NERIS: The European Platform on Preparedness for Nuclear and Radiological Emergency Response and Recovery

Strategic Research Agenda

Presented by:
Florian Gering (BfS), Vice-Chair of NERIS
fgering@bfs.de

Contributed:
Thierry Schneider (CEPN), Johan Camps (SCK•CEN),
Frank Hardeman (SCK•CEN)
History of the NERIS Platform

• Created in 2010
• Financial support from the European Commission to structure the Platform
• Adoption of legal statutes in May, 15, 2012 in Glasgow
• Legal registration under the French Law: August, 28, 2012
• Self-sustainable since 2014

• 24 countries
• 54 member organizations
  • 26 supporting organizations
• 26 in college 1 (authorities, TSOs, operators, professional organizations)
• 28 in college 2 (research institutes/universities, consultants, local and national stakeholders, NGOs)
NERIS: The European Platform on Preparedness for Nuclear and Radiological Emergency Response and Recovery:

- **Management Board:**
  
  T. Schneider (CEPN), S. Lafage (CEPN), J. Bardeley (IRSN), T. Duranova (VUJE), E. Gallego (UPM), F. Gering (BfS), F. Hardeman (SCK CEN), G. Hériard Dubreuil (Mutadis), C. Murith (FOPH), D. Oughton (UNMB), W. Raskob (KIT)

- **R&D Committee:**
  
  Johan Camps / Frank Hardeman (SCK•CEN), Antony Bexon (PHE), Jarmila Bohunova (VUJE), Sylvie Charron (IRSN), Pascal Croûail (CEPN), Claudia Landman – Wolfgang Raskob (KIT), Milagros Montero (CIEMAT), Eldri Naadland Holo (NRPA), Per Roos, Kasper Anderson (DTU), Kaj Vesterbacka (STUK)
• **Improving the effectiveness** of current European, national and local approaches for preparedness

• **Promoting more coherent**

• **Identifying gaps** and needs for further developments

• **Addressing new and emerging challenges** in the field of preparedness

• **Maintaining and improving know-how** and technical expertise in preparedness among all interested stakeholders in Europe
Updated version (v2) of NERIS SRA on April 8, 2014
Discussion during the NERIS Workshop April 2015

*Three research areas have been identified with 7 topics:*

1. New challenges in atmospheric and aquatic modeling
2. New challenges for better dose assessments and decision support based on improved knowledge
3. New challenges in stakeholder involvement and local preparedness and communication strategies
Key Topic 1: Atmospheric dispersion modelling
- To make more reliable and precise forecasts on atmospheric dispersion of radioactive materials in different environments:
  - *Urban, confined spaces*
  - *Models for non-conventional emissions*
  - *Simulation of (very) long-duration releases to air*
  - ...

Key Topic 2: Aquatic dispersion modelling
- To improve forecasts on aquatic dispersion of radioactive materials in different environments
  - *Urban hydrology systems*
  - *Coastal waters*
• **Key Topic 3: Improvement of existing Decision Support System**
  • To obtain a better analysis of the radiological situation (source-term, scenarios, etc.),
  • To support the decision-making processes during emergency and recovery phases

• **Key Topic 4: Data mining, information gathering and providing information to stakeholders and mass media**
  • To foster the information exchange between all interested stakeholders
  • To provide means for a more transparent decision-making process

• **Key Topic 5: Improvement of the decision-making processes**
  • Better structured processes at national, regional and local levels
  • Improvement of the efficiency of protective strategies
Research Area 3. New challenges in stakeholder involvement and local preparedness and communication strategies

- **key Topic 6: Stakeholder engagement and dialogue**
  - To improve the acceptability and social robustness of emergency response, ensuring that stakeholders are involved in decisions impacting their lives

- **Key Topic 7: Use of social media & networking**
  - To better understand the ways in which social media and other media are used in the flow of information and communication
• Priorities have been assigned in SRA v2, currently being revised

• Road map under development

• Feedback from NERIS workshop on April 27-29, 2015 in Milano (Italy) being evaluated
  Focus: State of the art and Needs for further research for emergency and recovery preparedness and response

• Meeting of Management Board and R&D committee planned for Oct. 14/15, 2015 -> update of priorities

• Next General Assembly: Jan. 19, 2016 in Bratislava
  -> Other platforms, CONCERT, HERCA, ... will be invited to discuss NERIS SRA, priorities and road map
Thank you for your attention

www.eu-neris.net