# CONSULTATIVE COMMITTEE FOR ACOUSTICS, ULTRASOUND AND VIBRATION

# STRATEGIC PLANNING WORKING GROUP

MINUTES OF THE 4th MEETING (28 October 2013)

The Strategic Planning Working Group of the Consultative Committee for Acoustics, Ultrasound and Vibration (CCAUV SPWG) held its 4<sup>th</sup> meeting at the Bureau International des Poids et Mesures (BIPM) Sevres, on Monday, October the 28th 2013.

The following were present:

#### Chairman:

Dr Bajram Zeqiri, NPL (Teddington)

#### President of the CCAUV:

Prof. Dr Joaquín Valdés, INTI (San Martín, Prov. Buenos Aires)

#### Members:

Dr Salvador Barrera-Figueroa DFM (Kongens Lyngby) Dr Christian Koch, PTB (Braunschweig) Dr Gustavo Ripper, INMETRO (Rio de Janeiro) Dr Enver Sadıkoğlu, UME (Gebze-Kocaeli) Dr Guillermo Silva-Pineda, CENAM (Querétaro, Qro) Mr Qiao Sun, NIM (Beijing) Mr Christiaan Ian Veldman, NMISA (Pretoria) Dr Ryuzo Horiuchi, NMIJ/AIST (Tsukuba)

#### **Guests:**

Dr Thomas Bruns, PTB (Braunschweig) Dr Akihiro Ota, NMIJ/AIST (Tsukuba) Dr Lixue Wu, NRC-INMS (Ottawa, Ontario) Dr Ping Yang, NIM (Beijing)

**BIPM members:** Mr Andy Henson, BIPM Dr Susanne Picard, BIPM

#### Excused:

Dr Richard Barham, NPL (Teddington) Dr José Salvador Echeverría Villagómez, CENAM (Querétaro, Qro)

# 1. Welcome and Introductions

Dr Bajram Zeqiri, Chair of the Strategic Planning Working Group welcomed all participants and opened the meeting with a round of presentations of the participants, and with practical information.

# 2. Appointment of Rapporteur

Dr Salvador Barrera-Figueroa was appointed as Rapporteur without any objection.

## 3. Confirmation of the Agenda

The proposed agenda was accepted unanimously by all participants.

## 4. Minutes of last SPWG meeting held on June 12, 2012.

The minutes of the 2nd SPWG meeting were summarily recapitulated by the Chair, and accepted without further comments.

#### 5. Recapitulation of the planning process of the SPWG

The Chair of the SPWG, Dr Bajram Zeqiri, gave an interesting account of the process that resulted in the CCAUV Strategic Planning document. This account helped in refreshing the paticipant's memory in preparation for the impending discussion to come at latter stages of the meeting.

#### 6. Review of Strategic Planning – what has happened – anticipated next steps

Mr Andy Henson gave a presentation of the time line of the process followed at BIPM for generating the BIPM strategy. Afterwards, he focused discussion on what is to come, particularly in the view of the imminent 25th CGPM in 2014. At that point, the BIPM Strategy and Work Program for 2016-2019 should be ready.

The 25-page CCAUV Strategic Planning document was comprehensive, but there was a need to generate a one-page version which could be more readily accessed by BIPM Directors. Mr Henson indicated that the Executive Secretaries were asked to identify the five most important issues faced by the CC. One remarkable aspect of the CCAUV Strategy is that these issues were all of technical nature, rather than organisatorial. Other CCs had chosen to merge WGs which informs us that the CCAUV seems to be happy with most aspects of the current organisation. Reasons for that may be that CCAUV is a small, relatively young Committee with stability in terms of the number of members. There were very few comments received from the CIPM on the CCAUV Strategic Planning document.

Mr Henson indicated that the Strategic Planning document should be considered as a living document and should be made openly available at the nearest oportunity with subsequent

refinements being encouraged. General renewal of the document should happen before the 18 months before the CGPM, bringing onto a four-year cycle.

#### 7. Feedback from the CIPM – reflections on the MRA

Prof. Dr Joaquín Valdés gave an interesting account of the activities of the CIPM. A major announcement was that the New SI will not be defined at the 25th CGPM in 2014, being postponed to the following CGPM in 2018. The reason for the postponment is the existence of some discrepancies between the realisation of the kilogram between the Watt Balance and the Avogadro number.

Although CCAUV is not suffering large updatings of the definitions of its units, Dr Valdés pointed out that the new definition of the kelvin (K) based on the determination of the Boltzmann constant is partially founded on measurement of acoustic resonances in a quasi-spherical resonator.

While the CIPM MRA has been the source of important achievements in harmonizing and moving forward the equivalence between NMIs (now 15 years old) it is also necessary to update and review the vision of the CIPM MRA; the CIPM has hence turned its mind to this task. A major challenge is that the NMIs and DIs are facing an ever growing demand for new comparisons while their resources are not growing at the same rate. This is not sustainable in the long run. An idea is to make sure that Key Comparisons relate to fundamental *core capabilities* rather than fractional services alone, considering that for instance primary calibration of a transducer includes control over the whole chain of measurement, including all intermediate steps.

# 8. Discussion of Strategy Document for Rolling Programme Development 2013 to 2023 – CCAUV

The discussion was opened by inviting comments openly on the degree of usefullness of the CCAUV Strategy Planning document. An extended view is that the technical content of the document will be used for supporting strategic planning of several NMIs, if it has not been already used as such. Although this may be slightly early, it was suggested that if there was any current "impact" example or case, it may be of interest for the CCAUV to share it, and employ it as an example of the usefulness of the Strategy document.

#### Action 1:

Feedback on case stories that support the relevance/impact of the strategy document by December 2013, along with general comments. All participants.

#### 9. BIPM web pages and CGPM

The Executive Sectretary outlined means by which we could better promote or "sell" the importance of the activities of the CCAUV. A presentation and poster on the Strategy of the CCAUV will be given at the 25th CGPM in 2014. Input in form of case studies supporting the document was requested by the Executive Secretary, especially addressing pictures owned by the participants which are not subject to copyright issues of web-derived images.

Similarly, the BIPM web-pages are likely to be renewed. In connection with this, a web-page will also be produced in order to disseminate Strategic Planning. A simple layout with a few cases derived from each line of work of the CCAUV contained on the front page may provide key messages which are readily accessible; the cases included in the summary of the CCAUV strategy can be used with relatively small modifications.

Action 2:

A layout of the website with input from the participants in form of pictures, and items of greater potential impact is to be prepared (Susanne Picard with contributions from all participants), by July 2014.

#### 10. Review of SPWG Terms of Reference and membership

The review of the current Terms of Reference of the SPWG was conducted by the Chair. A set of small modifications and updatings to these was suggested. These are compiled in the decision below.

#### Decision 1:

To delete point 2 (or merge it with point 3) of the current set of terms of reference.

To modify point 8 in order to broaden the scope of the final applications, either as being used by AUV, or being proposed by AUV.

By end of November, 2013.

#### 11. Date of next SPWG meeting

The next meeting of the SPWG will be held in connection to the 10<sup>th</sup> CCAUV meeting around October/November 2015.

#### 12. Any other bussiness

Nothing else was added to the discussion, and the Chair of the SPWG declared the 4<sup>th</sup> meeting of the SPWG closed.

Sèvres, 30 October 2013.

# Summary of actions and decisions

Action 1:

Feedback on case stories that support the relevance/impact of the strategy document by December 2013. All participants.

Action 2:

A layout of a website with input from the participants in form of pictures, and items of greater potential impact is to be prerared (CCAUV Secretary with contributions from all participants), by July 2014.

Decision 1:

To delete point 2 (or merge it with point 3) of the current set of terms of reference.

To modify point 8 in order to broaden the scope of the final applications, either as being used by AUV, or being proposed by AUV, by the end of November.