

Draft Agenda
23rd Meeting of the Directors of NMIs and Member State Representatives
17 – 18 October 2024
BIPM, Sèvres (and on-line)

Please register [here](#) or using the following link:
<https://form.jotform.com/BIPM/23rd-NMI-Dir-MS-Reps-meeting>

Day 1 - Thursday 17th October 2024		
09h30 Opening Session		
<p><i>The agenda for this meeting was prepared in collaboration with the Presidents of COOMET and GULFMET. The theme will be “Future opportunities for metrology in the digital transformation” which was chosen following discussion during the NMI Directors’ meeting in 2023.</i></p> <p><i>The opening sessions will highlight some of the work overseen by the CIPM in this area. After lunch, there will be an update on the challenges identified for metrology in quantum technology that emerged from the workshop held on March 2024.</i></p>		
	<ul style="list-style-type: none"> • Welcome to the meeting by the CIPM President. Dr Wynand Louw – CIPM • Highlights from the work of the BIPM Headquarters 2023/24, including the launch of the “SI Reference Point” Dr Martin Milton - BIPM • Report on the work of the “CIPM Forum on Metrology and Digitalization” Prof. Dr Cornelia Denz – CIPM <p style="text-align: center;">Coffee (10h45 – 11h15)</p>	
11h15 Metrology opens tomorrow with Digitalization– Artificial Intelligence		
<p><i>This session will focus on examples of how NMIs are bringing using their metrology experience to support the implementation of artificial intelligence.</i></p>		
	<p>Chair: Dr James Olthoff (CIPM)</p> <ul style="list-style-type: none"> • Dr Agnès Delaborde (LNE), “Enhancing control of Generative AI through metrology” (30 min) • Prof. Dr Tobias Schäffter (PTB), “Data quality metrics and reference data for AI” (30 min) <p style="text-align: center;">Lunch (12h30 – 14h15)</p> <p style="text-align: center;"><u>There will be an opportunity to visit the BIPM laboratories during the lunch break (13h30-14h00)</u></p>	

14h15 Metrological challenges in Quantum Technology

Speakers in this session will discuss metrological challenges related to quantum technology. These will include both the application of metrology principles to quantum technology and the use of quantum technologies to progress metrology.

Chair: Ms Georgette Macdonald (CIPM)

- **Dr J-T Janssen (CIPM)**, Summary report on “Workshop on Accelerating the adoption of Quantum Technologies through Measurements and Standards” (25 min)
- **Dr Yong-Ho Lee (KRISS)**, “Quantum computing and measurement standards” (25 min)
- **Dr Qu Jifeng (NIM)**, “Quantum Sensing Research at NIM” (25 min)

Coffee (15h45 – 16h15)

16h15 Metrology opens tomorrow with Digitalization– FAIR Data

This session will highlight how NMIs and stakeholders for metrology are adopting the principles of FAIR data as part of their strategies for digital transformation.

Chair: Dr Héctor Laiz (CIPM)

- **Dr Robert Hanisch (NIST)**, “How to establish a resilient FAIR data system at an NMI?” (30 min)

16h45 Panel Discussion

Chairs/Speakers from the previous sessions will participate in a panel discussion sharing NMI experience on implementing metrology programmes addressing quantum and digital technologies.

Chair: Dr Takashi Usuda (CIPM Secretary)

- **Panel members:** Ms Georgette Macdonald (NRC, Canada), Mr Lazizbek Saidoripov (UzNIM, Uzbekistan), Dr Peter Thompson (NPL, United Kingdom), Dr Yon-Kyu Park (KRISS, Republic of Korea), Dr Wynand Louw (CIPM President).

Close of Day 1 at 17h30 followed by a reception in the BIPM Gardens.

Day 2 - Friday 18th October 2024

09h00 – Opening of the second day

The second day will focus on the actions of the CIPM mandated at the 27th CGPM.

Chairs: Dr Wynand Louw (CIPM President) and Dr Takashi Usuda (CIPM Secretary)

- Progress with the mandates given to the CIPM by the 27th CGPM (**Dr Wynand Louw - CIPM**)
- The CIPM strategy (**Dr Wynand Louw - CIPM**)

Open discussion

Coffee (10h30 – 11h00)

- Progress with the modernization of the organization:
 - Status on the by-laws of the BIPM and the Rules of Procedure for the CGPM, (**Dr Philippe Richard – CIPM**)
 - Plans for an observer status to address the challenge of achieving “universal adherence”. (**Dr Victoria Coleman - CIPM**)
- Summary of the outcomes from the Young Metrologists’ “Vision 2050 plus” exercise
Mr Chingis Kuanbayev (BIPM) and Mr Kangyoung Sung (BIPM/KRIS)

Lunch (12h15 – 13h30)

13h30 - Towards a new definition for the second and a continuous UTC

Much progress has been made in the CCTF towards agreeing a new definition of the second and the extension of the offset between UTC and the Earth rotational angle, so to avoid the leap second discontinuities in UTC. A new hot topic is also arising: what reference time shall be used on the Moon and beyond? This session will include a report on this progress following the agreed CCTF roadmap and allow a period for discussion about the next steps which still require an engagement of all NMIs.

Chair: Dr James Olthoff (CIPM)

- “CCTF preparation to the CGPM 2026: redefinition, continuous UTC, and Lunar time” **Dr Noël Dimarcq (CCTF President)**

Open discussion

14h45 to 15h30 – Conclusions from Day 1 and Day 2

This final session will be open for discussion of any topics arising during the meeting.

- “Plans for the celebration of the 150th Anniversary of the Metre Convention” **Dr Martin Milton (BIPM)**
- Confirmation of key dates in 2025 and 2026.
- Any other business

Close of meeting (15h30)