

The R&D programmes G16.11

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EURAMET GA 2022 – Plenary session

Research metrology programmes



CREATING IMPACT BY ADVANCING MEASUREMENT SCIENCE

EURAMET's European Metrology Research Programmes (EMRP and EMPIR) are fostering international collaboration, driving research excellence, addressing society's grand challenges, including health, energy and the environment, and contributing to Europe's economic turnover



<https://www.euramet.org/metrology-for-societys-challenges/>

Research metrology programmes

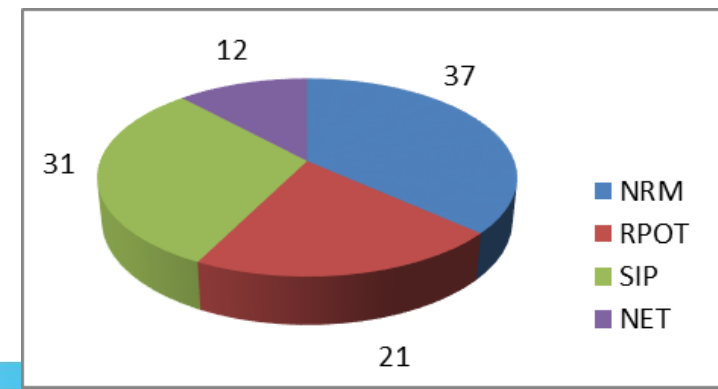


Achievements: 12 years of calls. EMRP fully completed (2009 – 2013). EMPIR calls finalized (2014-2020); last JRPs to be ended by 2024. One billion of euros invested (500 M€ by EC, 500 M€ by MS).
Implementation by EURAMET

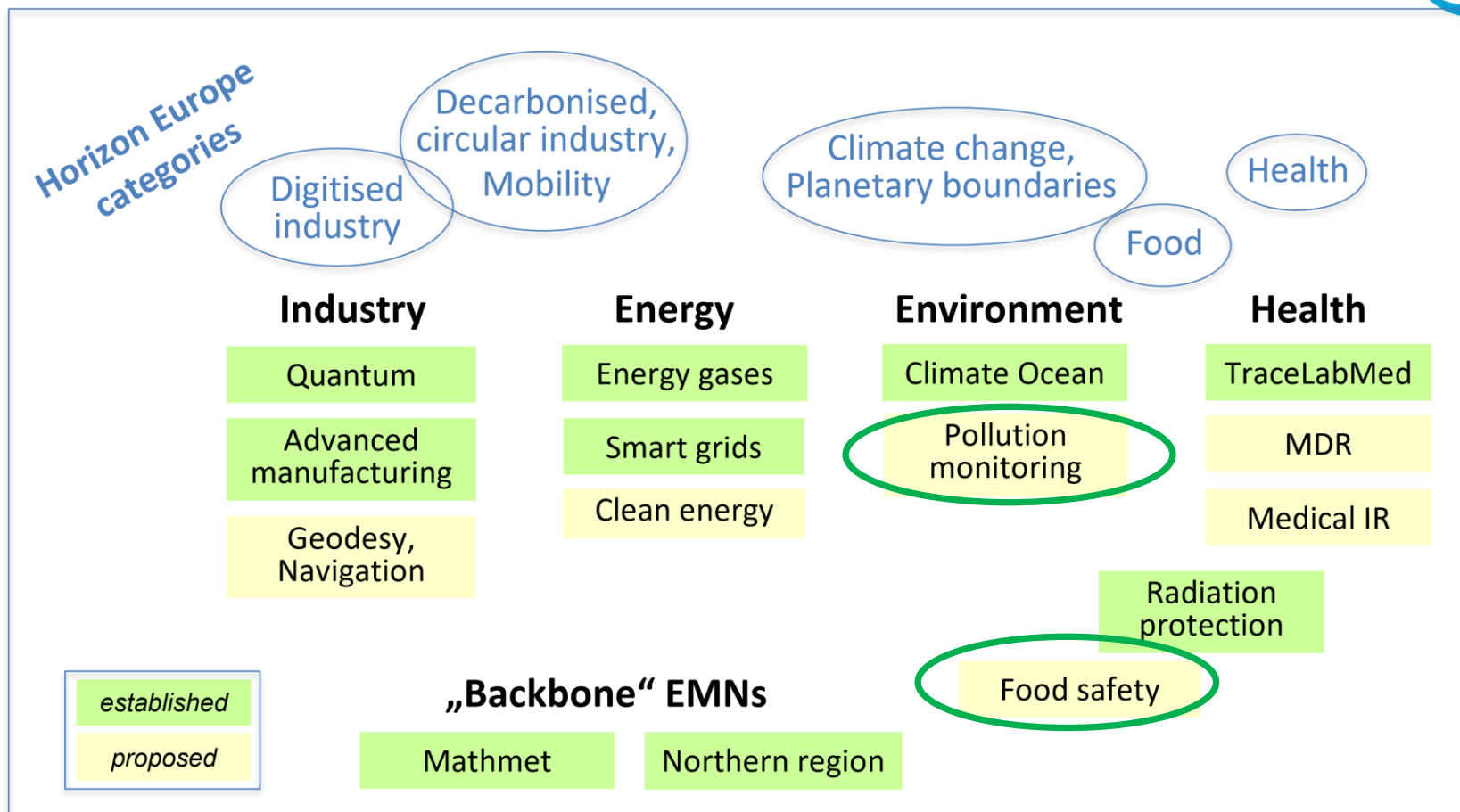
- 20 to 28 European countries involved
- around 380 joint research projects (JRPs) implemented
- topics
 - grand challenges : health, environment, energy
 - international system of units (SI) realization and dissemination
 - new technologies and fundamental
 - normative
 - capacity building RD projects
- co-funded by EURAMET Member States and EC
- Academia, universities, industries in JRPs



- 236 projects implemented (more than 70 not yet finalised).
 - great involvement of industries, universities and academia
 - implementation of a joint platform CEN/CENELEC – EURAMET for normative needs (STAIR-EMPIR)
 - ➔ 37 NRM projects
 - ➔ more than 1700 contributions to SDO committees, WGs, etc.
 - preparation of the future of EURAMET with creation of EMNs.
 - ➔ 12 NET projects
 - great involvement of industries, universities and academia
 - to support those countries that have emerging metrology research needs
 - ➔ 21 RPoT projects
 - to boost KT to industry
 - ➔ 21 SIP projects



European Metrology Networks



- consultation of stakeholders to better answer to metrology needs



- to develop sustainable and more transverse metrology activities at horizon 2030

Horizon Europe (2021 – 2027)



HORIZON EUROPE

EPM

SPECIFIC PROGRAMME: EUROPEAN DEFENCE FUND

*Exclusive focus on
defence research
& development*

Research
actions

Development
actions

SPECIFIC PROGRAMME IMPLEMENTING HORIZON EUROPE & EIT*

Exclusive focus on civil applications



Pillar I EXCELLENT SCIENCE

European Research Council

Marie Skłodowska-Curie

Research Infrastructures

Partnerships



Pillar II GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS

Clusters

- Health
- Culture, Creativity & Inclusive Society
- Civil Security for Society
- Digital, Industry & Space
- Climate, Energy & Mobility
- Food, Bioeconomy, Natural Resources, Agriculture & Environment

Joint Research Centre



Pillar III INNOVATIVE EUROPE

European Innovation
Council

European Innovation
Ecosystems

European Institute of
Innovation & Technology*

WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation & spreading excellence

Reforming & Enhancing the European R&I system

The European Partnership on Metrology

General Objectives



- (a) to develop a **sustainable, excellent and coordinated metrology system** at European level, thereby helping to bridge the investment gap between Europe and its global competitors
- (b) to ensure that **state-of-the-art metrology capabilities** are widely taken up by innovators in their ecosystems and beyond
- (a) to increase the impact of metrology on societal challenges in relation to the **implementation of policies, standards and regulations**, inter alia in the digital, economic, industrial and environmental areas, to make them fit for purpose.

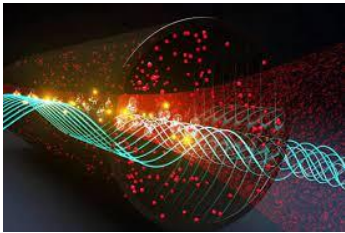


The European Partnership on Metrology

Specific Objectives



- a) to develop, by 2030, new research capabilities which: are built within the framework of new **EMNs** & perform in terms of CMCs at least equal to the leading metrology institutes outside the Participating States
- b) to support, by 2030, sales of **new innovative products and services** through the use and adoption of the new metrology capabilities in key emerging and enabling technologies
- c) to contribute to the **creation and diffusion of high-quality new knowledge**, competences and skills across the EU in the context of lifelong learning and with a view to achieving societal transformation, including through enhancing capability for innovation



The European Partnership on Metrology – Specific Objectives



d) to contribute fully and effectively, by 2030, to the design & implementation of specific **standards and regulations** that underpin public policies addressing societal, economic and environmental challenges



e) to unleash the potential of metrology among end-users, including SMEs & industrial stakeholders, as an instrument which contributes to achieving the **Union goals for the digital and green transitions**

EPM - Current Status



The European Partnership on Metrology approved by the European Parliament and the Council of the European Union, and is in force from the 1st December 2021



Signature of the FFPA
(contract) between EC
and EURAMET
31st of March 2022

Budget Ambition – 665 M€

- 365 M€ from Member States
- 300 M€ EC funding

Official Journal of the European Union

L 427



English edition

Legislation

Volume 64

30 November 2021

Contents

I Legislative acts

DECISIONS

★ Decision (EU) 2021/2084 of the European Parliament and of the Council of 24 November 2021 on the participation of the Union in the European Partnership on Metrology jointly undertaken by several Member States 1

European Partnership on Metrology – year 1



Objective: To create, by 2030, a world-class sustainable and coordinated system on metrology for Europe



Total Budget
~ 690 M€

EPM by now

- decision published in OJEU
- not far from 390 M€ from MS
- 300 M€ from EC
- **23 countries** with official commitment (Beneficiaries or Partners)
 - 3 countries still on discussion (RO, BG, GR)
 - 2 countries with no indication of participation (LV, RS)
 - 2 countries considered as associate partners (CH & UK),
no EC funding

The Horizon Europe logo features the words "Horizon" and "Europe" in a white, sans-serif font, stacked vertically. The text is positioned over a dark blue background that shows a curved horizon line of the Earth, with a bright light source creating a glow effect.

**Horizon
Europe**

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

EPM – Call topics and schedule



2021	Green Deal
2022	Health, Integrated European Metrology, Digitalisation
2023	Fundamental, Industry
2024	Green Deal, Digitalisation
2025	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



European Partnership on Metrology – year 1



- The European Partnership on Metrology (EPM) is in place
- EPM Committee officially exists (1st meeting in 2022)
- 2 different committees: EMPIR & EPM (different attendance)
 - Call 2021 is completed. JRP contracts will be elaborated
 - Call 2022 is on track, SRTs will be published mid-June
 - To design an EPM Logo
 - Still some documents to approve



**The Partnership Committee will face a great number of
challenges**

Support and advices of the Steering Group

