MELODI

Maximizing European research for radiation protection

Training session: Horizon 2020, 8 November 2013, Brussels
Contents

• Why MELODI?: key issues for low dose radiation protection in Europe
• Current achievements and developments of MELODI
• Next steps, preparing for Horizon 2020
• Conclusion
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2009: The HLEG Report on low-dose risk research

• **Major societal and scientific questions**
  – Dose/effect relationship at low dose/low dose rate exposures,
  – Individual sensitivity
  – Non cancer health effects
  – Internal exposure, associated to chemical contamination; influence of radiation quality

• **A need for a Strategic Research Agenda (SRA) and associated priority road map**
The HLEG Report on low-dose risk research

• A fragmented research community
  – Need for better integration of national and European programs

• A lack of sustainability of R&D efforts
  – Need for a permanent platform gathering the key actors, and interfacing with key stakeholders
DoReMi: a network of excellence to accelerate the implementation of HLEG recommendations

• To prepare and update a Transitional Research Agenda (TRA)
• To contribute to long-term Strategic Research Agenda of MELODI
• To address the main scientific questions and cross-cutting issues set by HLEG
DoReMi: a successful NoE

Joint Programme of Research

- Tissue sensitivities
- Internal emitters
- Radiation quality

Shape of dose response (cancer)

Individual sensitivities

Non-cancer effects

Low Dose Risk
DoReMi: step by step integration

Phase 1
Months 0-18
- Establishment of integration plan
  - Strengths and weaknesses
  - Coherent structure
  - Harmonised procedures
  - Best practices
  - Transition plan

Phase 2
Months 19-36
- Consolidation of Integration plan
  - Joint Programme of Activities
  - Application of procedures and best practices
  - Approaches to communication; training knowledge management
  - Infrastructures

Phase 3
Months 37-54
- Creation of permanent entity
  - Clear structure with accountabilities
  - Organised, permanent entity

Phase 4
Months 55-72
- Transition plan for sustainability
  - Permanent management structure
  - Long-term funding plan

Relevant indicators for the measurement of the degree of integration
Similar evolutions in other areas of radiation protection R&D problematics

- **Environmental issues: the future of European radioecology**
  - European Radioecology ALLIANCE / STAR NoE / COMET EC-funded project

- **Emergency preparedness: a renewed priority after Fukushima**
  - NERIS / PREPARE EC-funded project

- **Dosimetry: metrology as a key research resource and instrument for optimisation of exposures**
  - EURADOS
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MELODI Association: Status, membership

• Legal entity: non profit Association under French law

• Statutory mission: art II: « The purpose of the MELODI Association is to constitute a European Research Platform in the field of low-dose exposure to ionizing radiation and of radiation protection from such exposure aiming for a progressive integration of related national and European activities…/… MELODI defines priority scientific goals and implements research. »

• Membership rules: Founding members, with national role for RP R&D, commited to R&D integration, Ordinary members, contributing to MELODI work
Current MELODI membership

- 11 countries with « founding members »
- 4 countries with « ordinary members » only
- 1 application from Croatia
- 12 countries still without MELODI members
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<th>Country</th>
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<td>UK</td>
<td>PHE, UNIVERSITY OF BELFAST</td>
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Scientific Committee

WG WG WG WG WG

Members

WG  WG  WG  WG  WG

Working Groups

Integrative actions

Future joint research projects

R&D operational activities

International organisations: HERCA, UNSCEAR, ICRP

Other low-dose R&D programmes (USA, ...)

WGs: E&T, SRA Infrastructures… + Joint groups with other RP R&D platforms

MELODI structure

GA / Board

EC

Alliance
NERIS
EURADOS
EUTERP ...

EC
MELODI deliverables (1)

In the area of low dose exposure risks

• SRA, R&D priorities and « roadmap »
• Scientific opinions
• MELODI Award
• MELODI open workshops
• Organisation of open R&D calls (OPERRA WP3)
• European and national R&D integration strategy
• Education and training strategy and coordination
• Infrastructures strategy and coordination
MELODI deliverables (2)

Acting together with other RP specialised research associations, through a MoU for transversal cooperation

- Ensuring European overall coherence of R&D programs in response to priority RP needs (environmental protection, emergency preparedness, dosimetry, medical domain, E&T)
- Operational support to other EU FP7 projects: CO-CHER, COMET
- Preparing for H2020
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MELODI / OPERRA: a prototype of a future JEP instrument for Horizon 2020

• Joint SRA and R&D priorities development
• Administration of open R&D calls, with a methodology designed to prevent conflicts of interest
• Enhancing European integration of national R&D programmes and key infrastructures
• Reaching out to universities, new EU Member States, key stakeholders and to society
MELODI: From low-dose risk research to radiation protection R&D integration

• A cooperative action between MELODI, Alliance, NERIS, EURADOS, EUTERP

• Reaching out to the medical R&D community
Conclusion

• Radiation protection research addresses important stakes for Europe

• MELODI and sister platforms form a reliable and open instrument to progress towards European research integration

• With EC and Member States support, the next step may be the formation of a JEP proposal, gathering national R&D bodies committed to integration, and MELODI as an integrative platform, supported by the other European R&D RP structures
Thank you for your attention

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