

# Metrology – the science of measurement

Almost every aspect of our life is affected by measurements – from GPS navigation systems to clean running water or medical examination. **Precision** in industrial production and processes, the **reliability** of medical diagnosis, environmental monitoring, **trust in data quality** for regulation and many more applications rely on correct, reproducible and traceable measurements that necessitate a solid metrological underpinning.

# EURAMET e.V. – The gateway to Europe's metrology community

We, the European Association of National Metrology Institutes (EURAMET), are the Regional Metrology Organisation of Europe and the gateway to Europe's integrated metrology community. We serve the promotion of science and research and international co-operation in the fields of metrology like traceability of measurements to the SI units, international recognition of national measurement standards and related Calibration and Measurement Capabilities (CMC) of our members. By collaborating with European and international organisations responsible for quality infrastructure and worldwide metrology institutes, we aim to facilitate scientific knowledge transfer and promoting best practice to policy and industry with regard to the metrological infrastructure and European co-operation.

# Metrology Research in and for Europe



Our Members all over Europe: 37 National Metrology Institutes. Additionally, we have 71 Designated Institutes holding national standards as our Associates.

# What we do – Joint metrology research for Europe

EURAMET's major initiative towards European integration of research in metrology is the European Metrology Research Programme (EMRP) and its predecessor iMERA-Plus. The EMRP is jointly funded by 22 countries and the European Union with a value of 400 million Euros on the basis of Article 185 of the European Treaty. The programme enables European metrology institutes, industry and academia to collaborate on joint research projects within specific fields of metrology. The calls from 2009 to 2012 resulted in 117 projects with more than 650 participations by metrology institutes and 155 unfunded partners.

For the period of 2014 to 2024, the **European Metrology Programme** 

for Innovation and Research

(EMPIR) is proposed as EURAMET's future initiative. Our goal is to continue with the successful metrology research of EMRP and iMERA-Plus. EMPIR will further accelerate innovation and competitiveness and generate data and knowledge to solve society's Grand Challenges. By providing better tools for the scientific community EMPIR will have strategic impact for Europe.

proposed: 500 M €, 1/2 from EU, 7 call cycles

#### **EMPIR A185**

#### EMRP A169/185

63 M€, 1/3 from EU, 1 call

iMERA-plus

400 M €, 1/2 from EU, 5 call cycles

2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024

Time path of EURAMET's major initiatives

# European Metrology Programme for Innovation and Research (EMPIR), 2014–2024

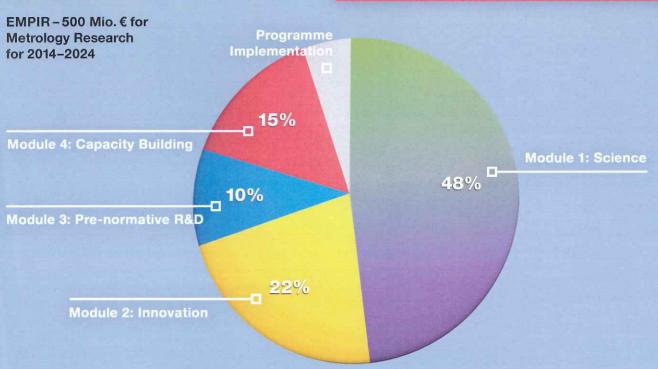
#### **EMPIR** in a nutshell

#### **EMPIR** shall

- be the main programme for European research on metrology.
- be realised on the basis of Article 185 of the European Treaty.
- be jointly implemented by EURAMET's member institutions.
- have an overall financial volume of 500 Mio. €, equally contributed by EURAMET members and the European Union.
- have four modules, each with a clear focus.
- have a duration of 10 years with calls launched between 2014 and 2020.
- **extend the range of activities** beyond research by including innovation related, standardisation and capacity building activities.
- open up for involvement of excellent research partners.

# EMPIR Modules and Budgets





### Contact and further details

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