

**EMRP ENV57 MetroERM  
Metrology for radiological  
early warning networks in Europe.**



# **JRP ENV57 Workshop WP4: Creating Impact**

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# About the project

- ▶ **‘Metrology for radiological early warning networks in Europe (MetroERM)’** is a Joint Research Project of 11 European national or designated metrology institutes (NMIs and Dis), two radiation protection institutes and two universities. It is organized by EURAMET (European Association of National Metrology Institutes) within the European Metrology Research Programme (EMRP).
- ▶ The project is **coordinated by Stefan Neumaier** from PTB (Physikalisches-Technische Bundesanstalt, Germany).
- ▶ Work package leaders are PTB, NPL (National Physical Laboratory, UK), CEA (French Alternative Energies and Atomic Energy Commission) and CMI (Czech Metrology Institute).

# About the project (cont.)

- ▶ The project started in June 2014 and will end in May 2017.
- ▶ The total budget is 4.7 MEUR.
- ▶ Work packages:
  - ▶ WP1: Dose rate monitoring networks (H. Dombrowski, PTB)
  - ▶ WP2: Airborne radioactivity monitoring networks (S. Bell, NPL)
  - ▶ WP3: Traceability and harmonisation for dose rate and airborne radioactivity monitoring (V. Blideanu, CEA)
  - ▶ **WP4: Creating Impact (P. Kovar, CMI)**
  - ▶ WP5: Management and Coordination (S. Neumaier, PTB)

# About the project (cont.)

- ▶ **Project webpage with open access:**

**<http://earlywarning-emrp.eu>**

- ▶ Information about the project and work packages description.
- ▶ Impact:
  - Knowledge Transfer (publications, presentations, workshops documents)
  - Training (training courses documents)
  - Exploitation (Exploitation plan)
- ▶ Stakeholder registration
- ▶ Project scope and participants

- ▶ The project has **29 stakeholders** from 5 universities, 10 public bodies, 13 industrial enterprises and 1 NMI not participating in the project. Two meetings with stakeholders were organized and held, in Bilbao 2014, and in Varese (Italy) 2015.
- ▶ **End-users uptake:**
  - Production of developed modular portable system for monitoring airborne radioactivity by a Czech company NUVIA a.s. after a long time on site testing.
  - Utilization of developed aerosol monitoring system in Spanish early warning network
  - Utilization of developed aerosol monitoring system in Slovenian NPP Krsko.

# Creating Impact– Knowledge Transfer (cont.)

- ▶ The first **workshop** for stakeholders was organized and held in Varese in March 2015 within the EURDEP workshop. Presentations are available on the project webpage:  
<http://earlywarning-emrp.eu/Impact/KnowledgeTransfer/Workshops>
- ▶ Thirty **contributions** were presented **at international conferences**. Links to conference presentations are available on the project webpage:  
<http://earlywarning-emrp.eu/Impact/KnowledgeTransfer/Presentations>

# Creating Impact– Knowledge Transfer (cont.)

- ▶ Eight **papers** were **published in peer-reviewed journals**.  
Links to publications are available on the project webpage:  
<http://earlywarning-emrp.eu/Impact/KnowledgeTransfer/Publications>
  
- ▶ Two **Good Practice Guides** will be prepared and disseminated to stakeholders:
  - Dose rate measurement at environmental levels.
  - Airborne radioactivity monitoring at environmental levels.

# Creating Impact– Knowledge Transfer (cont.)

- ▶ Information about the project was submitted to **standardisation and technical committees**:
  - ISO/TC85 Nuclear energy.
  - IEC/SC Radiation protection instrumentation.
  - EURAMET Technical Committee for Ionizing radiation.
  - ICRM working groups.
  - BIPM CCRI(I) and CCRI(II).



# Creating Impact- Training

- ▶ **Monte Carlo training course** was organised by UPC and held in Barcelona in May 2016.

Documents are available on the project webpage:

<http://earlywarning-emrp.eu/Impact/Training>

**Research stays for young researchers** were offered at PTB, CMI and NPL.

- ▶ **Exploitation plan** is available on the project webpage:  
<http://earlywarning-emrp.eu/Impact/Exploitation>
- ▶ **New calibration services** for airborne radioactivity monitors will be offered after the project ends.
- ▶ **New low dose calibration services** for early warning network monitors will be offered after the project ends.

# Project partners and contact persons

- ▶ **PTB**, Germany, **Stefan Neumaier** (project coordinator), [stefan.neumaier@ptb.de](mailto:stefan.neumaier@ptb.de)
- ▶ **CEA**, France, **Valentin Blideanu**, [valentin.blideanu@cea.fr](mailto:valentin.blideanu@cea.fr)
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- ▶ **UPC**, Spain, **Arturo Vargas**, [arturo.vargas@upc.edu](mailto:arturo.vargas@upc.edu)
- ▶ **NUVIA**, Czech Republic, **Jan Kubancak**, [jan.kubancak@nuvia.cz](mailto:jan.kubancak@nuvia.cz)

# Cooperation with stakeholders

- ▶ **Stakeholders** (persons, groups or organizations that have interest or concern in the project). Stakeholders are listed in the project Output and Impact Report and should be invited to workshops, trainings or scientific visits. They cannot be paid from project money.
- ▶ **Collaborators** (legal entities that do not sign the Grant Agreement or deliver any work necessary for the completion of the project, but have a formal relationship with the consortia). Collaborators are not regarded as partners or participants in the project. They can provide partners with some advice or facility. They cannot be paid from project money. Formally, they are linked to the project by signing the 'Letter of exchange'.
- ▶ **End-users** (persons, groups or organizations that adopt the project research results).

- ▶ **Cooperation** between potential project partners and potential stakeholders **during project preparation**. Stakeholders' needs should be followed, not researchers' needs:
  - In the SRT (Selected Research Topic), mandatory document for a project preparation, general objectives are given. All partners intending to participate in the project should address, at least in their countries, potential stakeholders and implement their needs in the project protocol.
  - Already during the project preparation, international organizations including standardization committees (IAEA, ICRM, BIPM, ISO, IEC) should be informed about the project and asked for their contribution.
  - Project partners should identify potential end-users able to exploit research results, especially instrumentation producers.

- ▶ **Cooperation** between project partners and stakeholders **during ongoing project**:
  - Project webpage with open access enabling direct stakeholders registration.
  - Workshops for stakeholders.
  - Training for stakeholders.
  - Research stays for stakeholders in partners' institutes.
  - Stakeholders visits to partners' facilities.
  - Partners visits to stakeholders' facilities.
  - Invited speakers for project meetings.

- ▶ **Involvement of new stakeholders** during ongoing project:
  - All project partners should continuously look for stakeholders, at least in their countries and identify potential end-users able to exploit the research results.
  - All project partners should continuously look for links to international organizations including standardization committees (IAEA, ICRM, BIPM, ISO, IEC) and informed them about the project results.

- ▶ **Cooperation with stakeholders after project completion:**
  - This cooperation and implementation of research results at stakeholders should be clearly specified in the project protocol as continuation of cooperation during the project.