

Report of the first meeting of the FORUM-MD to CCU

The mission of the [FORUM-MD](#) is

- to advise the CIPM on the SI Digital Framework and the wider implications of the global digital transformation for metrology and for the international Quality Infrastructure
- to harmonize internal processes related to digitalization between NMIs, CCs, RMOs, and BIPM headquarters.
- to act as a forum to exchange information and to create synergies and opportunities for collaboration in this field, including, but not limited to, liaison with International QI Organizations, relevant International Organizations, international Science organizations, relevant industry associations, and further relevant stakeholders in digitalization.

The first meeting of the FORUM-MD was held at the BIPM on 8-9 March. The meeting was attended by 56 experts in person and 38 online. The agenda consisted of three parts: The reports on digitisation activities at BIPM, in the RMOs, CCs and liaison organisations (signatories of the Memorandum of Understanding), break-out sessions to discuss and cluster topics to be discussed in the FORUM-MD, and a closing session to propose preliminary working groups and task groups of the FORUM-MD.

In the CCU report to the FORUM-MD, the work of the Core Metrology Terms (CMT) on an axiomatic system was highlighted and met with great interest. It is considered as a possible basis for the VIM and other vocabularies. The CODATA report mainly presented the activities of the [DRUM](#) (Digital Representation of Units of Measurement) Task Group. The aim of this Task Group is to work with international scientific societies to raise awareness, educate and empower their communities in the understanding and implementation of digital representation of units of measurement. DRUM maintains a list of digital unit representation systems (<https://tinyurl.com/3s9brkwn>), including the most commonly used (UCUM, QUDT, OM, NVS P06, WMO and UNECE / CEFACT), and is preparing a "State of the Unit Representation" paper, including a guide to good practice for unit representation.

The ISO report to the FORUM-MD covered two aspects: The SMART standards initiative (<https://www.iso.org/smart>) encompasses the essential components (formats, processes and tools) needed to make standards more accessible and effective. This transformation starts at the standardisation process to ensure that human and technology users can seamlessly engage with standards. A demo access is available for registered users (<https://smart-demo.iso.org/>). Another ISO initiative related to CCU is the work on terminology and semantics.

In the concluding session of the FORUM-MD, eight preliminary working groups or task groups are proposed:

- Harmonizing DCC and DRMC
- FAIR for Metrology
- Data Quality in Metrology
- Secure and Trustworthy AI
- Coordination between RMOs
- Metrological Semantics
- Coordination between CCs
- SI-digital framework

There were also two workshops which need to be organized on:

- Complex Sensor Networks
- Traceability

The CCU is directly concerned by the last three TG proposals. In particular, work on semantics and terminology should be coordinated better between VIM WG 2, ISO activities and the upcoming TG-CMT. As a next step, by the end of April, the preliminary Chairs will prepare the Terms of Reference

of each WG/TG. These will have to be approved by the FORUM-MD. The next meeting of the FORUM-MD will take place in March 2025. The WG/TGs are invited to directly start with their activities.

For the report:

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