



AIHS

Australian
Institute of
Health & Safety

Think forward

**National Strategy for Radiation Safety and
Implementation Plan:
Consultation Submission**

23 December 2021

Acknowledgement of Traditional Owners

We acknowledge the Traditional Owners of Australia and their ongoing strength in practising the world's oldest living culture. We acknowledge the Traditional Owners of the lands and waters on which we live and work, and we acknowledge that sovereignties of these lands and waters were never ceded. We pay our respects to Traditional Owners' Elders past and present, and commit to supporting them and Indigenous emerging leaders to create more equitable, healthy, and safe workplaces for all Australians, and in particular for those most disadvantaged.

About the AIHS

The Australian Institute of Health and Safety (AIHS) is the national association for people who work in generalist health and safety roles. The AIHS membership consists of more than 4,000 work health and safety (WHS) practitioners and professionals across Australia. Beyond our membership, we advocate for the >20,000 people who work in WHS nationally. For more than 70 years we have worked towards our vision of safe and healthy people in productive workplaces and communities.

Our voice as a profession and association of health and safety experts is often distinct from those of government, employers, and workers. Our focus is on the evidence- and risk-based practice of WHS to create safer and healthier workplaces.

As the peak body representing those who advise workplace stakeholders on health and safety risks in workplaces that use radiation, we support the development of the National Strategy and Implementation Plan. We provide the following for your consideration:

- There is insufficient focus on building the capabilities and capacities of both regulators and the industry's radiation safety workforce.
- The Strategy overall, through one of the objectives, could focus more on improving WHS outcomes as an explicit goal.
- The Strategy in its current draft form misses an opportunity to position Australia as a truly global leader in radiation safety practices and regulation.
- We encourage radiation stakeholders to engage with and learn from the WHS profession in their experience of attempting national regulatory harmonisation since 2007.
- Whilst the proposed Plan makes a positive start with 25 strategic actions, we would like to see timelines and allocation of responsibilities to achieve these objectives.
- The intended audience of the Strategy is unclear. Whilst broader issues like community concerns and workforce development are cited, the objectives and strategic actions are more inwards focused on the safety regulatory framework.
- For the strategic actions and objectives to be achieved, particularly those related to national unity, federal-state government endorsement at senior/Ministerial levels is required, in addition to enhanced resourcing, remit and regulatory powers of the national regulator.

Whilst we do have radiation safety professionals within our membership who contributed to this submission, our response comes from a position of dispassionate interest; we are applying overarching principals such as professional education and workforce competency, modern and effective regulation, national strategic considerations, and risk management practices to the issue at hand. These broad concepts have been informed by our radiation subject matter experts.

We thank you for the opportunity to respond to the survey and would welcome any further opportunity to contribute to the National Strategy and Implementation Plan in their further iterations.

Yours sincerely,

A handwritten signature in black ink, appearing to read "A. Heinrichs". The signature is fluid and cursive, with a long horizontal stroke at the end.

Andrew Heinrichs

AIHS Policy Committee Chair

1. Introduction

1. What is your name?

Andrew Heinrichs

2. What is your email address?

policy@aihs.org.au

3. What is the name of your organisation?

Australian Institute of Health and Safety

4. Are you providing feedback on behalf of your organisation?

Yes

5. What is your industry?

Professional association

2. The draft National Strategy

6. Is your industry adequately catered for by the objectives of the National Strategy for Radiation Safety?

No.

As work health and safety practitioners and professionals working across many industries that use radiation, we would like to see an objective that brings sharper focus to the preventative protection of human health, both in workplaces and the broader community. We believe the stated aim can be re-worded as simply:

The National Strategy for Radiation Safety aims to deliver a radiation safety and protection system for Australia that protects people and the environment from the harmful effects of radiation.

We note with interest that the introductory "case for change" states there are a number of challenges to Australia's radiation safety and protection system for "both business and regulators". We would envisage a comprehensive strategy as also addressing the challenges to consumers, workers, and the broader public.

7. Are the suggested objectives the right ones to include in the Strategy? Are there alternate or additional objectives that should be included to ensure Australian governments are able to deliver a regulatory system that continues to protect people and the environment from the harmful effects of radiation?

I. Uniformity

Agree. We encourage the radiation industry to learn from the harmonised WHS Act and Regulations project, led by Safe Work Australia. We believe there is a lack of uniformity in radiation protection legislative frameworks due to the niche, unique nature of the Australian radiation 'industry'. Whilst other areas like marine and food safety have common, agreed standards, radiation has been somewhat 'left behind'. Our federation hinders us in this area. We believe that if this National Strategy is to achieve uniformity objectives, it needs to be endorsed by senior levels of governments, and it likely requires a significantly enhanced national regulator, both in terms of resources and breadth and strength of enforcement powers. State-based regulatory authorities may then be able to act as 'subsidiaries', accounting for their local industry base, capabilities, and in some instances geology (e.g. mining). These objectives, like all others, should have timeframes allocated.

II. Incident management

Partially agree. We don't fully agree with current incident management capabilities not being 'fit for purpose'. We would suggest that Australia has regionally and globally leading pockets of excellence. This is an internationally (particularly in the Asia Pacific) respected but small capability. Similarly, we have seen in other areas such as bushfires and floods Australia's federal government and states deliver well integrated, inter-agency emergency responses.

What is lacking is depth in radiation expertise for responses, support, and medical interventions. We also have shortages in specialised equipment which is not readily available in Australia and must be sourced from overseas. The national incident response framework deserves attention, but there also needs to be a focus on increasing the depth of response, not just coordination.

At the workplace level, incidents involving people are complex, with causal factors and latent conditions interacting in ways human beings cannot anticipate or sometimes understand. This nuance is sometimes lost in more technical regulatory settings. We encourage radiation regulators to build their holistic incident response and investigation capabilities, to better account for the complexities of human decision-making and biases.

III. Science driven policy

Agree. Key elements missing from this objective (and strategic actions) are 1) responsibility for development and implementation and 2) resourcing.

IV. Future proofing

Agree. However in a technical sense, a key pillar of future proofing the Australian radiation industry is a dedicated waste disposal facility/facilities (see comments below). Whilst we are

aware there are private actors advocating for facilities, the Strategy is silent on this issue. We see this future proofing objective as being more about future proofing the regulatory system, rather than the industry (and professions serving the industry) itself. The 'Challenges' introduction highlights these broader issues, but all of the objectives are decidedly more focused 'inwards' on the safety regulatory framework itself.

V. Life cycle management

Agree. However, we note that both here and in the Implementation Plan there is no mention of a dedicated, onshore waste disposal facility. We view any framework or policy that is silent on this facility as not addressing intergenerational inequity, and unable to be truly 'future-proofed'.

8. Are there additional objectives that would maximise the benefits to be gained from the safe and justified use of radiation?

See question 1. An objective focusing on the preventative protection of human health, both in workplaces and publicly, should be included.

Another issue that isn't given significant attention, and may deserve its own objective, is that of radiation safety professional and workforce capabilities and skills development. There is current and forecast shortfalls in radiation protection professionals, with expertise continually needing to be imported. With the recent AUKUS agreement, where are future radiation protection professionals going to come from? The Strategy is largely silent on this.

9. Do you agree with the guiding principles of the National Strategy?

I. Risk-based, proportionate approach

We consider radiation safety to be a sub-set of WHS – and needs to apply the same principles. As important as harmonising the approach to radiation safety across jurisdictions is ensuring alignment in the approach to workplace hazards.

Arguably WHS provides a stronger framework for ensuring the application of the appropriate controls to keep people safe in a holistic way, that takes account of the human interface and the integration with other workplace hazards.

This Strategy needs to be mindful of inconsistencies, and potential contradictions, between 'as low as reasonably practicable' (ALARP) and safe radiation practices. Radiation safety regulators need to be mindful of these differences in their public communications and decisions about risk.

II. Recognise the benefits

Unsure. We don't understand the role this principle plays in a National Strategy; the document should not be a sales brief. Benefits to industry and users will materialise in regulated markets and shouldn't require high level advocacy. Including this objective makes the intended audience and users of the Strategy less clear, as existing industry participants and regulators should not need the benefits presented to them in this way.

III. Engagement, transparency and trust

Agree. We cautiously suggest that the brevity of this proposed draft is not ideal for building public and stakeholder trust and confidence in the regulator.

IV. Predictability and consistency

Agree. We would add that based on experiences with WHS harmonisation (or 'disharmonisation'), a well-resourced and technically capable regulator is critical to driving national consistency.

V. Intergenerational equity

Agree.

VI. International alignment

Agree. However, given our resources and advanced capabilities, we question whether there is not an opportunity for Australia to strive to be an international leader, rather than just a contributor, participant, and aligner.

VII. Evidence-based policy

Agree. We don't see how any strategy on something like radiation could be anything other than evidence-based.

10. Are there additional guiding principles you think need to be included?

If principle 3 is to be advanced, we would expect *public communications* to be prominently embedded within the document. Public education will be critical to gaining and maintaining public trust. This education takes concerted, prolonged communication, which needs to be appropriately funded and audience centred.

11. What do you think are the major risks and challenges facing governments, regulators, and users of radiation? Are these adequately reflected in the National Strategy?

Overlapping and gaps within regulatory remits. Radiation (where uncontrolled or mismanaged) can impact workplace health, public health, and the environment. Multiple agencies have responsibilities across these domains. Whilst 'uniformity' is the first objective, there could be greater focus on interagency coordination and cooperation, enabled by strong federal leadership (e.g. Ministerial endorsement, enhanced federal regulator capabilities, remit, enforcement powers, and resources).

Another opportunity for improvement identified by our contributors was the national regulator improving their expertise and capabilities in the area of naturally-occurring radioactive materials (NORM).

I. Implementation and governance

The radiation regulatory sector must learn from WHS' attempts, including successes and failings, to achieve national 'harmonisation' across states and territories. For example, because workplaces are regulated by state/territory jurisdictions, court cases, political drivers and events can and have forced divergence.

II. Monitoring and reporting progress

This section requires timelines.

3. Implementation Plan

12. Are there any additional actions that should be included in the Implementation Plan to reduce inconsistencies or unnecessary red tape, without compromising safety?

There needs to be alignment with the existing regulatory responsibilities for risk assessment etc. under WHS. In terms of 'red tape reduction', workplaces already have a regulator who manages non-compliance. There needs to be an awareness that the principles for WHS and radiation safety are sometimes not aligned (e.g. 'ALARP' vs safe radiation dosage limits) – which regulator perspective 'wins' or overrides the other if a decision, or even a court case, occurs?

13. What additional actions could be included in the Implementation Plan to harmonise the effective management of significant radiation incidents?

Whilst actions like 'developing a national register of available... resources' are useful, they won't aid on-the-ground efforts if response teams and equipment are not funded and deployed onshore prior to a large-scale emergency incident.

14. Are there any additional actions in the Implementation Plan that would support the development of radiation safety codes and standards?

We believe there is already consistency of exposure standards. The codes and core requirements for protection published by ARPANSA are appropriate. Some environmental divergence makes sense due to different geologies. But the risks from radiation are effectively the same nationally. Likewise, machinery testing practices and standards need consistent competencies, and the administrative burden on workplaces need to be consistent in like-for-like settings. We support actions that promote and enable this consistency.

15. What additional actions in the Implementation Plan could be included in the National Strategy to future proof the radiation safety regulatory framework?

Detailed actions in relation to resourcing the framework with appropriately trained and competent radiation safety professionals, in both industry and regulatory settings.

16. Are there any additional actions in the Implementation Plan to improve the life-cycle management of radioactive materials?

See comments above regarding a dedicated waste disposal facility.

17. Do you have any additional comments or suggestions about the National Strategy or Implementation Plan?

In our view the most significant objective is the development of an Intergovernmental Agreement (IGA) on radiation protection standards. We understand this was one of the objectives when the National Directory for Radiation Protection (NDRP) was developed (under similar cross-government mechanisms). This led to the fractured landscape we have today. We wish to highlight that unless the IGA has significant gravitas, the status quo will continue to unfold.

Similarly, if Health Ministers have oversight via enHealth, there is the risk that the *WHS* risk lens will be overlooked and/or understated. As a microcosm example of this issue, our contributors noted that they have firsthand experience of incident review sessions defaulting to 'retrain the worker' corrective actions (see feedback in questions 7.ii and 13) when led by public health experts, rather than systematically considering workplace-level contributory factors.

We see the 'plan' as not so much a plan, but rather a list of 25 desired outcomes, with no defined timeframes or allocated accountabilities. Whilst the governance structure is defined (Australian Health Protection Principal Committee (AHPPC)) to oversee the National Strategy via its Standing Committee on Environmental Health (enHealth), 'how' the objectives are intended to be met are largely undefined. This leaves the assumption that there must be subordinate planning documents under development. We look forward to providing input into these resources as/if they become available.

18. Is there any additional information or document that you would like to provide?

We direct stakeholders to the OHS Body of Knowledge chapter on ionising radiation, found here: <https://www.ohsbok.org.au/chapter-24-physical-hazards-ionising-radiation/>.