

## **Why, how and when participate in European metrology research projects**

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

Slides by Miruna Dobre (SMD, Belgium)  
+ Euramet Secretariat

# Research mobility grants



- Search projects from calls 2016 and 2017;
- Contact as soon as possible the coordinator or participants;
- Set-up the research plan with the host institution;
- Obtain the authorization for your institution
- Read here: <https://msu.euramet.org/downloads/>

## Practical details:

- Maximum duration 18 months; flexible duration
- You remain employee of your own institution, grant of 1800 €/month is paid to the institution
- 1500 €/6 months for training, conferences etc.
- 500 €/ 3 months travel

# Find projects for grants



## EMPIR CALL 2017 - INDUSTRY, FUNDAMENTAL, NORMATIVE, RESEARCH POTENTIAL & SUPPORT FOR IMPACT

In 2017 EURAMET issued calls for joint research for 'Metrology for Industry' (IND), 'Fundamental' (FUN), Metrology for Pre- and Co-normative' (NRM) and Research Potential (RPT) projects following a two stage process.

EURAMET also issued a Call for Support for Impact projects designed to increase the impact from completed i-MERA Plus and EMRP projects.

[View all Selected Research Topics for EMPIR Call 2017](#)

### INDUSTRY

PROJECT NUMBER ▲▼	SHORT NAME ▲▼	TITLE ▲▼	COORDINATOR ▲▼
17IND01	MIMAS	<a href="#">Procedures allowing medical implant manufacturers to demonstrate compliance with MRI safety regulations</a>	Bernd Ittermann (PTB)
17IND02	SmartCom	<a href="#">Communication and validation of smart data in IoT-networks</a>	Thomas Wiedenhofer (PTB)
17IND03	LaVA	<a href="#">Large Volume Metrology Applications</a>	Andrew Lewis (NPL)
17IND04	EMPRESS 2	<a href="#">Enhancing process efficiency through improved temperature measurement 2</a>	Jonathan Pearce (NPL)

# Find projects for grants



## Enhancing process efficiency through improved temperature measurement 2

Short Name: EMPRESS 2, Project Number: 17IND04



*Metal industry*

### COORDINATOR

Jonathan Pearce (NPL)

### PARTICIPATING EURAMET NMIS AND DIS

CEM (Spain)

CMI (Czech Republic)

DTI (Denmark)

DTU (Denmark)

INRIM (Italy)

IO-CSIC (Spain)

JV (Norway)

MIRS/UL-FE/LMK (Slovenia)

NPL (United Kingdom)

PTB (Germany)

UME (Turkey)

### INFORMATION

TYPE  
EMPIR

FIELD  
Industry

PROJECT TYPE  
Joint Research Project

STATUS  
in progress

CALL  
2017

DURATION  
2018-2021

### OTHER PARTICIPANTS

Acerinox Europa S.A. (Spain)

Babcock & Wilcox Vølund A/S (Denmark)

BAE Systems Marine Ltd (United Kingdom)

CCPI Europe Ltd (United Kingdom)

Consiglio Nazionale delle Ricerche (Italy)



# Find projects for grants

## Advancing measurement uncertainty - comprehensive examples for key international standards

Short Name: EMUE, Project Number: 17NRM05



*Scientists Beside a Microscope*

**COORDINATOR**  
**Maurice Cox (NPL)**



PARTICIPATING EURAMET NMIS AND DIS

BAM (Germany)

IMBiH (Bosnia and Herzegovina)

INRIM (Italy)

IPQ (Portugal)

LGC (United Kingdom)

LNE (France)

NEL (United Kingdom)

NPL (United Kingdom)

PTB (Germany)

SMD (Belgium)

VSL (Netherlands)

### OTHER PARTICIPANTS

Accredia - L'Ente Italiano di  
Accreditamento (Italy)  
Laboratorio Nacional de Engenharia Civil  
(Portugal)  
National Institute of Advanced Industrial  
Science and Technology (Japan)

# Find projects for grants

## Improved traceability chain of nanoparticle size measurements

Short Name: nPSize, Project Number: 17NRM04



*Scientist holding a red transparent pill*

### COORDINATOR

Vasile-Dan Hodoroaba (BAM)

BAM (Germany)

LGC (United Kingdom)

LNE (France)

PTB (Germany)

SMD (Belgium)

VSL (Netherlands)

### OTHER PARTICIPANTS

Commissariat à l'énergie atomique et aux énergies alternatives (France)

DIN Deutsches Institut für Normung e. V. (Germany)

POLLEN Metrology (France)

Università degli Studi di Torino (Italy)

# Outline



- **Why** involve in EMPIR research projects?

T. Tasic

09. Intro to EMPIR  
10. EMPIR Instruments

- **How** successfully participate in EMPIR projects?

T. Tasic

14. Creating a JRP  
15. External participant

- **When** to take which actions?

T. Tasic

11. Rules for particip.  
12. Projects impact.

# Why involve in EMPIR research projects?



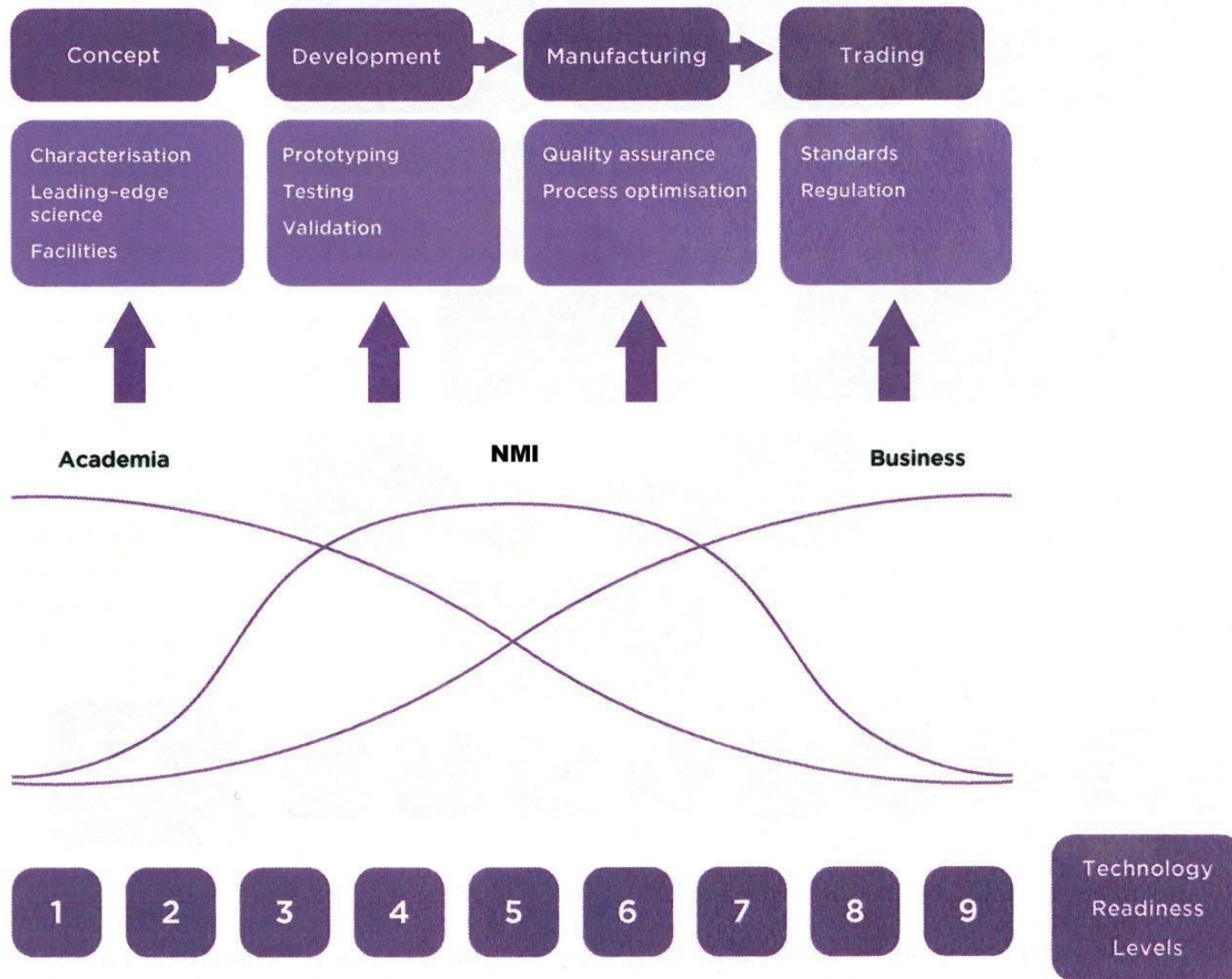
- Benefits for the NMI/country;
- Benefits for the projects consortium/ research;
- Benefits for the society/science

A blue, multi-pointed starburst graphic with a 3D effect, tilted diagonally. It contains the text "We all have the same problems" in white, bold, sans-serif font.

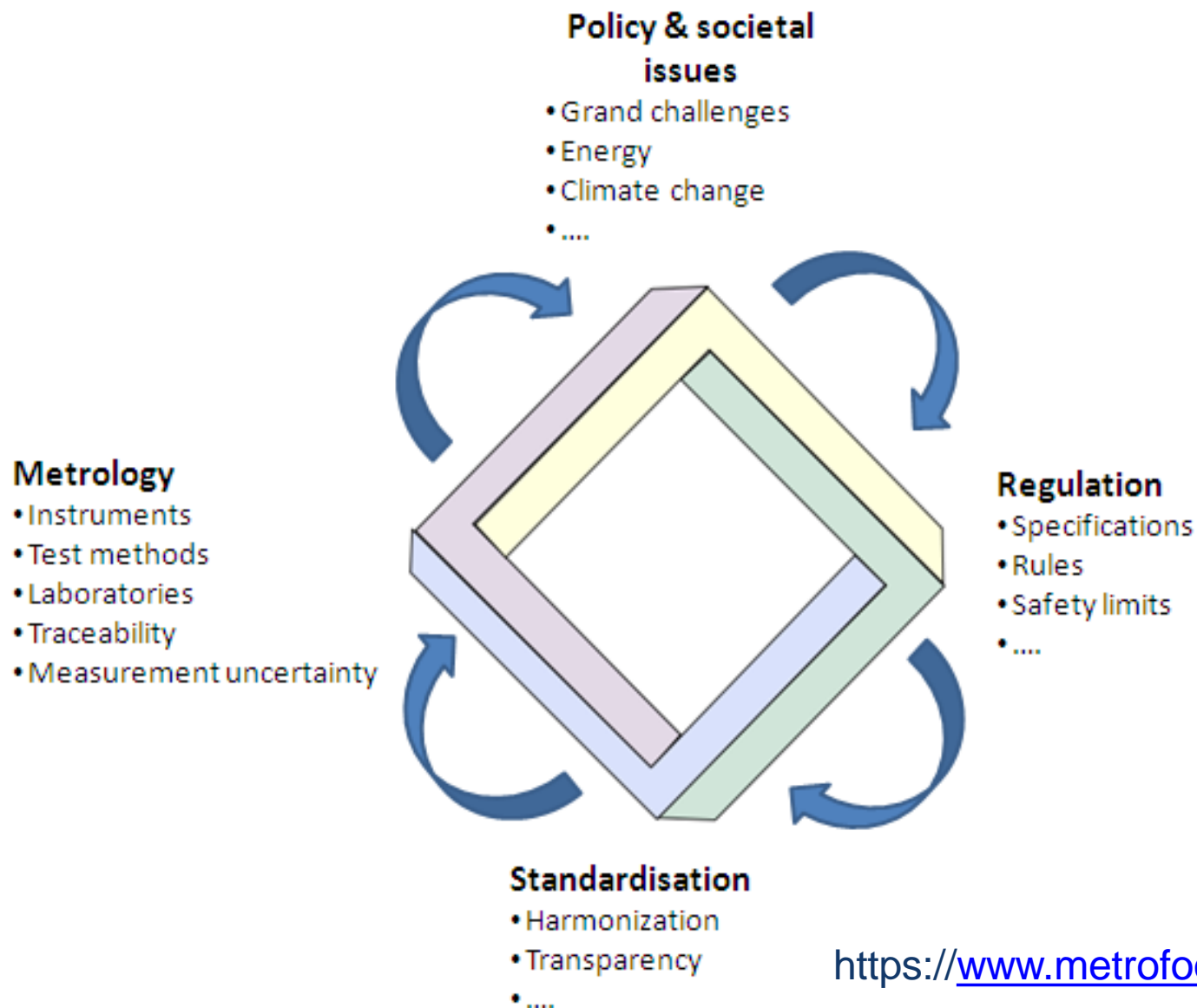
**We all have the  
same problems**



# NMI role in innovation



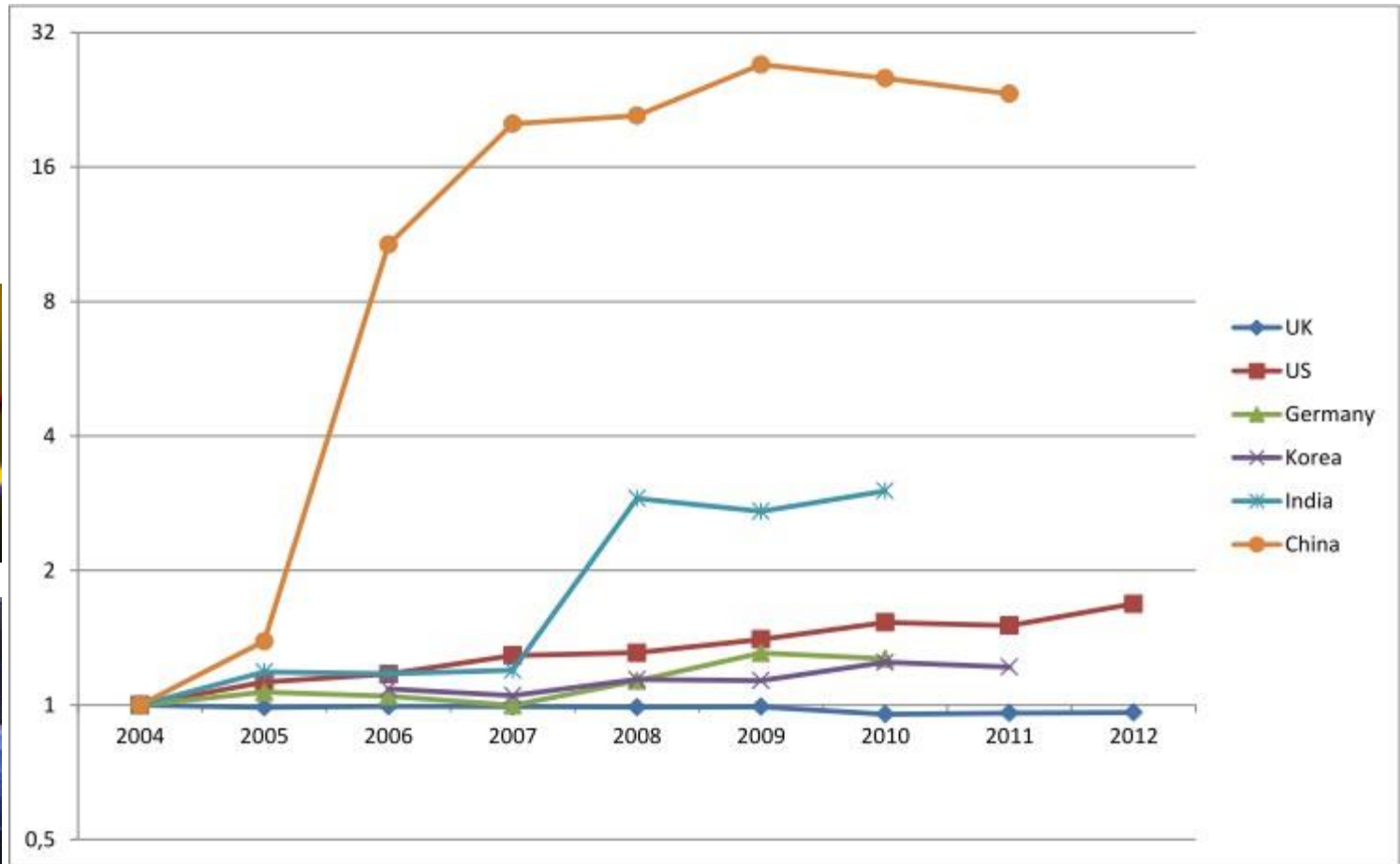
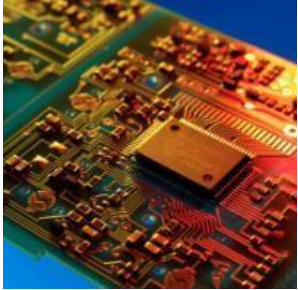
# NMI role in quality & safety infrastructure



# The European Metrology challenge

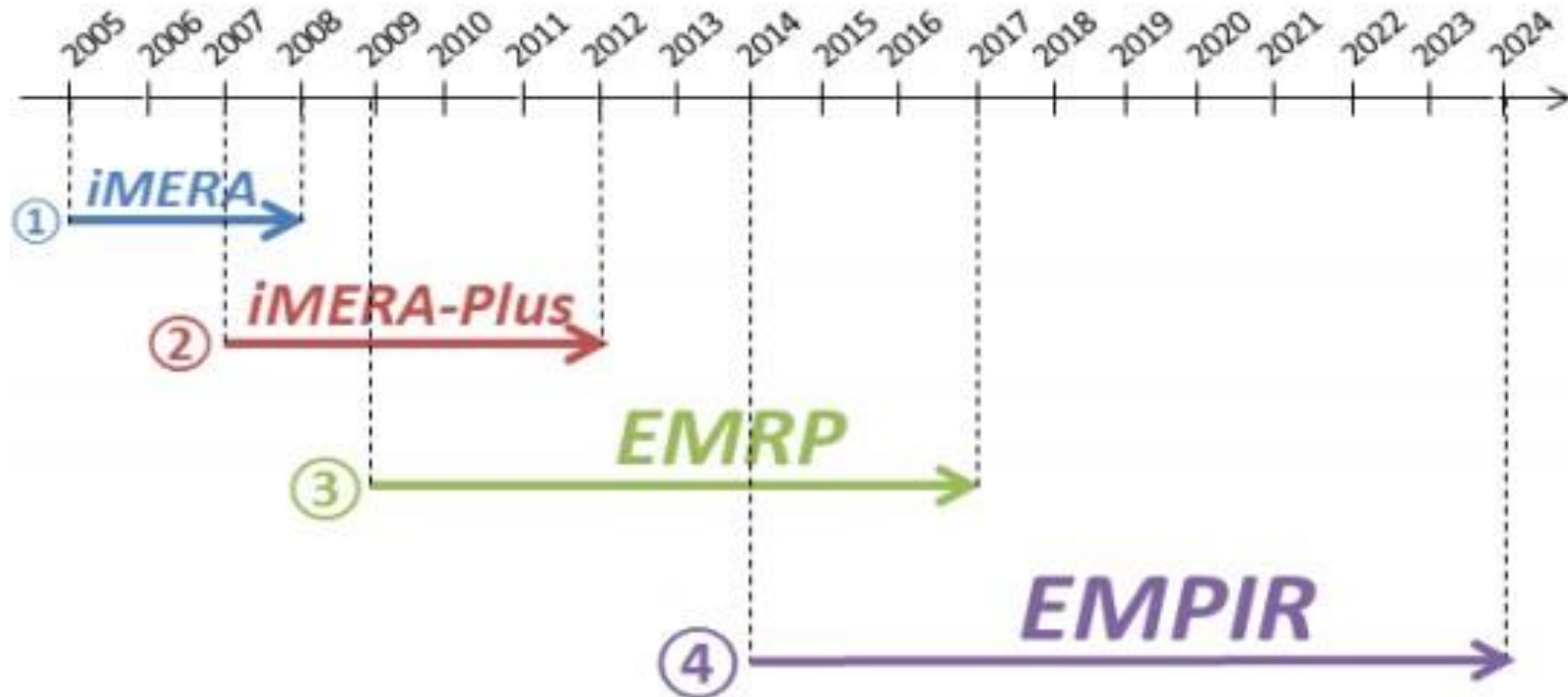


## Evolution of Investments in Metrology



Greater demands  $\leftrightarrow$  Limited resources

# Towards the integrated European Metrology landscape



# EMPIR in short



Fundamental  
Metrology

Grand  
Challenges

Pre- and  
Co-normative  
Research

Support for  
Impact

Capacity  
Building

- EC finances **100% of manpower**
- H2020 public-public partnership
- **600 M€**
- 10 years
- 28 countries
- Grand challenges: **energy, health, environment, industry**



# EMPIR in words



Fundamental  
Metrology

Grand  
Challenges

Pre- and  
Co-normative  
Research

Support for  
Impact

Capacity  
Building

- JRP Joint Research Project
- PRT Proposed Research topic
- SRT Selected Research Topic
- JRP Joint Research Project
- EMN European Metrology Network
  - JNP Joint Network Project
- RPoT Research Potential (projects)

# Why involve in EMPIR research projects?



T. Tasic

09. Intro to EMPIR

10. EMPIR Instruments

# How successfully participate in EMPIR projects?

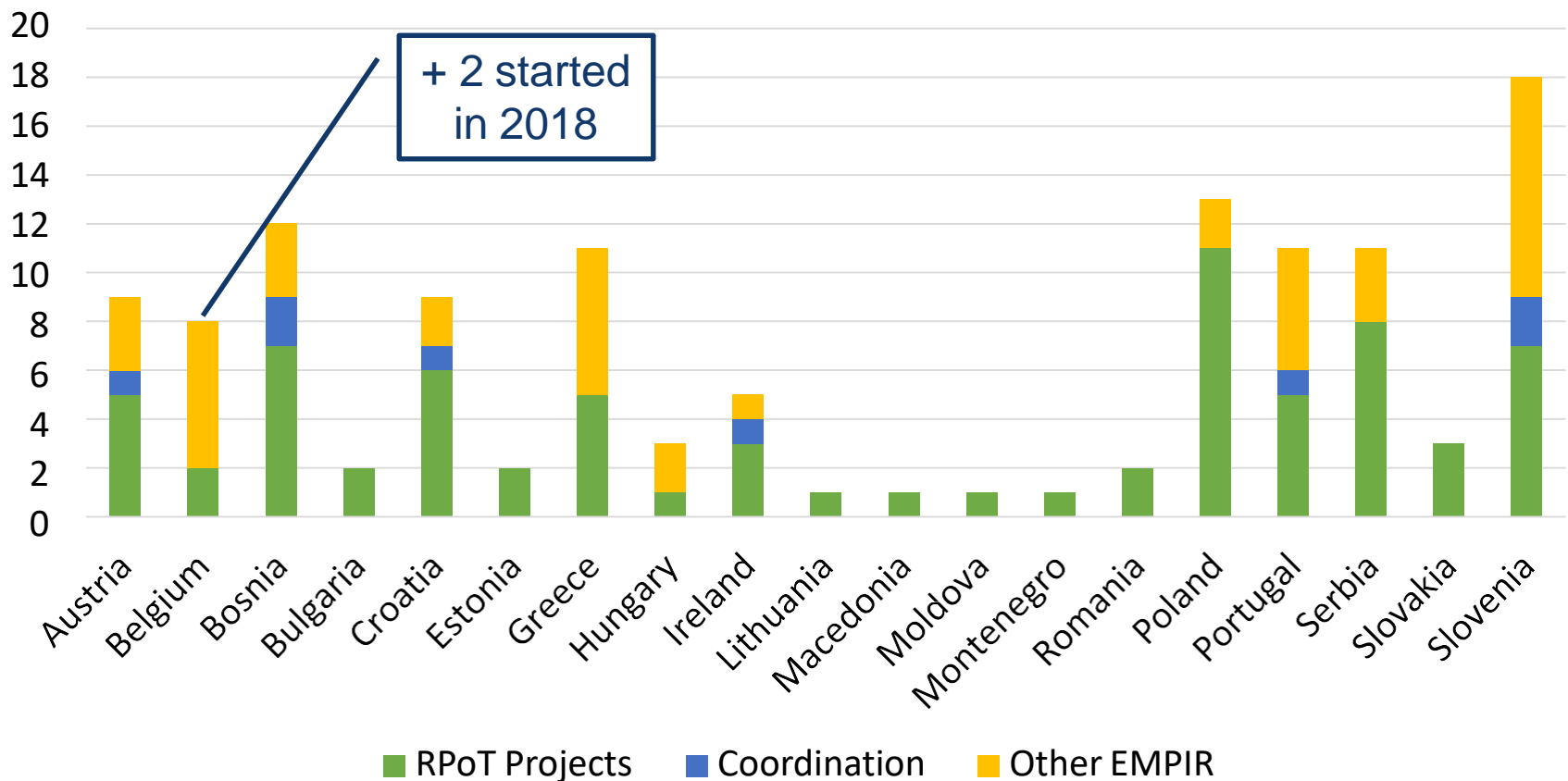


- Network, join communities of practice TC, EMNs;
- Focus on specific expertise;
- Involve stakeholders

# Increased activity in metrology research in emerging NMI's



**EMPIR Project Participation  
- small contributors -**



# How successfully participate in EMPIR projects?



T. Tasic

14. Creating a JRP

15. External participant



# When to take which actions?



- Early stages: 2 years or more before project starts;

- ✓ Strategic planning;
- ✓ Stakeholder consultation



TOPICS

- ✓ Network, TC meetings, conferences, CEN;
- ✓ Find funding for investments



PARTNERS

- Project proposals: 1 year before:



- During project: important deadlines;
- After project end: sustainability

# When to take which actions?



T. Tasic

11. Rules for participation

12. Projects impact

# Administrative and financial questions?



- Ask national contact points :  
<http://www.h2020.md/en/npc>
- Ask EMPIR-MSU Members Support Unit
- Follow [Trainings](#) at national level;
- Read [H2020 AGA](#) (Annotated Grant Agreement)