



EUROPEAN COMMISSION  
DIRECTORATE-GENERAL FOR RESEARCH & INNOVATION

Directorate E – Prosperity  
E.3 – Industrial Transformation

Brussels, 10 October 2023

## European Partnership on Metrology (EPM) 4<sup>th</sup> Steering Group meeting

DATE: 10 OCTOBER 2023, 09:30-12:30

PLACE: DG RTD PREMISES ORBN, 1040 BRUSSELS/BELGIUM AND REMOTE CONNECTION  
VIA MICROSOFT TEAMS

### Participants:

AMIHALACHIOAE Cornelia (Member, EFFRA), in-person  
AUERBACH Dagmar (Observer, EURAMET, Programme Manager), online  
CHAMBON Maguelonne (Observer, Metrology Partnership Chair), online  
COBBAERT Christa (Leiden University Medical centre), online  
DIDERICH Michael (Clean Hydrogen JU) online  
DEL CAMPO Dolores (Observer, EURAMET/CEM), in-person  
DRÖLL Peter (Co-Chair, Director of the Prosperity Directorate EC DG RTD), in-person  
FRIEDL, (Anna Ludwig-Maximilians-University of Munich), online  
GÜNES Minna (Member, Aalto University), online  
IMKAMP Dietrich (Member, ZEISS), online  
KOLIBOVÁ Natália (Co-chair, Czech Office for Standard, Metrology and Testing), in-person  
LINDBERG Mans (Observer, Policy Officer E3, EC DG RTD), in-person  
MASCALCHI Edoardo (Observer, Policy Officer E3, EC RTD), in-person  
MERIMAA MIKKO (Observer, EURAMET, General Secretary), in-person  
PINTO SEPPÄ Isabel (Member, B4P), in-person  
RASTELLO Maria Luisa (Member, CIPM), online  
SKLIAROV Volodymyr (Member, NSC-IM), online  
STENGER Jörn (Member, EURAMET Chair), physically  
TARASOVA Oksana (Member, WMO), online  
TIEDJE Jürgen (replacing the Co-Chair P. Dröll for the second half of the meeting , Head of Unit E3, EC DG RTD), in-person

### Guests:

LOTITO Alexandre (TECHNOPOLIS) online  
VISCIDO Sophie (TECHNOPOLIS) online  
VOLPE Roberto (Observer, Economic and Policy Analyst G2, EC DG RTD),  
online

## Operational Conclusions

- Steering Group Members have been asked to provide feedback on the Orientation Paper and the document containing the feedbacks of the March 2023 meeting (both prepared by EURAMET) with deadline 24/10/2023.
- Steering Group Members have been asked to provide feedback on the EPM Work Programme 2024 with deadline 24/10/2023.
- Steering Group Members have been asked to provide feedback on the preliminary results of the final evaluation of the European Metrology Programme for Innovation and Research (Horizon 2020) and the mid-term evaluation of the European Partnership on Metrology (Horizon Europe) with deadline 20/10/2023.
- DG RTD to share the Agenda and Registration link of the Future of Metrology Workshop (23/11/2023) to the Steering Group Members by 17/10/2023

## Minutes

Peter Dröll (European Commission, DG RTD) and Natália Kolibová (Czech Office for Standard, Metrology and Testing) welcomed the meeting participants. Part of the meeting has been co-chaired by Jürgen Tiedje (European Commission, DG RTD), replacing Peter Dröll.

### New Developments with EURAMET

Jörn Stenger (EURAMET) updated the meeting participants about new developments in EURAMET, in particular:

- The recommendations for future research topics on metrology provided by the EPM Steering Group have been circulated by EURAMET to the Delegates, Partnership Committee, European Metrology Networks and EURAMET Technical Committees in May.
- The latest EURAMET General Assembly, Research Council meeting, EMPIR Committee meeting, and Partnership Committee Meeting took place on 30/05-02/06/2023. In that occasion, the new Chair of EURAMET Dolores del Campo has been elected, and she will assume the position in the next EURAMET GA in June 2024. Dolores del Campo is the Deputy Director of the Centro Español de Metrología (CEM).
- The National Metrology Institutes of Ukraine and Georgia are now corresponding applicants of EURAMET as from February. Both NMIs are now following the necessary steps to become full members of EURAMET.
- EURAMET members reflected on the challenges for the next decade for metrology. Four priority areas have been identified: Green Deal, Competitive and resilient industry, Health, Cohesion and Infrastructure. The priority areas have been decided also in accordance with the main policy priorities of the Commission.
- EURAMET is in the process of re-organising their strategy towards liaison organisations, taking into account needs of the European Metrology Networks (EMNs). The new liaison scheme identifies “Cross-Sectorial Liaison Organisations” (covering all technical areas and in closer contact with the EURAMET GA) and in “Topical Liaison Organisations” (where EU Partnerships are also listed and in closer contact with the ENMs and Technical

Communities). Finally the group called “Associated NMIs” includes all the National Metrology Institutes from other Regional Metrology Organisations outside of EURAMET (e.g. from USA, Africa, Asia..).

Maguelonne Chambon (EURAMET) presented the status of the Calls 2023 of the European Partnership on Metrology. The deadline for the Stage 2 of proposals expired on 02/10/2023. The statistics of the submissions have been presented, including details on external coordinators (as decided in the previous meeting, The coordination was open for externals for the calls “Fundamental Metrology” and “Metrology support for Regulation and Standards”. The statistics are:

- Out of the 15 proposals for Fundamental Metrology, 0 are led by an external coordinator.
- Out of the 11 proposals for Metrology support for Regulation and Standards, 2 are led by an external coordinator. The proposals are:
  - N02 - Metrology support for the development of standardised methods for methane emission detection and quantification, Coordinator: BUREAU VERITAS EXPLOITATION, 4 Place des Saisons 92400 Courbevoie – France
  - N08 - Pioneering next-generation air quality monitoring by metrological validation of low-cost particulate matter sensors, NCSR Demokritos, Neapoleos 27, 15341 Agia Paraskevi, Greece

The figures refer to project proposals to be reviewed in November, these are not awarded projects. EURAMET envisages to launch a second test case for the Work Programme 2024 for the calls “Metrology support for Digital Transformation (DIT)”.

The Orientation Paper developed by EURAMET, considering the feedback of the EPM Steering Group, has been discussed. Before the last meeting on 14/03 all the Members of the Steering Group were asked to provide inputs for the future calls in the coming years. Starting from these inputs, EURAMET prepared an Orientation Paper. The Orientations Papers are instrumental for EURAMET in deciding on proposals for Potential Research Topics (PRTs) during the Stage 1 of the calls of the Partnership for the calls 2024. The Orientation Paper has been shared with the Steering Group on 18/09/2023 to see whether there is any feedback. The following feedbacks have been received during the meeting:

- It would be good to acknowledge in the document the European Metrology Network for quantum technologies as they developed an Orientation Paper for Quantum last year that has been source of inspiration.
- In the Orientation Paper from the Steering Group, some examples are mentioned. This information is not coming from the Steering Group. EURAMET explained that this has been done to complement the information given by the Steering Group with ongoing projects on the various topics. If such solution is not welcomed by the Steering Group, EURAMET will remove them from the Orientation Paper. It has been suggested by the Steering Group to remove the projects and draw the attention of the reader to the respective European Metrology Networks websites where projects are already suggested.
- Gases of emerging concern should be mentioned in the Green Deal area.
- The part on Manufacturing seems to well reflect the feedback shared by the Steering Group.
- Topics have different lengths due to the different feedbacks received.

Cornelia Amihalachioae (EFFRA) flagged that within the Partnership Made in Europe, a sub-community on Metrology has been created creating interests in the members of EFFRA (European Factories of the Future Research Association).

Edoardo Mascaldi (European Commission, DG RTD) shared during the meeting a document prepared by EURAMET including all the inputs from the Steering Group (in the March 2023 meeting) that has been the starting point for the Orientation Paper. The Steering Group has been asked to provide feedback to the mentioned document and the Orientation Paper with deadline 24/10/2023

Jörn Stenger proposed to transform the Orientation Paper with the Steering Group in a living document to be updated regularly ahead of future calls.

Jürgen Tiedje thanked EURAMET for proposing the creation of the Orientation Paper in the last meeting of the Steering Group. Jürgen Tiedje also asked EURAMET to provide further details on the link between the Orientation Paper and the Work Programme 2024.

Maguelonne Chambon and Jörn Stenger explained that, based on the information inside the Orientation Papers, applicants will suggest Potential Research Topics during the Stage 1 of calls 2024 to be opened in next year. During the evaluation of Stage 1, the sub-committees will take into account if a topic proposed is coming from the Orientation Papers or not.

Dolores del Campo (EURAMET), stressed that, based on her experience, applicants always check the Orientation Papers before submitting Potential Research Topics. They also make reference to them in the description of it.

Cornelia Amihalachioae (EFFRA) flagged that within the Partnership Made in Europe, a sub-community on Metrology has been created creating interests in the members of EFFRA (European Factories of the Future Research Association). She also welcomed the idea of a living document highlighting the need of a proper timeframe giving the link with specific periods of time and Work Programmes. This would ensure better synergies to ensure that the activities of EPM are well synchronised with the needs of the advanced manufacturing community.

Jörn Stenger highlighted the role of the European Metrology Networks to support the drafting of Orientation Papers encouraging to build relevant synergies with them. He also stressed that the Orientation Papers should be seen as strategic inputs.

Maguelonne Chambon also stressed that Steering Group Members are welcomed to flag any potential missing synergy between a specific European Metrology Network and a particular scientific community.

EURAMET will publish an updated version of the Orientation Paper in their website, taking into account the feedback received after the meeting. Expected publication end of November. With the intent of having the Orientation Paper as a living document in the future, EURAMET might evaluate the possibility to have it available in a shared space online for an easier update by the Steering Group Members in the next months.

## **Draft Work Programme 2024 – Presentation and Discussion**

Maguelonne Chambon explained the European Partnership on Metrology's calls process. Stage 1 is open to everyone (expected January/February 2024 for next calls).

During this stage, applicants submit Potential Research Topics (PRTs) After the deadline, sub-committees propose subjects to the EPM Committee that takes the final decision on which ones are approved for stage 2. During stage 2, calls for proposals are published for consortia to apply. After the deadline, during a review conference proposals are evaluated and, potentially, approved. Grant Agreements are then signed the year after and the projects starts around June. The following questions on the European Partnership on Metrology's call process have been asked by the Steering Group Members:

- During the evaluation of Proposed Research Topics, sub-committees support the selection of topics. Are the involved sub-committees known to the applicants?

The Partnership Committee has the overall responsibility to decide on the priority of the ideas included in the various PRTs (Proposed Research Topics) received and it has chosen to rely primarily on the recommendations of two sub-committees of the Committee (Research (SC-R) and Capacity Building (SC-CB)) charged with that responsibility. The experts in the sub-committees are elected among the Partnership members. EURAMET will check if the list of members of the sub-committees involved in the selection of PRTs are public on the Partnership website, in order to provide all the necessary information to the applicants.

- Can you please share more details on the statistics on the calls for 2023 that have been just closed?

The eligibility checks are ongoing. For the stage 2 of Call 2023 closed on 2nd October 2023, the Partnership received submissions for 54 Joint Research Projects (JRPs) and 1 CSP (Coordination and support action for capacity building). The breakdown of submissions is 15 Fundamental Metrology, 23 Industry, 11 Metrology for Pre- and co-normative research, 5 Metrology for Research Potential and 1 Capacity Building Coordination.

Maguelonne Chambon presented the Calls scopes for 2024: Green Deal, Metrology Support for Digital Transformation, Metrology Support for Regulation and Normative and Metrology support for Research Potential. These calls scopes are expected to be opened by January.

Steering Group Members have been asked to provide feedbacks on the Work Programme 2024 of EPM with a deadline on 24/10/2023.

## **Final evaluation of EMPIR, mid-term evaluation of EPM – State of Play and Discussion. Workshop on the future of metrology in Europe.**

Natália Kolibová and Jürgen Tiedje welcomed Alexandre Lotito (TECHNOPOLIS), Sophie Viscido (TECHNOPOLIS) and Roberto Volpe (Economic and Policy Analyst G2, EC DG RTD) who joined the meeting for the specific agenda point.

Sophie Viscido presented the preliminary results of the final evaluation of the European Metrology Programme for Innovation and Research (Horizon 2020) and the mid-term evaluation of the European Partnership on Metrology (Horizon Europe). The slides containing all the preliminary findings will be shared by Edoardo Mascalchi after the meeting.

Natália Kolibová encouraged the Steering Group Members to provide feedbacks on the current status of the evaluation. The following feedbacks/questions have been collected during the meeting:

- What will be the role of the EPM Steering Group in building a phasing out strategy of EPM? The process should ensure a level playing field between actors in suggesting future priorities.

In a recent workshop in September organised by the European Commission, Joint Undertakings (Partnerships based on Article 187 TFEU between the Commission, Member States and private entities) have been invited to work on a phasing out strategy after the end of Horizon Europe (2027). Partnerships based on Article 185 TFEU are expected to receive the same request later in 2024. More information are expected to be shared in 2024.

- Metrology is almost to be considered a public good, this needs to be taken into account when considering a phasing-out strategy. The discussions on the phasing-out strategies must be different compared to Joint Undertakings, especially for capacity building and standards. Different models of phasing-out strategies are needed for each type of Partnership.
- General agreement on the need to continue with a coordinated approach for Metrology in the EU, this needs to be reflected in a potential phasing-out strategy of EPM. Summaries of the achievements of EMPIR and EPM might be instrumental to understand the way forward.

The Steering Group Members have been invited to provide feedback on the Technopolis evaluation after the meeting with deadline on 20/10/2023.

A final version of the evaluation is expected by the end of the year.

Jürgen Tiedje draw the attention of the Steering Group to the upcoming workshop on the Future of Metrology on 23/11. During the workshop, presentations and discussions will reflect on the achievements of the current European Partnership on Metrology and what it is needed in the long term for the EU. Steering Group Members have been invited to join the discussions. Edoardo Mascacchi will share invitations to the members latest 17/10/2023.

## **New relevant developments with the Steering Group Members**

Jürgen Tiedje introduced the discussion highlighting that:

- In 2024 a new Commission will be established with new priorities that will also influence the work of EPM and Horizon Europe in general;
- We are thankful that EURAMET made a reflection on the future priorities and challenges and it is important that such discussion is also done in the Steering Group;
- By the end of the year there will be new regulations for e.g. Green Deal, Chips Act, Net Zero Industry Act. It would be interesting to understand the role of metrology as a support and enabler for such regulations;
- The Economic Security recommendation ([LINK](#)) deals also with the topic of technology leakage and it has been remarked the need to understand how EPM will deal with that depending on the results of the risk assessments to be performed soon.

- The Steering Group has been invited to engage with EPM and the European Commission, sharing ideas and opinions.

Highlights of the discussion:

- Oksana Tarasova (WMO) - Green deal asks to be carbon neutral but no one still knows what it actually does it mean. There is no way to quantify if you are carbon neutral. What are the consequences if you are not carbon neutral? The carbon tax is very difficult to implement if there is no way to quantify it. We are talking politically about a topic that we are not able to understand in a physical world.
- Cornelia Amihalachioae (EFFRA) - For the manufacturing industry green deal, chips, clean tech are all important topics with strong connections (e.g. digital product passport), collaboration will be fundamental. Ensuring human-centricity will also be key. Measurements need to become seamless and well embedded in the processes in order to provide to the factories and the workers the right instruments to produce clean technologies. New materials will also imply new ways to measure their performances. AI and Augmented Reality will also change the way to produce new products. Circularity will also require key contributions from Metrology. Data will have an important role too. Good measurements are also needed to ensure safety inside the factories. Metrology will play an important role in general for innovation in the manufacturing sector.
- Minna Günes (Aalto University) - On economic security and standardisation – these are very challenging issues, for example in the field of quantum. The Metrology Partnership should play the role of facilitator of such discussion that require players and expertise from very different sectors. Expertise from academia, companies and government will be needed.
- Isabel Pinto Seppä (B4P) - On net zero technologies: we should tackle not only green energy but also reducing its consumption (energy efficiency). This is particularly important for buildings and it will require good metrology. On materials/critical raw materials: for buildings is a big challenge how to recover them and one issue is the lack the good measures. Screening them and separate them is very complicated. Regarding climate resilience: monitoring of infrastructures (e.g. bridges) will be critical and more focus should be given to this. Good metrology is needed.
- Dietrich Imkamp (ZEISS) - Digital opportunities (e.g. digital processing) should not change our trust in measurements. Digital processing may alternate measurements. We should still be able to trust that results are safe. We should ensure that with the increasing use of digital technologies, the trust on our measures is not affected.

The discussion will continue in the next meeting of the Steering Group.

## **Future metrology needs for European regulation - Discussion**

In response to the Steering Group recommendation in their meeting in March 2023, EURAMET is now preparing an open public consultation on 'Metrology for Regulation' together with WELMEC. This will be an on-line event taking place on Monday, 23 October 2023, 9:00 - 12:30 CEST. The event will have a plenary session followed by three parallel sessions on Radiation Protection, Environment, and Legal Metrology (WELMEC), and a closing panel. Mikko thanked the Commission for

their willingness to provide one of the plenary presentations and reminded the Steering Group members that they should register on the event page if they are interested in joining the event. Outcome of the event will be used to orient the Regulation Call 2025. Presentations will be made available afterwards in the Event Page.

[Metrology for Regulation - Open Public Consultation - Online Event - EURAMET](#)

### **Date for the next meeting**

The next meeting will be again hybrid at the DG RTD premises “ORBN”, 1040 Brussels (Belgium) and online on MS Teams.

The suggested date for the next meeting is the 13/03/2024.