

EMN for Safe and Sustainable Food

Acting Chair: Andrea M. Rossi



BIPM

•The international organization established by the **Metre Convention**, through which Member States act together on matters related to measurement science and measurement standards

To represent the worldwide measurement community aiming to maximise its uptake and impact

- We liaise with relevant intergovernmental organizations and other international bodies in order to develop opportunities for the application of metrology to global challenges.



To be a centre for scientific and technical collaboration between Member States providing capabilities for international measurement comparisons on a shared-cost basis.

- We coordinate international comparisons of national measurement standards agreed to be of the highest priority.
- We establish and maintain appropriate reference standards for use as the basis of key international comparisons at the highest level and provide selected calibrations from them.



To be the coordinator of the worldwide measurement system ensuring it gives comparable and internationally-accepted measurement results

- We coordinate activities between the NMIs of Member States and the RMOs, including the provision of technical services to support the CIPM MRA and the infrastructure for the development and promotion of the SI.

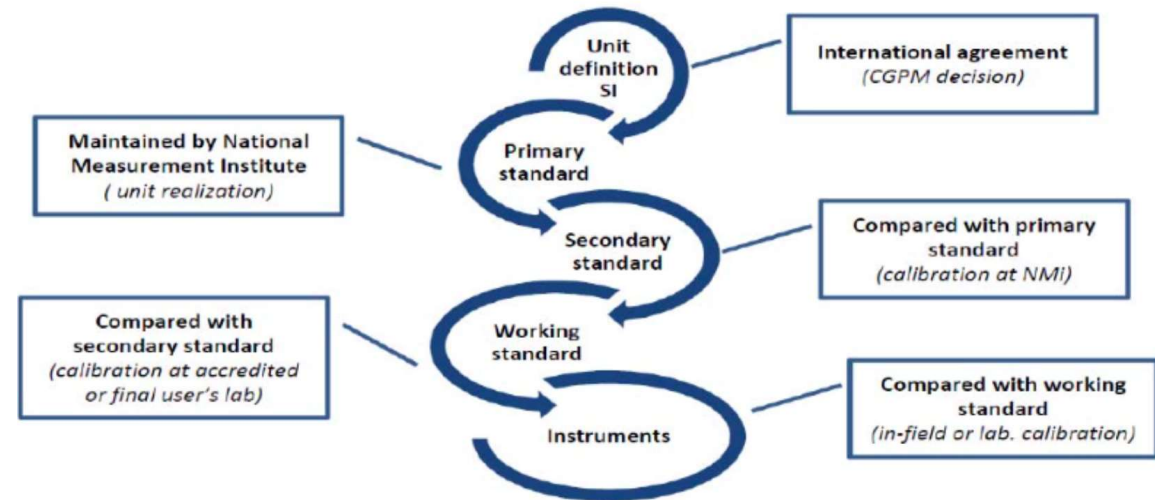
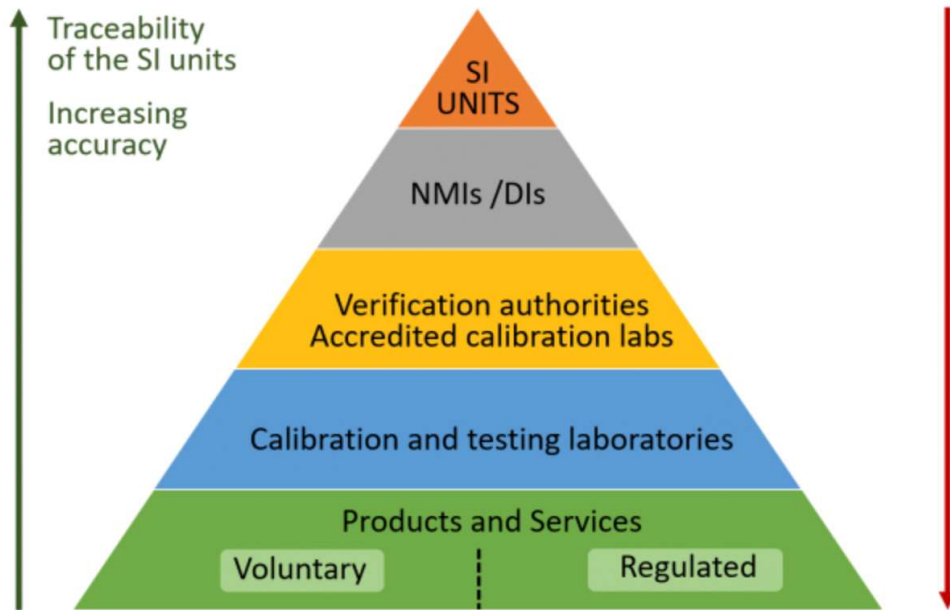
Fulfilling our mission and objectives is underpinned by our work in:

- capacity building, which aims to achieve a global balance between the metrology capabilities in Member States.
- knowledge transfer, which ensures that our work has the greatest impact.

Role of BIPM -CCQM

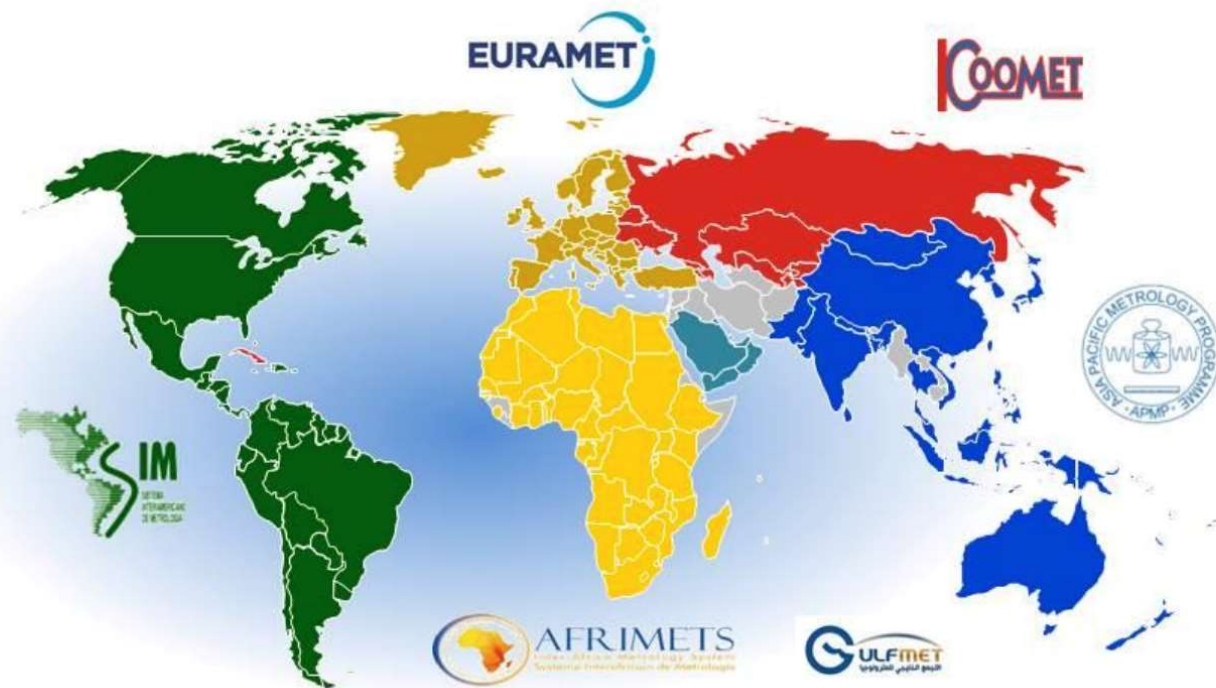
- The CCQM is responsible for developing, improving and documenting the equivalence of national standards (certified reference materials and reference measurement procedures) for chemistry and biology.
- It advises the CIPM on matters related to chemical and biological measurements including advice on the scope of BIPM's scientific programme activities.

Role of NMIs & DIs



RMO EURAMET

EURAMET (European Association of National Metrology Institutes, previously known as EUROMET, the European Collaboration in Measurement Standards) is a collaborative alliance of national [metrological](#) organizations from member states of the [European Union](#) (EU) and of the [European Free Trade Association](#) (EFTA) whose purpose is to achieve higher efficiency by co-ordinating and sharing metrological activities and services.



EMN-FOOD

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EURAMET

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European Metrology Networks / Safe and Sustainable Food

EMN FOR SAFE AND SUSTAINABLE FOOD

The provision of safe, high-quality food is vital for human health, and innovation in the food sector will be needed to protect the environment, ensure sustainability, and respond to future needs.

The European Metrology Network (EMN) for Safe and Sustainable Food will foster collaboration and coordination in the measurement science community to meet metrology needs along the food chain, working within the European Union's Farm to Fork Strategy.

The network will promote a harmonised approach to food measurements, reference materials and standards, which will allow National Metrology Institutes (NMIs) and Designated Institutes (DIs) across Europe to respond to stakeholders and regulations with confidence and quality. This will afford greater protection to citizens and the environment and accelerate the response to emerging and future metrology needs. The EMN aims to assess current capabilities within the network, transfer knowledge between network members, support provisional developments and create a research hub for food safety research.



EMN ACTING CHAIR

[Andrea Mario Rossi](#), INRiM, Italy

MEASUREMENTS SUPPORTING THE GLOBAL FOOD SYSTEM

WEBINAR

World Metrology Day 2023

MEASUREMENTS SUPPORTING THE GLOBAL FOOD SYSTEM

Webinar marking the 2023 World Metrology Day

The online event takes place on **Monday, 15 May 2023 from 14:00 to 16:00 CEST.**

To mark the day, INRiM, Italy's National Metrology Institute, hosts a webinar with a focus on the European Metrology Network for Safe and Sustainable Food, covering topics on this year's theme.

More information and a link to join can be found on the [event page >>](#)



MAY 15, 2023
2:00 - 3:30 pm CET (GMT +2)

MENU

[Safe and Sustainable Food Member Institutes](#)
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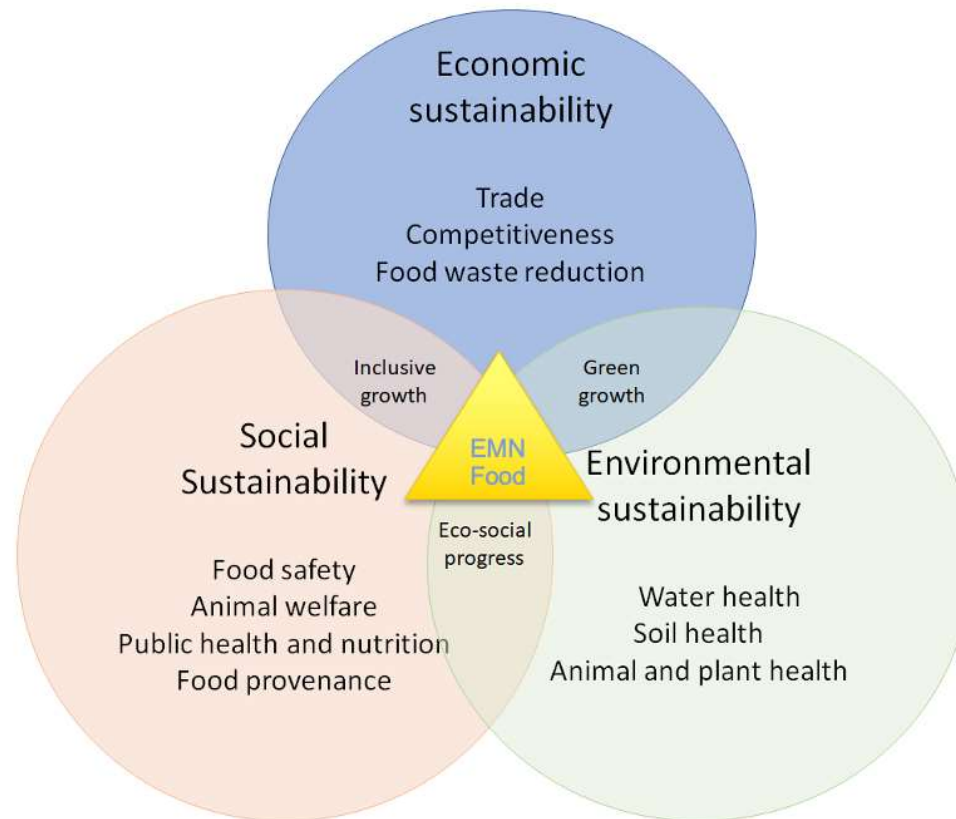
EURAMET EMNS

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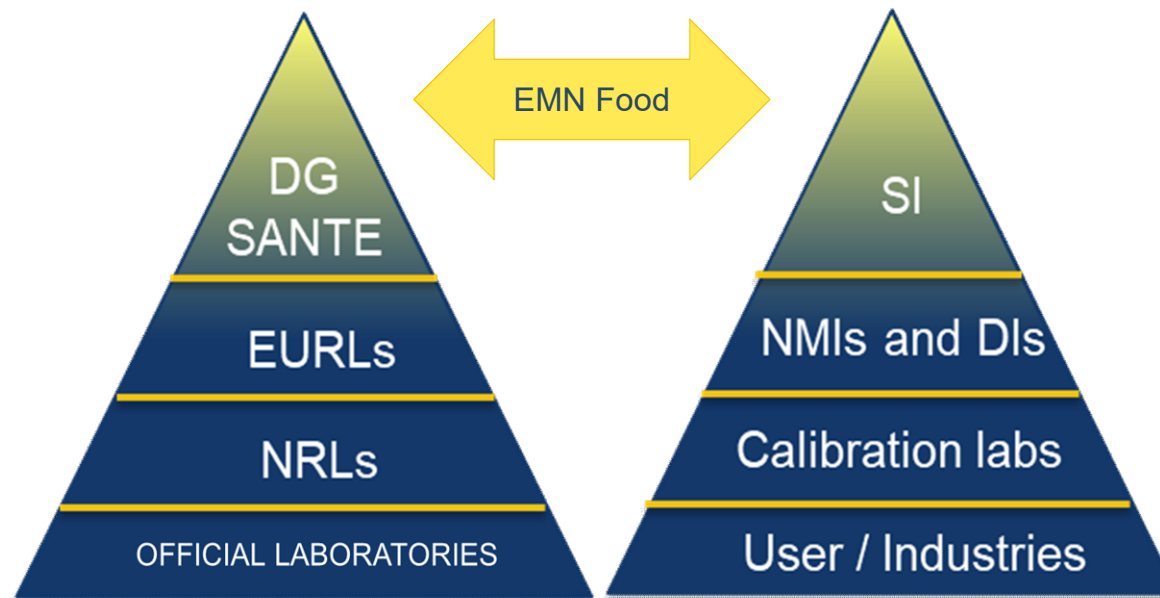
Needs

- Improve the EU food safety system along the food chain
- Support efforts in ensuring traceability to SI units of all food-related measurements



Needs

To underpin harmonization and standardization of food measurement results and support the legislation through metrological traceability



Members and Partners

NMIs and Dis on board so far:



MoU under signature

Strategic Research Agenda

- Current and future European trends for food safety and sustainability
- Policies and Strategies
- Summary of measurement needs
- Stakeholder inputs of measurement needs
- Identification of relevant stakeholders
- Creating synergies with existing initiatives and practices “clustering”

The EMN-Food will cover the food chain from “farm to fork” of relevant topics related to EU priorities, such as “food safety and sustainability”, “circular economy”, “nutrition and health” and “nanotechnology”.

Strategy

For the sustainability of the EMN and to carrying out the work of the SRA, two parallel approaches will be implemented:

- Communication and exploitation plan
- Alignment to smart specialization strategies
- Engagement with key stakeholders
- Collaboration with other European Partnerships and organizations related to food control on the preparation of joint call scopes
- Prompt dissemination of the outputs of the EMN activities to the standardisation processes and to promote the collaboration with other key-players in the areas of interest of the EMN.

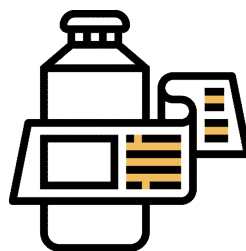
EMN-Food structure

Pillar I



Metrological support for advanced analytical techniques for food safety from farm to fork

Pillar II



Promoting the development of metrologically traceable matrix reference materials for a safe sustainable food and feed system

Pillar III



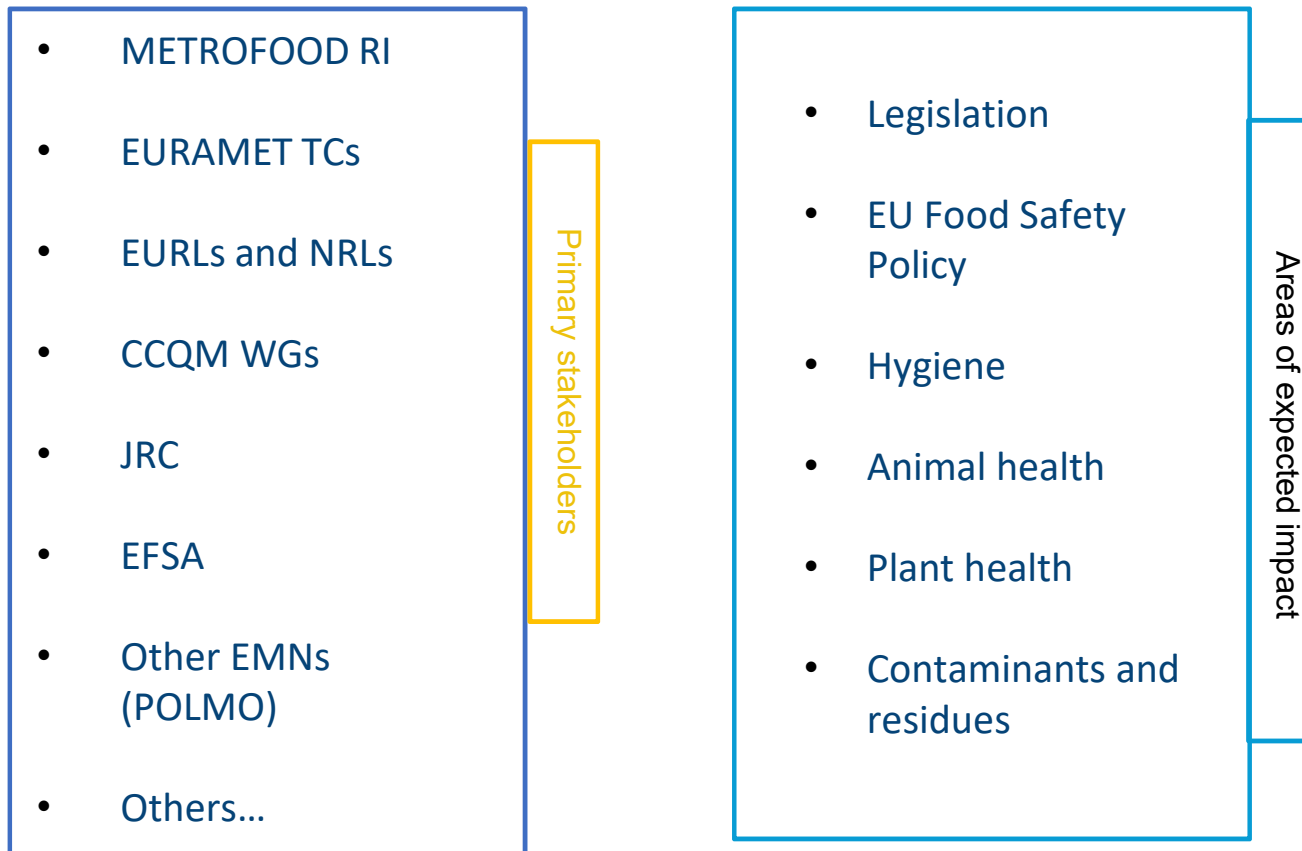
Metrology-based solutions for a sustainable food system

Engagement with stakeholders

2 specific working groups for engagement with stakeholder have been set up:

- Stakeholder mapping: re-prioritise stakeholder activity now the EMN has been formed, to raise awareness of the EMN and engage with the community to understand stakeholder needs and feed into the Strategic Research Agenda
- Survey for stakeholders : to i) understand requirements and priorities for materials, metrology training needs within EU Reference Laboratories; ii) understand needs and priorities for industry.

Engagement with stakeholders

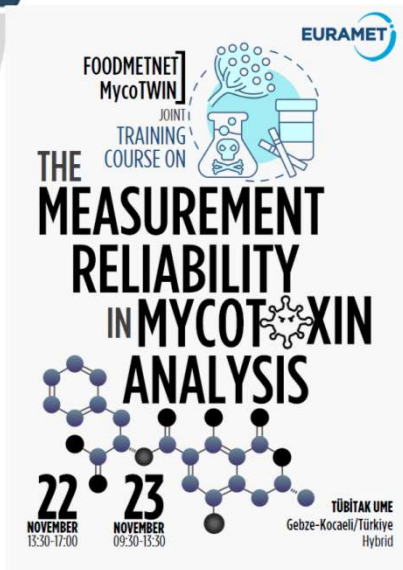


EMN: first steps

Kick-off meeting: held @TUBITAK UME the 23 November 2022

together with the training course and the 18M meeting of 20NET02

Training course: hybrid event; > 250 participants from reference laboratories, private and public institutions, research centers and universities in 48 different countries of the world



Economic Sustainability

PRIMA
PARTNERSHIP FOR RESEARCH AND INNOVATION
IN THE MEDITERRANEAN AREA

EUREKA 
innovation across borders

COST

THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION
HORIZON 2020

The European Partnership
on Metrology **EURAMET**

**Sustainable Blue
Economy Partnership**

Funding opportunities

**Circular
Bio-based
Europe**
Joint Undertaking

WATER4ALL
Water security for the planet

FOOD4EU
Public Funding
and Food Systems
through Research
and Innovation

EIC ACCELERATOR
European Partnership on
Innovative SMEs
Andriotto
FINANCIAL SERVICES

Cooperation opportunities

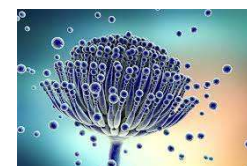
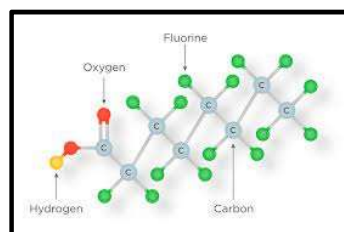
Economic Sustainability

- Tracing Micro and NanoPlastics in Food and Environment
www.plastictrace.eu

(EMP project 21GRD07 PlasticTrace)



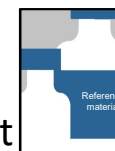
- Food contaminants
(i.e. PFAS, mycotoxins)



Food packaging (www.infrastrutturaimpresa.it)



Method validation via ILC studies and reference materials development



Thanks

**Let's create ONE VOICE FOR EUROPE to drive METROLOGY in the
FOOD SAFETY and SUSTAINABILITY field**

**Acting chairperson of EMN for Safe and Sustainable Food (EMN Food)
&
Food-MetNet JNP Coordinator**

<https://www.euramet.org/european-metrology-networks/safe-and-sustainable-food>

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