



Open Consultation on Metrology for Semiconductor Technologies

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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



Budget Ambition – 690 M€

- 390 M€ from Member States
- 300 M€ EC funding
- 23 countries (hope more...)

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

Metrology Partnership Call topics and schedule



- 2021 Green Deal
- Health, Integrated European Metrology, Digitalisation
- 2023 Fundamental, Industry
- 2024 Green Deal, Digitalisation
- Health, Integrated European Metrology
- 2026 Fundamental, Industry
- 2027 Green Deal





- Normative (& regulation) each year
- Research Potential (CB) the first 5 years
- *"Integrated European Metrology"* = SI development with a focus on joint capabilities and infrastructures



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

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Examples of joint research projects on Industry



- Metrology for manufacturing 3D stacked integrated circuits (3DStack -14IND07)
- Enhancing process efficiency through improved temperature measurement 2 (EMPRESS 2-17IND04)
- Microwave metrology for superconducting quantum circuits (SuperQuant 20FUN07)
- Traceability of localised functional properties of nanostructures with high speed SPM (MetExSPM-20IND18)
- Memristive devices as quantum standard for nanometrology (MEMQuD 20FUN06)
- Electrical nanoscale metrology in industry (Elena 20IND12)

Browse through our joint research projects https://www.euramet.org/research-innovation/search-research-projects/

Examples of Metrology Impact: https://www.euramet.org/metrology-for-societys-challenges/

European Metrology Networks



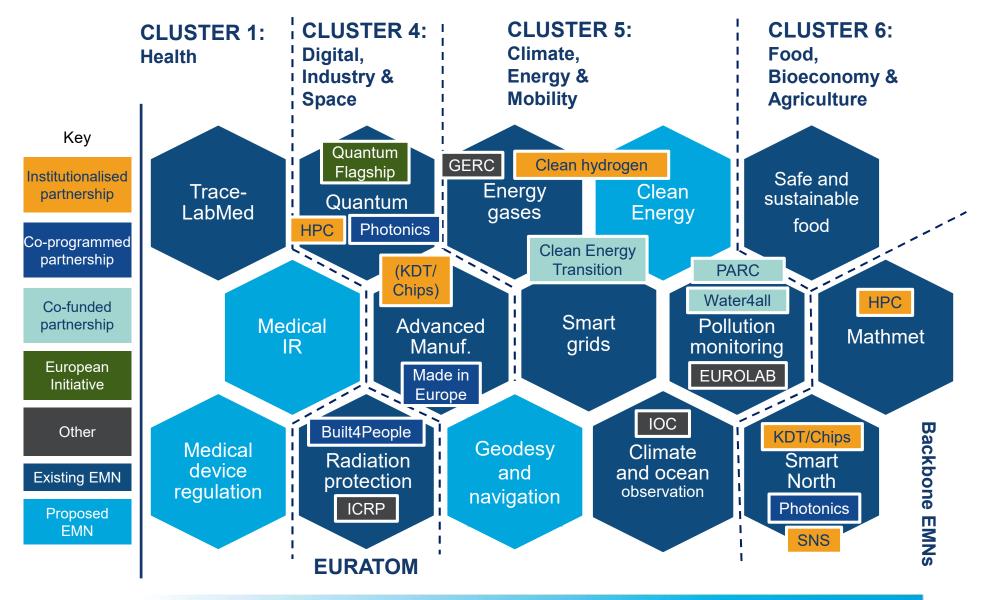
Objective: Create sustainable structures in areas of strategic importance for the future of European metrology



The Networks...

- cover areas of major strategic importance, with a European dimension
- establish close links with a wider **stakeholder community**, including other European Partnerships
- develop and coordinate a **common metrology strategy & infrastructure** to support innovation, public policy, and regulation (develop SA's and SRA's)
- Complement the work of the Technical Committees, which govern the CIPM MRA processes under the Metre Convention

Established EMN Liaisons with other European Partnerships & Initiatives





Thank you for your attention