robust, adaptable to changing circumstances and emerging issues, and sustainable.
- Should consider the ongoing workload and expertise necessary to develop and maintain
  - the competency units *per se*
  - approval of course content, providers and trainers
  - establishment of appropriate national documentation standards to record the minimum nationally agreed competency standards; for example, inclusion of competency descriptions within the RPS series or the NDRP
- Could identify appropriate resources to undertake this work.
- Should acknowledge that this work is a national priority to ensure the safe use of radiation sources for the protection of the public, workers, and the environment.
- Must recognise that new national programs and the increasing use of radiation technology are potential causes of depletion/dilution of the existing expertise needed across the country in industry and recognise the growing need for mobility of experts nationally. There is a significant lag in establishing a fully implemented national competency framework with potential for interruption of the supply of appropriately trained workers to meet national workforce requirements.
- Consider potential overlap with other competency frameworks (e.g. medical/defence) which may provide opportunities for alignment and cooperative support of competency development and training delivery. This could lead to greater opportunities for horizontal workforce mobility between industries.
- Involve relevant stakeholders in the development and maintenance of competencies to provide essential transparency, engage proactively with the appropriate industries, and assist with the resourcing of the essential activities to develop, deliver and maintain the competencies.
- Could identify potential evaluation strategies and measures of success relevant to implementing a national competency framework.

Conclusion

There is an urgent need for the creation of a national competency framework to ensure the safe use of radiation sources in Australia. Previous initiatives in this space have shown some promise but have proven inadequate to comprehensively address the issue. Strong leadership will be required to bring together all the various Australian radiation regulatory jurisdictions to map, support and maintain the competency requirements in a national framework.

Recommendations

Council presents the following recommendations for your consideration:

That ARPANSA:

1. Identify existing competencies that form part of licensing requirements by jurisdictional radiation regulators, so that a gap analysis can be undertaken.
2. Examine opportunities for stakeholder involvement in the development and maintenance of a national competency framework for the safe use of radiation sources.
3. Consider options to develop a system of national documentation of the framework and its component competencies.
4. Identify systems to support ongoing development, maintenance and review of a national competency framework.
5. Identify mechanisms to evaluate courses, train providers and trainers needed to support the delivery of a national competency framework. This may include identification of synergies and alignments with other sectors using competency-based systems in radiation protection.

Kind regards

Jane Canestra

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Chair
Radiation Health and Safety Advisory Council