WATER INDUSTRY
SKILLS TASKFORCE



Water Industry Skills Taskforce (WIST)

Submission Focus

The implementation of a National Certification Framework for water operators (the Framework) was identified as the number one skills priority for the water industry¹ at a specially convened Water Industry Skills Forum in late 2012. For this reason, the Water Industry Skills Taskforce (WIST) has chosen to focus only on this initiative in its response to *Theme 4: Investing in people: skills and culture* of the National Water Commission's (the Commission) *Urban Water Futures Discussion Paper*.

Executive Summary

The purpose of this submission, developed by WIST, Australia's leading water industry skills forum, in collaboration with its member organisations, is to request that a body, such as the National Water Commission, or a body of similar national standing, provide funding, support and/or advocacy for a National Certification Framework, based on a nationally coordinated approach to mandatory certification.

The proposed Framework defines skill levels for water operators who treat drinking water and aligns the associated skills, knowledge and competency requirements to the national Vocational Education and Training (VET) standards. This ensures that mechanisms for training and assessment are measurable, transparent and readily available via the VET sector. The proposed Framework also describes a re-Certification process that ensures ongoing maintenance and development of operator skills and knowledge.

The provision of safe drinking water supplies in Australia has long been under-recognised for the important role it plays in the protection of public health. With the exception of Victoria, which has agreed to non-mandatory, minimum competencies, water treatment operators working in the front line of the industry are not required to have formal qualifications. The implementation of a consistent National Framework will provide greater assurance to regulators, communities and consumers that operators are competent to manage drinking water systems, as well as being more capable of identifying and responding to water quality risks and incidents. While there are many areas of urban water management that require attention nationally, it is also the single most cost-effective investment that could be made to achieve demonstrable improvements in learning and development support systems, organisational culture and career progression for this crucial job role.

¹ Water Industry Skills Taskforce – 2012 National Skills Forum Report



Background

In March 2008 a National Water Industry Skills Forum was convened jointly by the National Water Commission (the Commission), Australian Water Association (AWA) and Water Services Association of Australia (WSAA). The findings from this Forum identified a number of priority areas for action and supported the establishment of a Water Industry Skills Taskforce (WIST). Its key role was to promote and oversee a nationally coordinated effort to address skills issues in the water sector.

The WIST was established in late 2008 and is hosted by AWA. In its first four years, it has overseen the development of a *Water Industry Skills Strategy* (2009), which was endorsed by the Council of Australian Governments (COAG) in December, 2009, and subsequently a *Business Plan* (2010) which sought to operationalise the Strategy. In support of this Strategy, the Australian Government, through the Commission's *Raising National Water Standards* program, agreed to fund three initiatives, of which the Framework is the output of Initiative 2.

Initiative 2: Up to \$250,000 for the development of skills and training standards for operators of potable water treatment facilities. This initiative aims to address the problem that no nationally agreed minimum skills and training standards currently exist for operators of potable water treatment facilities, which raises a potentially serious public health risk situation for the community. **Extract from:** Water for the Future: National Water Skills Strategy December 2009²

In June 2011, the Commission awarded the contract to develop a Framework to Government Skills Australia (GSA), the Industry Skills Council responsible for the Water Industry Training Package. Following extensive industry consultation, a proposed National Certification Framework and Final Report were delivered to the Commission in March 2012.³

In March 2013 the Commission presented back to industry, via the WIST, two implementation options; a mandatory and an industry-led approach. Industry has consistently indicated a preference for a mandatory approach, however, the WIST were concerned about the potentially high costs and time it would take to develop a coordinated mandatory approach, given that drinking water quality is regulated at a State and Territory level. The WIST asked the Commission to provide further information about the implications of an industry-led model.

In May 2013, the Commission convened a workshop with industry stakeholders to further discuss implementation options, and the outcomes from this workshop were presented to the WIST in June 2013 meeting. WIST discussed the recommendations at length and despite acknowledging the difficulties of moving forward without Australian Government seed funding for implementation (a

⁴ National Certification Framework Background and Options Paper NWC February 2013

² National Water Skills Strategy Business Plan October 2010

³ Proposed National Certification Framework 2012



key recommendation from the Steering Committee developing the Framework), supported maintaining momentum for this important water industry initiative via an industry-led approach.

At this meeting WIST members agreed that:

- The Framework will be industry-led (at least to begin with)
- Close collaboration between state and territory regulators and water businesses will be crucial to the Framework's success
- Although the Framework highlights the need for fit-for-purpose training in units of competency, strategies for implementation may vary across jurisdictions
- WIST would take the lead by assuming the role of Framework Owner on an interim basis in order to maintain momentum
- Recognising the work already underway in Victoria, AWA & WSAA would coordinate a pilot
 to test the implementation of the Framework in NSW and QLD, subject to the agreement of
 relevant stakeholders.

Key implementation issues /barriers

- National vs State and Territory approach: Industry has consistently indicated its preference for a national mandatory approach to Certification, but currently drinking water is regulated at a State and Territory level. It will be difficult to ensure a nationally consistent approach to implementation without COAG involvement, in the face of variations in regulatory across States and Territories.
- Mandatory vs voluntary approach: If the Framework is to eventually move from a voluntary to a mandatory code as industry recommends, then significant seed funding will be required. In line with the COAG Principles on Best Practice Regulation (2007) a cost benefit analysis (CBA) and a regulatory impact statement (RIS) would be required. Early indications are that developing a CBA and a RIS could cost the agency charged with developing them approximately \$250,000.
- Employer access to training and capacity of Registered Training Organisations
 Access to quality training has long been identified as a significant workforce development
 challenge for the water industry. The Final Report discusses some of the training challenges
 associated with implementation of the Framework along with some potential strategies to
 overcome the barriers—see pg 50 -68.
- Costs for employers: Being able to estimate the true costs involved in implementing such a Framework has remained a problem. Given that some Victorian water utilities have been implementing their similar Guidelines for several years now, the Victorian Health Regulator has approached Victorian water corporations asking them to provide information on their investment in training over the last three years, that is, since the Victorian Best Practice Guidelines commenced. This may provide industry with the best indications to date about



potential costs to their business. Industry believes the cost of certifying water operators will be a significant barrier particularly for smaller regional, rural and remote water supply services and therefore recommends ongoing funding incentives for smaller enterprises.

Costs for Framework Governance and Administration: The GSA Report (2012)⁵ made some attempt to estimate the costs required for supporting the Framework's governance and administrative arrangements.⁶ A yearly income of \$300,000-\$360,000 could eventually be expected, but seed funding would be required for at least three years before the business model would support itself.

Expected benefits of mandatory national implementation

- Better management of the public health risks associated with the provision of safe drinking water supplies
- Productivity gains from having a trained water workforce which can move easily across state and territory boundaries with common certification
- Efficiencies from having common national standards agreed to for an increasingly diverse range of Drinking Water Suppliers which now include both public and private enterprises
- Recognition and reward for important role played by water operators
- Culture change resulting from improved recognition of water workforce ⁷

Current status of the National Certification Framework

Whilst engaged in lobbying for a well-resourced mandatory national approach, WIST continues to promote industry-led voluntary implementation by supporting:

- A pilot in early 2014: A pilot in Queensland, coordinated by the Queensland Water Directorate and a pilot in NSW, coordinated by AWA & WSAA
- Ensuring Pilot participants will include employees from large urban and smaller regional and rural water supply services
- Encouraging collaboration across jurisdictions: The Victorian Department of Health is
 assisting in bringing state and territory regulators together to assist in the development of a
 national approach to implementation of the Framework

⁶ The discussions and estimates provided in relation to cost structures are based on two staff, an office and supporting physical and IT infrastructure and approx 13,500 water operators paying yearly certification fees of \$100-120 pg 68-69 of NCF Final Report

⁵ National Certification Framework Final Report March 2012

⁷ Some qualitative data is now emerging from the Victorian experience described in: *Drinking water operators* as health professionals- the journey towards certification by Kathy Northcott and John Harris pg 39-43 Water Journal Vol 40 No 8 Dec 2013



 Whilst moving ahead with plans to promote and pilot an industry-led, voluntary approach to certification of water operators, the WIST is committed to continuing to advocate a national mandatory approach.

Conclusion

A recent analysis of international water quality failure events has identified that the most significant cause of error has been human error⁸. The water industry has consistently argued that a national mandatory approach to the implementation of a National Certification Framework is critical to managing the ongoing risks to public health that an insufficiently trained and unregulated workforce poses to the Australian public.

In 2009, COAG, through the National Water Skills Strategy, recommended that, in order to better manage public health risks associated with the known variations in water supply standards and practices, that a National Certification Framework for water operators involved with drinking water be introduced.

Since then there has been significant investment and consistent support and commitment from industry, and much progress has been made. A National Certification Framework fully supported by industry is ready for immediate implementation, and the Australian Government needs to ensure that the benefits of the investment made in the development of the Framework are realised. Industry strongly believes that in order to ensure its successful implementation, that a nationally coordinated, mandatory, approach should be pursued. For this to happen, further resourcing and advocacy is required. The Framework report identifies the need for a national "Owner," and while WIST has taken on this role in the absence of an Australian Government "Champion," such an organisation must be found to ensure the longevity of the program.

Recommendations

On behalf of the Australian water industry, the WIST requests support for the implementation of a mandatory National Certification Framework through the following actions:

1. Progress incentive models to implement the Framework using a mandatory approach through an amendment of regulatory arrangements in each State and Territory, and work with States and Territories to determine the method for categorising the complexity of a Drinking Water Treatment System in accordance with Part 2 of the proposed Framework. In the event regulators in these jurisdictions agree that a Cost Benefit Analysis (CBA) and Risk Impact Statement (RIS) are required, provide financial support to facilitate this work.

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⁸ Resilience to evolving drinking water contamination risks: a human error prevention perspective Yanhong Tang, Shaomin Wu, Xin Miao, Simon J.T. Pollard, Steve E. Hrudey Journal of Cleaner Production 57 (2013) 228e237



- 2. Appointment of an Australian Government Department or Agency to oversee the Framework ⁹(the Framework "Owner.")
- 3. Provide seed funding for the establishment of a Certifying Body through a tender process. The Certifying Body should be independent of the Owner.¹⁰
- 4. Provide seed funding (potentially to be matched by States, Territories and Industry) to support coordination of the Framework implementation in each State and Territory.
- 5. Ensure provisions are made for ongoing funding to support certification in the smaller, less well resourced regional, rural, remote and indigenous water supply services.

NB All documents and reports referred to in footnotes are available on the AWA website via the WIST pages.

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⁹ See Appendix A for a summary and definition of likely Framework roles and responsibilities

¹⁰ See Appendix A as above



Appendix A

WIST views on roles and responsibilities required for implementation of the Framework

Framework component	Broad Responsibilities
Framework Owner	Ensure the ongoing viability of the Framework
	Maintain currency and relevance of Framework
	Expand the scheme to other disciplines e.g. wastewater
	Carefully develop tender and contract specifications for Certifying Body (to ensure commercial viability)
	Oversee the transfer of records from the Certifying Body
	Develops Risk Management Process
	Develops Dispute Resolution Process
Certifying Body	Contractual and reporting obligations to the Framework Owner
	Significant changes or amendments to the certifying arrangements need to be approved by the Framework Owner
	Demonstrates knowledge and currency of industry processes & the NWP07
	Records Management - establish and manage a database
	Demonstrates a Quality Assurance Process
	Maintains confidentiality/privacy arrangements
	Validates accreditation issued by Register Training Organisations (RTOs)
Drinking Water Suppliers	Duty to have operators who are competent, and only put forward for certification those operators who meet the minimum requirements of the Framework
	Requirement to provide system complexity rating data to the certifying body
Water Operators	Undertake training and professional development to achieve the minimum requirements of the Framework
	Undertake professional development to maintain Certification
Registered Training Organizations	Ensure the RTO has appropriately qualified trainers
	Be able to deliver training across the country
	Be able to address the LL&N, and Foundation skills needs of those they train
Regulators	Act as driver— through their role in administering state-based drinking water legislation that is based on the Australian Drinking Water Guidelines (ADWG)