



Introduction to EMPIR

Duncan Jarvis
Emrp-pm@euramet.org



The EMPIR Initiative is co-funded by the European Union's Horizon 2020 research and innovation programme and the EMPIR Participating States



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

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Introduction to EMPIR - Metrology Europe 2016

European Association of National
Metrology Institutes

EURAMET

Members:
37 European NMIs
28 of them are participating in EMPIR

Associates:
IRMM (EC)
75 DIs (Designated Institutes)

Liaison Organisations:
4 RMOs & BIPM
3 NMIs beyond Europe
KDM (Kosovo under UNSCR 1244)
6 regional/international Organisations

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Introduction to EMPIR, March, February 2016

What is EMPIR?

EURAMET

- It is about improving measurement to drive innovation and competitiveness.
- 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).

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Introduction to EMPIR, March, February 2016

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.

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Introduction to EMPIR - Market Entry - 2016

The road to EMPIR

Broadening
From 2014

Introduction to EMPIR - Market Entry - 2016

EMRP inputs



- | | |
|--------------------------|---------------|
| • Projects selected | 119 |
| • JRP funding contracted | 367 968 461 € |
| • RG funding contracted | 39 544 371 € |
| • Funded years in JRPs | 2116 |
| • Unfunded years in JRPs | 115 |
| • Funded years in RG | 494 |
| • Total participations | 2321 |

Introduction to ERMIS - Module 1 - February 2016

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

Introduction to ERMIS - Module 1 - February 2016

EMRP outputs



Conference presentations /posters	3928
Other dissemination activities	1626
Peer-reviewed publications	998
<i>Co-authored peer-reviewed publications (of the above)</i>	<i>305</i>
Inputs to standards committees	739
<i>No. of unique standards committees engaged with (of the above)</i>	<i>379</i>
Training activities (internal)	394
Training activities (external)	403
Patent applications	36
Total number of unique outputs	8124

Introduction to EMRP - Model Extension 2016

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



Introduction to EMRP - Model Extension 2016

EMPIR objectives



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

Introduction to EMPIR - Meeting February 2016

EMPIR objectives



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

Introduction to EMPIR - Meeting February 2016

