

EUROPEAN COMMISSION DIRECTORATE-GENERAL FOR RESEARCH & INNOVATION

Directorate E – Prosperity E.3 – Industrial Transformation

Brussels, 27 March 2023

European Partnership on Metrology 3nd Steering Group meeting

DATE: 14 MARCH 2023, 09:30-12:30

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

VIA MICROSOFT TEAMS

Participants:

AMIHALACHIOAE Cornelia (Member, MiE), physically AUERBACH Dagmar (Observer, EURAMET, Programme Manager), physically CHAMBON Maguelonne (Observer, Metrology Partnership Chair), online COBBAERT Christa (Leiden University Medical centre), online DIDERICH Michael (Clean Hydrogen JU) online DRÖLL Peter (Co-Chair, Director of the Prosperity Directorate EC DG R&I), physically 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), physically LINDBERG Mans (Observer, EC DG R&I), physically MERIMAA MIKKO (Observer, EURAMET, General Secretary), physically PINTO SEPPÄ Isabel (Member, B4P), physically RASTELLO Maria Luisa (Member, CIPM), physically SKLIAROV Volodymyr (Member, NSC-IM), online STENGER Jörn (Member, EURAMET Chair), physically TARASOVA Oksana (Member, WMO), online

Operational Conclusions

- 1. It was decided to open coordination of the 2023 calls "Fundamental" and Normative" also to external entities apart from NMIs or DIs. This is a test case where experience, and lessons will feed into WP 2024.
- 2. An open consultation on the "Regulation" call in autumn 2023 should take place with a subsequent discussion in the next Steering Group. An EC event to identify priorities could be envisaged.

3. Among the many contributions from members about metrology needs ahead of the Steering group meeting the following topics were identified:

Reducing the energy consumption, Radiation, Critical infrastructure, Oceans, Atmospheric chemistry, Other gases with big green house potential, Microplastics; Better regulation in manufacturing industry, Food safety. Also, cross cutting topics include Need for reproducibility, AI, Energy efficiency, 4. Citizen science

EURAMET will draft a standalone document summarising according to the call the structure in the next years. We should come back to this at the next meeting in October 2023.

4. Concerning the Draft Work programme 2024 the Steering Group was asked to provide written comments until the end of April in order to be able to submit to the partnership committee meeting at the end of May for final approval.

Minutes

Update by EURAMET

- The NMIs of Ukraine and Georgia have joined EURAMET and their Mutual Recognition Arrangements (MRA) processes run through EURAMET since February of this year.
- Regarding strengthening of cooperation with other partnerships. EURAMET is currently in a process of signing a MoU with Clean hydrogen JU and has already signed MoUs with i.e., the international measurement Confederation (IMEKO).
- The project selection for 2022 includes seven projects under "Normative", six projects under "Integrated European Metrology", four projects under "Health", four projects under "Research potential" and two projects under "Digital Transformation".
- An important development has been the Quantum Metrology and Testing infrastructure aiming for an infrastructure for quantum metrology and testing complementing the ones already in place (EuroQCI and EuroQCS).
- We were informed about how suggestions from the last Steering Group have been taken up since the last meeting. This included strengthened sharing of information within the EURAMET metrology community, strengthened liaison with other European partnerships and initiatives including the EURAMET NMI driven networks, Built4People and Chips KDT. In terms of standardisation seven projects were selected in the last call.

Work programme – role of NMIs as a coordinator of the projects – Discussion

- For transparency reasons Isabelle Pinto-Seppa announced that she is working in one of the NMIs (VTT) but not in the research area to avoid any conflict of interest.
- Peter Dröll informed about the legal situation where in principle all Metrology calls are open without any limitation in coordination but that a decision to differ in the WP can be taken after having consulted the Steering Group.
- Mikko Merimaa recalled that coordination is limited to make sure there is sufficient coherence as ministries and NMIs are owners of the national programmes and wishes to see coherence.

- Dietrich Imkamp made the observation that on the one hand the limitation to NMI is because projects are managed naturally. On the other hand, the capacity of NMIs and DIs has sometimes shown limitations to do coordination. The idea to decide for each call if coordination can be done from externals or if it should be limited to NMIs/DIs.
- Peter Dröll subscribed to the idea to do it on a call-by-call base. It would open up the "Fundamental" and the "Normative" call for coordination by others than NMIs DIs (they are not excluded), whereas in line with previous practice the call on "Industry", the call on "Capacity building coordination" and the call on "Research Potential" would remain restricted to coordination to NMIs and DIs.
- Mikko Merimaa added the EURAMETposition that it is important to limit coordination to NMIs and Dis in thematic programmes aiming at building the sustainable coordinated metrology infrastructure in Europe. It means that the calls on "Capacity building coordination" and "Research Potential" are not relevant to open up. In addition, this limitation should apply to the industry call to guarantee that the benefits from the metrology partnership go to any industrial stakeholder and that NMIs design the provision of future services.
- Oksana Tarasova pointed out that based on experience from being a coordinator a lot of time is lost on administrative tasks, and it is unfair to put that burden on NMIs.
- Maguelonne Chambon responded that administrative burden is being reduced step by step but that it would be difficult to completely externalise the coordination task.
- Jörn Sterner pointed out that an NMIs typically hire somebody for the administrative work.
- Minna Günes raised her concerns that by limiting coordination, projects that we cannot envision might be left out. Therefore, a call specific thinking is always good, although coordination by NMIs or DIs could be a priority expectation. But for justified reason and for specific projects, it can be coordinated by some other party which has to be justified in the proposal.
- Christa COBBAERT subscribed to the idea of favouring NMI involvement.
- Cornelia Amihalachioae added that if capacity and capability levels are a problem more detailed requirements for the coordinating NMIs are probably needed regarding outsourcing administration etc.
- Peter Dröll noted that we need to find the best project to be funded regardless of who is the coordinator and the aspect of neutrality of the coordinator. All in all, there is no big issue as regards neutrality and based on that no legal problem exists. After having listened to the steering group it is time to test and deliver on the new legal basis by opening up the proposed 2023 calls. E.g., "Fundamental" makes particular sense because universities who have a big experience in coordination might be interested. We should draw experience and lessons which will feed into WP 2024.
- Minna Günes expressed some concerns in terms of neutrality regarding the "Normative" call, since if a coordinator has strong ideas on what to get the neutrality will not be there.
- Jörn Sterner responded that both the "Industry" and "Standardisation" calls are industry driven. The difference is that the "Normative" call includes the request that the need for the project should come from a standard developing organisation like CENELEC. As part of standardisation there is a consensus

mechanism built in. That is the difference to the industry call where one specific industry company may bring forward own economic interest.

- Peter Dröll pleaded to include the "Normative" call in this test phase because it would lead to understanding of whether there is really a risk for neutrality. It is a calculated risk and if evidence is found it could be addressed in the 2024 call.
- Peter Dröll concluded the session by establishing that the Steering Committee had now been consulted as provided for by article 8 of the Council Decision and that a first test to open up coordination to entities outside NMIs and DIs will be made with the calls on "Fundamental" and Normative" in 2023.

Anticipated regulatory needs and open consultation event on regulation call in autumn 2023

- Mikko presented EURAMET regulatory ambition of supporting regulation at all levels where metrology is relevant. EURAMET already contributes to technical guides and want to increase work with ministries and regulators. Digital transition is key challenge for regulation. More than 70 EU regulations and directives including metrology have been identified. The proposed consultation would build on prepared discussion topics such as the role of metrology and traceable measurements in identification, design and implementation of regulations and policies. The consultation could be part of next steering group meeting, or alternatively of an online consultation with the metrology community. Also organise EC event to identify priorities
- Jörn Sterner recalled the tension between supporting industry, developing technology and protecting citizens. For that reason, it would be interesting in light of the "Green deal" call 2024, to be better informed by stakeholders where the projects should be set: within the innovation part or the protective part.
- Christa COBBAERT liked the idea and would like to give a presentation of regulatory needs from laboratory medicine and health community. It is difficult to progress on standardisation tests.
- Minna Günes supported a combined approach: to discuss at the steering group but also through an online consultation (but not in unstructured manner).
- Oksana Tarasova reminded about that within the climate and environment community these regulations are conventions with a higher commitment on countries and governments.
- Jörn Sterner clarified that it is not only about exploratory research but outcomes of the programmes at policy level (including previous programmes)
- Isabelle Pinto Seppa pointed out that even from previous programmes it would be relevant to discuss how the partnership can contribute with good accurate data for evidence base to support implementation of the regulation. It would be good to have it hybrid (both steering committee and consultation) with discussion after that.
- Peter Dröll underlined that EU rules are there to implement international agreements for green deal the EU even took the lead. Focus is of making European rules work. A subtitle could be "making rules work".
- Cornelia Amihalachioae pointed out that for EFFRA it is a lot about knowledge and technology transfer given that manufacturing uses metrology massively with all digital innovation, with AI, with virtual wireless sensing, with photonics. It is important how measuring of CO₂ emissions is embedded, or everything that

supports the safety on the production floor. Special attention should be made to the recommendations and learnings from Made in Europe R&I projects. It is worth examining if metrology related regulations need to be an integral part of evaluation process of R&I project in manufacturing so that outcome of a project also contains recommendations and regulation and standardisation aspects.

• Peter Dröll concluded that the open consultation should take place with a subsequent discussion in the next Steering group.

Partner presentations on metrology needs

- Peter Dröll thanked members of the Steering committee for having sent contributions in advance. This included more than 64 individual topics with needs and a dedicated paper from the scientific community. The objective is now to see how this has already been catered for by the Metrology partnership, to collect the view of the members of the Steering group and see how it can be followed up.
- Maguelonne Chambon presented the EMPIR project and the thematic calls under Industry (2014, 2017 and 2020), Energy-Environment (2016 & 2019), Health: metrology and diverse diseases, dosimetry and radiotherapy, Fundamental: quantum technology (as well as some examples from call 2021&2022 related to input from the Steering group members).
- Peter Dröll asked members how about possible priorities and how to turn it into something EURAMET can deliver. 2024 would be first opportunity.
- The following topics were discussed where members of the Steering group draw the attention to:
 - The energy efficiency part where the focus should also be on **reducing the** energy consumption.
 - **Radiation** where it is also important to table protection of critical infrastructure also considering that the definition of **critical infrastructure** is enlarging.
 - Oceans given that they act like a big sink absorbing up 25 %. This includes the whole measuring thing for oceans including pH measurement, chlorine measurement etc. Cross cutting open issues are also linked to atmosphere stability of different substances (atmospheric chemistry). Also, other gases that has big green house potential. Another thing is about microplastics.
 - Need for a **better regulation** in manufacturing industry.
 - Food safety.
 - Cross cutting topics include 1. Need for reproducibility, 2. AI, 3. Energy efficiency and 4. Citizen science is a cross cutting issue.
- Peter Dröll summarised the gaps highlighting in particular oceans micro plastics and energy efficiency. To make it "digestible" a standalone document should be created summarising according to the call structure in the next years. One section could be on cross cutting issues (AI). Such a document should take account of what the EC has received as written contributions and what we have heard. EURAMET are kindly volunteered to provide such a report.
- Jörn Sterner outlined three options:
 - We take what we have here and communicate it internally in the Metrology Partnership community.
 - We make it a public document which need to be edited and describing the framework to make it understandable.

- We encourage steering group members to communicate directly with the European Metrology Networks (EMNs) which are responsible. The priorities should be translated into metrology project calls.
- Maria Luisa Rastello reminded that a lot of useful materials exist in the strategic research agendas of the EMIs. The steering group could maybe be guided on this material trying to analyse the most sensitive points.
- Dietrich Imkamp informed that a lot of interesting content is coming out from the European metrology committee network for advanced manufacturing. It is necessary to find a way to organise the different requests to identify cross cutting topics. First to identify the cross-cutting sectors from NMIs and then make the correlation table to align priorities.
- Cornelia Amihalachioae thanked for incorporating the EFFRA contribution and underlined the importance to reflect cross cutting sectors such as AI and energy consumption. In addition, EFFRA have also provided general needs in R&I in metrology. What is important is that steering committee provides cross cutting and synergy-based recommendations.
- Peter concluded that we should see how far we can come with the current compilation. We should try to make a clearer relation between what is already in strategic agenda and what are emerging cross cutting issues so that it can feed into WP 24-26. EURAMET will draft a standalone document summarising and structuring according to the call the structure in the next years. We should come back at the next meeting in October 2023.

Draft Work Programmes 2024 - state of play and discussion

- Dagmar Auerbach and Maguelonne Chambon outlined the draft plans according to which in 2024 there will be calls on "Green deal", "Digital transformation", "pre-and co-normative" and "Metrology for research potential". The Green deal topic is very broad and input is needed on digital transformation. For Pre- and conormative ideas would also be welcome.
- The Steering Group is asked to provide written comments until end April to be able to submit to the partnership committee meeting for final approval at the end of May.
- Some internal scoping inside the EC (across EC services) could also be done with particular emphasis on the regulatory/normative call, in order to ensure more proposals.

AOB

Date for the next meeting

• 10 October 2023, morning preferred due to travel issues from several partners.