Meeting: ISO PC 316: Water Efficient Products – Rating
U.S. TAG Meeting

Date of Meeting: 9/14/18

Type of Meeting: Conference Call

Report Submitter: Jim Kendzel

Note: the following summary is a report developed by ASA for the ASA Plumbing Codes & Standards Committee. It is intended for guidance and information and should not be considered an official document of the ISO US TAG.

The following is a summary of key topics discussed and decisions made at the subject meeting. As a reminder, the purpose of the US Technical Advisory Group (TAG) is to develop and represent the U.S. position on the development of the new ISO standard project covering water efficient products. The main focus of this meeting was to receive the Chairs report on the ISO TC meeting held in Sydney, Australia from July 24-26, 2018 (Chair Report attached)

Title of the Standard

- US position was in opposition to the term "banding"
- The term "banding" was removed at the meeting in Sydney but there was further discussion on using the term "rating"
  - TAG Chair's recommendation is to bring this topic up again at some point and raise concerns about the term "rating"
  - General consensus was to keep the title simple without reference to either term even though the body of the standard may in fact have different levels of efficiency
  - *Chair is looking for ideas related to new title concepts*

Scope of the Standard

- The TAG discussed the various items that should or should not be considered in the scope of the standard.
  - Indoor and Outdoor Showers - concern noted about the potential new labeling requirement that might arise if there is a differentiation of indoor and outdoor use showers. TAG Chair will look into this issue.
  - Toilets
    - Need to develop a test scheme where toilet is separate from the water tank
    - Understood where methods already exist they would be considered
  - Non-Water Consuming Urinals
    - Just about every nation represented wanted non-water consuming urinals be included in the standard; rationale is "0" use is the most efficient.
    - It was noted that the inclusion of non-water consuming urinals could lead to other products being considered, such as composting toilets.
    - The major concern is that you can end up putting a mark on a product that consumes "0" water but there is no national performance standards.
  - Water Purifiers

- Chair is recommending we not include in the scope; general consensus of agreement reached on Chair's recommendation
- Request came from China using the example of RO

o *Chair asked that if any TAG members have an interest in including products not specifically noted (see ISO Resolutions Document) they could contact the Chair.*

Reference of National Performance Standards

US TAG reached a consensus to support the concept that products shall meet national performance requirements as noted in appendices to the ISO standard and where national standards do not exist the country should select appropriate requirements that are best applicable to their needs. (see document N22 attached)

Development Process

Two Ad-hoc Groups were established at the meeting in Australia, one for plumbing products and one for appliances. P. DeMarco will be the convener of the plumbing Ad-hoc Group. Phillip Robertson, technical manager for Australia's Consumer Electronics Suppliers Association, will lead the appliance Ad-hoc Group. The plumbing Ad-hoc Group will be responsible for drafting all the plumbing content for the standard.

The TAG Chair called for volunteers to help in developing a list of national product standards for the products covered under the proposed scope. Along with the US, other countries will also be developing a list of national standards. I volunteered to be a part of this group along with other members of the ASA Plumbing Codes & Standards Committee that are participating on the U.S. TAG.

ISO/PC 316 US/TAG Committee Work Document
For Committee Work Only – Not for Distribution

Date: August 18, 2018
To: US/TAG Committee for ISO/PC 316, ISOT
From: Peter DeMarco, US/TAG Chair
Subject: ISO/PC 316 – Meeting Report, Sydney, Australia, July 24 – 26, 2018

The first Technical Committee meeting for ISO/PC 316 took place in Sydney, Australia on July 24 – 26th. Participants included representatives from host and secretariat Australia, Singapore, Japan, UK, Switzerland, China and the USA.

Welcoming comments were provided by Australian Senator Anne Ruston, Assistant Minister for Agriculture and Water Resources and Adrian O'Connell, Deputy CEO of Standards Australia.

The Report of the Secretariat was provided detailing information on membership, background to the establishment of the committee, the approved scope (subject to revision), the standards development process and key policies and guides to assist the committee. The report of the secretariat is available as ISO/PC 316 Document N020.

ISO/PC 316 Chair, Steve Cummings presented an initial proposal for the development of the International Standard, based on the scope proposed in the approved New Work Item Proposal. In summary, this vision involved including a recommended universal test for the determination of water consumption, a universal rating/labelling requirements and a repository of also acceptable national standards, to accommodate schemes that are already in place. This approach would also exclude any national product requirements, as these are already well established.

The rationale for this approach is to provide one set of common requirements that apply to a recommended water consumption test, giving countries that do not have current standards or test procedures the ability to establish a water efficiency labelling scheme, while also accommodating current, established schemes from around the world. The committee also noted that current differences in banding systems around the world, for example in the USA, where this is assessed pass/fail. The committee also discussed how Standards in the repository would be assessed for inclusion and whether there would be minimum requirements imposed to be included in the repository, such a shower comfort test. It also noted that for appliances, there may be a need to include functional performance criteria.

National report presentations were provided by all economies attending, except Switzerland. All reports were previously circulated to the US/TAG except for the reports from China and the UK, which are available as ISO/PC 316 Document N014 and N015, respectively and are available for viewing and download on the Kavi site. P. DeMarco provided the US/TAG report (Document N016) which was well received and, as intended, set the stage for the

additional flexibility needed to accept existing national standards and test procedures already in place for in scope products.

The committee discussed the unintended consequences of water efficiency, including infrastructure and health/hygiene issues. It was noted that this was information that may be suitable for inclusion in the introduction of the document. It was also noted that some schemes around the world include requirements for energy efficiency and that broadly this is excluded from the scope of this project.

In general, the TC agreed to utilize ISO / IEC test procedures for the body of the standard, where they exist and unless technical issues necessitate consideration of alternate procedures. Existing national standards and test procedures (includes ASME/CSA/ASSE plumbing standards and WaterSense specifications) that will be called out as equal in the body of the standard will be referenced in a normative repository, thus qualifying the test procedures contained national standards for compliance to ISO/PC 316.

The committee discussed the title and the scope of PC 316 as proposed in the approved New Work Item Proposal. P. DeMarco recommend that the word "banding" be deleted from the title as many notions currently apply pass/fail criteria to water efficiency test procedures. A motion was made to revise the working title to "Water Efficient Products – Rating". This title is subject to further consideration and revision. Refer to Document N022 to review a development model graphic.

The committee then discussed what products would be included in the scope of ISO/PC 316 and tentatively agreed on the list of products as shown below:

- Showerheads and hand showers with shower hose
- Shower taps where the flow controller is integral to the fixture fitting
- Indoor showers
- Faucets/Taps
    - Kitchen taps/faucets, including all spray accessories and functions
    - Basin (lavatory) taps/faucets
    - Bidet taps/faucets
    - Commercial pre-rinse spray units
- Flow controllers (including as stand-alone replacement devices)
- All water-consuming toilets including:
    - Toilets / WCs – all types
    - independent tanks / cisterns (sold independently of a bowl, i.e. in-wall system)
    - independent bowls/pans (sold independently)
- All water-consuming urinals
- Dishwashers (residential and commercial)
- Clothes washing machines (residential and commercial)
- Combination washer/dryers, where they use water to dry washing loads
- Clothes Dryers that use water

- The committee agreed that commercial appliances, clothes washers, dryers and dishwashers, should be included within the scope of the Standard assuming a test method is available to adopt (this deviates from the approved Work Item Proposal)

The items below were identified as possibly in scope, pending further discussion:

- Outdoor showers
- Common wash tap/spray (examples to be provided by Singapore)
- Non-water consuming urinals
- Water purifiers (info to be provided by China)

The committee also discussed and confirmed the following products to be out of scope:

- Safety showers
- Tap equipment for use exclusively over a bath or spa (Tub fillers)
- Energy efficiency requirements
- Hygiene/health (with informative notations)
- Conformity assessment requirements

The committee also agreed that use of a ISO water efficiency label would be optional and that there would be flexibility in the design of the label. It was also agreed that an optional ISO label may be included in the Standard, however it was emphasized that this label should not be characterized in the standard as a better label or classification than current national schemes. The committee discussed that the inclusion of an optional ISO label or template would be very useful for developing countries, however noted that as the label is a communication tool, the appropriateness of the label was dependent on local contexts.

A Working Group led by Steve Cummings was established to develop the working drafts of the standard. Two Ad-hoc Groups were also established, one for plumbing products and one for appliances. P. DeMarco will be the convener of the plumbing Ad-hoc Group. Phillip Robertson, technical manager for Australia's Consumer Electronics Suppliers Association, will lead the appliance Ad-hoc Group. The plumbing Ad-hoc Group will be responsible for drafting all the plumbing content for the standard.

The committee also reviewed the proposed project timeframe put forward by the Secretariat and agreed to the approximate dates and deadlines outlined. The proposed Project Timeframe has been distributed as document N018.

Liaisons were established with the following ISO/IEC Committees due to perceived commonalities in scope:

- ISO/TC 147 Water quality
- ISO/TC 224 Service activities relating to drinking water supply wastewater and stormwater systems

- ISO/TC 268 Smart Cities and communities
- ISO/TC 282/SC 2 Water reuse in urban areas
- IEC/TC 59/SC 59 A Electric Dishwashers
- IEC/TC 59/SC 59 D Performance of household and similar electrical laundry appliances

There was a brief discussion pertaining to the differences in testing requirements for appliances, especially clothes washers. There was some commentary that, due to these extensive differences and existing national laws, it may be difficult to keep appliances in scope.

Developing liaison status with those committees will allow ISO/PC 316 Committee members to review/reference the output of work from those committees on the PC 316 web page.

The committee agreed to focus on development of the repository for the ISO/PC 316 standard by identifying the test procedures currently being utilized for water efficiency labelling for incorporation into the repository (appendices) of acceptable, alternate test procedures.

The committee agreed to tentatively hold meetings approximately every 6 months, with the next meeting scheduled in early 2019. Dates and location will be advised by the Secretariat.

See Document N019 for a list of resolutions resulting from the meeting that were approved by the Committee.

Respectfully submitted,
Peter DeMarco, US/TAG Chair

ISO/PC 316
Water efficient products - Banding

Email of secretary: Clare.Hobern@standards.org.au
Secretariat: SA (Australia)

Confirmed ISO 31600 Model

Document type: Other committee document

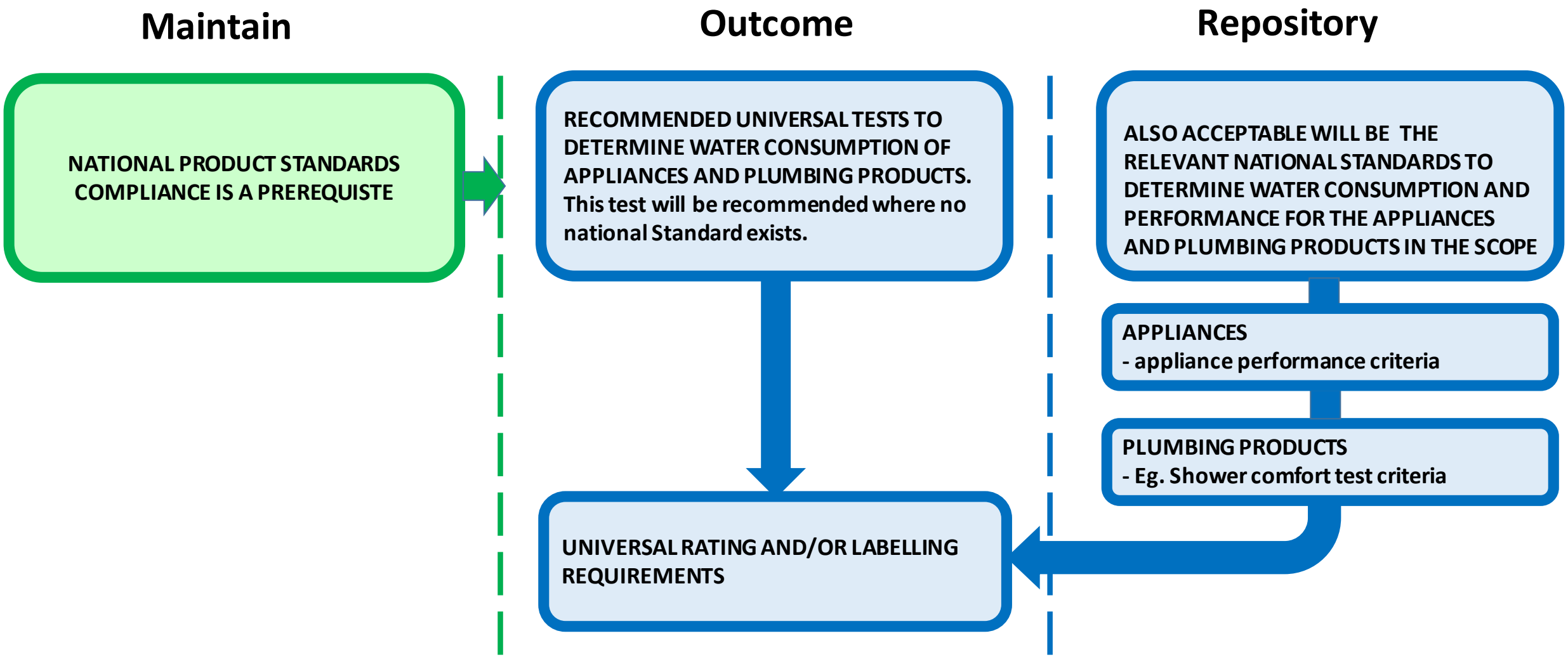
Date of document: 2018-07-26

Expected action: INFO

Background:

Committee URL: https://isotc.iso.org/livelink/livelink/open/pc316

ISO/31600 MODEL
ISO/PC 316 WATER EFFICIENT PRODUCTS - RATING



ISO/PC 316
Water efficient products - Banding

Email of secretary: Clare.Hobern@standards.org.au
Secretariat: SA (Australia)

Resolutions of ISO PC 316 Sydney July 2018

Document type: Resolution

Date of document: 2018-07-26

Expected action: INFO

Background:

Committee URL: https://isotc.iso.org/livelink/livelink/open/pc316

Resolutions

Resolution 1-2018 – Title and Scope of the Project Committee

ISO/PC 316 agrees on the new title "Water Efficient Products – Rating" for ISO/PC 316 and confirms its scope as "Standardization in the field of water efficient products – rating".

ISO/PC 316 requests its secretariat to submit this resolution to the ISO TMB for approval.

Resolution 2-2018 – Statement of Purpose

ISO/PC 316 requests its leadership to develop a statement of purpose for the committee's work based on discussions in Sydney, July 2018.

ISO/PC 316 requests its secretariat to circulate this statement to ISO/PC 316 for a six-week period of comment.

Resolution 3-2018 – Title and Scope of ISO 31600 *Water Efficient Products – Rating*

ISO/PC 316 approves the Title and Scope of ISO 31600 *Water Efficient Products – Rating* as the following:

Title: Water Efficient Products - Rating

Scope: The scope of the ISO standard will cover the following:

- Water efficiency ratings for the following plumbing products and appliances.
- Key test requirements and calculation for individual plumbing products and appliances and method to derive a water efficiency rating
- Optional ISO water efficiency label

Products to be included in the scope of ISO 31600

- Showers/showerheads and mixers
  - Showerheads and hand showers with shower hose
  - Shower taps with the flow controller integral to the tap.
  - Indoor and *outdoor* showers
- Tap equipment / taps and mixers
  - Kitchen taps
    - Mixers
    - Faucets
    - Spray units
  - Basin taps/mixers/faucets
  - Bidet taps/faucets
  - Common wash tap/faucets/*sprays*
  - Commercial pre-rinse spray units
- Flow controllers
- All water-consuming toilets including:
  - *independent cisterns*
  - *independent w/c*
  - *matching set of water closet and flushing devices*
- All water-consuming urinals
- *Non-water consuming urinals*
- *Water purifier*
- Dishwashers (domestic and commercial)
- Clothes washing machines(domestic and commercial)

- The dryer function of combination washer/dryers, where they use water to dry washing loads
- Clothes Dryers that use water

The Standard excludes:

- Ratings for safety showers
- *Ratings for tap equipment for use exclusively over a bath or spa*
- Energy requirements
- Hygiene/health (with informative notations)
- Conformity assessment requirements

Note: Italicized items are to be confirmed for inclusion/exclusion at the second meeting of ISO/PC 316

Resolution 4-2018 – Appointment of Project Leader & Timeframe

ISO/PC 316 appoints Steve Cummings as Project Leader for ISO 31600 and confirmed the 36-month development track.

ISO/PC 316 confirms the proposed project timeline circulated as N018.

Resolution 5-2018 – Working Group 1 – Water Efficient products – rating

ISO/PC 316 resolves to establish Working Group 1 "Water efficient products - rating" and appoints Steve Cummings [SCummings@gwagroup.com.au] as Convenor 2018 – 2021. The scope of this working group is to draft the international Standard within the scope of ISO 31600.

ISO/PC 316 requests that WG 1 prepare an initial working draft for discussion at the 2nd meeting of ISO/PC 316.

A call for experts will be announced by the secretariat. The following members have agreed to participate in this group:

- Singapore
- Japan
- China
- UK
- USA
- Switzerland
- Australia

Resolution 6-2018 – Ad Hoc Group 1 – Plumbing products

ISO/PC 316 resolves to establish Ad Hoc Group 1"Plumbing Products" and appoints Peter DeMarco (ANSI) [pete.demarco@iapmo.org] as Convenor 2018-2021. The scope of this working groups is to develop testing criteria/requirements for rating plumbing products within the scope of ISO 31600.

ISO/PC 316 requests that AHG 1 report their findings to ISO/PC 316 for discussion at the 2nd meeting of ISO/PC 316.

A call for experts will be announced. The following members have agreed to confirm participation in this group:

- Singapore
- Japan
- China
- UK
- USA
- Switzerland

- Australia

Resolution 7-2018 – Ad Hoc Group 2 – Appliances

ISO/PC 316 resolves to establish Ad Hoc Group 2 "Appliances" and appoints Phillip Robinson (SA) [phillip.robinson@cesa.asn.au] as Convenor 2018-2021. The purpose of this working group is to develop testing criteria/requirements for rating appliances within the scope of ISO 31600.

ISO/PC 316 requests that AHG 2 report their findings to ISO/PC 316 for discussion at the 2nd meeting of ISO/PC 316.

A call for experts will be announced. The following members have agreed to confirm participation in this group:

- Singapore
- Japan
- China
- UK
- USA
- Switzerland
- Australia

Resolution 8-2018 – Next Meeting with Host To Be Confirmed

ISO/PC 316 resolves that the next meeting of ISO/PC 316 and its Working Group(s) will take place in early 2019 and requests its Secretary to announce a meeting host as soon as possible.

Any expressions of interest to host a meeting of ISO/PC 316 should be communicated to the ISO/PC 316 Secretariat.

Resolution 9-2018 – Encouragement for non-members and O-members to become P-members

ISO/PC 316 encourages non-members and O-members to become P-members of this committee.

Resolution 10-2018 – Establishment of Liaisons

ISO/PC 316 resolves to liaise with the following ISO & IEC Committees:

- ISO/TC 147 - Water quality
- ISO/TC 224 - Service activities relating to drinking water supply wastewater and stormwater systems
- ISO/TC 268 – Smart Cities and communities
- ISO/TC 282/SC 2 – Water reuse in urban areas
- IEC/TC 59/SC 59 A – Electric Dishwashers
- IEC/TC 59/SC 59 D - Performance of household and similar electrical laundry appliances

Resolution 11-2018 – Appreciations and Thanks

ISO/PC 316 expresses its sincere thanks to Standards Australia for hosting the first meeting.

Resolution 12 -2018 – Appreciations and Thanks to P-Members for Their Reports

ISO/PC 316 expresses its sincere thanks to all P-members for providing detailed reports.