Next Edition of VIM

The JCGM WG2 (VIM Committee) is anticipating completing and circulating to the JCGM Member Organizations for comment a first Committee Draft (CD) of the next (fourth) edition of the International Vocabulary of Metrology (VIM4 CD) early in the second half of 2019.

Shortly after publication of the third edition of the “International vocabulary of metrology – Basic and general concepts and associated terms (VIM)” (VIM3), several users sent both general and specific comments, which convinced WG2 of the opportunity to spend some time (a few years) developing answers to frequently asked questions (FAQs) and a set of annotations that were provided in an electronic version of the VIM3 on the BIPM web site (https://www.bipm.org/en/publications/guides/vim.html). In parallel, two of the eight JCGM Member Organizations requested a more comprehensive treatment of nominal properties and ordinal quantities/properties in the next edition of the VIM. This led to considerable work in WG2, aimed at investigating the feasibility of this objective and the best way of achieving it, including discussion about whether the definition of ‘measurement’ should apply to the characterization of non-quantitative as well as quantitative properties. WG2 members came to an initial agreement that the definition of measurement and/or metrology could be expanded, and the WG2 Convener sent a letter to the JCGM Chairman in March 2018 stating this intention and providing an explanation and a justification. The letter was subsequently sent to the JCGM Member Organizations, with reaction to the letter being quite mixed, leaving WG2 with no clear guidance on how to proceed with this.

Another complicating factor in deciding whether to adopt an expanded definition of ‘measurement’ into the VIM4 was the realization that incorporating such an expanded definition would significantly impact over 20 entries in going from the VIM3 to the VIM4, which would lead to an unanticipated level of complexity in the development of the VIM4.

It has therefore been decided by the JCGM that WG2 produce a version of the VIM (VIM4) in the short-term that includes significantly more entries pertaining to nominal and ordinal properties than were in the VIM3, and includes the simplifications and clarifications provided in the VIM3 annotations, but that will not address the expanded definition of ‘measurement’ issue, nor several of the other still open more complex issues.

The JCGM has also encouraged WG2 to continue its work on a future revision of the VIM (VIM5?) to address the more complex issues under discussion within WG2 that will not be incorporated in the VIM4 (for example, to develop consensus on the international acceptability
of broadening the definition(s) of measurement and/or metrology to encompass nominal and
ordinal properties), but a timeframe for completing this work still needs further consideration.

Definition of ‘measurement unit’

The February 2018 version of the draft 9th Edition of the SI Brochure presented measurement
units as values, contrary to what is in the VIM3, the 8th Edition of the SI Brochure itself, and
other metrology documents. During its June 2018 meeting, WG2 reaffirmed, via a vote, its
support for defining ‘measurement unit’ as a quantity. There was majority support, with one vote
against and one abstention. This vote was taken in response to a request from ISO following an
ISO/TC 12 ballot on this same issue related to the development of an updated version of the ISO
80000-1 standard. This result was reported to ISO by the WG2 Convener.

Publishing Considerations for the VIM4

WG2 intends to use a web-based format for the VIM4, similar to the web-based format used for
the VIM definitions with informative annotations (“Annotated VIM3”,
https://jcgm.bipm.org/vim). This could also be used to generate pdf files as required, customized
to individual needs. For example, a version containing only the definitions relevant to nominal
properties could be generated. Using a web-based format will also allow for more flexibility
concerning the order of presentation of entries (e.g., alphabetical ordering versus ordering based
on concepts), and facilitate the introduction of supplementary material such as explanatory texts
and possibly translations into other languages.

WG2 Membership

There are presently sixteen members of JCGM-WG2:

Convener:
Dr Charles Ehrlich [OIML]

Executive Secretary:
Mr Robert Sitton [BIPM]

Members:
Dr Jerzy Borzyminski [OIML]
Dr Mirella Maria Buzoianu [BIPM]
Dr Anna Chunovkina [OIML]
Ms Michèle Desenfant [ISO]
WG2-related Resolutions of the JCGM at its Plenary Meeting held on Monday, 3 December 2018 at the BIPM, Sèvres

Decision 1

JCGM requests WG2 to complete a consultation among its members in order to finalize the text relating to nominal properties in chapter 6 of the working draft discussed at the December 2018 JCGM meeting. A complete draft of the “VIM4” (including the minimally revised versions of chapters 1-5 and the new chapter 6) will be circulated as a committee draft (CD) to the JCGM member organizations for their comments after the June 2019 WG2 meeting.

Decision 2

JCGM encourages WG2 to continue its work on a future revision of the VIM to address issues under discussion within WG2 that have not been incorporated in the CD mentioned in Decision 1 (for example, to develop consensus on the international acceptability of broadening the definition(s) of measurement and/or metrology to encompass nominal and ordinal properties).