

# The European Metrology Network for Pollution Monitoring – EMN POLMO

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The comparability and trueness of measurements are often compromised by the lack of intact traceability chains and appropriate quality controls, for example attained by the use of matrix-matched certified reference materials and participation in interlaboratory comparisons. Noticeable improvements are apprehended after practical demonstrations and scientific discussions on the importance of traceability to the SI with stakeholders and end-users.

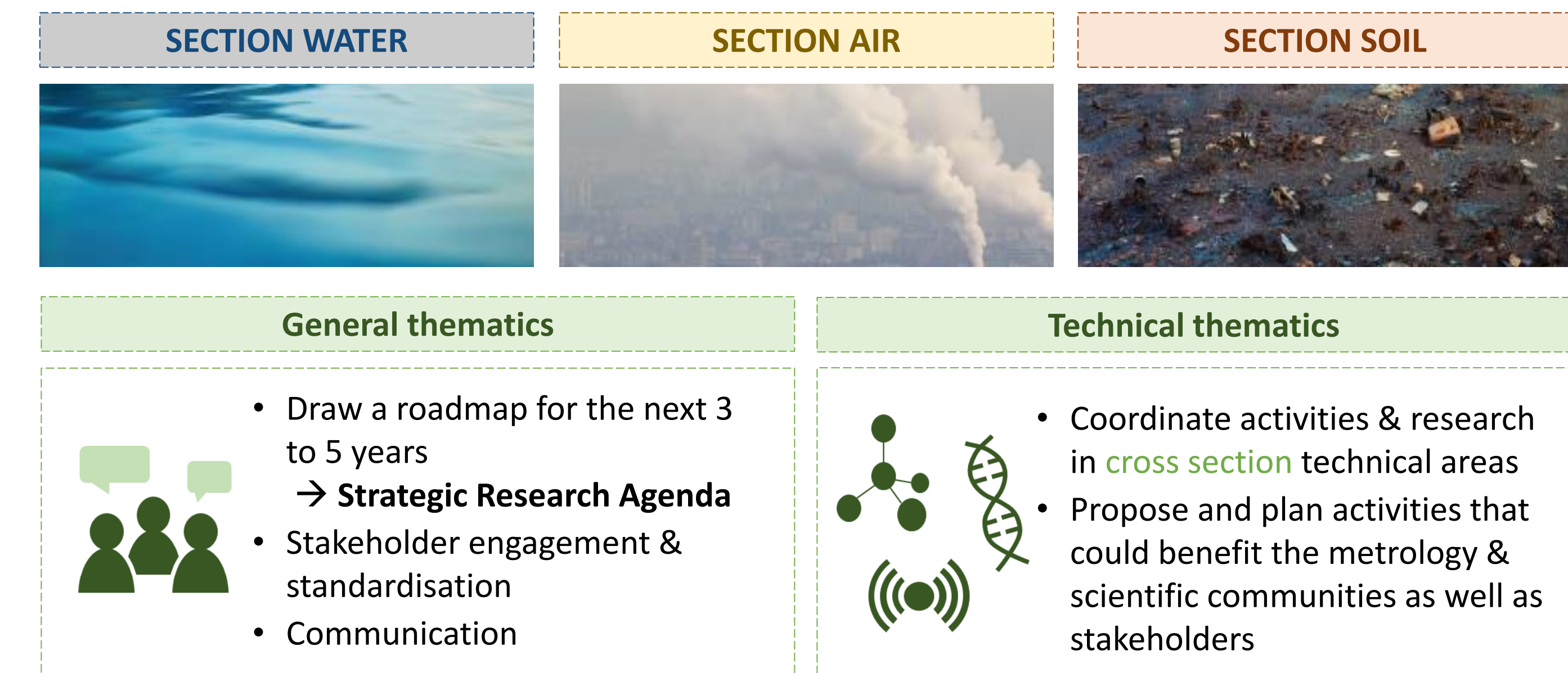
The European Metrology Network for Pollution Monitoring (EMN POLMO) was created in 2022 to provide metrology support to the environmental community and industry involved in the monitoring of variety of pollutants, including chemical pollutants, radionuclides, biological & microbiological, and nano and micro particles, in the three environmental compartments (air, water and soil). Recently, light pollution and noise pollution have been included in the scope of the network.

## EMN POLMO aims at

- Establishing a regular and sustainable dialogue between NMIs/DIs, stakeholders and policy makers
- Coordinating metrology research activities of EMN members in environmental monitoring
- Supporting the improvement of measurement capabilities and networking

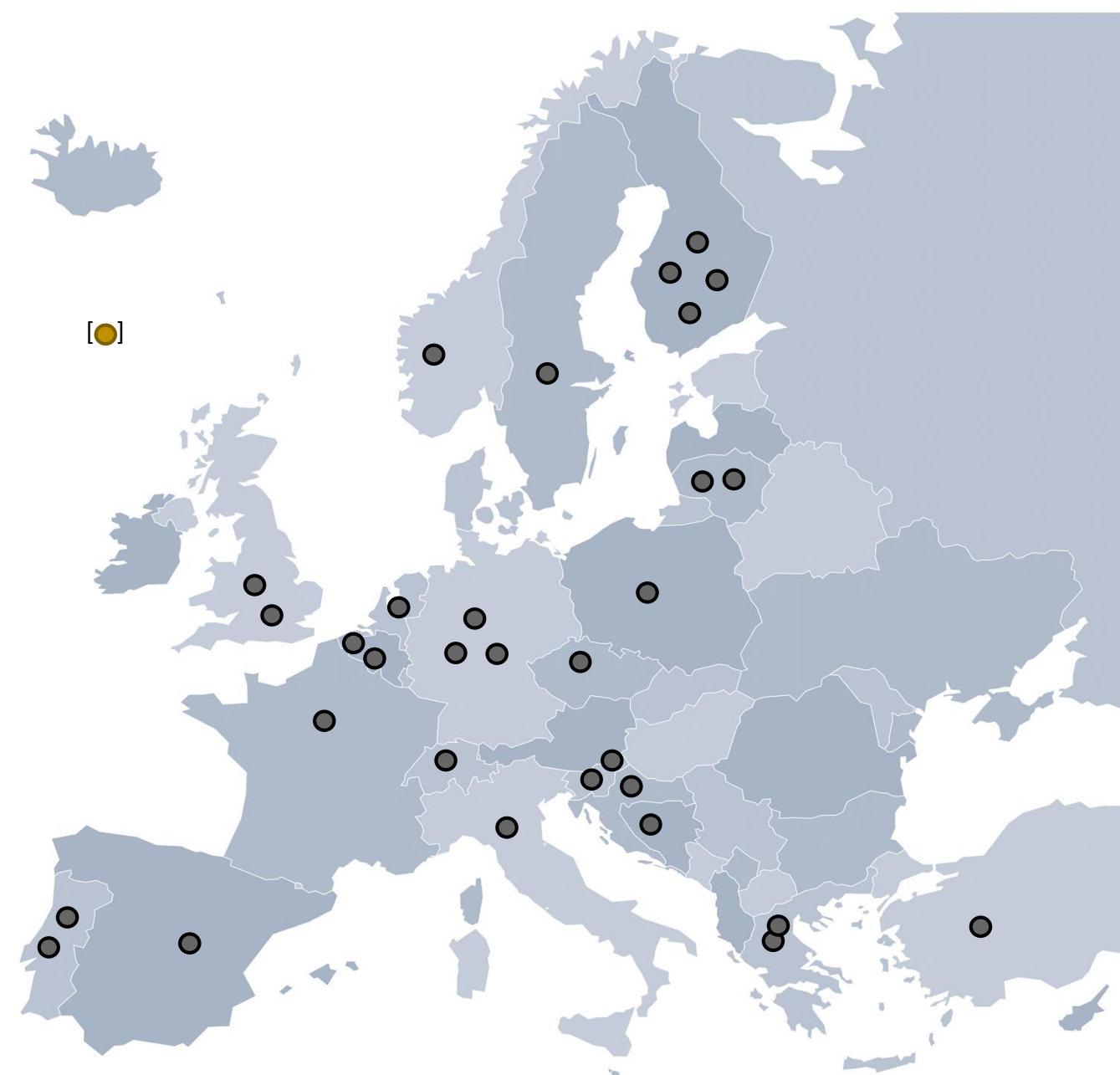


## EMN organisation



## Members

- EMN POLMO approved in June 2022 by EURAMET
- **32 National Metrology Institutes (NMIs) and Designated Institutes (DIs) members**
- **1 awaiting (NIVA (NO))**



## Strategic Research Agenda

The POLMO Strategic Research Agenda (SRA) identifies the key measurement challenges and opportunities in pollution monitoring and sets out a roadmap for future research & development.

### Specific research priorities:

- ☐ Developing and validating **new methods for measuring contaminants of emerging concerns**, which are known or suspected to be **harmful to human health and the environment** but for which regulations have only been established or are still in development
- ☐ Improving the relevance, **accuracy of measurements of existing pollutants**, in order to ensure the **reliability of pollution data**, for informed decisions
- ☐ Developing and validating **new methods for measuring the combined effect of multiple pollutants**, to understand their complex interactions and to assess the overall risk to human health and the environment
- ☐ Developing and validating **new methods for measuring pollutants in the fields in real time**, in order to monitor pollution levels and respond to pollution incidents, particularly in areas difficult to access



### General Task Groups

Plan and coordinate EMN activities with the view of updating regularly the SRA

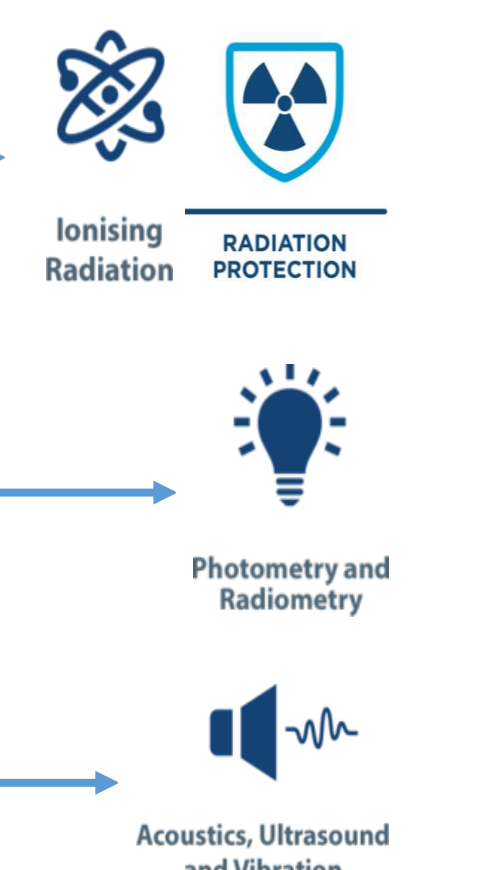
- TG-1. Strategic Research Agenda**
- TG-2. Stakeholder engagement & standardisation**
- TG-3. NMI Capability & smart specialisation**
- TG-4. Communication and impact**



### Technical Task Groups

Coordinate research & development in cross section technical areas and propose and plan activities that could benefit the metrology & scientific communities as well as stakeholders

- TG-5. Radionuclides**
- TG-6. PFAS**
- TG-7. Nano & micro particles**
- TG-8. Sensors**
- TG-9a. Light pollution**
- TG-9b. Noise Pollution**
- TG-10. eDNA**



### First Strategic Research Agenda (September 2024)

### Identification of cross section priorities

