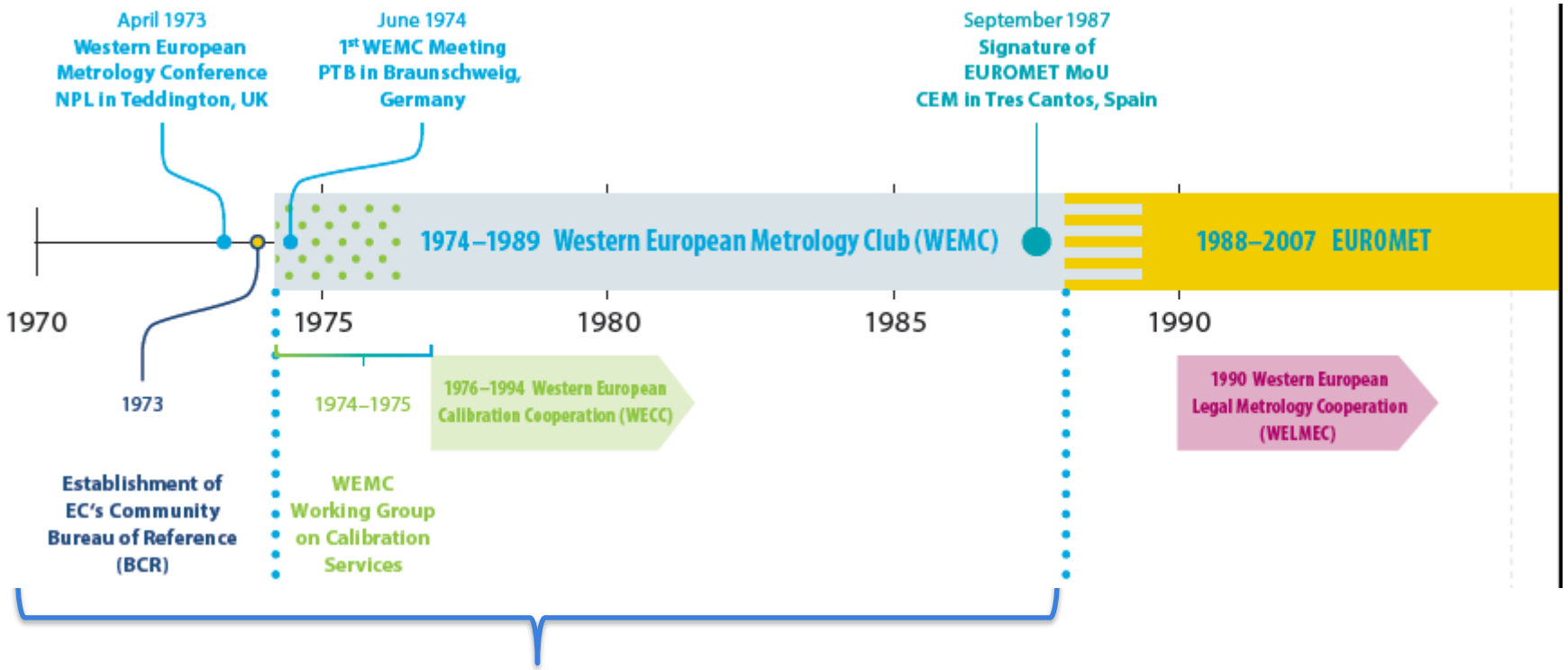
11th General Assembly
16 May 2017

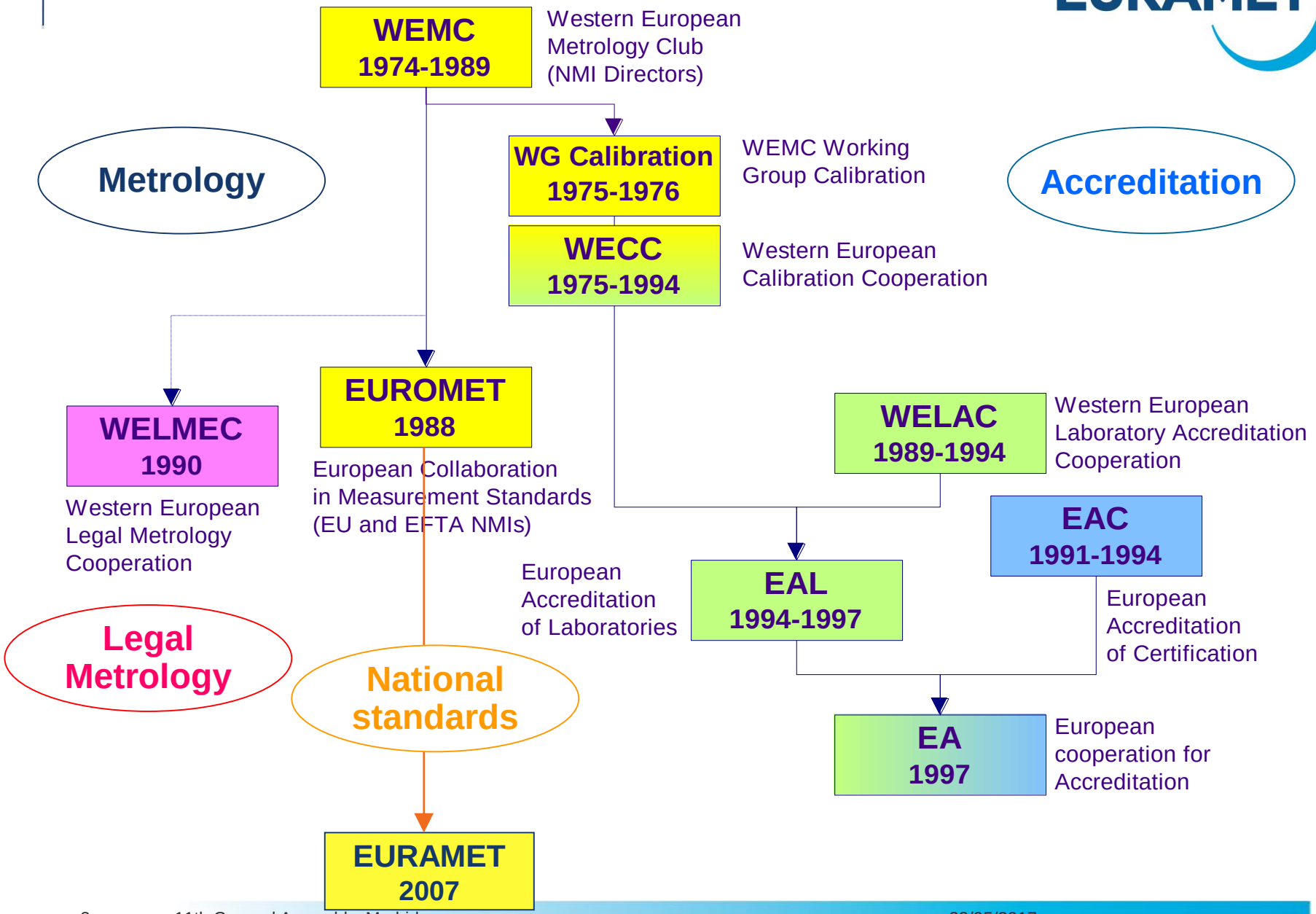
Beat Jeckelmann, EURAMET Chairperson

Timeline of collaboration

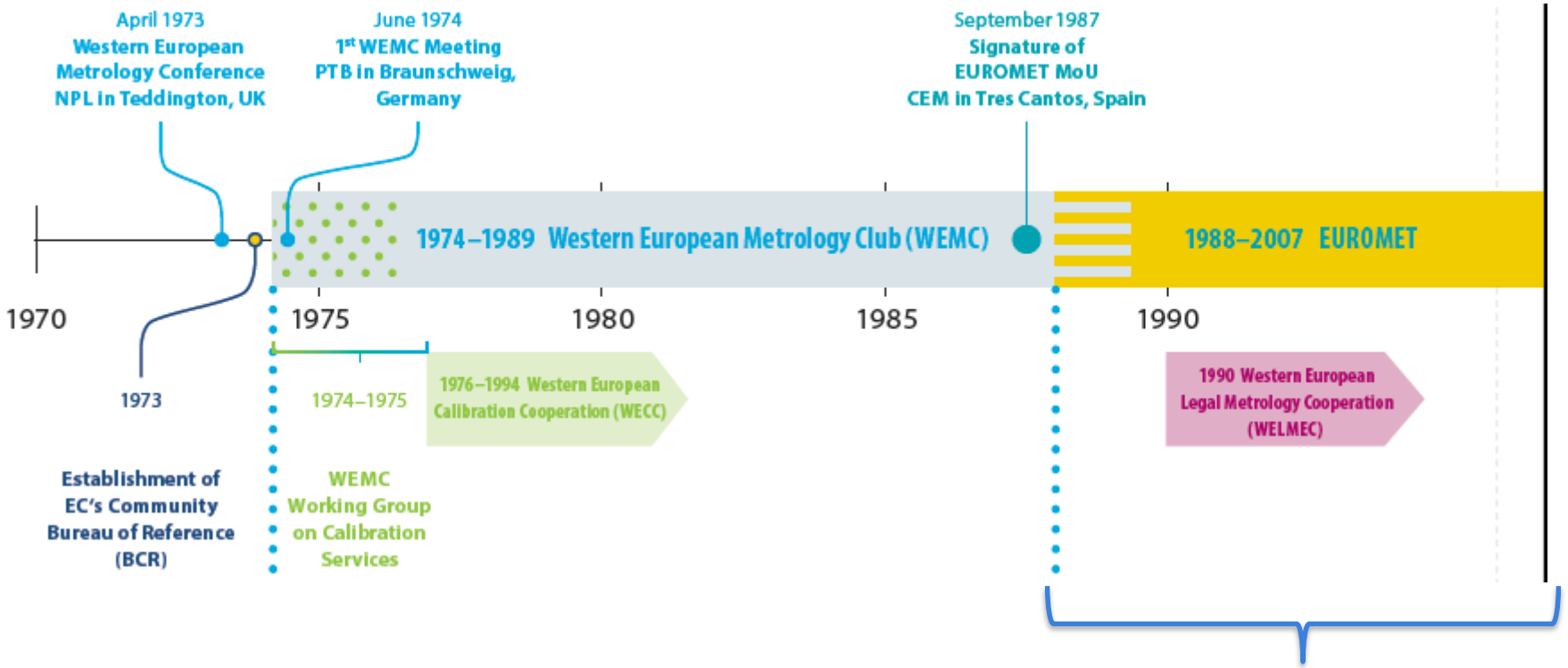


1. WEMC: Exchange on NMI management level

The beginnings



Timeline of collaboration (2)



2. EUROMET: Project phase

Signing of the EUROMET MoU

23 September 1987CEM, Tres Cantos (Spain)

Project phase

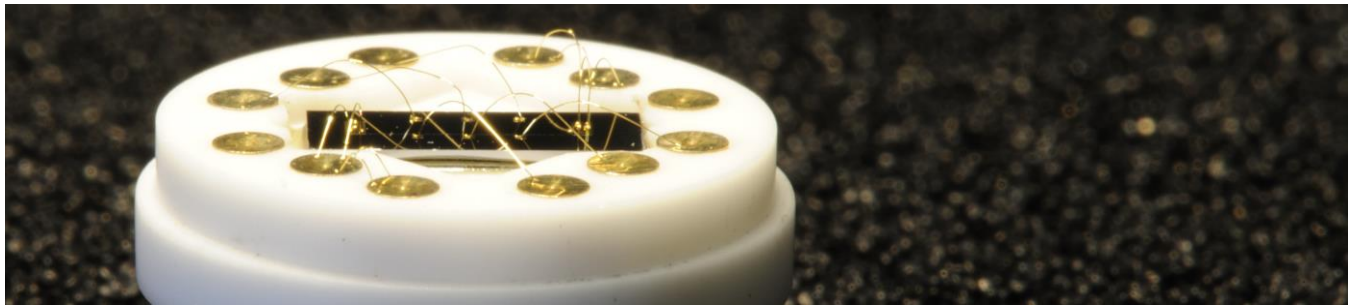
- Technical committees were established
- Collaboration projects started on:
  - Cooperation in research
  - Comparison of measurement standards
  - Consultation
  - Traceability
- Over 200 projects in the first 10 years

Example project

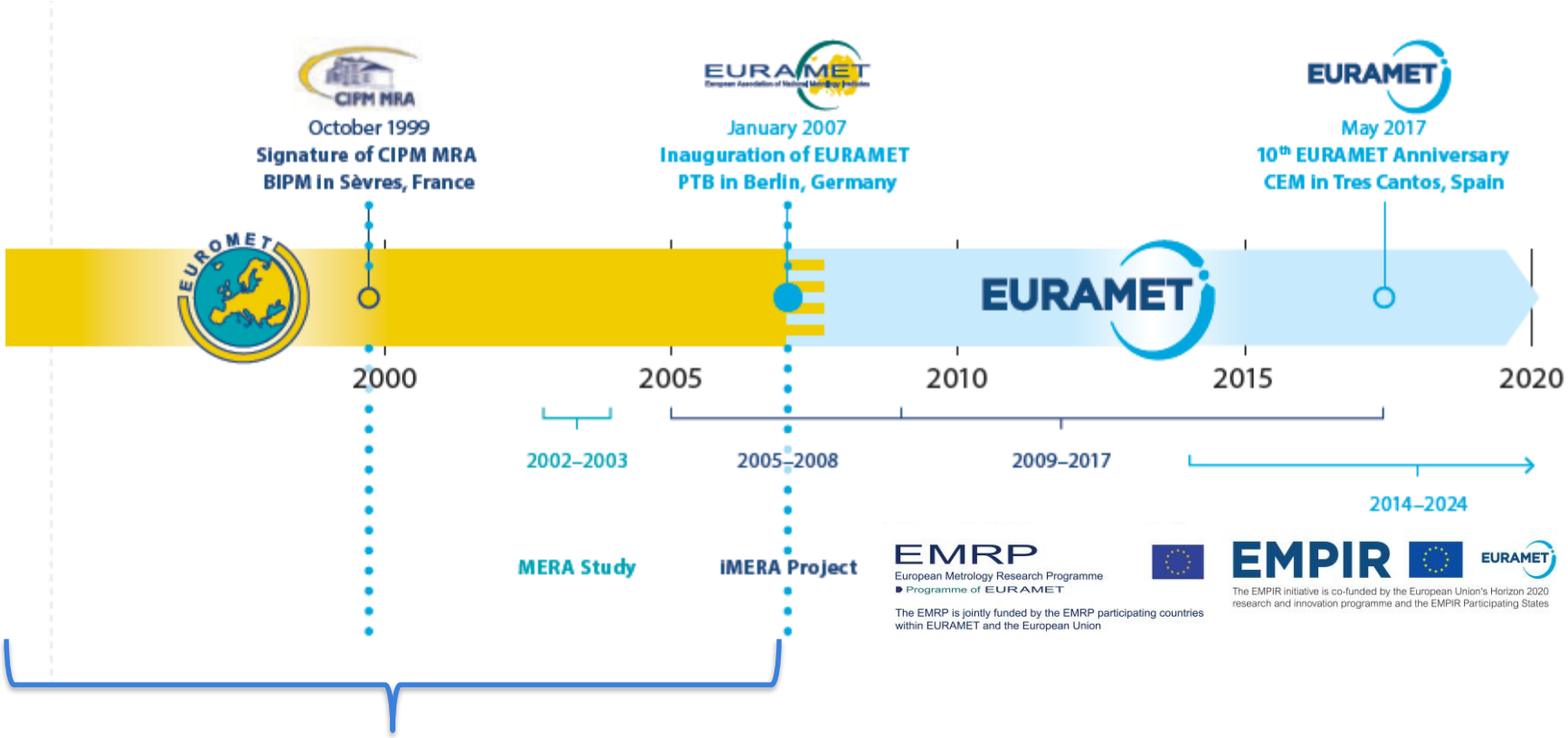
Field: Electricity
No: 15
Type: Research
Period: 1988-10-01 to 1990-12-31

Development of the QHE as a resistance standard

By exchange of quantum Hall samples and reference resistors and by performing high precision measurements at each other's site, more profound knowledge shall be gained on the metrological reliability of the effect with regard to its application as a new laboratory standard of resistance.

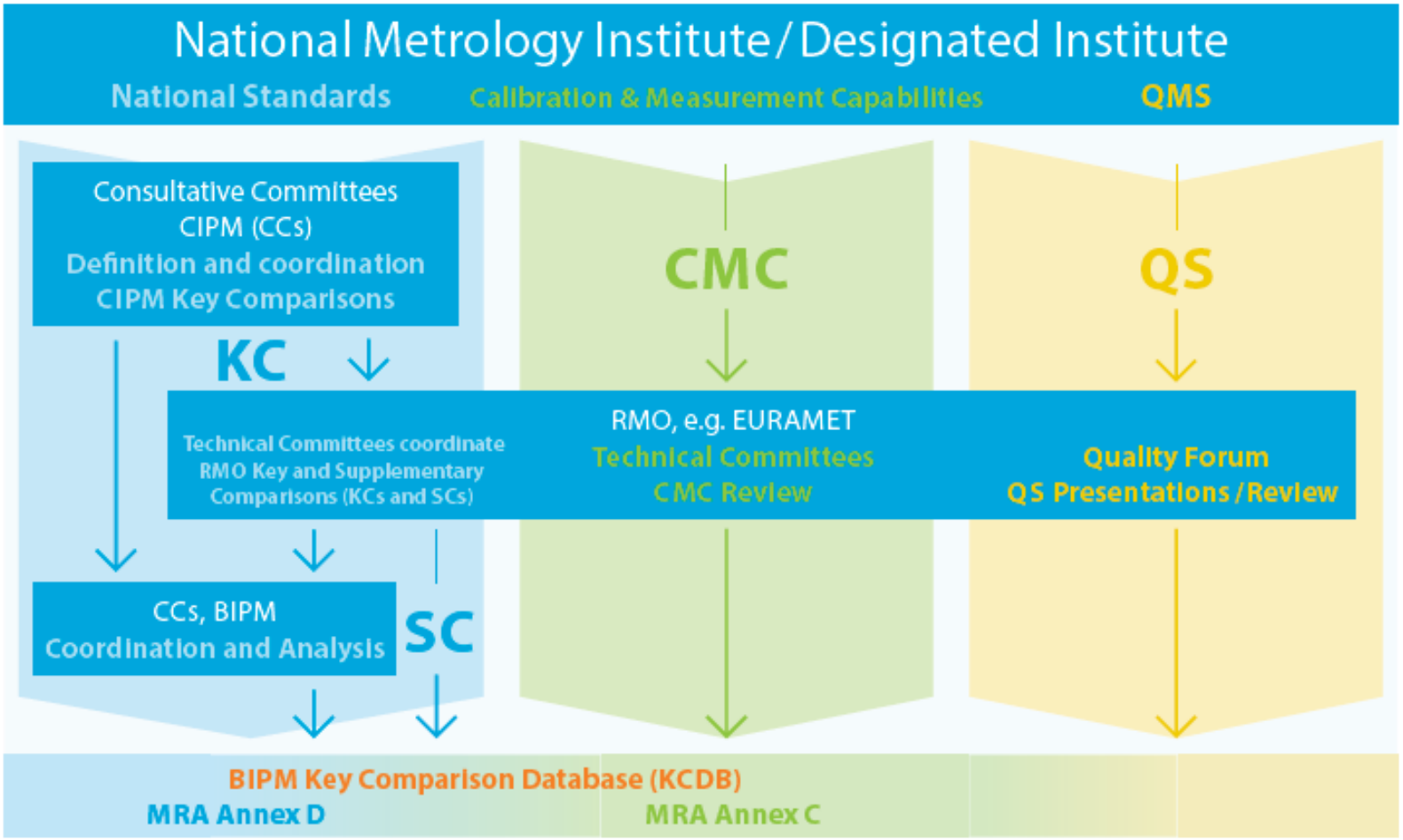


Timeline of collaboration (3)



3. CIPM MRA

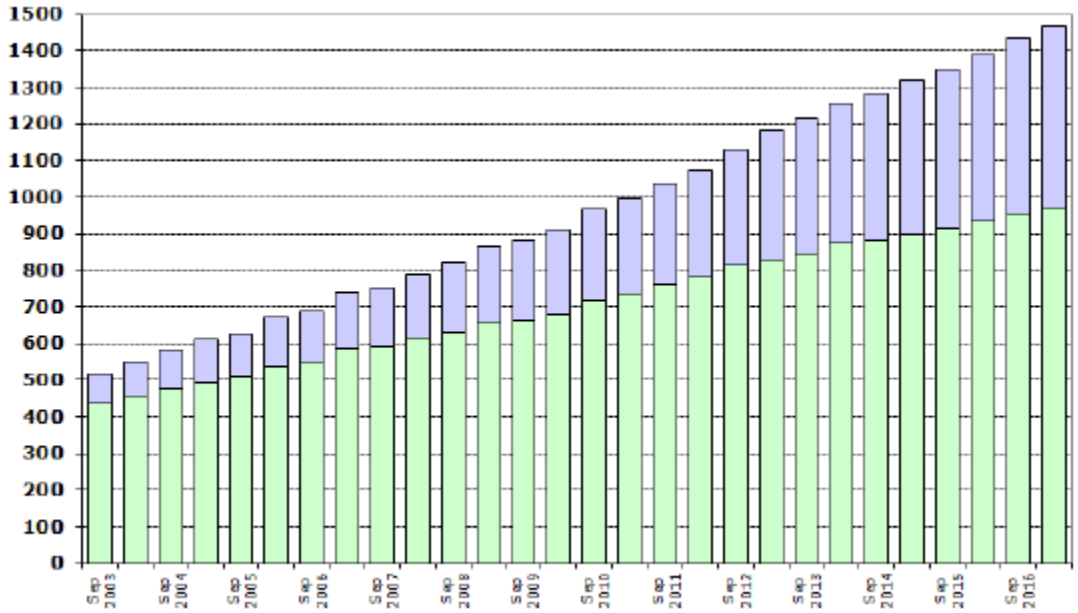
CIPM-MRA Processes



CIPM-MRA:
A system based on technical evidence

In 2017:

- 160 EURAMET KC and 175 SC
- 11’125 CMCs (out of 24’903 in the KCDB)



Key comparisons
And supplementary comparisons

The MERA study

Future development of European metrology infrastructure

- Evolution not Revolution
- **Local delivery of services** and expertise is **valued**
  - devolution not an issue for most NMIs
- **High potential** for increasing efficiency and efficacy **via closer cooperation in R&D**
- Arrangements are needed to enable strategic planning of longer term R&D collaboration
- Scope for improved planning and sharing of facilities
- **EUROMET to evaluate its own structures**

Complete report available:
http://www.euramet.org/index.php?id=documents

The iMERA Project

iMERA

= "**i**mplementing the
Metrology **E**uropean **R**esearch **A**rea"

EC "ERA-NET" Coordinating Action

04/2005 to 12/2008

Coordinated by NPL

Major Objectives:

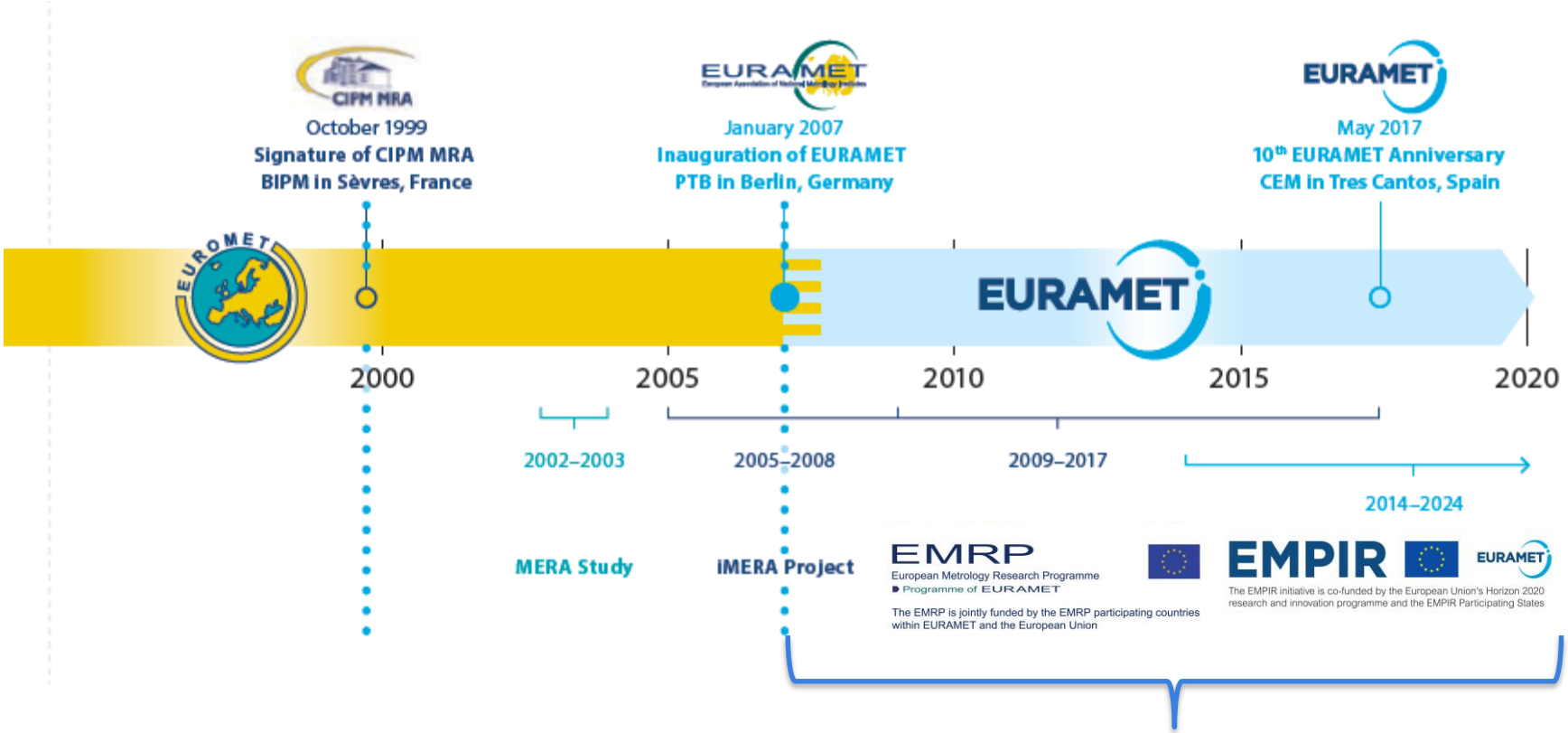
- Elaboration of an **EMRP**
  = European Metrology Research Programme
- Establishment of **Structures** for the execution of the EMRP
- **Funding** Aspects:
  ERA-NET Plus, A-169 *(now A-185)*
- Knowledge Transfer

Funded by the European Commission (EC)

Inauguration of EURAMET e.V.

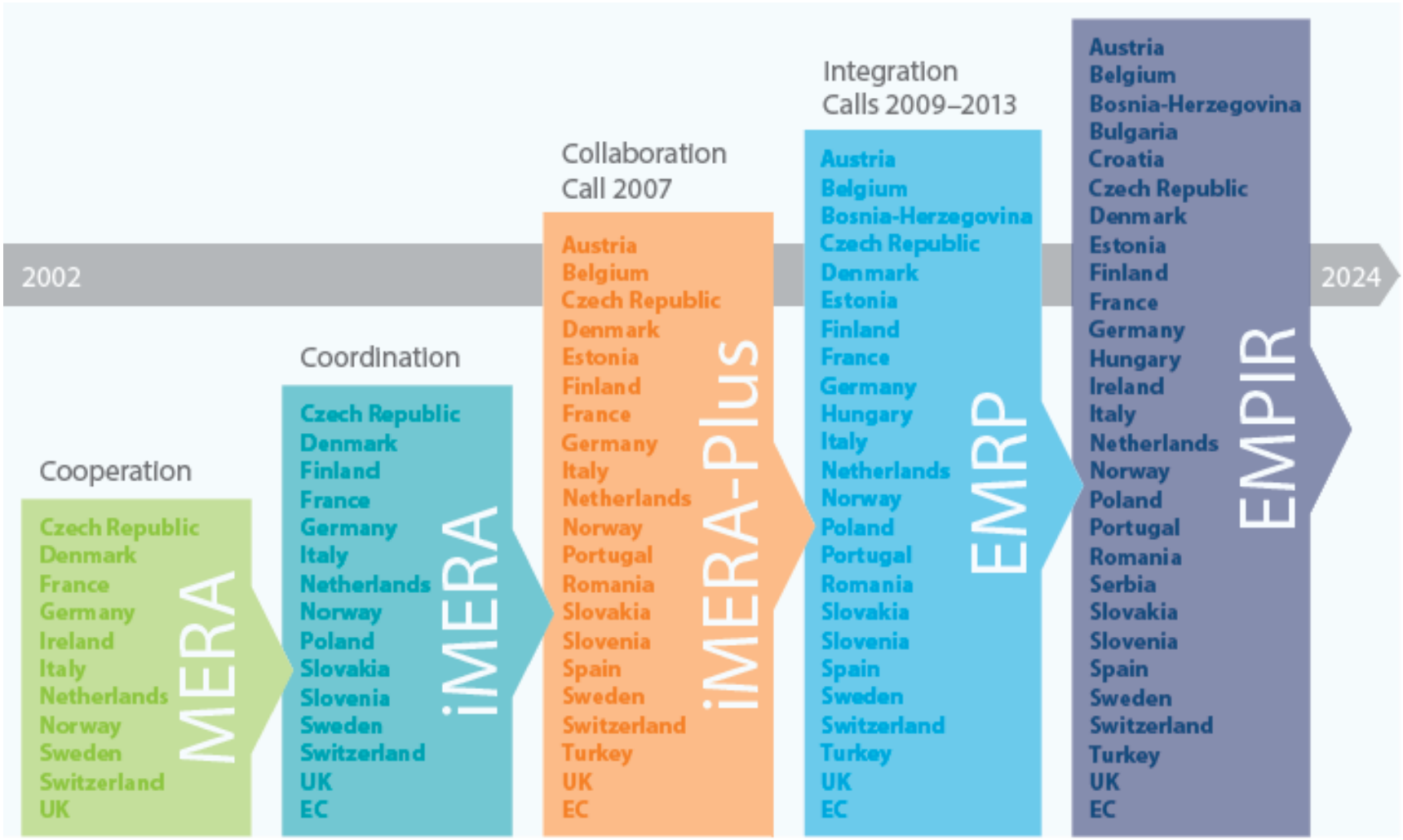
11th January 2007
Berlin, Germany

Timeline of collaboration (4)



4. Metrology Programmes

Developing cooperation in R&D



Delivering Impact

EMRP in numbers

119 projects with experts from

23 EMRP participating countries and 21 additional countries

916 non-NMI/DI organisations

1359 peer-review papers

3928 conference presentations

73 mobility grants

676 trainings

36 patents

739 contributions to
379 standards committees

Sharing knowledge and building capacity

- 2008: Focus Group for ’Facilitating National Metrology Infrastructure Development’
- 2015: BoD Working Group Capacity Building
- Guidance documents
- Trainings
- Researcher mobility
- Research potential projects
- ……

Thank you for your attention!

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