

Standards Terminology Model for the Water Monitoring Standardisation Technical Committee

Version 3.0

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Version Status

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1 Purpose and Scope

This document establishes consistent categorisation of standards and guidelines and associated terminology for use by the Water Monitoring Standardisation Technical Committee (WaMSTeC).

2 Background

The *Water Act 2007 (Cwlth)* precipitated the creation of a water information program in the Bureau of Meteorology and gave the Bureau powers to issue National Water Information Standards (sections 130 and 131 of the Act). In 2010 the Water Information Standards Business Forum (the Forum) was established to coordinate and foster development of regional and national water information standards in Australia. The Forum ceased to operate in October 2014, and its primary functions and activities were transitioned to WaMSTeC. One of the key roles of WaMSTeC as stated in its Terms of Reference is to endorse water resource monitoring standards and guidelines.

In addition to any standards or guidelines endorsed or reviewed by WaMSTeC there is also a large range of existing standards and guidelines within the water information and water resource monitoring realm which have been developed both within Australia and Internationally. In this context it is important that all WaMSTeC members share an understanding of the various categories of standards and guidelines, and that this is clearly communicated through the use of a common terminology model.

The first standards terminology model was originally proposed at a meeting of the Forum in 2012. When the Forum ceased operation in October 2014, Forum foundation documents, including the standards terminology model, were adopted by WaMSTeC and updated accordingly.

3 Three Tiered Approach

WaMSTeC will apply a three tiered model for standards terminology. The approach distinguishes between mandated standards, voluntary standards/guidelines and work practices and procedures.

All existing or new standards, guidelines and procedures can be categorised into one of the 3 tiers dependent upon legal status and content. The three tiers are;

Tier 1: Legislated standards;

Tier 2: Non-mandatory standards and guidelines; and

Tier 3: Work practices and procedures.

WaMSTeC will primarily focus within tier 2 through its role in proposing, reviewing and endorsing National Industry Guidelines. Existing non-mandatory standards developed by others, including Standards Australia and ISO also sit within tier 2.

The following sections provide an explanation of each tier, the role of WaMSTeC in that tier and examples in each case.

3.1 Tier 1: Legislated standards

Compliance with these standards is mandatory under legislative authority. These are standards with which there is a legal requirement for certain organisations to comply via a State/Territory or Commonwealth Act or Regulation. WaMSTeC will not be responsible for endorsing legislated standards. However WaMSTeC should be consulted in the development of legislated standards where they are relevant to WaMSTeC's Terms of Reference.

Legislated standards can include:

- "National Water Information Standards" issued by the Bureau under Part 7 of the *Water Act 2007*
- other standards mandated by the Bureau through the Water Regulations 2008.

In the case of “National Water Information Standards” issued by legislative instrument, the Bureau must consult with the States and Territories in the development of the standards. Organisations giving water information to the Bureau would need to ensure that their information complies with any applicable National Water Information Standards. Note that the Bureau has no current plans to issue National Water Information Standards.

The Water Data Transfer Format v1.0.2 (WDTF) is an example of a tier 1 legislated standard. WDTF has been mandated through the Water Regulations within an [Administrative Instrument](#) as the required format for delivery of certain information to the Bureau.

An example in a parallel sector would be the incorporation of Food Safety Standards into State and Territory law (e.g., in NSW the Food Regulation 2010 under the Food Act 2003 (NSW) contains requirements of the Food Standards developed by Food Standards Australia New Zealand).

3.2 Tier 2: Non-mandatory standards and guidelines

Conformance to these standards and guidelines is voluntary and there is no legislative requirement to comply. These are published documents that provide requirements, specification, guidelines or characteristics that can be used consistently to ensure that materials, products, processes and services are fit for their purposes.

This is a broad tier, and includes the variety of relevant existing standards and guidelines developed by Standards Australia, ISO, WMO and others (excluding any of these which would be classified as legislated standards). It is within this tier that WaMSTeC will play a key role in endorsement and promotion of “National Industry Guidelines”.

Tier 2 standards or guidelines can include:

- existing National Industry Guidelines endorsed by the Forum
- new National Industry Guidelines endorsed by WaMSTeC
- existing Australian and International standards and guidelines (e.g. ISO 748, AS 3778, WMO-No. 168 etc.).

The National Industry Guidelines for hydrometric monitoring are an example of tier 2 non-mandatory guidelines. These guidelines were endorsed by the Forum in May 2013 and contain Australian industry recommended practice for hydrometric monitoring, including the use of acoustic Doppler technology for flow measurement. They have been developed with substantial national input and review by industry, including final review by technical reference groups established by the Australian Hydrographers Association.

3.3 Tier 3: Work practices and procedures

Work practices and procedures are typically developed by an organisation to practically implement requirements of overarching standards or guidelines (tier 1 and/or tier 2) within each of the organisation’s business activities. Work practices and procedures describe detailed work instruction, direction and “How to” requirements. They will commonly contain aspects which are organisation and/or customer specific.

WaMSTeC will provide the opportunity to share work practices and procedures more widely, but is unlikely to play a role in developing and endorsing these documents.

There is a vast range of tier 3 work practices and procedures relevant to water information and water resource monitoring. Examples would include monitoring station establishment checklists, site visit procedures, operating procedures for specific monitoring instruments and documentation procedures for data editing.