

G16.10 Development of EMNs and new EMNs

General Assembly 2022 - plenary session -

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Convenor GA-wg on EMNs



**ADVANCED
MANUFACTURING**



ENERGY GASES



**QUANTUM
TECHNOLOGIES**



TRACE LAB MED



Smart North



**CLIMATE AND
OCEAN OBSERVATION**



MATHMET



**RADIATION
PROTECTION**



**SMART ELECTRICITY
GRIDS**

The overall objective is to **create sustainable structures in areas of strategic importance for the future of European metrology.**



EMNs...

- cover an area of major strategic importance, with **European dimension**;
- consist of a core network of NMIs/DIs with a **clear commitment** to contribute to the network;
- establish close links to a wider **stakeholder community**;
- strive for **scientific excellence**;
- plan the activities based on a **strategic agenda**;
- establish a **knowledge, technology transfer and promotion plan**;
- plan for **sustainable structures**;
- develop and coordinate **common infrastructure** if needed

Approved EMNs



Title	Chair/Acting Chair	GA-wg Mentor
Advanced Manufacturing (AM)	Harald Bosse (PTB)	Martti Heinonen
Climate and Ocean Observation (COO)	Emma Woolliams (NPL)	Maguelonne Chambon
Energy Gases (EG)	Annarita Baldan (VSL)	Hans Arne Frøystein
Mathematics and Statistics (MM)	Markus Bär (PTB)	Jörn Stenger
Quantum Technologies (QT)	Ivo Degiovanni (INRIM)	Maria Luisa Rastello
Radiation Protection (RP)	Annette Röttger (PTB)	Jörn Stenger
Smart Electricity Grids (SEG)	Gert Rietveld (VSL)	Martti Heinonen
Traceability in Laboratory Medicine (TLM)	Rainer Stosch (PTB)	Jörn Stenger
Smart Specialisation in Northern Europe	Jan Johansson (RISE)	Hans Arne Frøystein

The strategic importance of EMN's keeps on growing under the latest key developments

- **EURAMET 2030 Strategy**

EMN's are needed to reach our objectives

- **Contributions to stakeholder strategies**

EMN's raised expectations from externals

- **Partnership on Metrology**

Success with EMN's is part of the Partnership KPI's

We want and have to deliver

Partnership KPIs relating to EMNs



How to succeed in short:

1. New research capabilities
2. Support sales of new innovative products and services
3. Creation and diffusion of high-quality new knowledge
4. Design and implementation of specific standards and regulations
5. Implement metrology among end-users, including SMEs and industrial stakeholders.

- **NMIs part of an Horizon Europe funding infrastructure:** EMN Quantum facilitated the successful admission of 4 NMIs in the consortium of the Framework Partnership Agreement on Quantum Testing.
- **Bilateral collaboration with other Partnerships:** Energy Gases liaised with European Partnership on Clean Hydrogen and prepared joint research projects
- **More collaboration with high-level stakeholders:** Four EMN Stakeholder Councils exist providing regular exchanges with high-level players like, Siemens, Zeiss, Renishaw, TNO, GERG, Quantum Flagship, and many more...
- **More formal liaisons with EURAMET through EMNs:**
 - EMN RadProt: International Committee on Radiological Protection
 - EMN Energy Gases: GERG (European Gas Research Group)

More info in
the EMN
Report 2022

Supporting joint research in 2022



Number of brainstorming meetings & facilitators	PRTs and SRTs
Integrated European Metrology Call	
Two by EMN Energy Gases with Hydrogen Europe & HE Research	3 PRTs with 1 SRT
Two by Smart Grids with TC-EM	6 PRTs with 3 SRTs
Health Call	
Two meetings by TraceLabMed	9 PRTs with 8 SRTs
One meeting by Mathmet	4 PRTs with 3 SRTs
Digital Transformation Call	
One meeting by TC-IM M4D with AdvManu and Mathmet	4 PRTs with 3 SRTs
Normative	
Smart Grids and TC-EM	4 PRTs with 3 SRTs

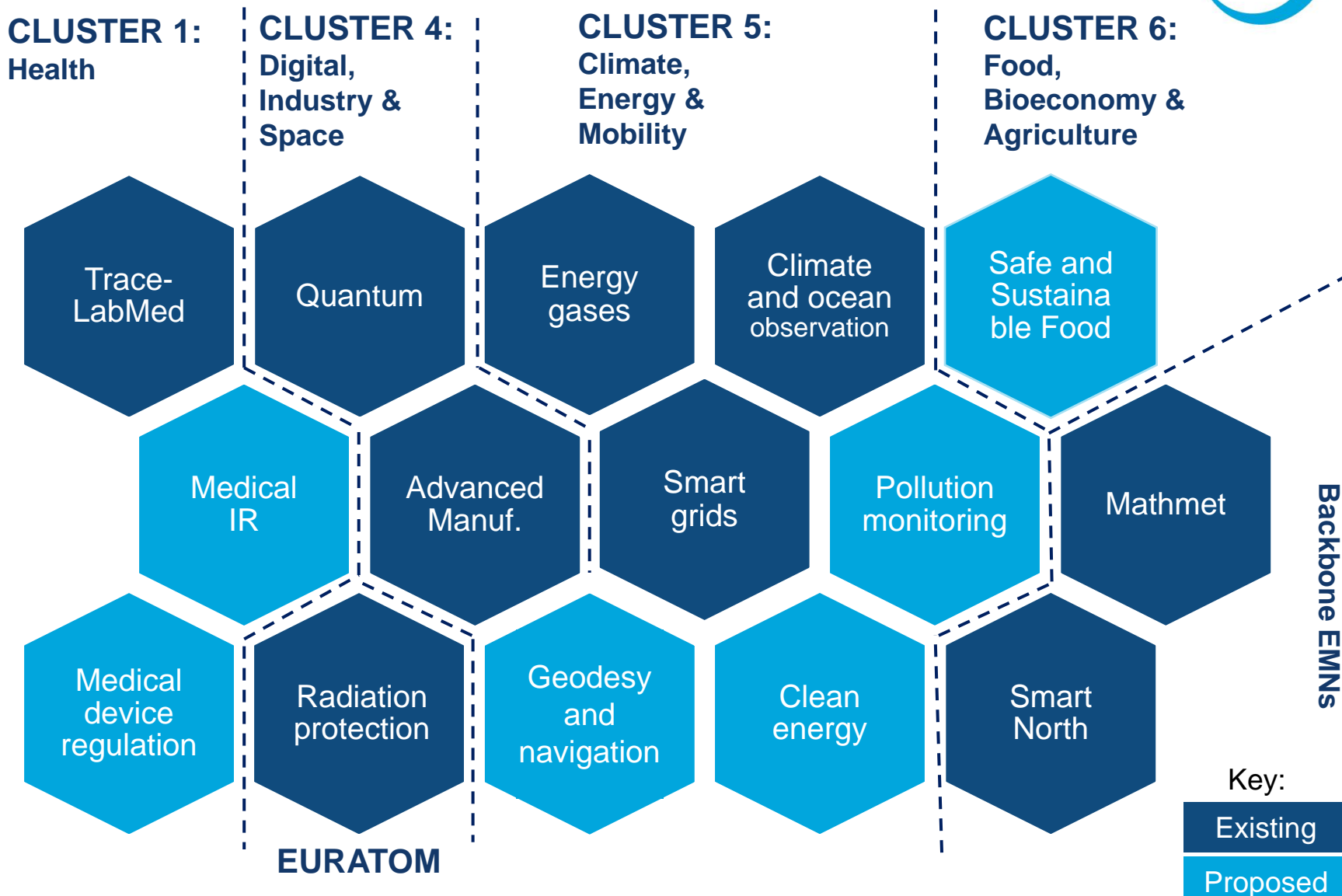
Any many more PRTs, e.g for RPOT, etc.

EMNs considered in 2022/23

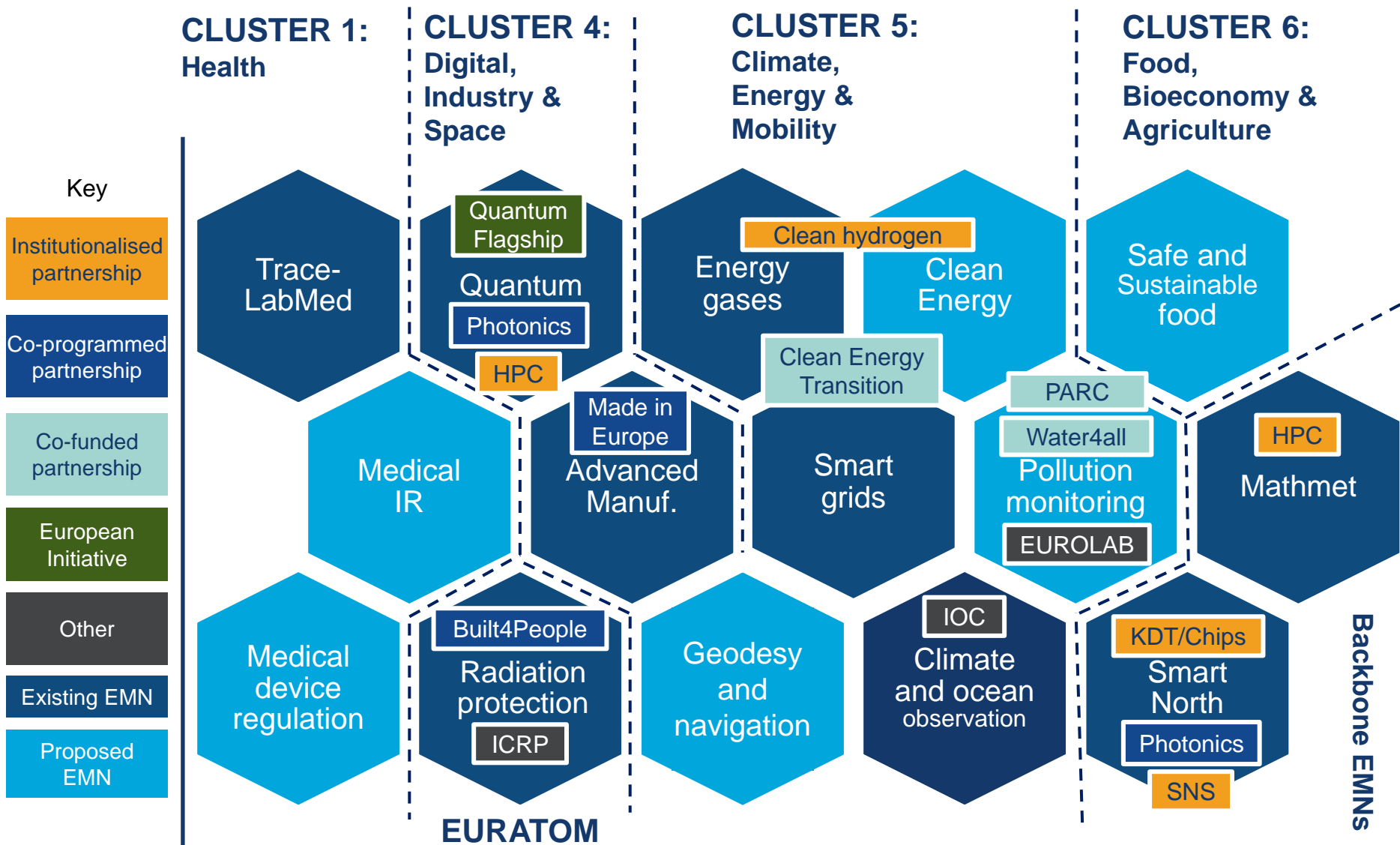


Possible EMNs	Contact Person	Plan to propose EMN on	
Medical use of Ionising Radiation	Valentin Blideanu (LNE)	July 2022	JNP since 2020
Clean Energy	Fabian Plag (PTB)	July 2022	JNP since 2020
Food Safety	Andrea M. Rossi (INRIM)	Approved!	JNP since 2020
Pollution monitoring	Sophie Lardy-Fontan (LNE)		JNP since 2020
Medical device regulation	Dominik Prazak (CMI)	2023	
Geodesy, Navigating, Timing and Positioning	Sten Bergstrand (RISE)	2023	

EMN Landscape – Cluster View



EMN Liaisons with other European Partnerships & Initiatives



EMN Chairs end of terms

Gert Rietveld (VSL)

EMN Smart Grids Chair from 05. 2019 – 05.2022

Gert prepared the EMN in 2018 and successfully launched it in 2019. → **Enrico Mohns (PTB) is the acting Chair of Smart Grids**



Markus Bär (PTB)

EMN Mathmet Chair from 05.2019 – 05.2022

Markus organised the transition from the original MATHMET (est. 2016) to the EURAMET EMN Mathmet. → **Francesca Penecchi (INRiM) was elected as the new Mathmet Chair**



Annarita Baldan (VSL)

EMN Energy Gases Chair from 04.2019 – 04.2025

Annarita prepared and launched this EMN and continues to develop it. **Annarita was re-elected in April for another three-years term of office**

