

A large, abstract blue graphic on the left side of the slide. It features several overlapping, curved shapes in various shades of blue, creating a sense of motion and depth. A small solid blue circle is positioned to the left of the main title text.

The European Partnership on Metrology : Opportunities for standardization to collaborate on research projects in 2025

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Chairperson**

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18 September 2024

European Partnership on Metrology



Objective: To create, by 2030, a world-class sustainable and coordinated system for metrology at European.



- A robust, **sustainable, excellent and coordinated** European Metrology Infrastructure
- To ensure state-of-the-art metrology R&D taken up by **innovators**
- **To increase impact** of metrology (industry, Society..)
- Address **European and global challenges**, including:
 - European Green Deal
 - UN Sustainable Development Goals
 - The Digital transition, European Industry strategy, KET
 - Better Health for All

Run from
2021 to 2027

Further information: <https://www.euramet.org/partnership>

European Partnership on Metrology

**METROLOGY
PARTNERSHIP**



- Article 185 TFEU
- Implemented by EURAMET, the European Association of National Metrology Institutes
- General Objectives:
 - to develop a sustainable, excellent and coordinated metrology system at European level
 - to ensure that state-of-the-art metrology capabilities are taken up by ecosystems
 - to increase the impact of metrology on societal challenges
- Specific objectives include:
 - to develop new research capabilities which are built within the framework of new European metrology networks
 - to support the use and adoption of the new metrology capabilities in key emerging and enabling technologies
 - to unleash the potential of metrology among end users, including SMEs and industrial stakeholders

EPM Calls 2021-2027

2021	Green Deal - Normative
2022	Health, Integrated European Metrology, Digital transformation, Normative , RPot
2023	Fundamental, Industry, Normative , Rpot, CSA-CBC
2024	Green Deal, Digitalisation, Normative , CSA (Com&Impact support)
2025	Health, Integrated European Metrology, Regulation
2026	Fundamental, Industry, Normative ,.....
2027	Green Deal, Normative

- **A dedicate call only for regulation in 2025**
- Some undefined calls in 2026 & 2027

Participant Portal: <https://www.metpart.eu>

EURAMET's ambitions regarding regulation



Support regulation at all levels where metrology is relevant

- **Develop and maintain capabilities** for measurement, testing, conformity assessment, including R&D and human and institutional capacity building
- **Contribute to** technical guides; MID, MDR, BSSR and more
- **Increase influence with European regulators and ministries**
 - Liaise with WELMEC/OIML, EU Commission and their advisory boards, other EU Partnerships, and national governments
 - Develop capabilities for policy advice

Open public consultations on 'Metrology for Regulation'

- [Metrology for radiation protection and Environment Regulation and legal metrology](#) - Monday, 23 October 2023, 9:00 - 12:30 CEST
- [Metrology for Energy Regulation](#) – Monday 24 June 2024, 9:30 - 12:30 CEST.

2 upcoming events

- [Metrology for Health Regulation](#) – Monday, 21 October 2024 – 10:00 - 13:00 CEST
- [Metrology for Food Regulation](#), date to be confirmed

2025 Regulation scope



What is the aim of the REGULATION projects ?

- Should describe **research and development needs for metrology solutions required for regulation, legal metrology, and conformity assessment.**
- Should **address the development of traceable measurement methods or the provision of validated data sets**
- Should address the **metrological background of EU regulation**, either by responding to **documented requirements** or by **exploring possible future regulation.**
- Are encouraged to respond to the challenges related to regulation contributing to the achievement of the Union goals for the twin transition and resiliency of the Union. **Examples of the relevant Union regulatory frameworks include the European Green Deal and the European Climate Law Regulation, the Green Deal Industrial Plan, the Net-Zero Industry Act, the REPowerEU package, the AI Act, and the Critical Raw Materials Act.**
- Can enhance **industry's ability to comply with regulations**, increase competitiveness, and drive innovation across sectors, by developing advanced metrological methods and solutions.
- Should include **representatives from regulators, conformity assessment bodies, industry and standardisation bodies** for their active participation in the projects, specifically to ensure that the project outputs are taken up by regulatory authorities.
- Are welcome to reflect **regulation needs related to pan-European research initiatives or to support other Partnerships under Horizon Europe.**

Source : Draft Call scope “ Metrology support for regulation 2025” – version 1.2

2025 Health Scope (provisional)



- The call on **Metrology for Health** is to support more reliable and efficient diagnostic and therapeutic techniques through metrological research and development. The call also addresses the development of new techniques to improve healthcare at lower cost, to improve patient quality of life, as well as to support the competitiveness of European medical industries and services.
- To enhance the impact of the R&D work and to include world leading expertise, the involvement of the larger health community, such as (academic) hospitals, (medical) universities and centres, medical products and equipment manufacturers, healthcare providers and insurers, decision makers, regulators and patient advocacy groups is expected (including subsidiary services). If appropriate, proposals should address specific demands of standards related to the health field and/or clinical guidelines.
- Healthcare increasingly relies on personalised medicine and monitoring, multi-parametric medical treatments and measurements, medical devices and active implants, applications of nanotechnology, multi-modality imaging data, (big) data analysis, and applications of artificial intelligence (AI) and machine learning.

Health Scope 2025 (provisional)



Topics could include, but are not limited to:

- Metrological methods to ensure efficacy and safety for diagnostics, including remote diagnostics, and therapeutics, also on cell and molecular levels.
- Metrological methods for disease prevention, personalized medicine, and monitoring, including the integration of AI into digital health technologies.
- Procedures, analytical methods, and statistical models to underpin epidemiology and strengthen disease prevention and protection of public health, including preparedness for future pandemics and resilience to medication.
- Metrological methods for digital technologies applied in the health sector, such as in medical devices, (quantitative) image analysis, personalized medicine, and applications of artificial intelligence (AI).
- Metrological methods for advanced (multi-modal) radiotherapy, nanomedicine and theranostics (therapy in combination with diagnostics).
- Quality assurance of test procedures, test kits and vaccines for infectious diseases, other virus- or bacteria-induced diseases, and non-infectious and non-transmissible diseases.
- Metrological methods for drug delivery, microfluidic applications and nanotoxicology, including engineering solutions such as closed-loop therapeutic drug delivery and sensing solution technologies.
- Proposed topics should indicate where metrology makes a difference and should address clear stakeholder needs. To enhance the impact of the R&D work, the involvement of the larger community, such as the European Metrology Networks, as appropriate, is expected.

Role of the standardization bodies in the REGULATION/HEALTH projects



- Role of the ESO - European Standardisation Organisations and Regulators
 - contributing to the definition of programme calls and being a key exploitation route for the project outputs.
 - play a key role in identifying needs for better measurements.
- For all the projects, EURAMET encourages proposals that include representatives from industry, regulators and standardization bodies for their active participation in the projects.
EPM : around 40% of the budget are dedicated to external partners

EPM REGULATION / HEALTH Projects



- Must include at least 3 National Metrology Institutes or Designated Institutes, each from different countries.
- Must be led by a metrologist coordinator or an external organization
- Has a maximum duration of 3 years, can be 2 years
- Expected to include external partners (funded or unfunded): industry, research organizations, standardization, regulators..
- Total budget per project :
 - Regulation Projects : 1,3 M€ maximum with around 30% dedicated to the external partners.
 - Health projects : 2 ,6 M€ maximum with around 35% dedicated to the external partners

What topics in a Regulation Project?



JRPs (Joint Research Projects) are metrology research projects.

Must address topics dealing with **traceable measurements** methods or validated data sets, as for example :

- The development of :
 - traceable measurement methods for measuring parameters
 - a new reference materials in close collaboration with instruments manufacturers
 - a new calibration method
 - metrological improvements of standardized test methods
 - calculation uncertainties
- The determination of all relevant parameters to design an accurate, robust and stable measuring instrument to elaborate a standardization document.

What topics are not relevant in a Regulation JRP?

Topics that:

- do not deal with traceable measurements (not be selected at the first stage)
- do not need research (for example restricted to a simple interlaboratory survey)
- address specific needs of a single industrial (JRPs are collaborative research project)
- are limited to a national concern (JRPs are expected to have a European dimension)
- are urgent and need to be finalized within 3 years : the EMP process required 18 months between the knowledge of the initial problem (PRT) and the start of JRP work (not suitable for some industrial users). The projects selected in the EPM Calls 2025 will start at beginning 2026.



EPM Calls Process

CEN and CENELEC TCs can submit a metrology research need that assist their standardisation and can be taken up in a PRT

- Input from CEN-CENELEC through STAIR EMPIR

- Stage 1 : Submission of ideas
PRT = Potential Research Topic

- Selection of the best ideas (Euramet)
SRT = Selected Research Topic

- Stage 2 : Call for proposals for the SRT
Consortia write the project proposals

- Review of proposals (referee)

- Start of work

December Year – 1

Jan – Feb

Apr-May

Jun – Sept

Nov

Year+1/1st Semester



Stage 1 : Submission of ideas in a PRT



PRT Template

- Anyone can submit a **Potential Research Topic (PRT)**
- **PRT Template : 5 pages maximum** : the submitters, the scientific objectives, the stakeholder needs and the potential impact of the proposed research.
- **What helps the selection of the PRT :**
 - Early discussion between metrologist and standardisation experts
 - CEN-CENELEC co-authoring the PRT
 - Need from the CEN STAIR consultation
 - 3 metrology institutes with a potential budget.
- It does not imply any commitment of submitters even when the PRT is selected.
- **Call 2025 : PRT to be submitted by XX February 2025**

European Partnership on Metrology¶
Potential Research Topic¶

¶

**European Partnership on Metrology¶
Potential Research Topic¶**

¶

<Type title of Potential Research Topic here>¶

¶

¶

*** A. -> KEY DATA FOR THIS PRT¶**

*** A.1. -> Targeted Programme¶**

Type the Targeted Programme and the topic classification here.¶

¶

*** A.2. -> Details of submitter¶**

¶	Name¶	Organisation / Affiliation¶	Country¶
Name of Submitter ¶	XXXXXXXXXXXXXXXXXXXX¶	¶	¶

¶

*** A.3. -> Optional details of co-authors¶**

Co-author¶	Name¶	Organisation / Affiliation¶	Country¶
1¶	XXXXXXXXXXXXXXXXXXXX¶	¶	¶
2¶	¶	¶	¶
3¶	¶	¶	¶
4¶	¶	¶	¶
5¶	¶	¶	¶
6¶	¶	¶	¶
7¶	¶	¶	¶
8¶	¶	¶	¶

¶

Note: Anyone named in this section must have given explicit permission to the submitter for their name to be included in support of this submission. EURAMET may attempt to contact anyone named here.¶

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Page:1 of 4¶

Template:2 PRT-template-v1.1.docx¶

Stage 2 : Preparing the project proposal



- **Selected Research Topics are public – Include the objectives**
- Forming the consortium, writing and costing the proposal
- Partners and Stakeholders decide how much they want to be involved and contribute to the works :
 - Have valid contributions and deliver tasks that can be funded.
Standardization representatives can be leaders of the impact Work Package. Funded and unfunded partners sign an agreement with EURAMET.
 - Offer guidance/support without any tasks to deliver and don't sign an agreement (collaborator or member of the stakeholder group).
- The standardisation group generally provides a letter of support joined to the project proposal to demonstrate the support of the standardisation.
- *Call 2025 : JRP proposals to be submitted by XX -XX 2025.*

What is STAIR EMPIR?



EURAMET considers it important to get some potential needs from industries and society via the standardisation organisations.



To enable that discussion, the common platform STAIR EMPIR (STAndards Innovation & Research) between EURAMET and CEN-CENELEC was created.



Since 2014, via this platform, CEN/CENELEC has consulted its Technical Committees about the emerging research and measurement needs related to standardization and has collected around 15 needs each year.



In addition, metrologists contribute to many standardisation committees on national, European and international level. They are in the best position to identify measurement needs that can generate normative projects.



The research needs coming from the standardization and collected by STAIR EMPIR are considered by the metrology community to develop normative projects.

This process will be continued in the Partnership calls.

How can standardisation submit research needs for the 2025 EPM call?



- Each year, all CEN and CENELEC TC/SCs are invited to submit their needs for metrology research to STAIR EMPIR.

Sept 2024: an email sent by CEN STAIR to all CEN and CENELEC TC/SCs. The Response Form has to be sent to metrology@cencenelec.eu by 13 December 2024.

Response form is available at <https://www.cencenelec.eu/get-involved/research-and-innovation/collaboration-agreements/standards-metrology/>

- From now, it is recommended to have early exchanges between TC/WG and metrology experts to ensure to collect relevant metrology research topics and a higher quality of the PRT :
 - *Discuss with metrology institutes involved in your TC/WG*
 - *Contact STAIR EMPIR to organize an exchange with EURAMET experts.*
- Standardisation needs are published on EURAMET website in January for a wider dissemination.

How can standardisation submit research needs for the 2025 EPM call?



RESPONSE FORM for Standardisation groups

All standardization needs will not result in a PRT :

- depending on the metrology institutes interested
- at least 3 for the JRP- their internal strategy,
- their budget....



10-September-2024



RESPONSE FORM for Standardisation groups

Objective: to collect standardization needs and suggestions to develop research projects in testing and measurements for the upcoming European Partnership on Metrology+ (EPM) calls in 2025

In the frame of the cooperation agreement between CEN-CENELEC and EURAMET, CEN and CENELEC have been invited by the EURAMET Management to put forward their testing and measurement needs in research for consideration by metrology institutes for future calls under EPM.

Relevant technical groups (sector fora, advisory boards, coordination groups, TCs, WGs...) are invited to contribute with:

- a short introduction or an overview paper of their unaddressed standardization needs for testing and measurement, and
- a contact person (secretary, chair, convenor, liaison officer, etc.) whom proposers for the Potential Research Topics can contact.

by using this Response Form and send it to CCMC at: euramet@cencenelec.eu

Deadline for the consultation: 13-December-2024

Source of the identified need* (identification of European or International standardization TC, WG, or other source, incl. title)	<input type="checkbox"/>
European entity responsible for submission of the need	CEN/CLC/TC #, or National Standardization Organization Title
Person that can be contacted for more detail	First name and family name E-mail Telephone Country
Title	Title and short scope/description of the need as such
Unaddressed need	Short description of the need as such
Further explanation of need* (TC business plan, road map, formal decision, work item, etc.)	Further explanation on the need, why it shall be filled and why specifically related to standard Estimated time frame that need shall be fulfilled
(if applicable) Current or planned Regulation requiring the metrology research	<input type="checkbox"/>
Proof of the need by the TC/SC	Indication by the standardization group of its support to use the effective research result is strongly recommended. Indicate a decision or attached minutes that underline that support. <input type="checkbox"/> Yes <input type="checkbox"/> No
Enclosures	<input type="checkbox"/> Yes <input type="checkbox"/> No

*See more information at: [Standards and Metrology](#) and [Metrology Partnership website](#)

This year's opportunity - recap



- Submission of metrology research needs by standardisation by 13 December 2024.
- Recommended prior discussion between metrology researchers and standardizers to qualify relevant topics.
- Contacts at CEN-CENELEC :
 - ❑ Luc Van den Berghe (CCMC) : lvandenberghe@cencenelec.eu
 - ❑ Sebastian Vogel (CCMC) : SVogel@cencenelec.eu
- Contacts at EURAMET:
 - ❑ Eveline Domini : Eveline.domini@lne.fr



More information:

EURAMET Website :

- <https://www.euramet.org/>
- [EUROPEAN PARTNERSHIP ON METROLOGY](#)

PARTICIPANT PORTAL

Metrology Partnership website - the portal for participants and applications:

<https://www.metpart.eu/>