

# **EURAMET and the Role of EMNs**

## **EMN Advanced Manufacturing**

**Stakeholder Event  
11 October 2021**

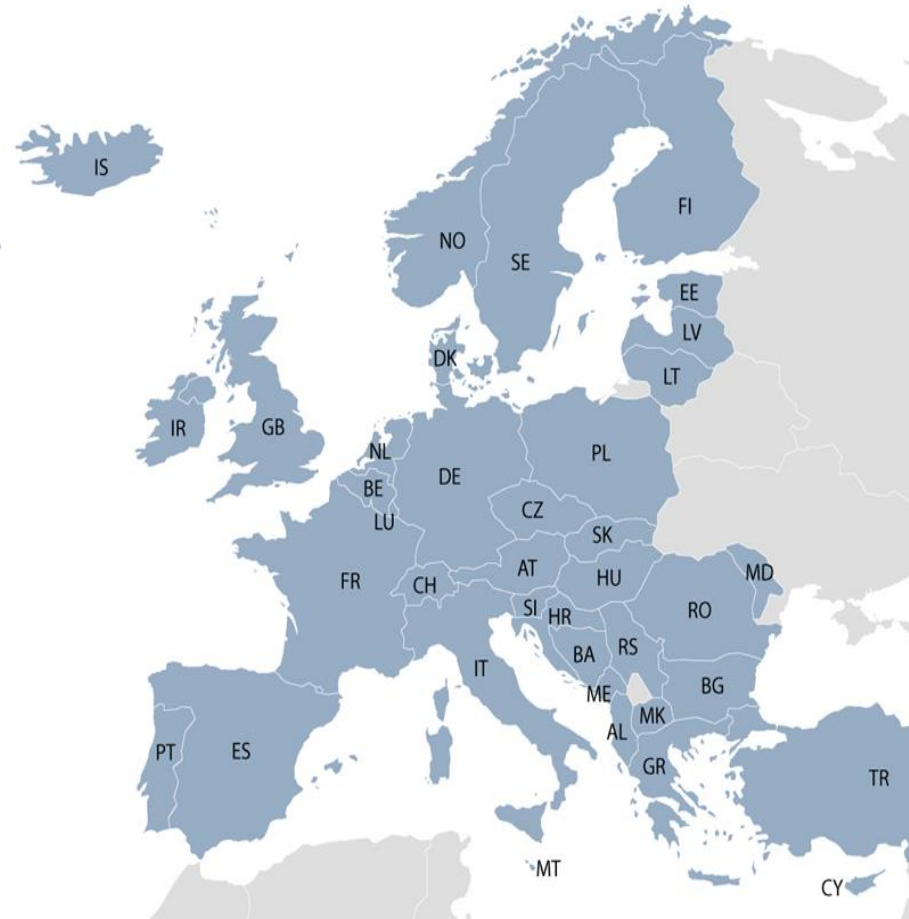
Jörn Stenger  
EURAMET Chairperson

# EURAMET e.V.

The European Association of National Metrology Institutes



- **38 National Metrology Institutes**  
(Members)
- **77 Designated Institutes** (Associates)
- **16 international Liaison Organisations**  
(e.g. IAEA, BIPM)
- Providing stakeholders with **world-leading measurement solutions and standards**
- Securing **world-wide trust** and **acceptance** of measurements, for all aspects of business and society
- Implementing **Metrology Research Programmes**



# Regional Metrology Organisations (RMO)



**RMOs** coordinate the cooperation of **National Metrology Institutes** and **Designated Institutes** in:

- **National Measurement Standards**  
(traceability, international recognition under the Metre Convention)
- Research in metrology
- Capacity building
- Interaction with key stakeholders
- Influence on policy makers
- and others



# Recent major developments



- **EURAMET 2030 Strategy**
- **European Partnership on Metrology**
- **European Metrology Networks (EMN's)**



# Strategic environment



The **EURAMET 2030 strategy** and the **Partnership on Metrology** respond to the strategic priorities Horizon Europe

- Green Deal
- Digital Transformation
- Health

and include

- The new SI with associated technological developments
- Regulation
- Capacity building

# European Partnership on Metrology



- Successor programme to EMPIR
- New strategic objectives
  - Sustainable metrology networks, regulation
- 300 M€ EU contribution
- Seven Call cycles 2021 to 2027
  - Green Deal, Health, Digital Transformation, Fundamental Metrology, Integrated European Metrology, Industry needs, Prenormative, CB

- „Trilogue“ of EU Parliament, Council and Commission finalised
- Formal co-decision expected in autumn
- „ahead-of-contract implementation“ this year

# European Metrology Networks



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

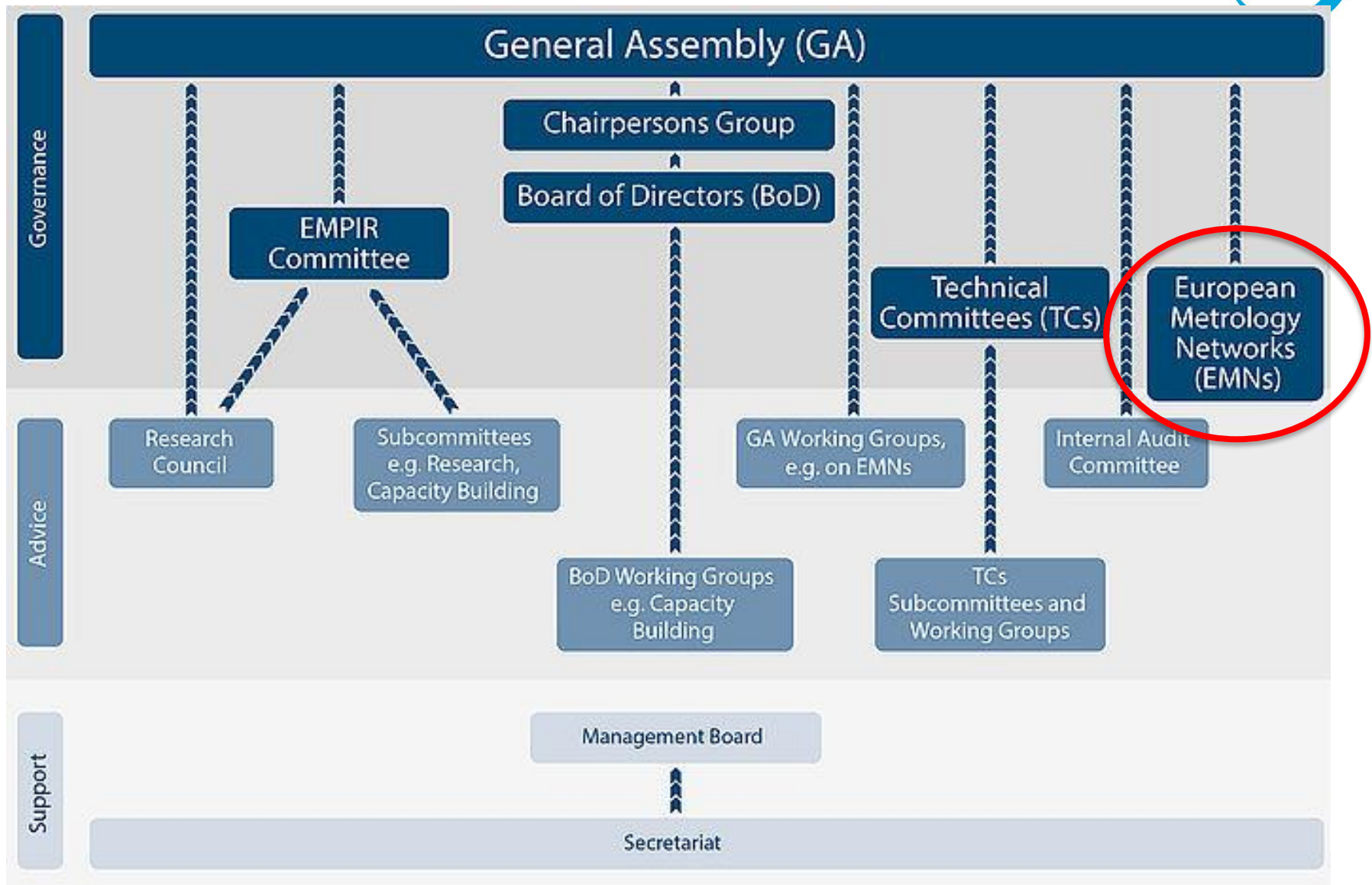


## The Networks...

- cover areas of major strategic importance, with a **European dimension**
- establish close links with a wider **stakeholder community**, including other European Partnerships
- strive for **scientific excellence**
- develop and coordinate a **common metrology strategy & infrastructure** to support innovation, public policy, and regulation



# EMNs are integral part of EURAMET





| Technical Committees                          | Metrology Networks                                                                               |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------|
| Focus on interactions between Euramet members | Focus on interactions with a specific group of stakeholders                                      |
| Govern the MRA processes, link to other RMOs  | Co-ordinate the work of the members to ensure that we make the best use of the limited resources |

Both

- are considered as sustainable structures
- cooperate strongly to mutually benefit from technical expertise and stakeholder engagement

# Approved EMNs



| Title                                   | Chair/Acting Chair     |            |
|-----------------------------------------|------------------------|------------|
| Advanced Manufacturing                  | Harald Bosse (PTB)     | <i>new</i> |
| Climate & Ocean Observation             | Emma Woolliams (NPL)   |            |
| Energy Gases                            | Annarita Baldan (VSL)  |            |
| Mathematics and Statistics              | Markus Bär (PTB)       |            |
| Quantum Technologies                    | Ivo Degiovanni (INRIM) |            |
| Radiation Protection                    | Annette Röttger (PTB)  | <i>new</i> |
| Smart Electricity Grids                 | Gert Rietveld (VSL)    |            |
| Laboratory Medicine                     | Rainer Stosch (PTB)    |            |
| Smart Specialisation in Northern Europe | Jan Johansson (RISE)   |            |

# EMNs considered in 2022/23



| Possible EMNs                               | Contact Person                |
|---------------------------------------------|-------------------------------|
| Medical use of Ionising Radiation           | Valentin Blideanu (LNE)       |
| Clean Energy                                | Fabian Plag (PTB)             |
| Food Safety                                 | Andrea M. Rossi (INRIM)       |
| Pollution monitoring                        | Raphaël Maillard (LNE)        |
| Smart Specialisation in Latin Region        | Carmen Garcia Izquierdo (CEM) |
| Medical device regulation                   | Dominik Prazak (CMI)          |
| Geodesy, Navigating, Timing and Positioning | Sten Bergstrand (RISE)        |

# EMN Landscape

## Thematic categories



Horizon Europe  
categories

Digitised  
industry

Decarbonised,  
circular industry,  
Mobility

Climate change,  
Planetary boundaries

Food

Health

### Industry

Quantum

Advanced  
manufacturing

### Energy

Energy gases

Smart grids

Clean energy

Geodesy,  
Navigation

### Environment

Climate Ocean

Pollution  
monitoring

Radiation protection

Food safety

### Health

TraceLabMed

Medical IR

MDR

Colour code:

*existing*

*proposed  
with JNP*

*proposed  
w/o JNP*

### NMI backbone EMNs

Mathmet

Northern region

# Conclusion



- EURAMET has identified Green Deal and digital transformation as top priorities
- The Metrology Partnership programme aims at benefits for industrial stakeholders (esp. SMEs)
- EMN Advanced Manufacturing is the EMN with the clearest focus on stakeholders from industry (esp. stakeholders on European level)
- EMN Advanced Manufacturing is a key for addressing metrology supporting digital transformation and Green Deal issues of industrial processes and products