



OPERRA

OPEN PROJECT FOR EUROPEAN RADIATION RESEARCH AREA

# Presentation of the OPERRA Project

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OPERRA Project Coordinator



## Concept & Main Objectives

- To build up an umbrella coordination structure that has the capacity in a legal and logistical sense to administer future calls for research in radiation protection on behalf of the European Commission
- The MELODI Association will take the lead with the support of sister structures as equal partners (e.g. Alliance, NERIS, EURADOS, EURAMET, EUTERP, etc.)



## Overall Strategy

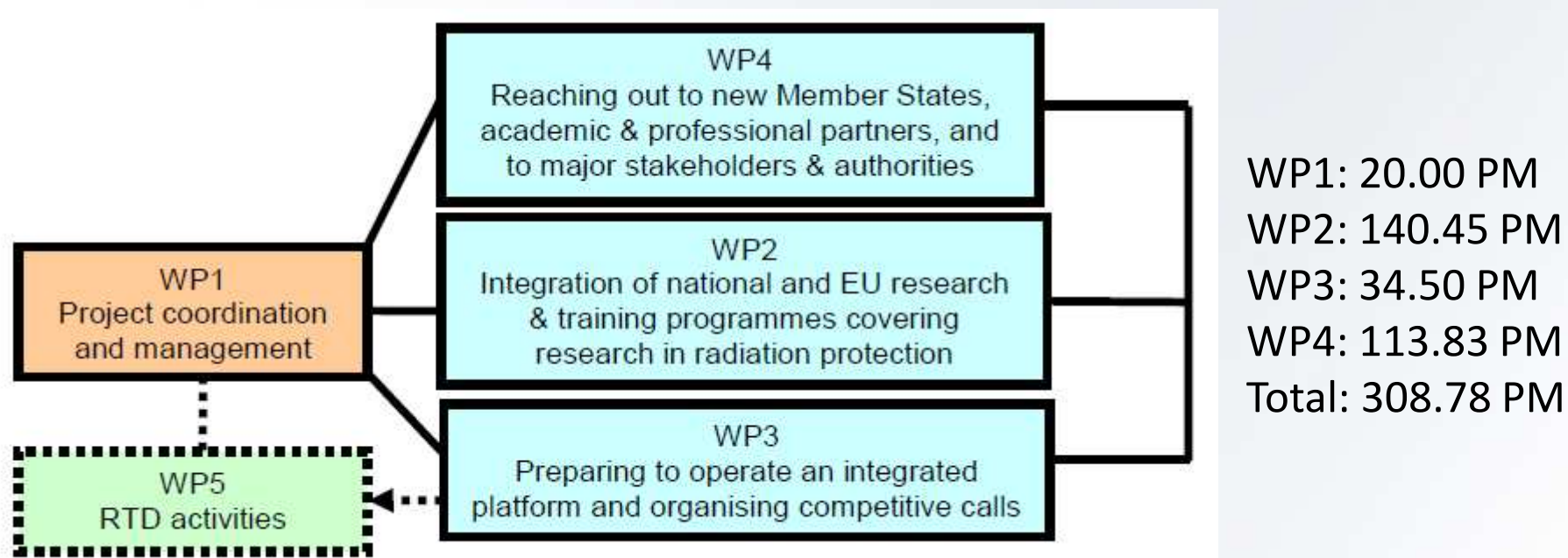
- The OPERRA project aims at developing a Joint Programming European Instrument describing the actions to be implemented for:
  - Setting-up a sustainable organisation governing radiation protection research, including education and training issues, in Europe (WP3)
  - Organising research calls in radiation protection (WP3)
  - Engaging the key partners in radiation protection as well as national & international funding agencies (WP2)
  - Reaching out to universities & academic partners, new EU Member States, major stakeholders & authorities as well as other technical platforms within and outside of EURATOM (WP4)



## List of Beneficiaries

No	Name	Short name	Country	Project entry month <sup>10</sup>	Project exit month
1	INSTITUT DE RADIOPROTECTION ET DE SURETE NUCLEAIRE	IRSN	France	1	48
2	STUDIECENTRUM VOOR KERNENERGIE	SCK·CEN	Belgium	1	48
3	BUNDESAMT FUER STRAHLENSCHUTZ	BfS	Germany	1	48
4	SATEILYTURVAKESKUS	STUK	Finland	1	48
5	Association Melodi	MELODI	France	1	48
6	JIHOCESKA UNIVERZITA V CESKYCH BUDEJOVICICH	JU	Czech Republic	1	48
7	ORSZAGOS FREDERIC JOLIOT-CURIE SUGARBIOLOGIAI ES SUGAREGESZSEGUGYI KUTATO INTEZET	OSSKI	Hungary	1	48
8	HEALTH PROTECTION AGENCY HPA	HPA	United Kingdom	1	48
9	COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES	CEA	France	1	48
10	FUNDACIO CENTRE DE RECERCA EN EPIDEMIOLOGIA AMBIENTAL - CREAL	CREAL	Spain	1	48
11	ISTITUTO SUPERIORE DI SANITA	ISS	Italy	1	48
12	HELMHOLTZ ZENTRUM MUENCHEN DEUTSCHES FORSCHUNGSZENTRUM FUER GESUNDHEIT UND UMWELT GMBH	HMGU	Germany	1	48
13	UNIVERSITA DEGLI STUDI DI PAVIA	UNIPV	Italy	1	48
14	STOCKHOLMS UNIVERSITET	SU	Sweden	1	48

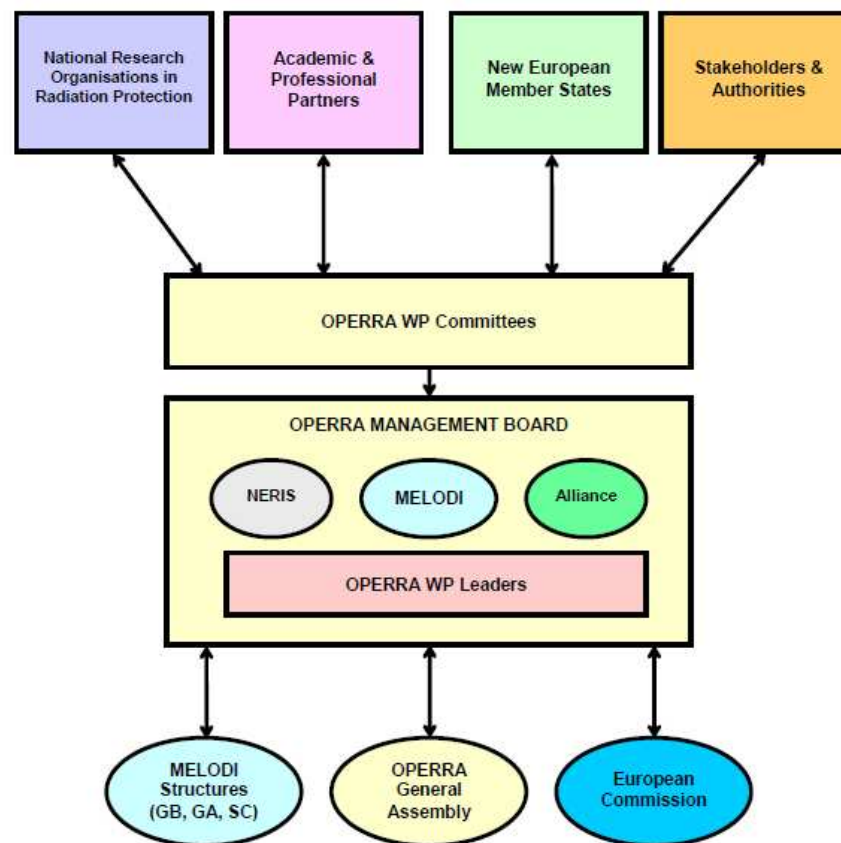
## Relationships between Work Packages



Duration of the Project: 48 Months

WP Leaders: IRSN (WP1), BfS (WP2), MELODI (WP3), STUK (WP4)

# Decision-making Structure

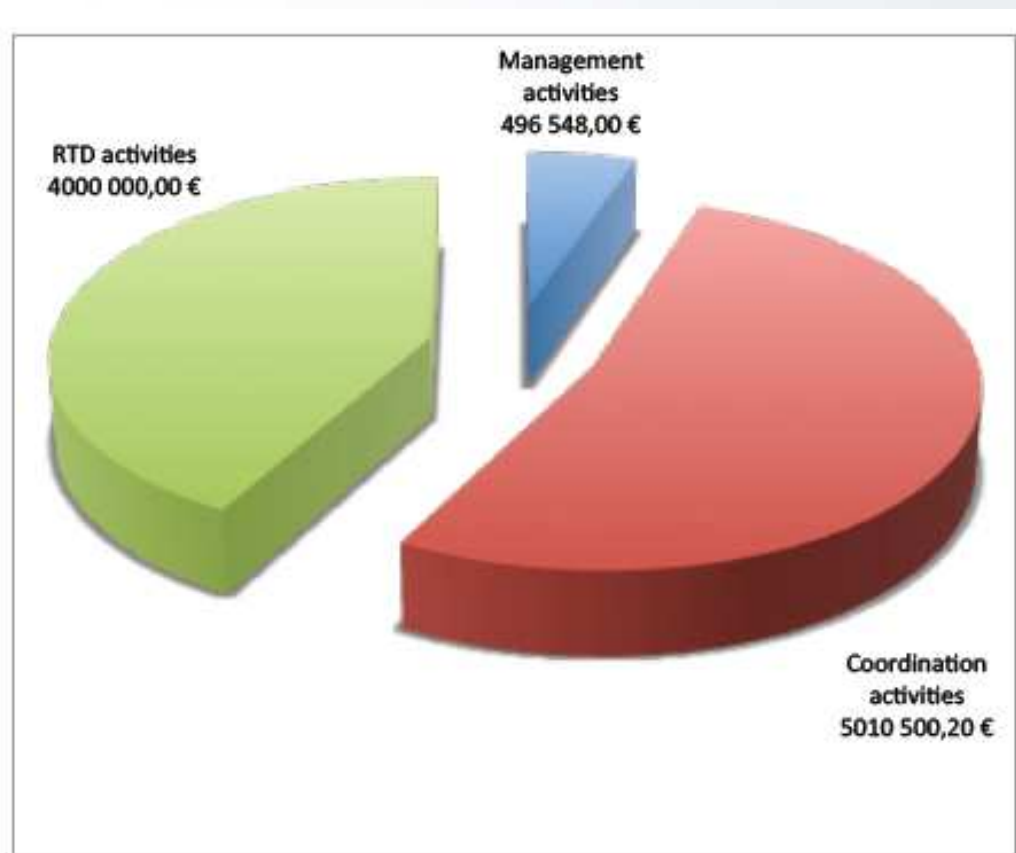




# OPERRA Consortium Meetings

- OPERRA WP Committees: WP Leaders are urged to organise as often as necessary WP committees aiming at defining work plans and ensuring an efficient follow-up of WPs achievements (summary reports to be submitted to the Coordinator for approval)
- OPERRA Management Boards: OPERRA MB bringing together WP Leaders, MELODI Chair, Alliance Chair & NERIS Chair (and a EC representative as an observer) will be organised 3-4 times per year. The MB may invite other partners when necessary (summary reports to be distributed to all OPERRA beneficiaries)
- OPERRA General Assemblies: organised at least once a year, the objective is to inform all OPERRA beneficiaries about the key achievements of the OPERRA project. The OPERRA GA will bring together representatives of each beneficiary having one vote right, as well as a EC representative and the President of HERCA as observers. The attendees will be informed about the OPERRA achievements and consulted for strategic decisions, such as replacement of the OPERRA Coordinator, modification of the OPERRA MB composition and for resolving disputes (summary report to be posted on MELODI, Alliance and NERIS websites)
- With the view of saving resources, all meetings will be organised in conjunction with other meetings (e.g. MELODI GA, Alliance GA or NERIS GA) when possible

## Total Eligible Costs per Activity Type



Total Costs  
9,507,048.20 €

EC Contribution  
8,000,000.00 €





# Management of Flexibility Funding

- The flexibility funding is budgeted under the Coordinator and allocated to actual and new beneficiaries during the course of the project according to the MB's decisions
- The flexibility funds are used for RTD activities that will be selected through the two competitive calls scheduled in 2013 and 2014
- The Coordinator will monitor the actual organisation of the competitive calls with the support of an external advisory entity and a "Go-between" administrator operator (see WP3 description)
- Research projects selected through competitive calls will be included in WP5 and will offer the opportunity to include new beneficiaries within the OPERRA project (all partners, including OPERRA beneficiaries will have the possibility to answer research calls)
- Flexibility funding for supporting the participation of external experts in OPERRA meetings is also budgeted under the WP2, WP3 & WP4. The flexibility plan will be updated and its actual use reported on a regular basis within the periodic reports



# Major Deliverables

- Publication of competitive call texts & associated documents (M7, M19)
- Periodic Reports (M18, M36, M48)
- Recommendations on how to make full use of the universities' research potential for low-dose risk radiation research (M24)
- Report on the final workshop with key partners in radiation protection & roadmap for further collaboration (M30)
- Analysis of stakeholder questionnaire responses (M30)
- Proposed actions for the best way forward with migration from DoReMi, STAR & NERIS-TP (M36)
- Policy statement and roadmap for education & training in new technologies and the use of large European infrastructures (M36)
- Improve the new Member States' potential to participate in EU-supported low-dose risk research (M40)



## Major Deliverables

- Recommendations for future research on risk communication, risk perception and ethics of radiation protection and integration of these issues in training and education (M40)
- Roadmap for integrating knowledge from non-radiation research (M40)
- Report on the final workshop with key funding agencies: possibilities of joint funding strategies (M40)
- Summary report on the collaborations and generation of topics for future common calls and projects with other technical platforms in EURATOM (M42)
- Report on a strategy for coordinating, integrating and supporting E&T programs in radiation protection (M48)
- Final report on survey of infrastructures inside and outside of the radiobiology/radioprotection fields and their applicability to the radioprotection community (M48)



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**WP2: Integration of national and EU  
research and training programmes  
covering research in radiation protection**

Lead: Thomas Jung (BfS, Germany)



## SRAs, Priorities and Road Maps

- Platforms and organizations should be encouraged to develop and maintain their own SRAs, priorities and road maps
- Beside research topics SRAs should include E&T
- OPERRA should develop a view on joint programming, priority setting and road map development for RPR as a whole, by building on existing SRAs from platforms/organizations and by making use of the synergisms of intra, inter and extra platform/organization discussions



## SRAs, Priorities and Road Maps

- WP2 will start work on joint programming by identifying relevant international platforms and organizations (Task 2.1) and national institutions as well as national funding organizations (Task 2.2)
- Procedures to start thematic joint programming will be developed together with the relevant partners identified (Tasks 2.3-2.6)



## Task 2.1 - Identifying key partners involved in RP research, and E&T, and joint programming of research activities in RP: links with MELODI, ALLIANCE, NERIS, EUTERP, EURADOS & EURAMET

- Existing integration mechanisms in the different research platforms will be analyzed and the potential for collaboration will be explored. Joint programming of radiation protection research will be promoted as well as integration of education & training activities with research activities in all areas of radiation protection research.
- To this end, close collaborations between the existing radiation research platforms will be established. A joint strategic research agenda (SRA) and road map (RM) for radiation protection research in Europe will be developed. The specific traditions and identities within the scientific disciplines will be respected as long as the main goal of joint programming is the driving force. Key partners for joint programming in research as well as education & training will be engaged.



## Task 2.2 - Determining joint funding mechanisms for national & EU Fission R&D programmes

- Aim is to firstly elucidate ways of joint programming and funding of radiation protection research in Europe to meet the strategic goals as described by HLEG and MELODI. In a later step agreed ways of joint programming and if possible funding will be ascertained
- Two options:
  1. On the basis of the joint programming, shared funding responsibilities have to be discussed and agreed on between relevant bodies in Europe and MS in a way that specific parts of the program are funded by Europe and other parts by national funding agencies. For this option, it must be clear from the very beginning that the projects with the joint programming will be closely linked to each other
  2. On the basis of joint programming, national funding agencies will give a defined portion of their available budget to the new umbrella organization to better coordinate European and national funding





## Task 2.3 - Identifying experiences and lessons learned from existing exposure situations, including Chernobyl, Fukushima, and the NORM industry

- Existing exposure situations from natural radioactive sources or after a major nuclear accident are major challenges for radiation protection in general and targeted research in particular.
- Experience from existing exposure situations will be gathered and lessons learned from emergency response, remediation measures and health impact will be described. Based on this, research needs to improve preparedness for future accidents and to optimize radiation protection measures for exposure remediation will be identified. They will be prioritized with regards to health impact.
- There will be three subtasks:
  - Subtask 2.3.1: Emergency situations
  - Subtask 2.3.2: Remediation
  - Subtask 2.3.3: Health impact



## Task 2.4 - Exploring how to enhance radiation protection research activities related to the medical uses of ionizing radiation

- Best strategies to optimize medical exposures will be developed by integrating knowledge from radiation protection and medical professionals and by identifying research, education and training priorities to improve radiation protection in medicine.
- Subtask 2.4.1: "High dose" procedures based on X-ray imaging (CT, angiography)
  - The aim of the workshop to be organized within this subtask is to decide in which direction European research should go to have an important impact on radiation protection for staff and patients.
- Subtask 2.4.2: Nuclear medicine procedures
  - The aim of this subtask would be to gather information about hitherto performed investigations. The workshop to be held is aimed at deciding on future research directions.
- Subtask 2.4.3: Therapeutic procedures
  - The effectiveness of radiation therapy types in terms of tumor curing and reducing late health effects (like secondary cancers) is not investigated for many applications so far. Within this task, a workshop will decide on the future research to be performed in this field.



## Task 2.5 - Preparing the migration from DoReMi, STAR & NERIS-TP

- Existing NoEs in RP research have established successful methods to promote radiation protection research by
  - Contributing to SRA development
  - Infrastructure and knowledge management
  - Engaging wider scientific community
  - Organizing internal and competitive calls
- Good practices need to be migrated to the new platform to be established in WP3
- This task will perform an evaluation of methodology development for the TRA process and make recommendations for best practices for future program development
  - How input data for TRA development was obtained and what the best practises had been?
  - How topics for internal and competitive calls were identified?
  - How relevance, potential impact and feasibility of approaches was evaluated?
  - How external consultation was searched?



## Task 2.6 - Integrating knowledge from non-radiation research

- This task will explore expertise gathered in other fields of research, not directly related to radiation protection research, with a view to strengthening the exchange and integration of knowledge between the radiation and non-radiation research communities.
- For this, Task 2.6 will organize small workshops with scientists from outside and inside the radiation community in order to identify knowledge and infrastructures that can be applied to radiation research, thus optimizing resources for the future, and drawing on outside expertise and avoiding re-inventing the wheel where it exists.
- By bringing together relevant experts in thematic workshops (Review of existing European non-radiation cohorts, molecular epidemiological approaches, lessons from stem cells and animal models outside the radiation field, biomarkers/molecular biology (including proteomics), integrative biology including systems biology and biochemistry, modeling of pathogenesis), a roadmap will be developed for the integration of knowledge in epidemiology, biology, biostatistics, bioinformatics, biochemistry and physics from outside.



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**WP3: Preparing to operate an integrated platform & organizing competitive calls**

Lead: Jacques Repussard (MELODI Association)



## Main Objectives of OPERRA WP3

- To build up an umbrella coordination structure that has the capacity in a legal and logistical sense to administer future calls for research in radiation protection as a whole (including low-dose risk, radioecology, nuclear emergency management, and also research activities related to the medical uses of ionising radiation) on behalf of the European Commission
- To organise a first competitive call for projects in low-dose risk research (2013) and a second competitive call for broader projects in radiation protection research (2014), subject to the approval of EC services



## Selecting an External Advisory Entity and a “Go-between Operator”

- An External Advisory Entity (EAE) and a “Go-between” Operator (GAO) will be chosen to carry out the administration of competitive research calls in radiation protection in an independent manner
- The criteria for the selection of the EAE and the GAO will include considerations on their capabilities to organise closed meetings, ensure the confidentiality and record the discussions, and guarantee the anonymity of experts attending the closed meetings
- To optimize as much as possible the costs related to the organisation of competitive calls, the OPERRA & COMET consortia will rely on the services of the same EAE and GAO for their respective calls for research projects



## Setting-up a European Umbrella Structure for Radiation Protection Research Call Administration

- The OPERRA Project aims at bringing the MELODI Association, with the support of its sister structures, to the level of managerial, legal, administrative and financial maturity required to implement the preparatory phase for the development of a federating body
- The OPERRA project will elaborate a draft European Joint Programming Instrument describing the operational function of an umbrella structure as a federating body, structuring and organising radiation protection research in Europe
- This task will get benefit of consensus seminars bringing together representatives of research organisations, universities, national competent authorities, stakeholders, and non-EU countries: the draft instrument should be applicable to the other fields of radiation protection





## Setting-up a European Umbrella Structure for Radiation Protection Research Call Administration

- The OPERRA Project will prepare draft documents describing the statutory and internal rules of decision-making structures, management structures, external advisory board (involving other partners, e.g. HERCA, European Society of Radiology, Third Countries, etc.) as well as of inter-governmental agreements that may be necessary at a later stage
- A document describing how the MELODI Association, with the support of its sister structures, will manage and justify its liability for the European funds that would transit, through MELODI, from the EC to all research partners concerned will also be elaborated
- The OPERRA Project will define financial arrangements for the coordination and integration of national R&T efforts through national and translational public-public partnerships



## Setting-up a European Umbrella Structure for Radiation Protection Research Call Administration

- The OPERRA Project will study alternative mechanisms through which innovative R&T approaches, including infrastructures, may be funded in complement
- The OPERRA Project will plan, over a period of at least ten years, the conditions for progressive integration of the national R&T efforts, and describe indicative timetables for future radiation protection research calls (call drafting, submission, evaluation, negotiation, etc.)
- The OPERRA Project will estimate and define timing of human & financial resources needed to manage the MELODI Association as an umbrella organisation governing research calls in radiation protection at the European level
- The OPERRA Project will examine the options of including these resources inside MELODI, or in a subcontracting system according to periodic tendering contracts



## Supporting the organisation of competitive calls for radiation protection research

- Profiting from the experience gathered within the DoReMi network of excellence, OPERRA will launch a first call for low-dose risk research (2013) and a second call addressing widely research in radiation protection (2014)
- It is proposed to complement the MELODI SRA with a “RTD roadmap” listing research priorities. This roadmap would evolve each year, reflecting SRA developments and the contributively potential from laboratories across Europe: a first proposal will be presented at the MELODI workshop in Brussels in October 2013
- The call specification will be drafted in an independent and confidential manner by a small group convened by the “Go-between” Operator. This group will be chaired by the President of HERCA and will comprise independent experts proposed by the scientific third party, the President of HERCA and the European Commission



## Supporting the organisation of competitive calls for radiation protection research

- The GAO will organise the evaluation process. The evaluation of the responses to the call will be done by experts selected for appropriate skills and independence, from the database of experts currently operated by the EC
- The GAO will ensure that the evaluation process is conducted anonymously, with respect to the OPERRA and project partners, including MELODI
- The evaluation summary reports will be transmitted by the GAO to the OPERRA Coordinator. On the basis of the evaluation summary reports and the ranking list of the proposals, the OPERRA MB will make final decision of the proposals to be funded
- The OPERRA Coordinator will then perform the necessary actions to include new beneficiaries in the consortium or allocate additional funding to existing members, inform the EC of the results of such activities and prepare amendment of the OPERRA GA to include new members in the consortium



## Supporting the organisation of competitive calls for radiation protection research

- The competitive calls will be published in at least one international journal and in three different national newspapers in three different Member States or Associated Countries
- The competitive calls will also be widely advertised using specific information supports, e.g. websites of on-going EC-supported projects, the external websites of existing platforms (e.g. MELODI, Alliance, NERIS) and through national contact points set up by the Member States and Associated Countries
- The OPERRA consortium will inform the European Commission of the calls and their content at least thirty (30) days prior to its expected date of publication
- The selected research projects will be included in a new WP that will form the RTD OPERRA WP (WP5). The OPERRA MB will be responsible for monitoring the implementation of the selected projects and the OPERRA Coordinator will guarantee that the granted partners provide timely the scientific and financial reports



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**WP4: Reaching out to new Member States,  
academic & professional partners,  
stakeholders & authorities**

Lead: Sisko Salomaa (STUK, Finland)



## WP4 Main Objectives

- To ensure the involvement of all other actors, aside from those clearly identified as already playing a central role, who may also contribute to defining the future research priorities in radiation protection
- To benefit from all resources that may serve the interests of the European radiation protection community

## WP4 Detailed Objective #1

- To explore how the potential of academic & professional institutions can be integrated to strengthen their role in radiation protection research, and
- To take advantage of their experience in social & human sciences (e.g. risk communication, risk perception, ethics)





## WP4 Detailed Objective #2

- To undertake coordination activities to remove the barriers that inhibit the involvement of the new EU Member States in radiation protection research

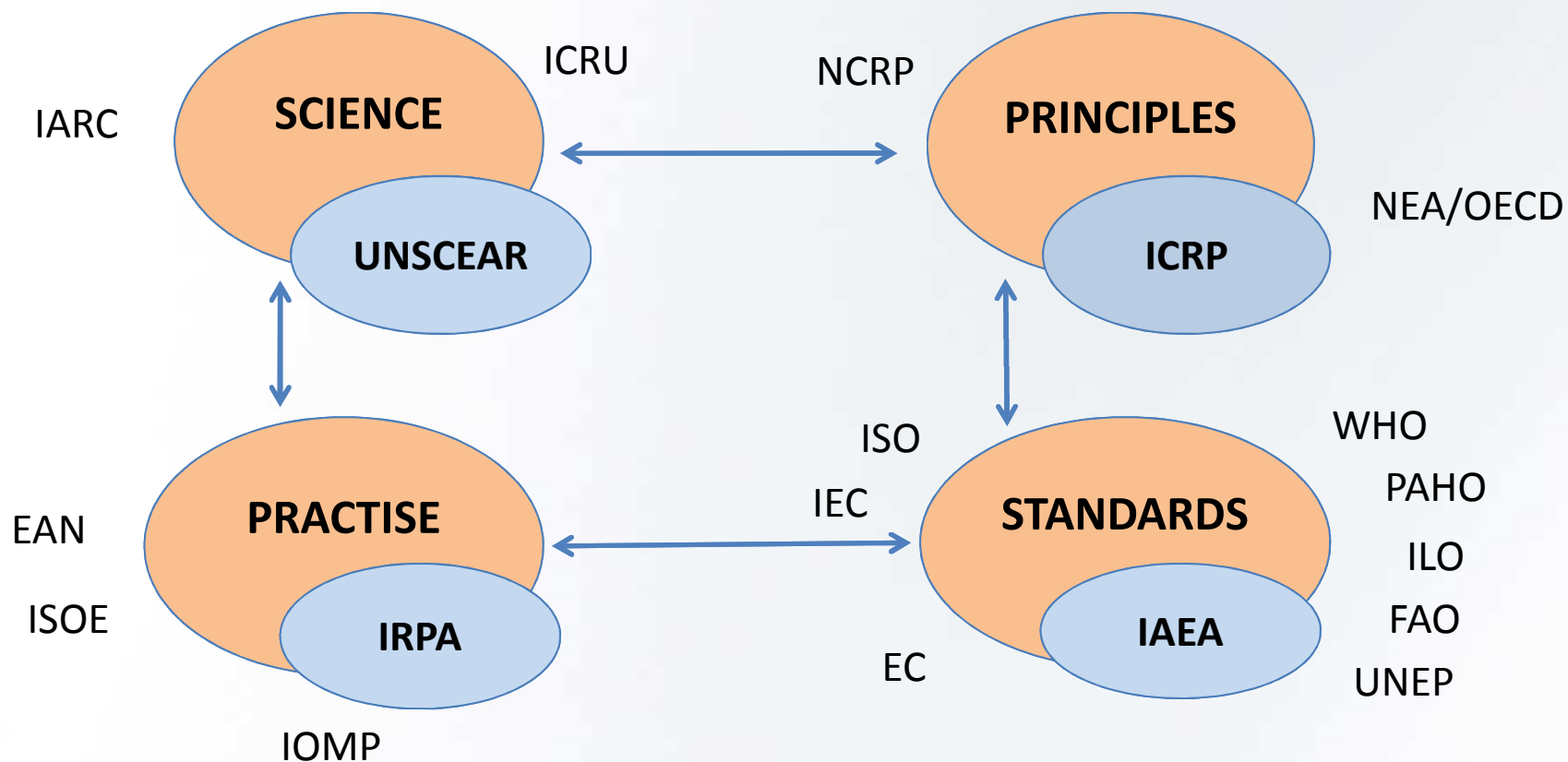


## WP4 Detailed Objective #3

- To encourage an active dialogue with all parties at the national & international level with a significant interest in radiation protection
- To ensure that the research prioritized by key platforms (MELODI, Alliance, NERIS and EURADOS) is directed towards issues of concern to major stakeholders & authorities

## International RP organisations

### The four pillars of radiation protection





## WP4 Detailed Objective #4

- To maximize the use of and access to Europe-wide research infrastructures within and outside the radiobiology community
- To reach out to and integrate with flagship projects of the EC, ESFRI, and major networks of excellence outside of radiobiology and radiation protection



## WP4 Detailed Objective #5

- To dialogue and cooperate with other technical integrated platforms (e.g. SNE-TP, IGD-TP) paving the way for Horizon 2020 within EURATOM



## WP4: Reaching out to new Member States, academic & professional partners, stakeholders & authorities

- Task 4.1 - Reaching out to universities & professional partners (lead: JU, Friedo Zoelzer)
- Task 4.2 – Reaching out to and integrating new Member States (lead: OSSKI, Géza Sáfrány)
- Task 4.3 – Reaching out to major stakeholders & authorities (lead: HPA, Simon Bouffler)
- Task 4.4 – Interactions with ESFRI platforms & large EU consortia to support research in the field of radiation protection (lead: CEA, Paul-Henri Roméo)
- Task 4.5 – Reaching out to the other technical platforms within EURATOM, e.g. SNE-TP & IDG-TP (lead SCK-CEN, Frank Hardeman)



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