



PIANOFORTE Partnership

European Partnership for Radiation Protection Research

Horizon-Euratom - 101061037

D1.2 – Annual Work Program for year 2 – AWP2

Main Authors: Jean-Christophe Gariel, Radia Tamarat (IRSN), Filip Vanhavere (SCKCEN), Andreas Blume, Achim Neuhauser (BfS), Andrzej Wojcik (SU), Liz Ainsbury, Simon Bouffler (UKHSA), Marie Davidkova (SURO), Jolanta Drozdz, Hanna Sroczynska (NCBR)

Reviewer(s): Members of the Executive Board

Work package / Task	WP1	T1.3				
Deliverable nature:	Report					
Dissemination level: (Confidentiality)	Public					
Contractual delivery date:	Month 9 28 February 2023					
Actual delivery date:	Month 10 31 March 2023					
Version:	1.0					
Total number of pages:	41					
Keywords:	Radiation protection resea	rch, Annual Work Programme,				
	Second open call					
Approved by the coordinator:	Month 10					
Submitted to EC by the coordinator:	Month 10					

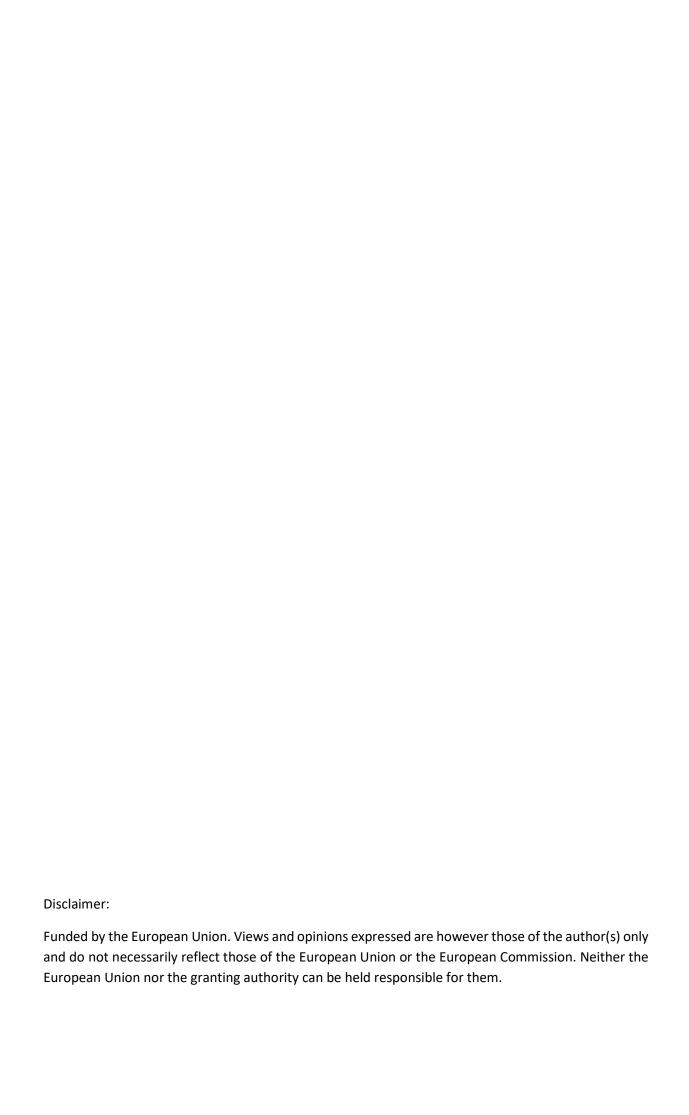




Table of Contents

1.	Cohe	rence with Annex 1	4
	1.1		
	1.2	Expected impacts	5
2.	Annu	al Work Programme Activities	7
	2.2	Structure of the Annual Work Programme	7
	2.3	Timing of the different programmed activities and their components	8
	2.4	Detailed work description	10
3.	Parti	cination in Annual Work Programme Activities	22



1. Coherence with Annex 1

1.1 AWP objectives for month 13 to 24

The PIANOFORTE partnership aims to improve radiological protection of members of the public, patients, workers and the environment in all exposure scenarios and to provide solutions and recommendations for optimised protection in accordance with the BSS. This objective will be reached by multidisciplinary research, innovation and citizen involvement activities in a collaborative approach of scientists, regulators and stakeholders. Research projects focusing on identified research and innovation priorities will be selected through competitive open calls.

This general objective will be reached through the achievement of six specific objectives (four scientific specific objectives and two integration specific objectives) that are inter-dependent and are as follows:

- To innovate in ionising radiation based medical applications combating cancer and other diseases by new and optimised diagnostic and therapeutic approaches improving patient health and safety and supporting transfer of the R&I outcome to practice.
- To improve scientific understanding of the variability in individual radiation response and health risk of exposure.
- To support regulations and implementation of the BSS and improve practices in the domain of low dose exposures of humans and the environment by better understanding and reducing uncertainties in risk estimates.
- To provide the scientific basis to recommendations, procedures and tools for assuring better preparedness to response and recovery from a potential radiological event or nuclear accident and to improve the know-how to manage legacy sites.
- To maintain a sustainable expertise capability on radiation protection issues across the EU by fostering the availability, the use, and the sharing of existing state-of-the-art infrastructures at European level and beyond, and conducting education and training activities.
- To involve all the relevant stakeholders at the different stages of the implementation of research projects and assure efficient dissemination, knowledge management and uptake of results

The consortium aims to continue its work done in the first 12 month. Activities of the consortium will continue to focus on the one hand on the aspects to develop an integrated landscape for radiation protection in Europe and, on the other hand, which will be the main focus, to directly fund coordinated research projects in an open, fair and transparent manner dedicated to state of the art science and tailored to the needs of the stakeholder target groups that have been defined in part B of the proposal. Integration of education and training activities in connection with co-funded research projects as well as optimal use of research infrastructures in Europe and even beyond are also essential to the consortium. Finally, communication, dissemination of results and impact creation activities will ensure that the outcomes from the Partnership will contribute to a significant improvement of radiation protection of the public, patients, workers and the environment at the European level.





1.2 Expected impacts

The set of activities in the Annual Work Plan Month 13 to 24 will contribute to the circling workflow on an approximately annual basis to prepare and launch the second Open Call.

WP1

The coordinator has set up all management procedures for the PIANOFORTE Partnership in the first year and will continue to call for ExB and GA meetings in the second year as necessary for the management of the project, in particular for taking decisions on the funding of open call research projects, education and training activities, on strategies for future research, dissemination activities and on new members joining the PIANOFORTE consortium following the open calls. Furthermore, the coordinator will continue the interaction with the EC concerning reporting and Grant Agreement updates. Experience from the first year will be used to optimise and improve the PIANOFORTE internal information and workflow between work package leaders on one side and the PIANOFORTE beneficiaries on the other.

WP2

WP2 and WP3 will work on the lessons learned after the priority setting for the first call. With this input the procedure for setting the priorities for call 2 will be established and executed. Also for call 2, the priority setting will contribute to the harmonization of radiation protection research by reflecting the views of POMs and European radiation research platforms, agreed by various stakeholders (including the Stakeholder and Advisory Board, SAB) and in line with HORIZON EUROPE and EURATOM research policies.

In preparation of the update of the CONCERT Joint Roadmap (JRM) a permanent evaluation of the state of the art in radiation protection research will be done, by identification of changes in science, technology, society and environment affecting the Joint Roadmap.

As the first research projects will start at the end of year 2, task 2.3 will organize online topical workshops between projects working towards the same research priorities. The workshops will identify synergies and possible ways to cooperate and seek possibilities to combine dissemination efforts. A questionnaire will also be sent to all coordinators of the selected projects, and the results will be used to promote interactions with other parties and for exchanging the information between projects.

In the framework of the Task for Integration of Artificial Intelligence (AI) in Radiation Protection (RP) the activities that are planned for Year 2 concern the organization of the Technical Meeting on AI and big data implementations in RP in May 2024 and the preparations for Milestones and Deliverables that are due later in the Project (such as the Workshop with leading experts on ethics and AI, the reports on "Recommendations on the uptake of AI in R&I calls" and "Review of AI and big data implementations in RP" and the interactive sessions with relevant Tasks in other WPs of the Project).

<u>WP3</u>

In the course of the second project year, PIANOFORTE will further develop its stakeholder engagement activities that will raise awareness of radiation protection issues and widen the inputs into developing





research priorities over the partnership life. Key activities will be the continuous stakeholder engagement and the work with the various internal and external project stakeholders, i.e. with regards to the 2nd Open Call and the lessons learned from the 1st Open Call. Further consultation meetings will be organised with the SAB and t internal stakeholders (POMs and platforms) regarding joint research needs and priorities and gained input will be further analysed and used in R&I Calls. The proposed research priorities will be also presented and discussed during topical online consultations /meetings with the different identified stakeholder groups in the second project year for the 2nd Open Call. Subsequent to the finalisation of the report on modern proton therapy in year one, a workshop on standardisation of clinical proton therapy datasets and aim for minimal requirements for clinical trials will be organized and implemented in project year two. The e-survey focusing on research needs and knowledge gaps which was conducted and briefly analysed during the first project year will undergo an in-depth evaluation, including the publication of results.

WP4

WP4 on education and training will specifically contribute to reinforcing training by continuous training and career upgrades. It will develop competences in radiological protection with a special focus on radiological protection culture. To this end WP will continue organizing calls on a competitive basis and finance: 1) short courses for young researchers and professionals on topics related to radiation protection; and 2) mobility grants for researchers and radiation protection professionals to participate in conferences, training activities and exchange visits. Also, the applications for setting up and maintaining a European PhD and early career researcher/professional association in the field of radiation protection will be evaluated.

<u>WP5</u>

The maintenance of sustainable RPR capabilities and expertise on radiation protection issues across the EU is being achieved through the objectives of WP5, namely to foster the availability, use, sharing and optimization of existing state-of-the-art infrastructures and data management systems at the European level and beyond, and by conducting education and training activities. Following successful establishment of the Infrastructures Oversight Committee and the confirmation of the Data Management Plan in year 1, the key performance indicators of this activity within year 2 will be to further develop and establish the PIANOFORTE system for cross-national access to infrastructures. In support of this aim, work will also continue to evaluate and identify key infrastructures as well as to develop SOPs to promote standardisation within the wider radiation protection research community. Further development towards training programmes of relevance for the key infrastructures will also be carried out, in the form of access to infrastructures, organization of dedicated courses by selected key infrastructures, and courses focused on dissemination of the WP5 learning. The key expected impact will thus be the establishment and classification of the key RP research infrastructures (under Task 5.3, due M24).

WP6

Within the WP6, which focuses on knowledge management, communication, dissemination and impact creation, several activities are planned during the second year of the partnership. The on-line





communication tools, including the partnership web pages and social media channels will be exploited to disseminate results of the first project call, statistics and details about funded projects. Later the same tools will serve to inform research community about scientific topics, financial and legal rules of the second open call. We envisage organisation of the meeting devoted to the presentation of projects funded in the first open call. Information meeting for EU researcher groups about the call content will be organized after launching of the second call. Regular update on partnership activities shall be provided by all communication means including also newsletters.

First estimations of project impact via stakeholders, international RP organisations, national RP offices and organisations will be performed.

WP7

During first months the main involvement on WP7 will focus on the evaluation of submitted proposals within the first PIANOFORTE Open Call 2023. As a result a Ranked List of Eligible Projects (RLEP) will be prepared.

Moreover, under WP7 will be organized and managed second Open Call for R&I proposals for funding multilateral research projects on radiation protection under the Partnership for European research in radiation protection and detection of ionising radiation co-fund mechanism. The aim of the call will be the support for transnational research projects that combine innovative approaches in the field of radiation protection in line with the research priorities of PIANOFORTE Partnership set up in WP2. WP7 lead will be responsible for preparation of all call documents. The call will be implemented as a one-step submission procedure. An electronic submission portal will be in place. The second Open Call will be launched at the end of the second year.

2. Annual Work Programme Activities

2.2 Structure of the Annual Work Programme

The Annual Work Plan of year 2 of the PIANOFORTE partnership is dominated by the circling work flow of PIANOFORTE Year 2 will be dominated on the one hand by the implementation of research projects selected following the first open call (projects will start on month 19) and, on the other hand, by the preparation of the second open call. This strictly follows the work flow description of the PIANOFORTE proposal. In year 2 PIANOFORTE will focus on maintaining and improving the structures and procedures to manage and administer the Partnership with the goal to launch the second open call at the end of month 22. All PIANOFORTE WP are integrated into this circling work flow, which is in principle designed to start with the prioritization of research priorities and finally the funding and monitoring of research projects which fulfil all the requirements of scientific excellence and integration. Cross-cutting through this circling workflow are WP dedicated to integration activities which on one side have input through interfaces into the circling work flow and on the other side have





the target for a sustainable support of radiation protection research. These principle work flows, one circling, and one more or less continuous are described in the PIANOFORTE proposal. However, the same principles give the AWP a clear structure. Activities in the AWP are listed as WP activities. Due to the large number of POM as PIANOFORTE participants and many institutions actively involved in PIANOFORTE activities as AE in addition to the strong involvement of the research platforms with their large active membership a breakdown of the annual activities further down as WPs and Tasks results in low person-month involvement of some PIANOFORTE participants and AEs.

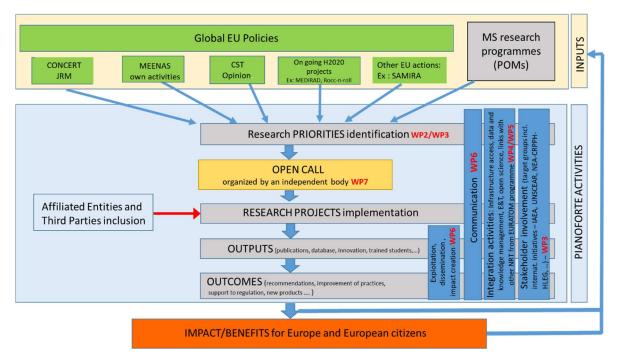


Figure 1: This diagram shows both the iterative process and the inter-relationship between the different WP in the PIANOFORTE partnership.

2.3 Timing of the different programmed activities and their components



YEAR 2 Q2 10 11 12 Project coordination and management WP1 D1.3, D1.4 meetings (kick-off, periodic meetings) Task 1.1 Coordination and management Task 1.2 Executive and AG meetings Task 1.3 Updating the AWP Task 1.4 Negociation of projects funded Task 1.5 Funding decision process for Integration activities Task 1.6 Monitoring of the progress of PIANOFORTE WP2 Research and innovation projects D2.1.2 Task 2.1 Setting-up the research priorities Task 2.2 Update of the Joint Road Map Task 2.3 Scientific follow-up of projects Task 2.4 Integration of AI in Radiation Protection WP3 Stakeholder engagement D3.9 Task 3.1 International Partners and priority setting Task 3.2 Partnership projects Task 3.3 Stakeholder engagment planning and management Task 3.4 Direct Stakeholder engagement plan Task 3.5 Addressing stakeholder interests of DG Health: RP and proton therapy WP4 Education and Training D4.3.2 Task 4.1 Support of targeted courses Task 4.2 Support of mobility for MSc/PhD
Task 4.3 Support of continuous professional devpt Task 4.4 Dvpt of sustainable radiation protection E&T WP5 Infrastructures and data management for radiation protection research D5.3 Task 5.1 Establish an infrastructure oversight/stakeholder committee Task 5.2 Providing support for cross–national access to infrastructure Task 5.3 Promoting harmonization of quality standards, practices and protocols Developing a vision and strategic work plan for utilisation, novel uses and inter-Task 5.4 operability of key RPR infrastructures Developing a plan and vision for data management and approaches to Task 5.5 exploitation of archived data WP6 Knowledge management, communication, dissemination and impact creation D6.4.1 Task 6.1 Knowledge management Task 6.2 Communication and dissemination Task 6.3 On-line communication tools Task 6.4 Impact creation Organisation and management of PIANOFORTE R&I Open Calls D7.1.2 D7.2.1 Task 7.1 Setting up a Calls Secretariat Task 7.2 Preparation of the Open Call documents and launch of the calls Task 7.3 Implementation of the open calls Task 7.4 Quality management of open research calls procedures





2.4 Detailed work description

Table 2.3.a: Annual Work Programme Activities for each set of activities

Set of Activities Number	WP1		Start D	ate or S	tarting	Event		Mon	th 12
Set of Activities Title	Partne	ership	coordin	ation ar	nd mana	agemer	nt		
Participant number	1	5	2	3	40	7	19		
Short name of participant	IRSN	SCK CEN	BfS	SU	UK HSA	SURO	NCBR	All POMs	All platfor ms
Person months per participant	30	0,4	0,4	0.4	0.4	0.4	0.6	28x0,0 5=1.40	6x0,05 = 0,3
Start month	12								24

Objectives

WP1 purpose is to ensure the most effective coordination, administrative and financial management of the consortium with a view of reaching a good synergy between the partners; The overall objective of the managerial organisation is to provide the necessary structures for participatory and efficient decision-making and coordination of activities, fluent day-to-day management including flow of information and financing (including the establishment of contracts with PIANOFORTE grantee consortia and PIANOFORTE external contractors), reporting to EC, as well as providing support and guidance on consortium activities.

Description of work (where appropriate, broken down into tasks), lead partner role of participants and relevant Work Package

Task 1.1: Overall coordination and legal, contractual, administrative and financial management (Lead: IRSN).

Key activities during year 2 are:

- Monitoring the compliance by beneficiaries with their obligations under the grant agreement
- Monitoring the progress of the project and review the deliverables and reports to verify consistency

with the project tasks

- Collection of information about achievements in relation to objectives from the partners every 12 months in order to ensure efficient follow-up of the project progress and proper reporting to EC.
- Updating the Consortium Agreement following the first open call.
- Administration of the EC financial contribution regarding its allocation between beneficiaries and activities, in accordance with the grant agreement and the decisions taken by the consortium.
- Keeping the records and financial accounts
- Writing the second periodic report

Task 1.2: General Assembly and Executive Board meetings (Lead IRSN, ExB members, General Assembly members)

Key activities during year 2 are:

- Organisation of periodic GA meetings in connection with reporting periods and launch of the second open call
- Organisation of regular ExB meetings (about every 6 weeks) by video conference.





Task 1.3: Updating the annual work plan (IRSN, ExB, GA members)

Key activities during year 2 are:

- Update of the AWP
- Submission of the AWP together with the annual project report to the EC not later than month 9 of the project year 2

Task 1.4: Negociation of projects to be funded through open R&I calls (Lead: IRSN, ExB members, GA members).

Projects for the first open call will be selected at month 18.

Key activities during year 2 are:

- Organisation of the PIANOFORTE Funding Meeting of the ExB.
- Preparation of draft contracts by the coordinator and WP 7 leader
- Negociation of the contracts

Task 1.5: Funding decision process for integration activities listed in the approved annual work program (Lead: IRSN, ExB members,)

Key activities during year 2 are:

- Proposal by the coordinator and decision by the ExB on the funding of integration activities as listed in the AWP.
- When it is suggested by the ExB that an integration activity be performed, in part or in total, by one or more external entities, the Coordinator launches a European public procurement procedure to identify and contract with such entities for the delivery of the required services

Task 1.6: Monitoring of the progress of the Partnership (Lead IRSN, ExB members)

Key activities during year 2 are:

- To monitor KPI indicator twice a year at the ExB level.

Deliverable(s):

N°	Name	WP	Lead	Туре	Level	Due date
D1.3	Second periodic report to the EC in accordance with the provisions of the consortium contract	1	IRSN	Report	PU	21
D1.4	Annual work programme for year 3	1	IRSN	Report	PU	21





Set of Activities Number	WP2	Start [Date or S	tarting Eve	nt	nt M12		
Set of Activities Title	Research an	d innovation	n projects	S				
Participant Number	5	13	32	18	22	21	24	
Short name of participant	SCK-CEN	NNK	SSM	CIEMAT	JSI	EK	ENEA	
Person-months per Participant:	4.0	2.5	1,5	1.5	0.1	0.1	1	
Participant Number	17.1	34	23	23.2	20	42		
Short name of participant	STUK	NCRPP	CEA	INSERM	ISS	UExet		
Person-months per Participant:	1	1	1	0.3	0.1	0.6		
Participant Number	16	1	11.1					
Short name of participant	NCSRD	IRSN	OVGU	All other	POMs			
Person-months per Participant:	3	1.25	1	0.25x28=				
Start month	M12	M12			M24			
				month				

Objectives

- Task 2.0: Management of WP2
- Task 2.1: (a) Preparation of the consensual list of research priorities for the second open call
- Task 2.2: (b) Identification of changes in science, technology, society and environment affecting the Joint Roadmap
- Task 2.3: (a) Organize online topical workshops between projects working towards the same research priorities and (b) make a questionnaire to the project coordinators to steer the project outputs;
- Task 2.4: (a) review the relevance and applicability of AI and big data technologies in RP domains; (b) identify and develop links with scientific communities specializing on AI and big data technologies; (c) promote the uptake and application of AI in the PIANOFORTE R&I calls; (d) assess the key ethical issues arising for use of AI approaches in RP





Description of Programmed Activities (possibly broken down into tasks), lead partner, role of participants, and relevant Work Package

- 2.1.a: (Lead NNK): The list of research topics prepared for Call 1 will be updated based on comments received from various stakeholders during the prioritization process. POMs, SAB, other stakeholders and platforms will have the possibility to review, update, change these topics and also to add new topics. They will also have the opportunity to suggest prioritization criteria to evaluate and prioritize the list of suggested topics. Task 2.1 based on the suggested prioritization criteria will make a shortlist of topics, which will be presented to the above stakeholders again asking them to numerically rank the topics. This ranked list will be presented to the PIANOFORTE Executive Board who will finally choose 2-3 topics for which they will seek the approval of the General Assembly. The prioritization process will continue the good practices of the procedure in Call 1 but will also adopt additional steps for consultation with the stakeholders in order to improve the transparence and the overall acceptance of the prioritization process by all beneficiaries and stakeholders of PIANOFORTE.
- 2.2.a: *(Lead ENEA)*: Identification of changes in science, technology, society and environment affecting the Joint Roadmap: permanent evaluation of state of the art, by literature and participation in events such as ERPW meetings. The Milestone related to this task is only due in M32, but this task has a permanent character. Contributions of this subtask led by ENEA are expected from SCK CEN, JSI and EK.
- 2.3.a *(Lead CEA):* Organize online topical workshops between projects working towards the same research priorities. The workshop identifies synergies and possible ways to cooperate and seek possibilities to combine dissemination efforts. The SAB and relevant members of the Stakeholders Network (WP3) will be invited.
- 2.3.b (Lead NCRRP): After the first round of projects start, make a questionnaire to project coordinators. The results will be used to promote interactions with other parties and for exchanging the information between projects. This will also serve to identify best practices in the integration of social sciences and humanities and citizen involvement in research.
- 2.4.1 *(Lead: NCSRD):* The literature review on relevance and applicability of AI and big data technologies in radiation protection domains will be continued.
- 2.4.2 (**Lead IRSN**): The process of identification and development of links with scientific communities specializing on AI and big data technologies will be continued and the Technical Meeting on AI and big data implementations in RP will be organized in May 2024 at NCSR "Demokritos".
- 2.4.3 *(Lead OVGU):* Preparation of the report on "Recommendations on the uptake of AI in R&I calls" will be continued..

Deliverable(s):

N°	Name	WP	Lead	Туре	Level	Due date
D2.1.2	Research priorities for the second open call	2	CIEMAT	Report	PU	23





WP3 M12 **Set of Activities Number Start Date or Starting Event Set of Activities Title** Stakeholder engagement 1.1 3.1 **Participant Number** IRSN CEPN BfS SU SKAND SCK-CEN Short name of participant 0,3 0,3 12 0,1 0,5 1,6 Person-months per Participant: 5.1 15 **Participant Number** 14 15.1 18 18.1 KU Leuven CIEMAT UTARTU GIG IFJ MERIENC Short name of participant 0.5 2 3 0.2 Person-months per Participant: 0.3 0.3 20 21 22 22.1 23 23.1 **Participant Number** ISS ΕK EIMV CEA UNICAEN JSI Short name of participant 0,2 0,1 0,2 0,3 0,1 0,5 Person-months per Participant: 27 30 31 33 28 28.1 **Participant Number** EEAE IMROH UNIZG IST NRG INFN Short name of participant 0,1 1,5 0,1 0,4 0,1 0,5 Person-months per Participant: 44 40 43 **Participant Number** DН DSA NMBU Short name of participant Person-months per Participant: 0,1 Start month 13 End month 24

Objectives

This work package will connect the diverse set of relevant stakeholders within and outside the radiation protection community to show that radiation protection research influences and improves the lives of all European citizens.

Aims during project year 2 are:

- Organise further consultations to get input to priority setting from all external stakeholders target groups.
- Usage of professional and agile consultation methods to consider the voice of the users of radiation science products as well as the broader civil society.
- Identify the most urgent stakeholder needs for the large political missions of our time health, sustainability, innovation and safety.
- Specific focus on stakeholder needs in medical applications, specifically proton therapy.

Description of Programmed Activities (possibly broken down into tasks), lead partner, role of participants, and relevant Work Package

Task 3.1 International partners and partnership priority setting (Lead: BfS; Partners: DH-PHE, SU, GIG, EIMV, UTartu, STUK)

Key activities during year 2 are:

- Link to international RP research initiatives/networks.
- Priority setting for R&I call 2 in collaboration with WP2.
- Coordination of stakeholder engagement within PIANOFORTE.





Task 3.2 Partnership Projects (*Lead: IMROH, Partners: JSI, MERIENCE, SCK CEN, IRSN, CEPN,* UNIZG-RGNF) Key activities during year 2 is:

Oversee running PIANOFORTE funded projects and link them to the overall stakeholder activities in a coordinated manner and in line with the stakeholder engagement plan

Task 3.3. Stakeholder Engagement Planning and Management (Lead: CIEMAT; Partners: DSA, CEPN, IRSN, ISS, GIG, SCK CEN, EIMV, MERIENCE).

Key activities during year 2 are:

- Support and coordination of the Stakeholder and Advisory Board (SAB), i.e. in terms of joint research needs and research topic prioritisation of the 2nd Open Call, as well as on lessons leared in the 1st Open Call
- Align stakeholder engagement activities with the guidelines given in theStakeholder Engagement Plan (SEP) (D3.6).

Task 3.4 Direct Stakeholder Engagement (Lead: DSA; Partners: BfS, CIEMAT, EK, SCK-CEN, IRSN, CEPN, CEA, ISS, IST, EIMV, EEAE, NMBU, NRG, GIG, UTartu).

Key activities during year 2 are:

- Detailed evaluation of the results from conducted PIANOFORTE e-survey, publication and proper dissemination of findings
- Direct stakeholder engagement Organisation and implementation of topical online consultations/meetings with regard to the 2nd Open Call

Task 3.5 Addressing stakeholder interests of DG Health: radiation protection and proton therapy (PT) (Lead: IFJ, Partners: SKANDION, KULeuven, INFN, UCaen, SCK CEN, BfS)

Key activities during year 2 are:

• Organisation and implementation of a workshop on standardisation of clinical proton therapy datasets and aim for minimal requirements for clinical trials

N°	Name	WP	Lead	Туре	Level	Due date
D3.9	Conclusions from the Proton Therapy workshops	3	IFJ	Report	PU	18





Set of Activities Number	WP 4		Start D	ate or	Starting	g Event		Mo	Month 13	
Set of Activities Title	Educat	ion and	Training	3				'		
Participant number	2	3	4	5	6	8	9	10	11	13
Short name of participant	BfS	SU	MELODI	SCK CEN	EURADOS	NERIS	ALLIANCE	SHARE	EURAMED	NNK
Person months per participant	0.2	6.2	0.2	1	0.2	0.2	0.2	0.2	0.2	0.2
Participant number	14	25	21	22	44	23.1	24.1	30	52	
Short name of participant	Utartu	GIG	EK	JSI	NMBU	UnCaen	UnPv	IST	UVZSR	
Person months per participant	0.2	0.2	1	0.2	1	0.2	0.2	0.2	0.2	
Start month	13		End month							24

Objectives

WP4 will maintain existing and develop new competences in radiation protection in research areas relevant for radiation protection. Specific aims are:

- To support targeted courses to promote training and competence;
- To promote mobility of students and early career researchers by travel grants;
- To support continuous professional development (CPD) by mobility grants to professionals;
- To develop and implement sustainable early career researcher and professional networking.

Description of work (where appropriate, broken down into tasks), lead partner role of participants and relevant Work Package

Task 4.1: Support of targeted courses to promote knowledge, skills and competences of MSc/PhD students, early career researchers and professionals (Lead NMBU; Participants: SCK CEN, SU, EK, IST, UniPv, UniCaen, ALLIANCE, EURADOS, EURAMED, MELODI, NERIS, SHARE).

Key activities during year 2 are:

- Evaluate the courses held in 2023
- Launch call for courses 2024, evaluate applications and fund winning courses

Task 4.2: Support of mobility for MSc/PhD students and early career researchers (travel grants) (Lead SU; Participants: SCK CEN, NMBU, EK, NNK, UTartu, VIAA, ALLIANCE, EURADOS, EURAMED, MELODI, NERIS, SHARE)

Key activities during year 1 are:

- Evaluate the applications 2022/2023 and if needed adjust the calls for year 2 of the project
- Launch calls for the mobility programme, evaluate applications and fund winners

Task 4.3: Support of a continuous professional development programme for radiation protection professionals (Lead SCK CEN; Participants: BfS, GIG, SU, NMBU, EK, JSI, VIAA, ALLIANCE, EURADOS, EURAMED, MELODI, NERIS, SHARE)

Key activities during year 2 are:

- Evaluate the applications 2022/2023 and if needed adjust the calls for year 2 of the project
- Launch calls for the mobility programme, evaluate applications and fund winners





Task 4.4: Development of a sustainable radiation protection E&T programme and support for early career researcher organisations (Lead EK; Participants: UTartu, UniPv, SCK CEN, NMBU, SU, ALLIANCE, EURADOS, EURAMED, MELODI, NERIS, SHARE)

Key activities during year 2 are:

- Evaluate the applications for call launched in 2023
- Organize the PIANOFORTE early career researchers and professionals (ECRP) group and collate European RP E&T initiatives

Deliverable(s):

N°	Name	WP	Lead	Туре	Level	Due date
D4.3.1	Report on the received applications, evaluation, consultation with PIANOFORTE beneficiaries and final decision of the calls, including financial reporting of task 1, 2, 3 and 4.1.	4	SU	Report	PU	24

Set of Activities Number	WP5	Start Date	or Star	ting Event	t	Month 13		
Set of Activities Title	Infrastructu	res and da	ta mana	gement fo	r radiatio	n protection	on research	
Participant Number	40	23	20	14	2	4	9	
Short name of participant	UKHSA	CEA	ISS	UTartu	BfS	MELODI	ALLIANCE	
Person-months per participant	3.05	1.6	0.36	0.36	2.15	0.2	0.2	
Participant Number	6	11	8	10	23.3	16	28	
Short name of participant	EURADOS	EURAMED	NERIS	SHARE	CNRS	NCSRD	IMROH	
Person-months per Participant:	0.5	0.2	0.2	0.2	0.3	0.2	0.3	
Participant Number	3	22	33	21	24.1	41	18	
Short name of participant	SU	JSI	INFN	EK	UniPv	UCAMB	CIEMAT	
Person-months per Participant:	0.1	0.29	0.7	0.7	0.3	0.6	0.2	
Participant Number	1							
Short name of participant	IRSN							
Person-months per Participant:	0.2							
Start month	13			End month	24			





Objectives

The objective of WP5 will be to ensure that all infrastructure needs required for the implementation of the RPR roadmap and *Pianoforte* projects are recognised and served, with a specific emphasis on development of new approaches for management of data and data infrastructures.

With the activities of year 1 successfully completed, in year 2, the key objectives will be to continue to develop the activities in support of develop and describe the identified protocols and related qualification criteria for the selected infrastructure classes.

Description of Programmed Activities

Within year 2, the relevant tasks and activities will be:

Continuation of Task 5.1 - Establish an infrastructure oversight committee, with a focus on how the group will support the objectives of the WP including on training and intercomparisons (*Task leader: UKHSA; participants: all Platforms, SU, IRSN, CEA, ISS, UTartu, BfS*);

Promoting the use of key existing RPR infrastructures, in support of Task 5.2.1., specifically around collation of data evaluating and identifying key infrastructures. (*Subtask leader: INFN*; participants: CEA, CNRS, UTartu, EK, all Platforms);

Continued development of training materials about different infrastructures and their role in the RPR research landscape, in support of the wider Task 5.2.3. Developing and promoting training in the use of key RPR infrastructures (*Subtask leader: CEA*; participants: UniPv, EK, all Platforms);

To use the data collated during year 1 to continue analysis of current intercomparisons, in support of wider Task 5.3.1. Development of a system for funding inter-comparisons to promote standardization (identify tools and funding framework; (Subtask lead: EURADOS; participants: JSI, INFN, ISS, all Platforms);

To begin to identify and develop key protocols in support of Subtask 5.3.2. Development of Standard Operating Procedures (SOP) for key protocols to promote standardization; (*Subtask leader: IMROH*; participants: CIEMAT, ISS, JSI, all Platforms);

To develop a framework of guidelines to promote best practice for sustainable RPR infrastructures within a harmonized European context in support of Task 5.4.2. Guidelines of best practices for sustainable, harmonized RPR infrastructures. (Subtask lead: EK; participants: CEA, IRSN, UTartu, ISS, UKHSA, BfS, all Platforms);

To continue work on Subtask 5.5.2. Promoting and training on available data storage platform (STOREDB) (*Subtask lead: UCAMB; participants: BfS*).

Deliverable(s)

N°	Name	WP	Lead	Туре	Level	Due date
D5.3	Document describing the identified protocols and related qualification criteria on selected infrastructure classes	5	ISS	Report	PU	24





Set of Activities Number	WP6		Start Date	or Starting	Event	Month 1	3
	Knowledge creation	manageme	ent, comr	nunication,	dissemi	nation a	and impact
Participant Number	1	2	3	40	7	23	18
Short name of participant	IRSN	BfS	SU	UKHSA	SURO	CEA	CIEMAT
Person-months per participant	0.7	0.2	0.2	0.6	6	0.2	0.6
Participant Number	43	27	22.1	21	15	30	22
Short name of participant	DSA	EEAE	EIMV	EK	GIG	IST	JSI
Person-months per Participant:	0.6	0.1	0.2	0.6	0.2	0.1	0.1
Participant Number	34	16	13	31	14	35	1.1
Short name of participant	NCRRP	NCSRD	NNK	RIVM	UTartu	UVZSR	CEPN
Person-months per Participant:	0.1	0.4	0.6	2	0.6	1.4	0.6
Participant Number	44	26					
Short name of participant	NMBU	HZDR	All platforms				
Person-months per Participant:	0.8	0.1					
Start month	13			End month	24		

Objectives

The main objectives of WP6 are:

- To enable bidirectional communication about PIANOFORTE and its results effectively to the broader research community, key stakeholders and the public
- To make PIANOFORTE open calls projects results transferable and accessible to audiences that may use the new knowledge, data and information in their own work, enable use and uptake of results and maximize the impact of the EU-funded research
- To develop practical knowledge management tools that contribute to the integration of national research programs as well as to a sustainable collective memory in the radiation protection field on the basis of open science principles.
- To exploit the outputs of PIANOFORTE in order to maximize its impact

Description of work

Task 6.1: Knowledge management (Lead: RIVM; SURO, HZDR, UTartu, CIEMAT, EEAE, NCSRD, EK, NNK, DSA, NMBU, GIG, DH-PHE, ALLIANCE, EURADOS, EURAMED, MELODI, NERIS, SHARE, JRC)Key activities during year 2 are:

- Comparing best practices developed in other European projects
- Implementation of knowledge management best approaches

Task 6.2: Communication and dissemination (Lead: VIAA; CEPN, NCRRP, SURO, CEA, DSA, GIG, IST, JSI, DH-PHE ALLIANCE, EURADOS, EURAMED, MELODI, NERIS, SHARE)

Key activities during year 2 are:

- Review of communication plan
- Involving the entire consortium in communication activities by providing input into regular Newsletter





• Publishing results of the first project call, statistics and details about funded projects

Task 6.3: On-line communication *tools (Lead: SURO;IRSN, EIMV, ALLIANCE, EURADOS, EURAMED, MELODI, NERIS, SHARE)*

Key activities during year 2 are:

- Regular update on news related to the partnership
- Communicating results of the first project call
- Attracting research community to information meetings and 2nd open call

Task 6.4: Impact creation (Lead: SU; IRSN, CEPN, SURO, BfS, CIEMAT, CEA, EK, NNK, RIVM, DSA, NMBU, EIMV, DH-PHE, ALLIANCE, EURADOS, EURAMED, MELODI, NERIS, SHARE)

Key activities during year 2 are:

- First estimations of project impact via stakeholders, international RP organisations, national RP offices and organisations
- Organization of the information meeting for EU researcher groups about projects funded within the first open call
- Organization of the information meetings for EU researcher groups about the second open call

Deliverable(s)

N°	Name	WP	Lead	Туре	Level	Due date
D6.4	Information on projects selected for funding	6	UVZSR	Report	PU	17





Set of Activities Number Start Date or Starting Event Month WP7 13 **Set of Activities Title** Organisation and management of PIANOFORTE R&I Open **Participant Number** 19 12 36 NCBR Short name of participant IFA MUR 0,15 Person-months per participant 19 0,15 Start month 13 End 24 month

Objectives

The aim of WP7 is the PIANOFORTE open research calls process.

The main objectives of the second project year are:

- Implementation of the first open call,
- Preparation of the documents for the second PIANOFORTE open research call,
- Launching the second PIANOFORTE open research call.

Description of work (where appropriate, broken down into tasks), lead partner role of participants and relevant Work Package

Task 7.1 – Setting up a Call Secretariat (CS) and Call Steering Committee (CSC) (Lead: NCBR, participants: IFA, MUR)

Key activities during second year are:

Monitoring by the CSC actions taken by the CS

Task 7.2 - Preparation of the Open Call documents and launch of the calls (Lead: NCBR, participants: IFA, MUR),

Key activities during second year are:

- Call documents will be prepared for the second PIANOFORTE open research call Governance of the Call and Evaluation document, Call Text, Guidelines for applicants, Proposal templates and documents for reviewers
- Submission and evaluation platform will be provided

Task 7.3: Implementation of the open calls (Lead: NCBR, participants: IFA, MUR)

Key activities during second year are:

- Implementation of an evaluation process for submitted proposals in the first PIANOFORTE open research call
- Launch of the second PIANOFORTE open research call

Deliverable(s)

N°	Name	WP	Lead	Туре	Level	Due date
D7.1.2	Ranked list of eligible projects to be	7	NCBR	Report	PU	17





funded from the joint international peer review of full proposals for the PIANOFORTE open Call 1

D7.2.1. Call documents: governance of the Call 7 NCBR Report PU 22 and evaluation document, call text, Guidelines for applicants, proposal templates, for the PIANOFORTE open Call2

3. Participation in Annual Work Programme Activities

Most of the PIANOFORTE consortium partners do not plan to involve Associated Entities (AE) or external experts at the stage of proposal submission.

The following PIANOFORTE consortium partners will involve, or plan to involve, AE and/or external experts in their works:

Participant 1: IRSN, France:

Does the participant plan to subcontract certain tasks (please note that core tasks of the programme should not be sub-contracted) (article 6.2 B and 9.3 of Model Grant Agreement (MGA))?	N
Does the participant envisage that part of its work is performed by affiliated entities (article 8 of MGA)?	Υ
The AE (CEPN) is research partners of IRSN in its function as national radiation paresearch programme manager. In WP 3 and WP6, of PIANOFORTE and integrative input is required that cannot be covered by the national PM in total. Additional experimental competence is provided by the AE	activities
Does the participant envisage the use of in-kind contribution provided by third parties (articles 6.1 and 9.2 of MGA)?	N
The AE have special expertise and competence for input in the PIANOFORTE integrative and possibly in the R&I activities. Its contribution is expert input in the tasks and deliv WP3 and WP6.	
Does the participant envisage the provision of financial support to third parties (articles 6.2 D.1 and 9.4 of MGA)?	N
Does the participant envisage that part of the work is performed by associated partners ¹ (Article 9.1 of the MGA)?	N

Centre d'étude sur l'Evaluation de la Protection dans le domaine Nucléaire (CEPN), 28, rue de la Redoute, F-92260 FONTENAY AUX ROSES, Tel: +33 1 55 52 19 20, contact: thierry.schneider@cepn.asso.fr , http://www.cepn.asso.fr/en/

Participant 2 BfS, Germany





Does the participant plan to subcontract certain tasks (please note that core tasks of the programme should not be sub-contracted) (article 6.2 B and 9.3 of Model **Grant Agreement (MGA))?** BfS will subcontract the organization of major meetings in Task 3.4 target meeting, especially with external impact, to quarantee a consistent high level, e.g. in organization, moderation and sum up of results. This can be guaranteed by a professional provider. Does the participant envisage that part of its work is performed by affiliated entities Ν (article 8 of MGA)? If yes, describe the affiliated entity, the link of the participant to the affiliated entity, and describe and justify the foreseen tasks to be performed by the affiliated entity Does the participant envisage the use of in-kind contribution provided by third parties (articles 6.1 and 9.2 of MGA)? Does the participant envisage the provision of financial support to third Ν parties (articles 6.2 D.1 and 9.4 of MGA)? Does the participant envisage that part of the work is performed by Ν associated partners¹ (Article 9.1 of the MGA)?

Participant 3: SU, Sweden:

Does the participant plan to subcontract certain tasks (please note that core	
tasks of the programme should not be sub-contracted) (article 6.2 B and 9.3 of Model	
Grant Agreement (MGA))?	
Does the participant envisage that part of its work is performed by affiliated entities	Υ
(article 8 of MGA)?	
SKANDION clinics, Uppsala . SKANDION is the national Swedish proton therapy centre.	There is
a standing collaboration with SU in the area of medical radiation protection research. Sk	ANDION
will contribute to WP3 with its expertise in evaluating the therapeutic and cost effective	eness of
proton therapy. The responsible person in SKANDION is Dr Alexandru Dasu, the head	medical
physicist.	
Does the participant envisage the use of in-kind contribution provided by	N
third parties (articles 6.1 and 9.2 of MGA)?	
Does the participant envisage the provision of financial support to third	N
parties (articles 6.2 D.1 and 9.4 of MGA)?	
Does the participant envisage that part of the work is performed by	N
associated partners¹ (Article 9.1 of the MGA)?	

Dr Alexandru Dasu, Chief Medical Physicist, Skandionkliniken von Kraemers allé 26, 752 37 Uppsala, Sweden, +46-18-495 80 06, alexandru.dasu@skandion.se

Participant 40 : DH-PHE, UK

Does the participant plan to subcontract certain tasks (please note that core tasks	N
of the programme should not be sub-contracted) (article 6.2 B and 9.3 of Model	
Grant Agreement (MGA))?	





Does the participant envisage that part of its work is performed by affiliated entities (article 8 of MGA)? University of Cambridge is an Affiliated Entity to DH-PHE and has worked with DH-PHE over many years in the context of a variety of projects/contracts. University of Cambridge is part of a DH-PHE instigated UK-wide collaboration on radiation protection research. University of Cambridge will be contributing expertise in radiation protection research data management, notably the STORE database as such they will contribute to WP5, task 5. University of Exeter is an Affiliated Entity to DH-PHE and has worked with DH-PHE in the context of stakeholder engagement issues in the CONCERT project and European radiation protection research platforms. University of Exeter is part of a DH-PHE instigated UK-wide collaboration on radiation protection research. University of Exeter will be contributing to the Pianoforte partnership as lead of the SHARE platform and in its own right, contributing to tasks in WPs 2, 4, 5 and 6. Does the participant envisage the use of in-kind contribution provided by third parties (articles 6.1 and 9.2 of MGA)? Does the participant envisage the provision of financial support to thirdparties N (articles 6.2 D.1 and 9.4 of MGA)? Does the participant envisage that part of the work is performed by associated partners¹ (Article 9.1 of the MGA)?

Participant 5: SCK CEN, Belgium

Does the participant plan to subcontract certain tasks (please note that core tasks of the programme should not be sub-contracted) (article 6.2 B and 9.3 of Model Grant Agreement (MGA))? Does the participant envisage that part of its work is performed by affiliated entities (article 8 of MGA)? AE: KULeuven Link: SCK CEN and KULeuven are both member of the Belgian Convention of Radiation Protection Research, which governs the Belgian Radiation Protection Research Programme Tasks: KULeuven will participate in Task 3.5 on proton therapy, as they are the seat of the Belgian Proton Therapy Centre. Does the participant envisage the use of in-kind contribution provided by third parties	
Agreement (MGA))? Does the participant envisage that part of its work is performed by affiliated entities (article 8 of MGA)? AE: KULeuven Link: SCK CEN and KULeuven are both member of the Belgian Convention of Radiation Protection Research, which governs the Belgian Radiation Protection Research Programme Tasks: KULeuven will participate in Task 3.5 on proton therapy, as they are the seat of the Belgian Proton Therapy Centre.	
Does the participant envisage that part of its work is performed by affiliated entities (article 8 of MGA)? AE: KULeuven Link: SCK CEN and KULeuven are both member of the Belgian Convention of Radiation Protection Research, which governs the Belgian Radiation Protection Research Programme Tasks: KULeuven will participate in Task 3.5 on proton therapy, as they are the seat of the Belgian Proton Therapy Centre.	
(article 8 of MGA)? AE: KULeuven Link: SCK CEN and KULeuven are both member of the Belgian Convention of Radiation Protection Research, which governs the Belgian Radiation Protection Research Programme Tasks: KULeuven will participate in Task 3.5 on proton therapy, as they are the seat of the Belgian Proton Therapy Centre.	
AE: KULeuven Link: SCK CEN and KULeuven are both member of the Belgian Convention of Radiation Protection Research, which governs the Belgian Radiation Protection Research Programme Tasks: KULeuven will participate in Task 3.5 on proton therapy, as they are the seat of the Belgian Proton Therapy Centre.	
Link: SCK CEN and KULeuven are both member of the Belgian Convention of Radiation Protection Research, which governs the Belgian Radiation Protection Research Programme Tasks: KULeuven will participate in Task 3.5 on proton therapy, as they are the seat of the Belgian Proton Therapy Centre.	
Research, which governs the Belgian Radiation Protection Research Programme Tasks: KULeuven will participate in Task 3.5 on proton therapy, as they are the seat of the Belgia Proton Therapy Centre.	
Tasks: KULeuven will participate in Task 3.5 on proton therapy, as they are the seat of the Belgia. Proton Therapy Centre.	n
Proton Therapy Centre.	
,,	ian
Does the participant envisage the use of in-kind contribution provided by third parties.	
poes the participant envisage the use of in-kind contribution provided by till a parties N	
(articles 6.1 and 9.2 of MGA)?	
Does the participant envisage the provision of financial support to third parties (articles N	
6.2 D.1 and 9.4 of MGA)?	
Does the participant envisage that part of the work is performed by associated partners ¹ N	
(Article 9.1 of the MGA)?	

Participant 7: SURO, Czech Republic:

Does the participant plan to subcontract certain tasks (please note that core	Ν
tasks of the programme should not be sub-contracted) (article 6.2 B and 9.3 of Model	
Grant Agreement (MGA))?	





Does the participant envisage that part of its work is performed by affiliated entities (article 8 of MGA)?	Υ
See below	
Does the participant envisage the use of in-kind contribution provided by third parties (articles 6.1 and 9.2 of MGA)?	N
Does the participant envisage the provision of financial support to third	N
parties (articles 6.2 D.1 and 9.4 of MGA)?	
Does the participant envisage that part of the work is performed by associated partners ¹ (Article 9.1 of the MGA)?	N

Linked Third Parties to SURO: (comment – not taking part in integration activities, planning to take part in open calls)

Nuclear Physics Institute of the Czech Academy of Sciences, Husinec-Řež, čp. 130, 250 68 Řež, Czech Republic, Phone: +420 266 177 200, Contact Person: Dr. Marie Davídková (davidkova@ujf.cas.cz), www.ujf.cas.cz

University of South Bohemia in České Budějovice, Branišovská 1645/31a, 370 05 České Budějovice, Czech Republic, Phone: +420 776 296 676, Contact Person: Prof. Friedo Zölzer (zoelzer@zsf.jcu.cz), www.jcu.cz

Participant 11: EURAMED, European Platform

Does the participant plan to subcontract certain tasks (please note that core tasks of the	N
programme should not be sub-contracted) (article 6.2 B and 9.3 of Model Grant	
Agreement (MGA))?	
Does the participant envisage that part of its work is performed by affiliated entities	Υ
(article 8 of MGA)?	
Part of EURAMED's work in the project will be performed by OvGU. OvGU is a member in	stitution
of EURAMED, and Prof Christoph Hoeschen is Chair of the EURAMED Scientific Committe	е.
Within PIANOFORTE OvGU will contribute to the work package 2 "Research and innovati	on
projects", among other tasks dedicated to improving medical radiation protection resear	ch with
the aim of helping to combat cancer including modern approaches, in particular to the to	ısk 2.4
" Integration of Artificial Intelligence in Radiation Protection."	
Does the participant envisage the use of in-kind contribution provided bythird parties	N
(articles 6.1 and 9.2 of MGA)?	
Does the participant envisage the provision of financial support to thirdparties (articles	N
6.2 D.1 and 9.4 of MGA)?	
Does the participant envisage that part of the work is performed by associated partners ¹	N
(Article 9.1 of the MGA)?	

Participant 12: IFA, Romania





Does the participant plan to subcontract certain tasks (please note that core tasks of the programme should not be sub-contracted) (article 6.2 B and 9.3 of Model Grant Agreement (MGA))?	N
Does the participant envisage that part of its work is performed by affiliated entities (article 8 of MGA)?	Y
The Affiliated Entities are research partners of IFA in its function as national radiation presearch programme manager. Joint programing and integrative activities input cannot be by the national PM, so additional expertise and competence is needed from the Affiliated	e covered
Does the participant envisage the use of in-kind contribution provided by third parties (articles 6.1 and 9.2 of MGA)?	N
Does the participant envisage the provision of financial support to third parties (articles 6.2 D.1 and 9.4 of MGA)?	N
Does the participant envisage that part of the work is performed by associated partners¹ (Article 9.1 of the MGA)?	N

Institutul Național de Cercetare-Dezvoltare pentru Fizică și Inginerie Nucleară "Horia Hulubei" (IFIN-HH), 30 Reactorului str., Măgurele, Ilfov county, 077373, Tel. 021.404.2300,

Fax 021.457.4440, <u>Webpage: https://www.nipne.ro/</u> Legal link between PM and AE: Cooperation Agreement <u>Contact person</u>: Dr. Diana SAVU, <u>dsavu@nipne.ro</u>

Institutul Național de Cercetare-Dezvoltare pentru Fizica Laserilor, Plasmei și Radiației (INFLPR), 409 Atomiștilor str., Măgurele, Ilfov county, 077125, Tel. 021.457.4489, Fax

021.457.4243, Webpage: http://inflpr.ro

Legal link between PM and AE: Cooperation Agreement

Contact person: Dr. Gabriela CRĂCIUN, gabriela.craciun@inflpr.ro

Institutul Național de Cercetare-Dezvoltare pentru Fizica Materialelor (INFM), 405A Atomiștilor Str., Măgurele, Ilfov county, 077125, Tel. 021.369.0185, Fax 021.369.0177,

Webpage: https://infim.ro/

Legal link between PM and AE: Cooperation Agreement Contact person: Dr. Andrei GĂLĂŢEANU, gala@infim.ro

Institutul Naţional de Cercetare-Dezvoltare pentru Tehnologii Criogenice şi Izotopice (ICSI), 4 Uzinei Str., Râmnicu Vâlcea, Vâlcea county, 240050, Tel.: 025.0733890, Fax: 025.0732746, Webpage: https://www.icsi.ro/

Legal link between PM and AE: Cooperation Agreement <u>Contact person</u>: Dr. Sebastian BRAD, <u>sebastian.brad@icsi.ro</u>

Institutul Național de Cercetare-Dezvoltare pentru Optoelectronică (INOE 2000), 409 Atomiștilor Str., Măgurele, Ilfov county, 077125, Tel. 021.457.4522, Fax 021.457.4522,

Webpage: https://www.inoe.ro/ro/

Legal link between PM and AE: Cooperation Agreement Contact person: Dr. eng. Roxana RADVAN, radvan@inoe.ro

Universitatea Alexandru Ioan Cuza din Iași (UAIC), 11 Carol I Bld., Iași, Iași county, 700506, Tel. 023.220.1010, Fax 023.220.1201; Webpage: https://www.uaic.ro/





Legal link between PM and AE: Cooperation Agreement Contact person: Dr. Cătălin BORCIA, cborcia@uaic.ro

Universitatea din Craiova (UCv), 13 A.I.Cuza, Craiova, Dolj county, 20580, Tel. 035.1403.145,

Fax. +025.141.1688; Webpage: https://www.ucv.ro/

Legal link between PM and AE: Cooperation Agreement

<u>Contact person</u>: Mihaela Tinca UDRIŞTIOIU, <u>mtudristioiu@central.ucv.ro</u>

Participant 17: UEF, Finland

Does the participant plan to subcontract certain tasks (please note that core tasks of the	N
programme should not be sub-contracted) (article 6.2 B and 9.3 of Model Grant	
Agreement (MGA))?	
Does the participant envisage that part of its work is performed by affiliated entities	Υ
(article 8 of MGA)?	
STUK (Finnish Radiation and Nuclear Safety Authority) is an affiliated entity to UEF throug	gh a
national radiation research network (CORES). The network is based on agreements and lo	ng-
lasting cooperation.	
In WP2 joint programming and integrative activities input is required that cannot be cove	red by
the national Program Manager alone. Additional expertise and competence are provided	by the
AE. AE will lead a WP2 task to evaluate scientific output of the research projects, evaluate	? the
integration of social sciences and humanities in the projects, and monitor the innovation (and
guidance formation of the projects.	
In WP2 joint programming and integrative activities input is required that cannot be cove	red by
the national Program Manager alone, such as the role and competence of STUK as nation	nal
authority in radiation protection and nuclear safety that provides insight into the implem	entation
of results.	
Other Affiliated Entities to UEF are University of Jyväskylä, University of Helsinki, Aalto Ur	
University of Oulu, Turku University Hospital, Tampere University Hospital, and Kuopio Ur	
Hospital. These AEs will be interested in applying funding through open calls arranged by	
PIANOFORTE. These AEs do not have any specific role in this stage.	ı
7	N
(articles 6.1 and 9.2 of MGA)?	
Does the participant envisage the provision of financial support to thirdparties (articles	N
6.2 D.1 and 9.4 of MGA)?	
Does the participant envisage that part of the work is performed by associated partners ¹	N
(Article 9.1 of the MGA)?	
	ĺ

UEF AEs and their PIC numbers (all other information could be accessed through PIC):

- Radiation and Nuclear Safety Authority (STUK; AE participating in Integration Activities): 999460744
- University of Jyväskylä (JYU): 999842245
- University of Helsinki (HY): 999994535
- Aalto University (Aalto): 991256096
- University of Oulu (UOulu): 999844670
- Turku University Hospital (VSSHP/TUCH): 999495858





Tampere University Hospital (PSHP/TAUH): 999460065

• Kuopio University Hospital (PSSHP/KUH): 998250766

• Tampere University (TAU): 902999288

• University of Turku (UTU): 999903064

LUT University (LUT): 999591209

• Oulu University Hospital (OUH): 950305509

• Åbo Akademi (ÅA): 999903355

• Helsinki University Hospital (HUS): 999483830

Participant 15: GIG, Poland

Does the participant plan to subcontract certain tasks (please note that core	N
tasks of the programme should not be sub-contracted) (article 6.2 B and 9.3 of Model Grant Agreement (MGA))?	
Grant Agreement (WGA).	
Does the participant envisage that part of its work is performed by affiliated entities (article 8 of MGA)?	Y
The AE is research partners of GIG in its function as national radiation protection programme manager. In WP5 and WP3 of PIANOFORTE and in integrative activities, of	
input is required that cannot be covered by the national PM in total. Additional expe	rtise and
competence in the proton therapy and standardization of measurement protocols is	provided
by the AE	
Does the participant envisage the use of in-kind contribution provided by third parties (articles 6.1 and 9.2 of MGA)?	У
The AE have special expertise and competence for input in the PIANOFORTE integrative	activities
and possibly in the R&I activities. Its contribution is expert input in the tasks and deliver WP5 and WP3.	erables of
Does the participant envisage the provision of financial support to third	N
parties (articles 6.2 D.1 and 9.4 of MGA)?	
Does the participant envisage that part of the work is performed by	N
associated partners¹ (Article 9.1 of the MGA)?	

Associated Entity (AE) to GIG:

THE HENRYK NIEWODNICZANSKI INSTITUTE OF NUCLEAR PHYSICS, POLISH ACADEMY OF SCIENCES KRAKOW, PL

PIC: 999611579

Participant 18: CIEMAT, Spain

Does the participant plan to subcontr	act certain tasks (please note that core tasks of the	N
programme should not be sub-contra	cted) (article 6.2 B and 9.3 of Model Grant	
Agreement (MGA))?		
If yes, describe and justify the tasks to	be subcontracted	
Does the participant envisage that pa	rt of its work is performed by affiliated entities	Υ
(article 8 of MGA)?		





The AE (32. MERIENCE SCP, Calle Llimoner, 30. 08734 Olèrdola, Barcelona. Contact: Meritxell Martell (meritxell.martell@merience.eu). Tel. +34 664674180. www.merience.eu) is a research partner of CIEMAT in its function as national radiation protection research programme manager. The AE (MERIENCE SCP) participates in two tasks of WP3 on Stakeholder Engagement (Task 3.2 Partnership Projects, and Task 3.3. Stakeholder Engagement Planning and Management), providing additional expertise and competence.

Does the participant envisage the use of in-kind contribution provided by third parties (articles 6.1 and 9.2 of MGA)?

Does the participant envisage the provision of financial support to third parties (articles 6.2 D.1 and 9.4 of MGA)?

Does the participant envisage that part of the work is performed by associated partners¹ N (Article 9.1 of the MGA)?

Participant 19: NCBR, Poland:

Does the participant plan to subcontract certain tasks (please note that core tasks of the programme should not be sub-contracted) (article 6.2 B and 9.3 of Model Grant Agreement (MGA))?	Υ
In order to launch the call the electronic submission portal will be need. It will be subcoas NCBR does not have its own portal dedicated to international calls. It is planned to put the license for the submission system which will be in line with technical specification section.	ourchase
Does the participant envisage that part of its work is performed by affiliated entities (article 8 of MGA)?	N
Does the participant envisage the use of in-kind contribution provided by third parties (articles 6.1 and 9.2 of MGA)?	N
Does the participant envisage the provision of financial support to third parties (articles 6.2 D.1 and 9.4 of MGA)?	N
Does the participant envisage that part of the work is performed by associated partners ¹ (Article 9.1 of the MGA)?	N

Participant 23 : CEA, France

Does the participant plan to subcontract certain tasks (please note that core tasks of the	
programme should not be sub-contracted) (article 6.2 B and 9.3 of Model Grant	N
Agreement (MGA))?	
Does the participant envisage that part of its work is performed by affiliated entities	
(article 8 of MGA)?	Υ

CEA will work with 3 Affiliated entities. INSERM, CNRS and University of Caen; Inserm is the only public research organization in France entirely dedicated to human health. Its objective is to promote the health of all by advancing knowledge about life and disease, treatment innovation, and public health research. Better estimate the risk of exposure to ionizing radiation in medical use and in societal conditions represents the main research for more than 20 Inserm teams with expertise in radiobiology, medical physic, mathematic, radio-epidemiology and medicine. In this purpose, Inserm is developing a research from basic studies to clinical application in radiation protection. INSERM has a long term official agreement ("Accord-cadre") with CEA and





several joint labs are running. INSERM will be a very valuable partner in medical use of radiations and will contribute to WP2 on task dealing with topical web-workshops dedicated to PIANOFORTE Priorities.

The Centre National de la Recherche Scientifique (CNRS) is a French multidisciplinary public research organization under the supervision of the Ministry of Higher Education, Research and Innovation. It brings together 32,000 researchers in more than 1100 research laboratories located in France and abroad. It is one of the most important research institutions in the world. Its main objective is to meet the major challenges of the present and the future by exploring life, matter, the Universe and the functioning of human societies. CNRS comprises 10 institutes, including the Institute for Biological Sciences (INSB), the Institute of Chemistry (INC), the Institute of Ecology and Environment (INEE) and the Institute of Nuclear and Particle Physics (IN2P3). These four institutes have been collaborating for several years mainly in the fields of health, nuclear energy and the study of the impact of radionuclides in the environment, conducting interdisciplinary research from the very basic to the development of applications with societal impact.

CEA and CNRS have a long term official agreement ("Accord-cadre") and several joint labs are running. CNRS will be a very valuable partner in medical use of radiations and will contribute to WP5 on tasks dealing with transnational access to Infrastructuresand will bring its expertise in running very large infrastructures and implementing transnational access.

One of the priorities of University of Caen Normandy (UniCaen)in France is performing research and education in radiobiology. The university comprises 45 laboratories (21 of which are supported by large research bodies such as the CNRS, CEA, INSERM and INRA) within several large multidisciplinary scientific poles including radiation sciences. Since many years, due to GANII, CYCERON and the new HARDON therapy facilities, University of Caen Normandy has long-term collaboration and official agreement with CEA in both research and educational activities within radiation research. The University of Caen and the region of Normandy invested tremendous economic resources for obtaining new radiation equipment (such as cyclotron C400, proton cyclotron and x-rays machines), infrastructures and laboratory for continue doing basic and translational radiation biology covering high as well as low dose research. UniCaen is a very important partner for Education and training (WP4). UniCaen is a university with long-time experience in E&T, so its expertise is needed in the evaluation process of courses and mobility grants. Even more so because the majority of POMs are non-academic institutions. Moreover Unicaen in collaboration with Medical expert from the new Hadron therapy Facility will contribute to WP3 on Protontherapy and Radioprotection.

Does the participant envisage the use of in-kind contribution provided by third parties	
(articles 6.1 and 9.2 of MGA)?	N
Does the participant envisage the provision of financial support to third parties (articles	
6.2 D.1 and 9.4 of MGA)?	N
Does the participant envisage that part of the work is performed by associated partners ¹	
(Article 9.1 of the MGA)?	N

Participant 24 :- ENEA, Italy

Does the participant plan to subcontract certain tasks (please note that core tasks of the programme should not be sub-contracted) (article 6.2 B and 9.3 of Model Grant Agreement (MGA))?	N
Does the participant envisage that part of its work is performed by affiliated entities	Y
(article 8 of MGA)?	





UniPv is a University research partner affiliated to ENEA, with collaboration consolidated in several European projects. UniPv will participate in WP4 Education and Training and WP5 Infrastructures and Data management. As a University with long-time experience in E&T (also coordinating E&T in EURATOM projects), its expertise is needed in the evaluation process of courses and mobility grants for WP4 and in tasks related to training on infrastructures for WP5. UniPv contribution is also important as the majority of POMs are non-academic institutions.

Does the participant envisage the use of in-kind contribution provided bythird parties (articles 6.1 and 9.2 of MGA)?

Does the participant envisage the provision of financial support to third parties (articles 6.2 D.1 and 9.4 of MGA)?

Does the participant envisage that part of the work is performed by associated partners¹ (Article 9.1 of the MGA)?

If yes, please describe the associated partner (s) and their contributions

Affiliated Entities to ENEA

University of Pavia: Contact: Dr. Giorgio Baiocco (giorgio.baiocco@unipv.it), Tel. +39 0382

987948

Address: Physics Department, University of Pavia, Via Bassi 6, Pavia I-27100, Italy

Homepage: http://radbiophys.unipv.eu/

Participant 22 : JSI, Slovenia:

Does the participant plan to subcontract certain tasks (please note that core	N
tasks of the programme should not be sub-contracted) (article 6.2 B and 9.3 of	
Model Grant Agreement (MGA))? N	
Does the participant envisage that part of its work is performed by affiliated entities	Υ
(article 8 of MGA)?	
The AE is a research partner of JSI. In WP 3 and WP6, of PIANOFORTE and integrativ	
input is required that cannot be covered by the national PM in total. Additional exp	
competence is provided by the AE. The AE have special expertise and competence fo	
the PIANOFORTE integrative activities and possibly in the R&I activities. Its contribution	
input in the tasks and deliverables of WP3 and WP6.	
Does the participant envisage the use of in-kind contribution provided by	Ν
third parties (articles 6.1 and 9.2 of MGA)? N	
Does the participant envisage the provision of financial support to third	N
parties (articles 6.2 D.1 and 9.4 of MGA)? N	
Does the participant envisage that part of the work is performed by	N
associated partners ¹ (Article 9.1 of the MGA)? N	

Affiliated Entity to JSI

Elektroinstitut Milan Vidmar, Hajdrihova 2, 1000 Ljubljana, Slovenia Contact person: Nadja.Zeleznik@eimv.si, https://www.eimv.si/

Participant 43: DSA, Norway





Does the participant plan to subcontract certain tasks (please note that core tasks of the N programme should not be sub-contracted) (article 6.2 B and 9.3 of Model Grant Agreement (MGA))?

Does the participant envisage that part of its work is performed by affiliated entities (article 8 of MGA)?

IThe affiliated entity, the Norwegian University of Life Sciences (NMBU) (www.nmbu.no, Address: P.O. Box 5003 NMBU, 1432 Aas, Norway; Contact persons: prof. Deborah Oughton, deborah.oughton@nmbu.no; prof Lindis Skipperud, lindis.skipperdu@dsa.no) will support DSA in the role of national programme manager for radiation protection research during the PIANOFORTE partnership.

NMBU will participate in WP3, WP4 and WP6 of the PIANOFORTE.

In WP3, Stakeholder engagement, NMBU will contribute with its long experience of stakeholder involvement and organization of engagement activities.

In WP4, Education and Training, NMBU is a university with long-time experience in E&T, so its expertise is needed in the evaluation process of courses and mobility grants. Even more so because the majority of POMs are non-academic institutions.

In WP6, Knowledge management, communication, dissemination and impact creation, NMBU will support dissemination and communication activities, particularly linked to the ethical aspects of open science and data management, drawing on international engagement in the area through UNESCO and ALLEA.

Does the participant envisage the use of in-kind contribution provided by third parties (articles 6.1 and 9.2 of MGA)?	N
Does the participant envisage the provision of financial support to third parties (articles 6.2 D.1 and 9.4 of MGA)?	N
Does the participant envisage that part of the work is performed by associated partners ¹ (Article 9.1 of the MGA)?	N

Participant 25 : MoD, Denmark

Does the participant plan to subcontract certain tasks (please note that core tasks of the	N	
programme should not be sub-contracted) (article 6.2 B and 9.3 of Model Grant		
Agreement (MGA))?		
Does the participant envisage that part of its work is performed by affiliated entities	Υ	
(article 8 of MGA)?		

DEMA will contribute to WP2: Research and Innovation calls, defining priorities for joint programming in order to enhance radiation protection culture and emergency preparedness. Especially, we are able to introduce advanced use of decision support systems and dispersion models into the project through the use and development of the ARGOS system, which has been developed in a close collaboration with DTU, PDC-ARGOS and Danish Meteorological Institute (DMI). To maintain and constantly improve ARGOS, to adopt it to the rapid development in international standards of data sharing, to establish links to other dispersion models, and to update the nomenclature used for best possible description of the available information DEMA needs support from Affiliated Entities. Another priority is to further develop methods and advice on optimized intervention and related measurement strategies both for decision support and for practical implementation.





DTU has been the main supplier of calculation concepts, methodologies and data for particularly the inhabited areas modules of ARGOS and RODOS (e.g., ERMIN), but has also delivered datasets for improvement of for example the food dose modules of the two decision support systems. Further, DTU has developed the methodologies for, e.g., plume rise, physicochemical source term characterization and dose calculation in the CBRN-related parts of ARGOS. DTU has also been a major supplier of information on countermeasure implementation based on a comprehensive practical development and testing program. DTU constitute an important part of the Danish emergency preparedness, and continuously carry out radiation surveillance work (e.g. national data for EU's REM database). DTU has a long history of collaboration with DEMA and PDC-ARGOS in European projects (e.g., EURANOS (2004-2009), NERIS TP (2011-2014), PREPARE (2013-2016), CONFIDENCE (2017-2020)). DTU has also had extensive collaboration with DMI, as well as DEMA and PDC-ARGOS, in for example a suite of research and development projects under the Nordic NKS framework, developing methodologies for the ARGOS system.

PDC-ARGOS together with DEMA has originally developed the ARGOS system to be used for CBRN(E) Emergency Preparedness and Response. ARGOS is a software system to support the emergency organization to make the best possible decisions in case of incidents involving atmospheric dispersion of hazardous CBRN-materials. PDC-ARGOS also maintains and develops on the short range ADM-model RIMPUFF, Incorporated in the ARGOS DSS. RIMPUFF is originally developed by DTU. In addition, PDC-ARGOS, DEMA and DMI have been mutually engaged in a number of international research and development projects i.a PDC-ARGOS is a supporting member of the NERIS-platform.

The second Affiliated Entities will be the Danish Meteorological Institute (DMI, Denmark). Since 1992, DMI has been an operational partner of the Danish nuclear emergency preparedness for which the Danish Emergency Management Agency (DEMA) is responsible. Through national and international research activities, DMI is constantly improving national meteorological services in the area of emergency preparedness for atmospheric dispersion of nuclear and other harmful substances. DMI has taken part in, and in many cases initiated and coordinated, numerous international research and development projects within radiation protection; e.g. NKS projects SOCHAOTIC, SLIM, AVESOME, MESO, FAUNA, MUD, NordRisk, NordRisk II, MetNet, and EKO-4, as well as EU projects ENSEMBLE, RTMOD, ETEX, ATMES-II, RODOS, and EnviroRisks.

All three EAs, Technical University of Denmark (DTU), Danish Meteorological Institute (DMI, Denmark) and PDC-ARGOS will provide in-kind contribution to PIANOFORTE with their own resources.

Does the participant envisage the use of in-kind contribution provided bythird parties (articles 6.1 and 9.2 of MGA)?	N
Does the participant envisage the provision of financial support to third parties (articles 6.2 D.1 and 9.4 of MGA)?	N
Does the participant envisage that part of the work is performed by associated partners ¹ (Article 9.1 of the MGA)?	N

Participant 26: HZDR, Germany

Does the participant plan to subcontract certain tasks (please note that core tasks of the **N** programme should not be sub-contracted) (article 6.2 B and 9.3 of Model Grant Agreement (MGA))?





Does the participant envisage that part of its work is performed by affiliated entities	Υ
(article 8 of MGA)?	
The AE's are research partners of HZDR in its function as national radiation protection res	search
programme manager.	
In WP2, WP3, WP4, WP5, and WP6 of the PIANOFORTE project and integrative activities input is	
required that cannot be covered by the national PM in total. Additional expertise and competenc	
is provided by the AEs.	
Does the participant envisage the use of in-kind contribution provided by third parties	N
(articles 6.1 and 9.2 of MGA)?	
Does the participant envisage the provision of financial support to third parties (articles	N
6.2 D.1 and 9.4 of MGA)?	
Does the participant envisage that part of the work is performed by associated partners ¹	N
(Article 9.1 of the MGA)?	

Affiliated entities to HZDR

Karlsruher Institut für Technologie (KIT), Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen, Tel.: +49-721-608/25525, contact: Dr. Angelika Bohnstedt (angelika.bohnstedt@kit.edu), Mr. Wolfgang Raskob (wolfgang.raskob@kit.edu)

Helmholtz Zentrum München (HMGU), Ingolstädter Landstraße 1, 85764 Neuherberg, Tel.: +49-89 3187-2801, contact: Dr. Markus Eidemüller (markus.eidemueller@helmholtz-muenchen.de), Prof. Dr. Werner Rühm (werner.ruehm@helmholtz-muenchen.de)

GSI Helmholtzzentrum für Schwerionenforschung, Planckstraße 1, 64291 Darmstadt, Tel.: +49-6159 71 2009, contact: Prof. Marco Durante (M.Durante@gsi.de)

Participant 28: IMROH, Croatia

Does the participant plan to subcontract certain tasks (please note that core	Z
tasks of the programme should not be sub-contracted) (article 6.2 B and 9.3 of Model	
Grant Agreement (MGA))?	
Does the participant envisage that part of its work is performed by affiliated entities	Υ
(article 8 of MGA)?	
The AE is research partners of IMROH in its function as national radiation protection research	
programme manager. In WP 3 & WP5.3.2 and maybe in WP4 , of PIANOFORTE and integrati	
activities educational input is required that cannot be covered by the national PM in total.	
Additional educational expertise and competence is provided by the AE (both of them)	
Does the participant envisage the use of in-kind contribution provided by	Z
third parties (articles 6.1 and 9.2 of MGA)?	
Does the participant envisage the provision of financial support to third	N
parties (articles 6.2 D.1 and 9.4 of MGA)?	
Does the participant envisage that part of the work is performed by	N
associated partners ¹ (Article 9.1 of the MGA)?	

Affiliated entities to IMROH





UNIZAG RGN

Main project contact person at the UNIZAG-RGN Faculty: **Zelimir VEINOVIC**, PhD, Assistant professor - <u>zelimir.veinovic@rgn.unizg.hr</u> University of Zagreb - Faculty of Mining Geology and Petroleum Engineering Pierottijeva 6, 10 000 Zagreb, HR- Croatia

UNIZAG - Faculty of Forestry and Wood Technology

Main project contact person at the Faculty:

Kristijan TOMLJANOVIC, PhD, Assistant Professor - ktomljanovic@sumfak.hr
University of Zagreb - Faculty of Forestry and Wood Technology

Svetošimunska 25, 10 000 Zagreb, HR- Croatia

Participant 31, RIVM, Netherlands

Does the participant plan to subcontract certain tasks (please note that core tasks of the	N
programme should not be sub-contracted) (article 6.2 B and 9.3 of Model Grant	
Agreement (MGA))?	
Does the participant envisage that part of its work is performed by affiliated entities	Υ
(article 8 of MGA)?	
NRG is one of the leading nuclear expertise centers in the Netherlands. NRG is a major sup	oplier of
medical isotopes and operated a publicly financed research program on nuclear science, v	vhich
includes dedicated research activities in radiation protection, aligned with the major SRA	from e.g.
EURADOS, EURAMED and ALLIANCE. The department for RP has a total of 30 FTE, with de	-
computer and experimental facilities used in research. NRG and RIVM have a history of jo	
in radiation protection research. In recent years, this has focused on naturally occurring	
radioactive materials in building materials, and their relevance to exposure of indoor expo	
the public. NRG will contribute to WP3.	
Does the participant envisage the use of in-kind contribution provided by third parties	N
(articles 6.1 and 9.2 of MGA)?	
Does the participant envisage the provision of financial support to third parties (articles	N
6.2 D.1 and 9.4 of MGA)?	
Does the participant envisage that part of the work is performed by associated partners ¹	Ν
(Article 9.1 of the MGA)?	





Table 2.3.b: AWP Set of Activities

Activity No	Activity Title	Lead Participan t N°	Short name of lead participant	Total Person- Months	Start Month	End Month
WP1						
1.1	Overall coordination and legal, contractual, administrative and financial management	1	IRSN	20	M12	M24
1.2	General Assembly and Executive Board meetings	1	IRSN	6,0	M12	M24
1.3.	Task 1.3: Updating the annual work plan	1	IRSN	1,5	M12	M24
1.4	Negociation of projects to be funded through open R&I calls	1	IRSN	3,7	M12	M24
1.5	Funding decision process for integration activities listed in the approved annual work program	1	IRSN	0,5	M12	M24
1.6	Monitoring of the progress of the Partnership	1	IRSN	2,6	M12	M24
			Total WP1	34,3		
WP2						
2.0	Management	10	SCK CEN	2	M13	M24
2.1.a	Priority for second call	20	NNK	14	M10	M20
2.2.a	Identification of changes in science, technology, society and environment affecting the Joint Roadmap	41	ENEA	1.4	M13	M24
2.3.a	Organise topical workshops with selected projects	37	CEA	3	M20	M24
2.3.b	Questionnaire to selected projects	55	NCRPP	1.5	M20	M24
2.4.1	Review on AI implementations in RP	24	NCSRD	3	M13	M24
2.4.2	Interaction with scientific communities specializing on Al	1	IRSN	1.25	M13	M24
2.4.3	Promoting the uptake of AI in R&I calls	11.1	OVGU	1	M13	M24
2.4.4	Ethical challenges of Al	42	UExet	0.6	M13	M24
			Total WP2	27.9		
WP3						
3.1	International partners and partnership priority setting	3	BfS	8,6	M13	M24



3.2 Partnership Projects IMROH 3,2 M13 M24 28 3.3 Stakeholder Engagement Planning and CIEMAT 5 M13 M24 18 Management Direct Stakeholder Engagement M24 3.4 DSA 65,5 M13 43 3.5 Addressing stakeholder interests of IFJ 6 M13 M24 DG Health: radiation protection and 15.1 proton therapy **Total WP3** 28.3 WP4 4.1 Support of targeted courses to NMBU 2.6 M12 M24 promote knowledge, skills and competences of MSc/PhD 35 students, early career researchers and professionals 4.2 Support of mobility for MSc/PhD SU 4,4 M12 M24 students and early career 4 researchers (travel grants) 4.3 SCKCEN 2.8 M12 M24 Support of a continuous professional development 10 programme for radiation protection professionals ΕK M12 M24 4.4 Development of a sustainable 2,4 radiation protection E&T 31 programme and support for early career researcher organisations **Total WP4** 12,2 WP5 5.1 Establish an infrastructure UKHSA 3.7 M12 M60 6 oversight/stakeholder committee 5.2.1 M12 INFN 2.02 M24 Promoting the use of key existing 54 RPR infrastructures, 5.2.3 Continued development of CEA 1.52 M12 M60 training materials about different 37 infrastructures 5.3.1 Development of a system for EURADOS 3.38 M12 M24 funding inter-comparisons to 12 promote standardization (identify tools and funding framework) 5.3.2 IMROH M12 M24 To begin to identify and develop 1.68 46 key protocols 5.4.2 To develop a framework of ΕK M12 M24 1.0 guidelines to promote best 31 practice 5.5.2 Promoting and training on UCamb M12 M24 3.23 available data storage platform 7 (STOREDB) Total WP5 15,53





WP6 6.1 Knowledge management tool and **RIVM** M1 M12 5.1 internal communication plan 50 development 6.2 Communication and PEDR plan VIAA M1 M12 3 53 formulation Establishment of the on-line tools 6.3 **SURO** M1 M12 13 5.52 SU 6.4 Impact creation system and events M1 M12 4 3.38 **Total WP6** 17 **WP 7** Set up Call Steering Committee M24 7.1 **NCBR** M13 1,3 (CSC) and Joint Call Secretariat 19 (JCS). 7.2 Preparation of the Open Call NCBR M19 M22 9 19 documents and launch of the call 7.3 Implementation of the open call NCBR M13 M24 19 9 **Total WP7** 19,3



Table 2.3.d: Summary of staff effort

	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Activity 6	Total Person/ Months per Participant
WP1	T.1.1	T.1.2	T.1.3	T.1.4	T.1.5	T.1.6	
IRSN	20	2,5	1,5	3,5	0,5	2	30
SCK CEN	0	0,3				0,1	0,4
BfS	0	0,3				0,1	0,4
SU	0	0,3				0,1	0,4
PHE	0	0,3				0,1	0,4
SURO	0	0,3				0,1	0,4
NCBR	0	0,3		0,2		0,1	0,6
All POMs		1,40					1,40
All Platforms		0,3					0,3
Total WP1	20	6	1,5	3,7	0,5	2,6	34,30
WP2	T.2.0	T2.1	T.2.2	T.2.3	T2.4		
		1.5					4.0
SCK CEN NNK	2	2.5	0,2	0,1	0.2		4.0 2.5
SSM		1.5					1.5
CIEMAT		1.5					1,5
JSI		1.5	0.1				0.1
EK			0.1				0.1
ENEA			1				1
STUK				1			1
NCRPP				1			1
CEA				1			1
INSERM				0.3			0.3
ISS				0,1			0.1
UExet				1	0.6		1.6
NCSRD				_	3		3
IRSN					1.25		1.25
OvGU					1		1
All POMs		7					7
Total WP2	2	14	1,4	4.5	6		27.9
WP3	T.3.1	T.3.2	T.3.3	T.3.4	T.3.5		0.2
IRSN	-	0,1	0,1	0,1	-		0,3
CEPN	-	0,1	0,1	0,1	-		0,3
BfS	8,0	1,0	1,0	1,0	1,0		12
SU	0,1	-	-	-	- 0.5		0,1
SKANDION	-	- 0.1	- 0.1	- 0.4	0,5		0,5
SCK CEN	-	0,1	0,1	0,4	1,0		1,6
KU Leuven	- 0.1	-	- 0.1	- 0.1	0,5		0,5
UTARTU	0,1	-	0,1	0,1	-		0,3
GIG	0,1	-	0,1	0,1	- 2.0		0,3
IFJ PAN	-	-	- 2 5	-	2,0		2
MEDIENCE SCD	-	- 0.1	2,5	0,5 -	-		3
MERIENCE SCP	-	0,1	0,1		-		0,2
133	-	-	0,1	0,1	-		0,2



ΕK 0,1 0,1 JSI 0,2 0,2 0,1 **EIMV** 0,1 -0,1 -0,3 **CEA** 0,1 0,1 UNICAEN 0,5 0,5 **EEAE** 0,1 0,1 **IMROH Zagreb** -1,5 ---1,5 **UNIZG-RGNF** 0,1 0,1 0,2 IST 0,1 0,1 0,4 NRG 0,1 0,1 **INFN** --0,5 0,5 DH 0,1 0,1 DSA 0,5 1,5 2 NMBU 1,0 1 **Total WP3** 5 8,6 3,2 5,5 6 28,3 WP4 T.4.1 T.4.2 T.4.3 T.4.4 0.2 0.2 0.3 **SCK CEN** 0.3 1 BfS 0.2 0.2 0.1 0.2 **UTartu** 0.1 UnCaen 0.2 0.2 0.4 0.2 0.2 ΕK 0.2 1 NNK 0.2 0.2 UnPv 0.1 0.1 0.2 VIAA 0.2 0.2 0.4 **NMBU** 0.2 0.2 0.2 1 GIG 0.2 0.2 0.2 IST 0.2 SU 3.2 6.2 1 1 1 JSI 0.2 0.2 **ALLIANCE** 0.05 0.05 0.05 0.05 0.2 **EURADOS** 0.05 0.05 0.05 0.05 0.2 0.05 **EURAMED** 0.05 0.05 0.05 0.2 **MELODI** 0.05 0.05 0.05 0.05 0.2 **NERIS** 0.05 0.05 0.05 0.05 0.2 **SHARE** 0.05 0.05 0.05 0.05 0.2 **Total WP4** 4.4 12.2 2.6 2.8 2.4 WP5 T.5.3.1 T.5.1 T.5.2.1 T.5.2.3 T5.4.2 T5.5.2 & 2 0.25 3.05 **UKHSA** 2.8 0.1 **MELODI** 0.05 0.03 0.03 0.03 0.03 0.03 0.2 **ALLIANCE** 0.05 0.03 0.03 0.03 0.03 0.03 0.2 **EURADOS** 0.05 0.03 0.03 0.33 0.03 0.03 0.5 **EURAMED** 0.05 0.03 0.03 0.03 0.03 0.03 0.2 0.2 **NERIS** 0.05 0.03 0.03 0.03 0.03 0.03 **SHARE** 0.05 0.03 0.03 0.03 0.03 0.03 0.2 SU 0.1 0.1 **IRSN** 0.1 0.1 0.2 CEA 0.1 0.7 0.7 0.1 1.6 2.2 2 ISS 0.1 0.1 0.07 **UTartu** 0.1 0.07 0.12 0.36





D.f.c	0.4			0.05	1		2.45
BfS	0.1	0.5		0.05		2	2.15 0.7
INFN CIEMAT		0.5		0.2			0.7
IMROH				0.2			0.2
NCSRD				0.3		0.2	0.3
CNRS		0.15	0.15			0.2	0.2
JSI		0.07	0.07	0.15			0.29
UniPv		0.15	0.15				0.3
EK		0.2	0.2		0.3		0.7
UCamb						0.6	0.6
Total WP5	3.7	2,02	1.52	3,38	1.0	3,23	14,85
WP6	T.6.1	T.6.2	T.6.3	T.6.4			
SURO	0.4	0.4	4.8	0.4			6
IRSN			0.6	0.1			0.7
BfS				0.2			0.2
SU				0.2			0.2
DH-PHE	0.2	0.2		0.2			0.6
CEA		0.1		0.1			0.2
CIEMAT	0.5			0.1			0.6
DSA	0.2	0.2		0.2			0.6
EEAE	0.1						0.1
EIMV			0.12	0.08			0.2
EK	0.2			0.4			0.6
GIG	0.1	0.1					0.2
IST		0.1					0.1
JSI		0.1					0.1
NCRRP		0.1					0.1
NCSRD	0.4						0.4
NNK	0.1			0.5			0.6
RIVM	1.8			0.2			2
UTartu	0.6						0.6
VIAA		1.4					1.4
CEPN		0.3		0.3			0.6
NMBU	0.4			0.4			0.8
HZDR	0.1						0.1
Total WP6	5.1	3	5.52	3.38			17
				2.00			
WP7	T.7.1	T.7.2	T.7.3				
NCBR	1	9	9				19
IFA	0,15						0,15
MUR	0,15						0,15
Total WP7	1,3	9	9				19,3

