



Multidisciplinary European Low Dose Initiative

MELODI

**Maximizing European research
for radiation protection**

Training session: Horizon 2020, 8 November 2013, Brussels



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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

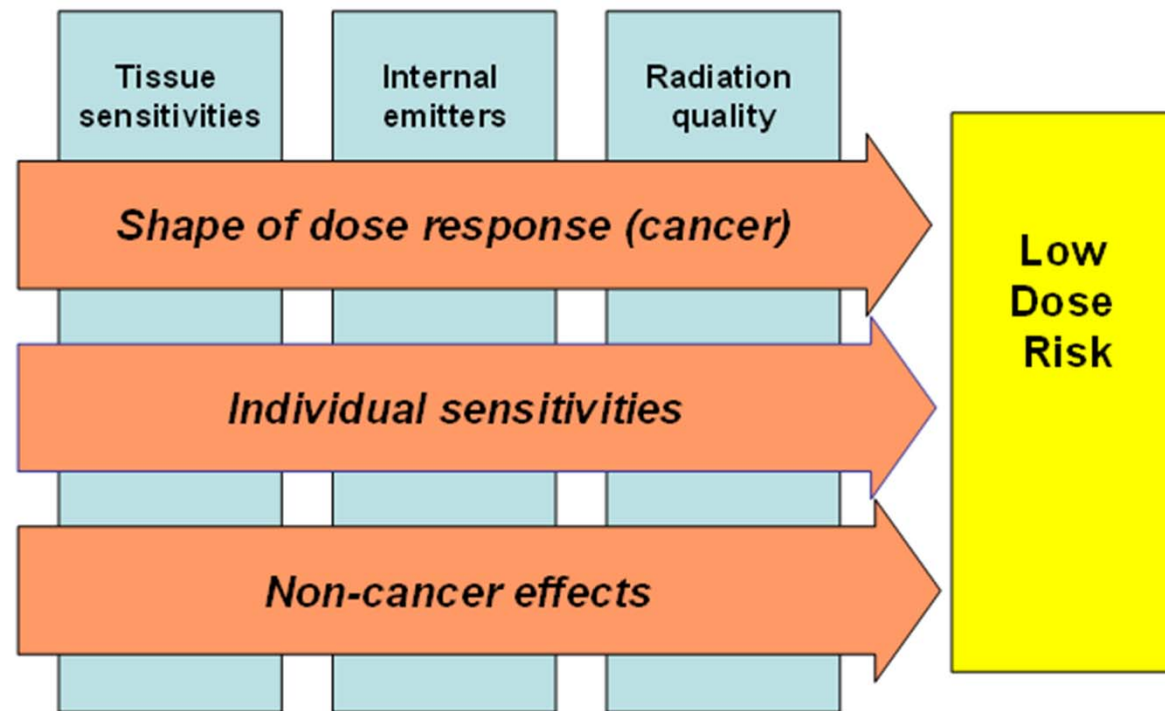
- **A fragmented research community**
 - Need for better integration of national and european programs
- **A lack of sustainability of R&D efforts**
 - Need for a permanent platform gathering the key actors, and interfacing with key stakeholders

DoReMi: a network of excellence to accelerate the implementation of HLEG recommendations

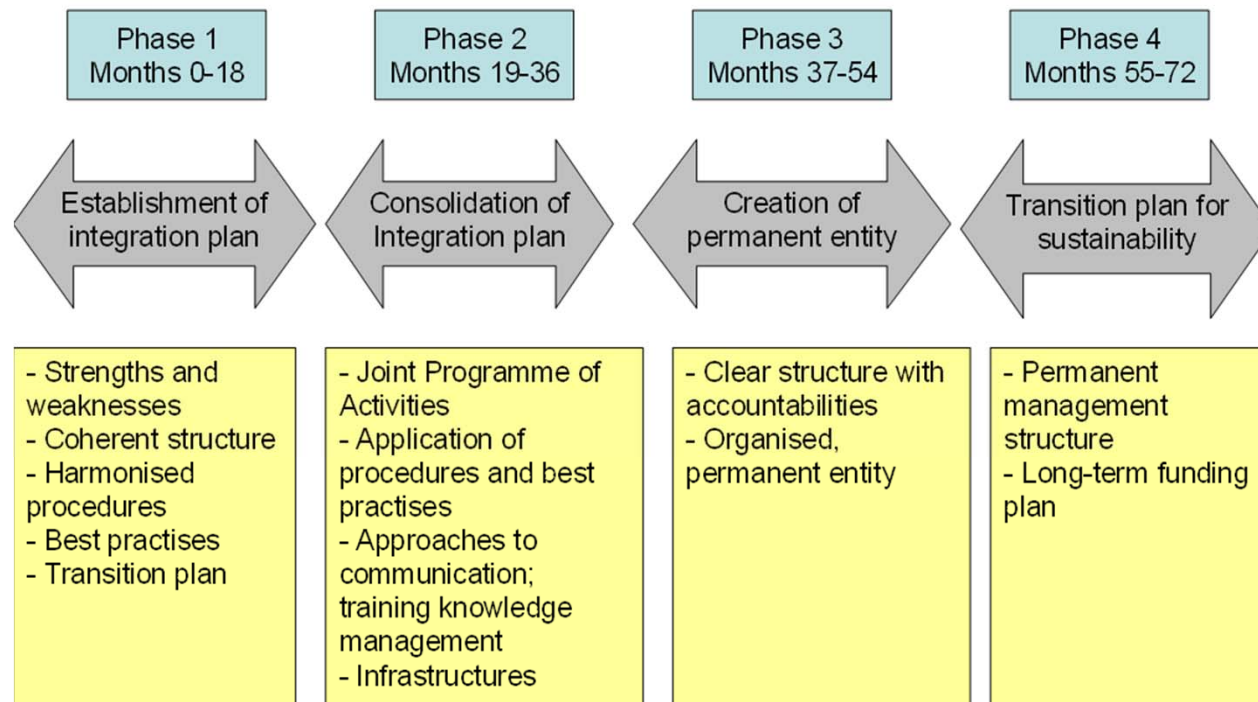
- To prepare and update a Transitional Research Agenda (TRA)
- To contribute to long-term Strategic Research Agenda of MELODI
- To address the main scientific questions and cross-cutting issues set by HLEG

DoReMi: a successful NoE

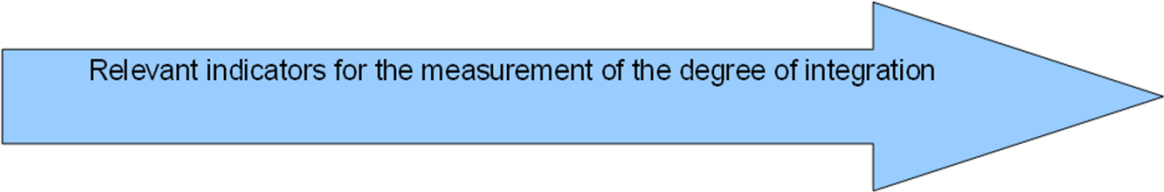
Joint Programme of Research



DoReMi: step by step integration



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

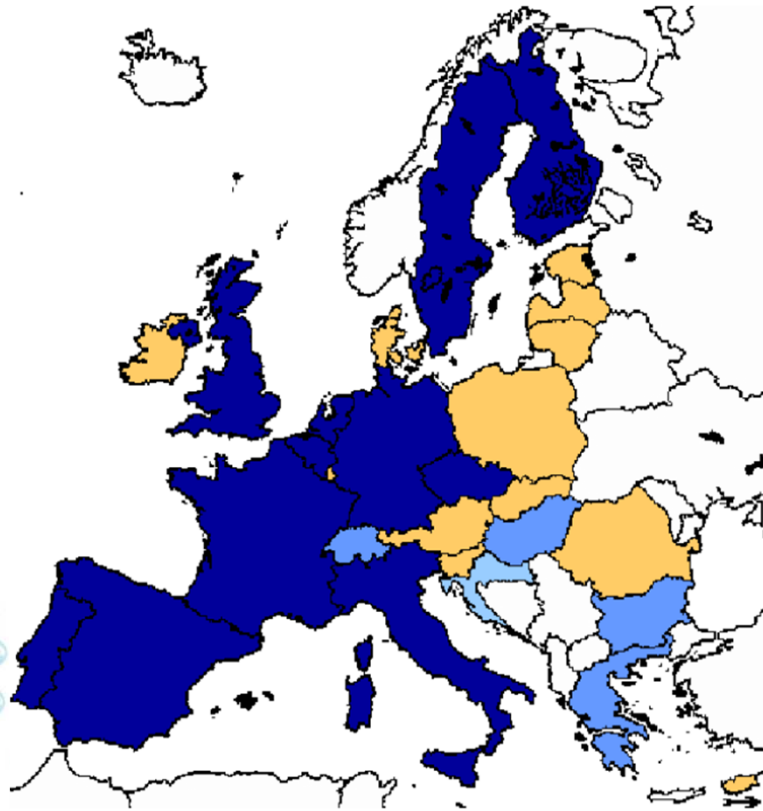
- Legal entity: non profit Association under French law
- Statutory mission: art II: « *The purpose of the MELODI Association is to **constitute a European Research Platform in the field of low-dose exposure to ionizing radiation and of radiation protection** from such exposure aiming for a progressive 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, committed to R&D integration, Ordinary members, contributing to MELODI work*



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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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BELGIUM

SCK-CEN, ISP



BULGARIA

NCRRP

CROATIA

IMROH

CZECH REPUBLIC

UNIVERSITY OF SOUTH BOHEMIA



FINLAND

STUK



FRANCE

CEA, IRSN



GERMANY

BFS, HMGU, KIT, KVSF, UNIVERSITY OF ROSTOCK,

GREECE

DUTH



HUNGARY

HUNGARIA ACADEMY OF SCIENCE, NRIRR



ITALY

ENEA, INFN, ISS, UNIVERSITY OF PAVIA

NETHERLANDS

RIVM



PORTUGAL

ITN

SPAIN

CREAL, UAM, URV

SWEDEN

SSM, SU



SWITZERLAND

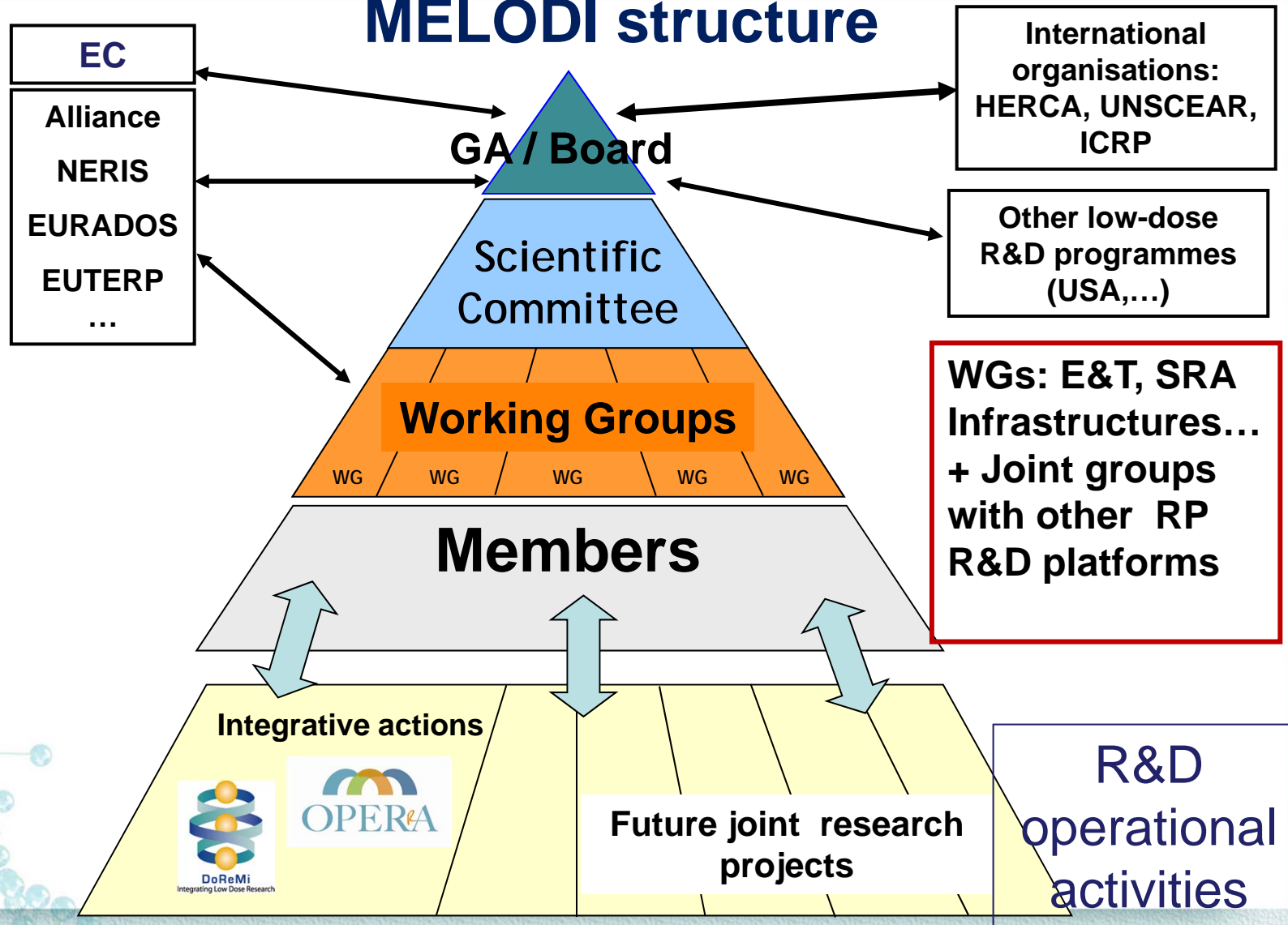
IRA



UK

PHE, UNIVERSITY OF BELFAST

MELODI structure





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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



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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



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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



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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**



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Thank you for your attention

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