



## TC-IR: Activity and Highlight Report

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Radiation**

TC-IR currently is involved in 11 EMRP/EMPIR projects (Calls 2013, 2015, 2016), almost all JRPs are coordinated by TC-IR members:

- 6 JRPs **Environment** (Calls 2013 and 2016)
- 3 JRPs **Health** (Call 2015, next Call 2018 !)
- 1 JRP SI Broder Scope (Call 2015), 1 SIP-JRP (Call 2014), 1 RPT-JRP (Call 2014)

## Projects **Health** Call 2015:

- **PerfusImaging** 15HLT05, Metrology for Multi-Modality Imaging of Impaired Tissue Perfusion, T. Schäffter (PTB, Germany)
  - **MRTDosimetry** 15HLT06, Dosimetry for molecular radiotherapy, S. Judge (NPL, UK)
  - **MRgRT** 15HLT08, Metrology for MR guided RadioTherapy, J. de Pooter (VSL, The Netherlands)
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- Trend in the field Health: combination of methods from different disciplines => requires **interdisciplinary metrological research**
  - EMPIR Calls 2018: TC-IR brainstorming meeting in Brussels (November 2017); joint meeting with TC-MC (early February 2018)

# TC-IR: organizational structure



## Document *Objectives of TC-IR (Rules of Procedure and organizational Structure of TC-IR)*:

- TC-IR annual CP meeting
- TC-Chair
- Management Board
- Working group *CMCs and Comparisons*  
(split in three review teams *Radioactivity, Dosimetry, Neutrons*)
- Working group *Ionizing Radiation and Radionuclides in Health*  
(roadmap *Ionizing Radiation and Radionuclides in Health*)
- Working group *Ionizing Radiation and Radionuclides in Environment, Energy and Industry*  
(roadmap *Ionizing Radiation and Radionuclides in Environment, Energy and Industry*)
- Contact person for *Capacity Building*



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# TC-IR: capacity building



- TC-IR currently has 27 registered contact persons, 13 from NMIs and 14 from DIs. IAEA + BIPM as liaison organizations have observer status.

9 contact persons come from EU member states with an emerging metrological infrastructure in IR, 3 institutes do not have any CMC claims.

- Needs:
  - practical training courses in the calibration of dosimeters or standard instruments
  - training in organization and coordination of comparisons
  - training in coordination of projects
  - RPot EMPIR projects
- **New:** TC-IR contact person for capacity building:  
Denis Glavič-Cindro (MIRS/IJS, Slovenia)



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## Present situation:

EURAMET TC-IR: 4040 CMC claims (1000 for Dosimetry, 2841 for Radioactivity and 207 for Neutrons). Consequence: high number of comparisons for supporting the CMCs and a high number of very time-consuming review processes.

## Revision of the CIPM-MRA and *Recommendations from the Working Group on the Implementation and Operation of the CIPM MRA (08/2016):*

TC-IR AdHoc group prepared *Proposal for a revised scheme for the CMCs for the IR fields Radioactivity, Dosimetry and Neutrons*. (Proposal is currently being approved by TC-IR CPs and shall be presented at the next CCRI meetings end of June 2017 at BIPM.)

- Present CMC order is along the quantities / services as given in their original definition.

Suggestion: to replace it by an order along the national measurement standards, which are either primary measurement methods or secondary measurement methods with traceability to a primary standard.

Same approach for the three IR areas Radioactivity, Dosimetry, Neutrons.

- **Next TC-IR CP meeting:**  
February 7-9, 2018, hosted by BEV in Vienna, Austria, 2.5 days meeting. First day: joint meeting with TC-MC
- **EMPIR Calls 2018:** TC-IR Brainstorming meeting, November 2017 in Brussels
- **Revised MRA:** TC-IR Proposal for a revised scheme for the IR-CMCs (Radioactivity, Dosimetry, Neutrons); Presentation at the next CCRI meetings end of June 2017 and depending on the discussions working on the implementation of the proposed new scheme
- **Capacity Building:** needs for training visits or training courses learning the organization and coordination of comparisons => RPot - EMPIR projects
- **Collaborations** with other organizations => EURADOS and ICRM are important partner