

Introduction to EMPIR

EURAMET Information Day for INM Moldova,
INM, Chisinau, 7 - 8 November 2018

Slides by
EURAMET Secretariat

EURAMET is...



- The gateway to Europe's integrated metrology infrastructure
- It facilitates access to European measurement expertise, and underpins the delivery of globally competitive, high impact metrology
- It ensures Europe maintains its global reputation for excellence in measurement science
- It raises awareness of the value of measurement by demonstrating the impact of metrology on society's grand challenges

European Association of National Metrology Institutes



Members:

37 European NMIs

28 of them are participating in EMPIR

Associates:

78 DIs (Designated Institutes)

1 Corresponding applicant

Liaison Organisations:

4 RMOs & BIPM

3 NMIs beyond Europe

KMA (Kosovo under UNSCR 1244)

8 regional/international Organisations



What is EMPIR?



- It is about improving measurement to drive innovation and competitiveness, and to support regulation and quality of life.
- It enables European metrology institutes, industrial organisations and academia to collaborate on joint research projects.
- It is implemented by EURAMET (European Association of National Metrology Institutes).

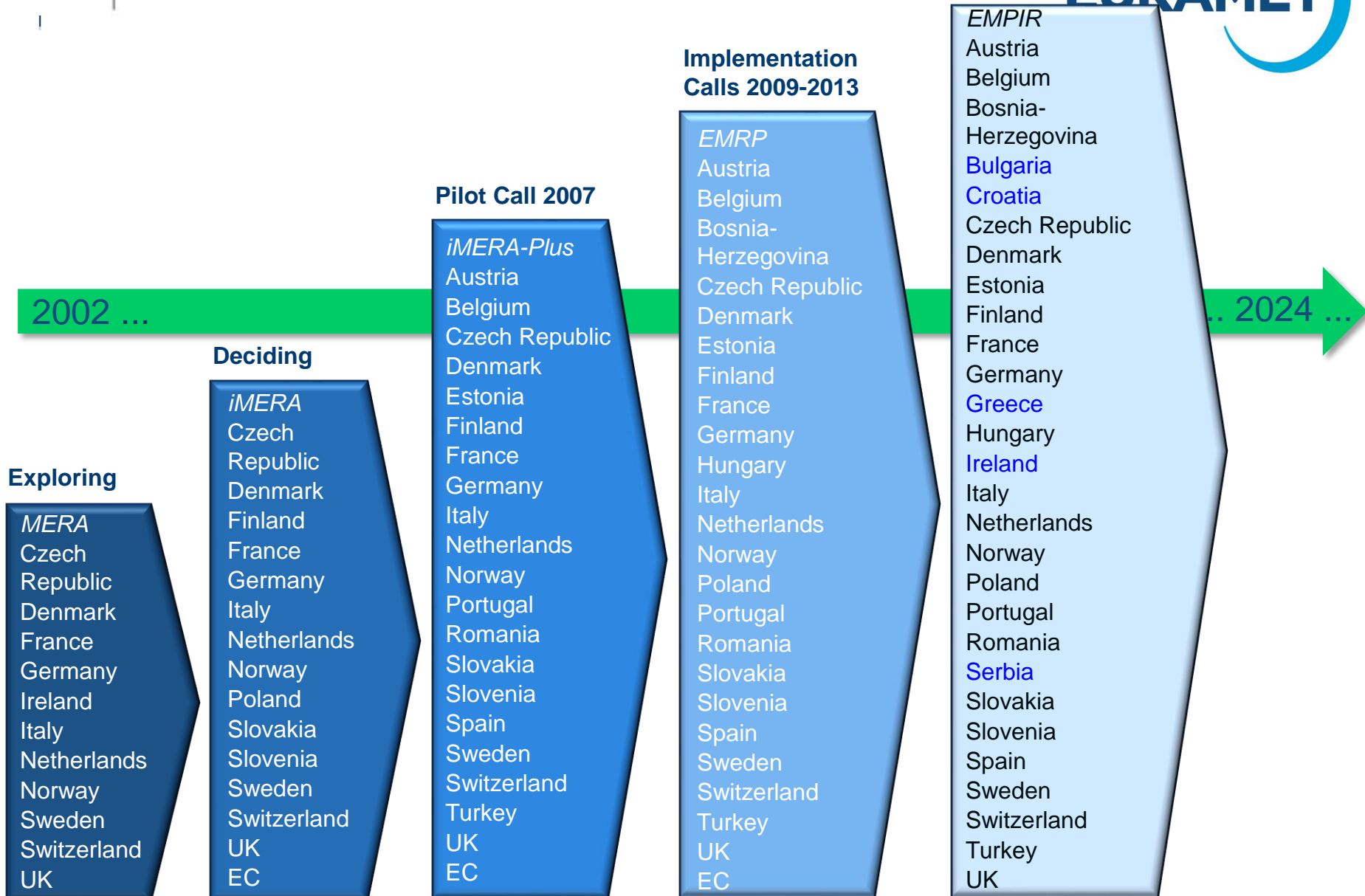
How does it work?



- It is based on Article 185 of the Lisbon Treaty.
- It is jointly funded by the EMPIR participating countries and the European Union and has a budget of approximately 600 M€ over seven years.

The road to EMPIR

Broadening
From 2014



EMRP inputs



• Projects selected	119
• JRP funding contracted	367 968 461 €
• RG funding contracted	39 710 531€
• Funded years in JRPs	2116
• Unfunded years in JRPs	123
• Funded years in RG	498
• Total participations	2423

EMRP outputs



- Excellent science – focussed on society's needs
 - At one extreme the application of ground breaking physics to fundamental metrology
 - At the other, direct application to measurements that enable regulation
 - In-between, measurements that promote innovation

EMRP outputs



Conference presentations /posters	4915
Other dissemination activities	2155
Peer-reviewed publications	1432
<i>Co-authored peer-reviewed publications (of the above)</i>	<i>368</i>
Inputs to standards committees	1135
<i>No. of unique standards committees engaged with (of the above)</i>	<i>486</i>
Training activities (internal)	463
Training activities (external)	557
Patent applications	36
Total number of unique outputs	10693

EMPIR inputs



• Projects selected	91
• JRP total value	227 870 939 €
• EU Contribution	112 444 953 €
• National Contribution	100 752 808 €
• Self contribution	14 673 178 €
• Years effort in JRPs	1276
• Total participations	2423

Impact: programme perspective

EMRP / EMPIR

High-level objectives

- European growth and jobs
- Respond to global challenges
- Create an integrated European Metrology Research System



Specific objectives

- Boost industrial uptake of metrology research supporting development of new & improved products and services
- Improve standardisation / regulation
- Underpin a coherent, sustainable and integrated European metrology landscape



Boost industrial uptake and improve standardisation

- At least 400 M€ of European turnover from new or significantly improved products and services that can be attributed to the research activities of EMPIR and its predecessors
- At least 60 % of CEN/CENELEC /ISO/IEC Technical Committees and equivalent standardisation bodies with potential to benefit directly from EMPIR projects to engage with the programme

Boost industrial uptake and improve standardisation

- At least 400 M€ of European turnover from new or significantly improved products and services that can be attributed to the research activities of EMPIR and its predecessors. **340 M€ identified so far**
- At least 60 % of CEN/CENELEC /ISO/IEC Technical Committees and equivalent standardisation bodies with potential to benefit directly from EMPIR projects to engage with the programme **Contributions to 17 published and 103 draft standards**

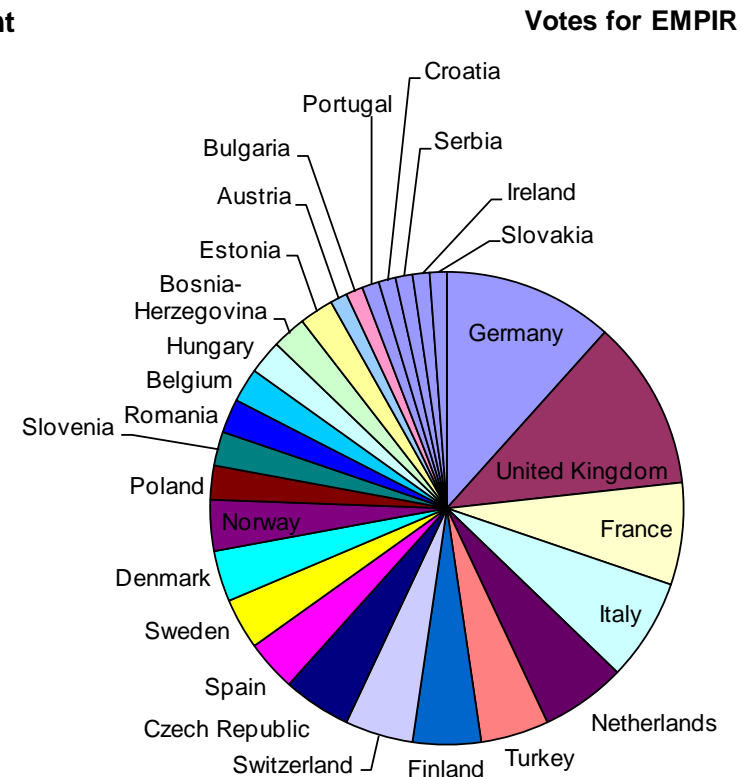
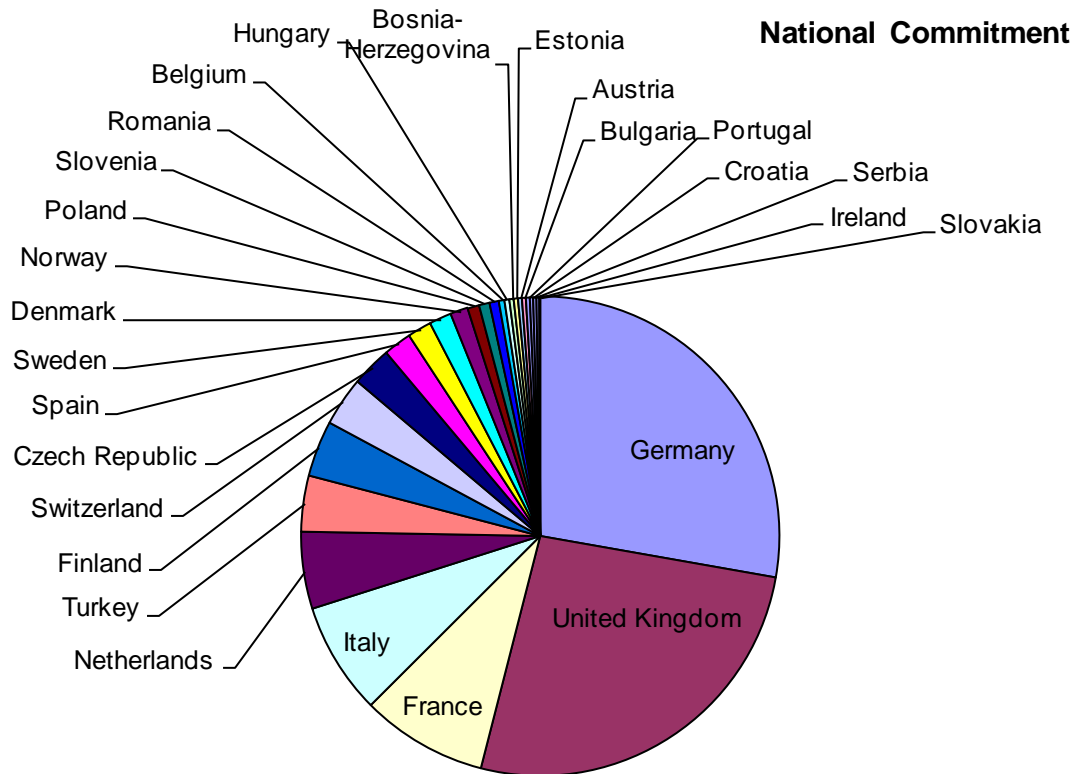
Underpin a coherent, sustainable and integrated European metrology landscape to fully exploit the EU potential

- Maintain a level of at least 50 % of dedicated national metrology research investments in Europe being coordinated or influenced via the programme
- All European NMIs and their designated institutes to interact with the programme
- European leadership in at least 20 % of international metrology committees

Underpin a coherent, sustainable and integrated European metrology landscape to fully exploit the EU potential

- Maintain a level of at least 50 % of dedicated national metrology research investments in Europe being coordinated or influenced via the programme **Level maintained**
- All European NMIs and their designated institutes to interact with the programme **Cyprus, Luxembourg**
- European leadership in at least 20 % of international metrology committees **50 %**

National Commitment (317 M€)



Questions?

