EUROPEAN JOINT PROGRAMME FOR THE INTEGRATION OF RADIATION PROTECTION RESEARCH

CONCERT

EUROPEAN JOINT PROGRAMME - CONCERT

TRANSNATIONAL CALL FOR PROPOSALS (2017)

FOR

"RADIATION PROTECTION RESEARCH IN EUROPE"

CALL TEXT

SUBMISSION DEADLINE: 02-May-2017 AT 17:00 (CEST)

Link to electronic proposal submission:
https://secure.pt-dlr.de/ptoutline/app/concert2017

CONCERT JOINT CALL SECRETARIAT

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INTRODUCTION & MOTIVATION

The European Joint Programme for the Integration of Radiation Protection Research (acronym: CONCERT) aims to contribute to the sustainable integration of European and national research programmes in the field of radiation protection. It will do so by focusing resources and efforts in five key directions:

- Bring together the competences of the scientific communities in Europe in the fields of radiation effects and risks in humans, radioecology, nuclear and radiological emergency preparedness, dosimetry and medical radiation protection;
- Strengthen integrative activities in multidisciplinary radiation protection research with special attention to synergetic as well as complementary projects;
- Stimulate and foster scientific excellence by setting up and co-funding of advanced programmes in radiation protection research;
- Exchange and communicate with stakeholders;
- Foster the harmonious application of radiation protection practices on the best available scientific knowledge.

The European Commission's EURATOM research and training programme 2014-2018 supports CONCERT, a European Joint Programme (EJP) instrument in the field of Radiation Protection (2015-2020). One of the aims of the CONCERT EJP is to co-fund Europe-wide coordinated national research and innovation programmes in the field of radiation protection research. Please visit our website for more information about this initiative: http://www.concert-h2020.eu/en

CONCERT develops its strategic plans based on the work of the European research platforms MELODI, EURADOS, NERIS, ALLIANCE and EURAMED in the fields of radiation effects in humans, dosimetry, nuclear emergency preparedness, radioecology and radiation protection in medicine respectively. In addition, CONCERT supports the establishment of a strategic research agenda (SRA) in the field of social sciences and humanities. The platforms developed strategic research agendas in their field of activities, recommend research priorities and develop research road maps. CONCERT serves as an umbrella structure for joint programming and the integration of the research agendas from the European research platforms and national research programmes. Beyond joint programming CONCERT brings together research organisations, authorities and responsible ministries to develop joint activities and programmes in order to coordinate and co-fund high quality research in radiation protection across national borders in Europe. CONCERT Beneficiaries have decided to launch a second open CONCERT transnational call to fund multidisciplinary innovative research projects in radiation protection. The Joint Call Secretariat (JCS) will coordinate the present call for proposals.

Please consult http://www.concert-h2020.eu/en and Annex A of this document for a list of CONCERT Beneficiaries and their Linked Third Parties, for more information on CONCERT. Participants that do not belong to any of the organisations listed here are advised to contact their respective national organisations participating in CONCERT (national Programme Owners or Managers as CONCERT Beneficiaries or their Linked Third Parties) as early as possible ideally before starting the preparation of the proposal, to explore funding solutions at the national level (see below 2. Application, and Annex B Financial Call Conditions).

1. AIM OF THE CALL

This call addresses 2 main topics:

- Topic 1:
  Understanding human health effects from ionising radiation and improving dosimetry.
- Topic 2:
  Radioecology, emergency and social sciences and humanities.

Each one of these topics has three sub-topics (see down below for more details).

The aims of the call are:

- To support transnational research projects that combine innovative approaches in the field of radiation protection in line with the research priorities of CONCERT;
- To actively integrate E&T activities and collaboration with universities in multidisciplinary research projects;
- To make optimal use of research infrastructures.

Project proposals will address multidisciplinary and transnational research. The project proposals must fall within one of the following topics. They may answer one or more sub-topics within one of the topics when appropriate:

Topic 1 Understanding human health effects from ionising radiation and improving dosimetry

Sub-topics:

I. Improvement of health risk assessment associated with low dose/dose rate radiation

Challenge

Today the main uncertainties in radiation health risk assessment relate to (i) the magnitude of cancer risk following protracted exposures of the order of 100 mSv or less and organ specific risks following acute or protracted doses of a few hundred mSv, particularly for inhomogeneous dose distributions, and (ii) the magnitude of the risks of vascular and cognitive disease, cataracts and other tissue injury below 500 mSv. A better understanding of the effects of low-dose ionizing radiation on human health and the mechanisms leading to radiation-induced diseases, is essential for radiation protection of populations and individuals in all situations occupational, medical, emergency and in the course of normal life.

In order to consolidate further the radiation protection system, it is necessary

- to improve understanding of the biological mechanisms underlying radiation-induced diseases and of the factors that modulate the risk of diseases
- to improve the health risk evaluation through classical and/or molecular epidemiological studies
- to address the effects of, and risks associated with, internal exposures, differing radiation qualities and inhomogeneous exposures.

These are long-term goals, which can however be achieved through a succession of steps which can be implemented into the radiation protection system when research results are appropriately validated.

Scope

Proposals should identify concrete research steps that are likely to contribute effectively to the above-mentioned challenge. For this purpose, appropriate attention should be given to the quality of the dosimetry, outcome data and other relevant data to be obtained and/or analysed in the course of the project. High priority is given to studies relating to cancer and vascular diseases, but other radiation-induced diseases are also of interest.

Expected impact

Research results are expected to contribute to protect people's health on an individual and collective basis through the optimization of future European BSS. Additionally, given the long-term nature of the work, the impact may be through contribution to the evolution of global protection standards and the evidence base on which they are formulated.

Type of action

Research and innovation actions. Project proposals may address part of the scope.

II. Improvement of occupational dosimetry

Challenge

The challenge is to provide reliable, accurate and on-line personal dosimetry for workers when exposed to ionizing radiation and in particular to neutrons. This requires monitoring the workers in real time for relevant limiting quantities (e.g., whole body, eye lens, extremities, brain, heart), and to provide input for the optimal application of the ALARA principle. Dosimetric research for personal dosimetry should deliver well characterized dosimeters, and good computational tools.

Scope

The EURADOS objective for the 2nd CONCERT call is to improve occupational dosimetry with particular emphasis on neutron applications; however, applications featuring other radiation qualities are also welcome.

Active dosimeters need to be developed for radiation fields relevant for occupational exposure. These dosimeters should be developed with the final goal that they can also be used for official dose records. Active sensors may also be developed to provide estimates of eye lens and extremity exposures. Improvement of active dosimeters is also needed so that the measured dose is visible to the operator on-line and that the results can be easily implemented in advanced staff databases. The inclusion of dosimetry of other potentially radiosensitive organs (brain, heart) might also be needed. In the medical field, there is the special problem of whole body dosimetry in case of lead shielding (lead apron, thyroid shield). This requires the development of the best method to monitor effective doses in case of inhomogeneous irradiation.

In particular, accurate active dosimeters for neutrons should be developed. External dosimetry for neutron radiation, which is inevitably accompanied by a photon component, still presents challenges despite many years of development of neutron personal dosimeters. Neutron sources are intentionally used and/or incidentally created in various scientific areas, and in technical and medical applications. Some of the fields represent particular challenges due to strongly pulsed radiation or due to an energy range of interest that might cover many orders of magnitude from thermal energies up to several 100 MeV. The simultaneous measurement of energy and directional distributions might be beneficial.

The developed dosimeters should be user friendly and take into account work specifics of different users and their working environment. Changes in the behaviour of individuals using on-line dosimeters can be part of the research scope. A draft exploitation plan should be included.

Expected impact

The availability of reliable and on-line personal dosimetry for workers will increase the awareness of the workers and will improve the optimal application of the ALARA principle.

Development of more accurate dosimeters will decrease the large uncertainties that still exist in personal dosimetry, especially for neutrons, and will thus be an important improvement in estimating the risk of working with ionising radiation.

III. Patient-tailored diagnosis and treatment: full exploitation and improvement of technology and techniques with clinical and dose structured reporting

Challenge

In terms of optimising radiation protection for the increasing number of patients exposed to ionizing radiation in the context of medical diagnosis and treatment there are various steps that are unsolved so far. One major approach, the comprehensive tailoring of imaging and therapeutic procedures in terms of the clinical question, anthropometric and physiological parameters as well as individual susceptibility of each patient and especially children and lesion-specific characteristics is a key challenge that still is not addressed properly. Patient-tailored procedures will reduce the risks for individual patients. The patient group and indication dependent optimisation in terms of dose distributions need to be improved and standardized to allow a better compliance with COUNCIL DIRECTIVE 2013/59/EURATOM (BSS) Article 56 (Optimisation in medical use) and to pave the way for susceptibility dependent medical application of ionising radiation. Therefore, a full exploitation of technology and techniques is needed with clinical and dose structured reporting.

Scope

The scope of the proposed topic is to foster the full exploitation of technology and its improvement for diagnostic or therapeutic applications to patients dependent on characteristic parameters (individual susceptibility, age, gender etc. and clinical indication) in combination with providing documentation and optimisation tools (e.g. by clinical implementation of diagnostic reference levels, harmonisation of procedures for stratified patient groups, maximise clinical information and/or benefit relative to patient risk etc.) including the uncertainties in the determination of the variables. A project fitting to this topic will either aim to implement harmonisation or documentation schemes throughout Europe improving patient radiation protection and allowing better data for future patient based radiation biology (different levels of irradiation exposures) or show feasibility of individualisation or stratification approaches and determine how such approaches could be implemented in the future. Projects need to include clear concepts of dosimetric description of procedures including various dose levels in different organs or body regions in combination with clinical outcomes (structured clinical and dose reporting) and of ways for standardisation (an example for such an approach could be DRLs based on such structured reporting, but other examples like in theranostics could also be possible). It would be beneficial, to address justification and the ethical basis underlying the optimisation process.

Connections are seen with approaches of MELODI, EURADOS and SSH.

Expected Impact

Optimised and harmonised practices will lead to reduced uncertainty in radiation exposure and corresponding risks. There will be a better exposure documentation allowing a future possibility to achieve accumulated doses and a patient tailored optimisation of radiation application to patients to reduce the risk for individualised patients. Both aspects would be big steps for a more efficient implementation of the BSS. In addition, this individualised risk reduction harmonised throughout Europe will give greater confidence and assurance to patients. This could allow also a better communication for such medical applications.

Type of action

Research and innovation actions. Project proposals may address part of the scope and links to other subtopics are welcome. Involvement of young [1] researchers in hospitals is mandatory.

Topic 2 Radioecology, emergency and social sciences and humanities

Sub-topics:

I. Biomarkers of exposure and effects in living organisms, as operational outcomes of a mechanistic understanding of intra- and inter-species variation of radiosensitivity under chronic low dose exposure situations

Challenge

The issue of biological effects of low doses of ionising radiation (environmentally relevant) is still of major concern for both human and environmental radiation protection, as highlighted after the Fukushima accident, especially with the aim of quantifying (and reducing if needed) the magnitude of risk to individuals or populations for human and non-human species health at such low doses/dose rates. The present moving of ICRP towards an integrated system of protection of both human and the environment urges to complement the knowledge and associated tools to be able to face the wide biodiversity and biological responses to radiation (from molecules to ecosystems) in a credible and robust way. A key for success is to explore intra- and inter-species causes of radiosensitivity variation. This requires reliable quantification of radiosensitivity *in vitro* and ideally also *in vivo*. This will help to screen out candidates for biomarkers of exposure and effects to be used as early warning tools after *ad hoc* validation. Identification of such biomarkers will be relevant to radiation protection.

Scope

Proposals will contribute to the identification of the principal mechanisms of radiation induced effects at the molecular level and their propagation up to the individual level, including

[1] young follows the nomenclature of ERC young investigator grants and includes PhDs or MDs: so either PhD, MD or up to 8 years after PhD or MD (can be extended for parenthood), no institute or clinic or department head

consequences for physiological functions (e.g. reproduction) with potential population level impact. This will be evidenced by evaluating suitable biomarkers of exposure and biomarkers of effects. A comparative and "lab-field-modelling"-combined approach for a number of exposure conditions and/or a number of species will enhance the understanding of the toxicity profiles as a response to exposure conditions. When relevant, dose-response relationships will be established making the best use of "omics" analytical methods, possibly combined with the use of a system biology approach, to provide evidence of linkage between metabolic pathways and associated biomarkers of effects. Research could expand to the use of genetic and epigenetic changes as potential biomarkers by implementing innovative approaches to test changes in the genome (e.g., mutation rates and types) and the epigenome (e.g., epigenetic tags) through generations. The research will need accurate biodistribution and accurate dosimetry as a prerequisite for any robust dose-response relationships. The proposed research should provide the basis for the development of biologically-based extrapolation models which are the key to tackle the wide species diversity and would be useful for risk assessors by helping reducing uncertainty in predictions of exposure and/or effects (and ultimately risk). The implications of the research results on the perception and communication of risks from low doses of ionising radiation should be evaluated and addressed.

The topic is relevant for any exposure situations where flora and fauna, and humans, may be chronically exposed to environmentally relevant levels of radionuclides from various sources (e.g., radiocontaminated territories after a major accident, NORM-sites, legacy sites) in that biomarkers potentially also useful in health surveillance, are looked for.

Expected impact

The study will contribute to answer an issue of concern which is the long-term biological effects of low radiation doses and alleviate part of the existing controversy.

The identification of robust biomarkers of exposure and effect and of radiation sensitivity and associated acquired knowledge will highlight and feed the various extrapolations needed when assessing radiological risk to humans or non-human species, and will provide robustness in decision making. Outcomes will support emerging policy in the field of radioprotection of the environment, mentioned in the EURATOM Basic Safety Standards through the statement that *"While the state of the environment can impact long-term human health, this calls for a policy protecting the environment against the harmful effects of ionising radiation. For the purpose of long-term human health protection, environmental criteria based on internationally recognised scientific data (….) should be taken into account".*

By encouraging openness to other disciplines and innovative hypothesis-driven approaches to understand underlying mechanisms, this research topic will contribute to increasing acceptability of the radiation protection system and aid in risk prediction, management and communication.

II. Countermeasure strategies preparedness for emergency and recovery situations

Challenge

Defining countermeasure strategies is an important task in the response and recovery phase of a nuclear or radiological emergency, in particular the management of contaminated territories in the aftermath of such an event. In past Framework Programmes several European projects (FARMING, SAGE, EURANOS, NERIS TP, PREPARE) have addressed countermeasure management options including the multiple dimensions such as the radiological effectiveness, technical feasibility, stakeholder involvement and societal aspects. The accident in Fukushima highlighted however the need for further work in the area of emergency and recovery preparedness and response as regards the development of countermeasure strategies. Radiological and societal aspects that are difficult to describe are e.g. vulnerabilities and resilience capabilities of a territory that should be taken into account when developing management strategies. It is also important to define appropriate strategies at different levels ranging from local to the national and European level. Finally, the aspect of optimisation of management measures is often expressed in publications but so far not fully investigated in terms of realisation and implementation. In this perspective the challenge is to ensure that parameters governing the radiological consequences can be identified in time to enable optimised countermeasures and remediation. All these aspects require the further development of impact assessment capabilities such as adequate monitoring and modelling techniques, insight in the societal dimension of countermeasures and the improvement of the decision making processes for the selection of the “optimal” strategies.

Scope

Proposals should focus on one or more of the following elements: 1/ the in-depth analyses of the implementation of management strategies in the emergency and/or recovery phase of the Fukushima nuclear event; 2/ the investigation of local differences and how they can be reflected in the countermeasure simulation models; 3/ the development of novel and adequate tools (including monitoring and modelling tools) for assisting countermeasure emergency and/or recovery strategies; 4/ the improvement of the decision making tools and/or processes.

To contribute to preparedness, there is a need to characterise and improve the adequacy of existing tools and decision making processes at the local and national level combining radiological, societal and cultural dimensions in the evaluation of the effectiveness of the countermeasure strategies. This should be accompanied by approaches allowing to effectively optimise management strategies once the basic strategy has been implemented. As preparedness is crucial in managing contaminated territories, it should be investigated to which extend approaches can be developed to identify vulnerabilities and resiliencies allowing tailoring appropriate management strategies in the preparedness phase and contributing to the development of sustainable approaches for the engagement of local stakeholders in emergency and recovery preparedness and response. Inputs from social sciences and humanities are required concerning the social, economic and ethical dimensions of vulnerability and resilience, including countermeasure strategies.

Expected Impact

Improved management strategies in the aftermath of a nuclear or radiological emergency will surely strengthen the preparedness and response capabilities in Europe and beyond. Developing integrated approaches taking into account radiological, human, economic, ethical and societal aspects will improve the decision making capacities of authorities and relevant stakeholders and contribute to improved preparedness for emergency and recovery situations. Important in this aspect is the integration of these approaches in existing widely used decision support systems in Europe. In addition, by contributing to the validation of models and tools, the developments will favour harmonization of emergency and recovery countermeasures across Europe and will largely contribute to the implementation of the Basic Safety Standards.

III. Models, tools and rationales for stakeholder engagement and informed decision-making in radiation protection research, policy and practice for situations involving exposures to ionising radiations.

Challenge

Governance of radiological risks is challenged by the particularities of ionizing radiation (e.g. scientific and societal uncertainties, different perceptions of risks, societal trust issues) and the evolving European societal landscape (e.g. new mass media, active citizenship). To address this, research on new models, tools and rationales of stakeholder engagement in radiation protection research, policy and practice is needed, for different exposure situations. Although a number of national and international recommendations and legal requirements for stakeholder engagement in radiation protection (e.g. Basic Safety Standards, Aarhus Convention) have been developed, there is still a big gap between discourse and practice, as highlighted for instance by the FP7 projects EAGLE and PREPARE. In addition, the increasing capacity of organised civil society stakeholders and citizens to investigate by themselves radiation protection issues and to produce knowledge poses new challenges for institutional actors in radiation protection to engage with non-institutional stakeholders and develop new models of interaction taking into account these social dynamics. The aim of this action is to improve the governance of radiological risks by enhancing stakeholder engagement and informed decision-making on multiple levels (e.g. institutional, non-institutional, individual), by clarifying the venues and instruments for stakeholder engagement, the factors that inform engagement (socio-psychological, political, economic, cultural, legal, ethical), and the impact of stakeholder engagement on justification, health and wellbeing.

Scope

Proposals will identify and address key challenges in stakeholder engagement and informed decision making in radiation protection, by analysing rationales and developing new models and tools for stakeholder interaction and engagement. This is needed for different exposure situations and categories of exposures, whether affecting an individual, groups of people, or

larger communities. The proposal outcomes may include the analysis of societal needs for and evaluation of legal instruments and governance frameworks supporting access to information, public participation and access to justice in relation with radiation protection issues; the ethical principles guiding engagement and justification; and the examination, assessment and design of stakeholder and public participation tools and methodologies for different radiological exposure situations and categories of exposure. Proposal may entail highlighting roles and rules of stakeholders in the engagement process; the interaction between institutional and non-institutional stakeholders; factors facilitating engagement; stakeholders' sense-making of ionizing radiation concepts, risk and uncertainty (e.g. practitioners, patients, local population); impact of stakeholder engagement on the interplay of psychological aspects associated with radioactivity, social environment, culture and radiation protection behaviours; and the role of recent developments in communication including social media (e.g. citizens' journalism).

Expected impact

The research should bring insights on ways to intensify responsiveness to societal needs and concerns, increasing the quality of radiation protection approaches, techniques and culture. It should improve the mutual understanding between stakeholders, and enable informed decision making. Proposals should reinforce the links between social sciences and humanities research and the radiation protection platforms (MELODI, NERIS, ALLIANCE, EURADOS, EURAMED) and help with disseminating and understanding stakeholder engagement processes. The research results should be applicable, for instance to support the implementation of Basic Safety Standards.

Type of action

Research and innovation. Project proposals may address the entire or part of the scope.

Recommendations

Impact and collaboration

Proposals must clearly demonstrate the potential impact on radiation protection in Europe as well as the added value of transnational collaboration: sharing of resources (models, registries, diagnoses, etc.), harmonisation of data, sharing of specific know-how and/or innovative technologies.

The individual project partners of the joint applications should be complementary and the proposed work should contain novel, innovative, ambitious ideas and their potential application to the end users.

Education and Training

Education and training is a part of all activities within CONCERT. Proposals should include a plan for integration of education and training into the research programme, with a description of

the proposed activities. The proposal should also give details of collaboration or involvement with academic departments, and of intended PhD thesis work, MSc project work, teaching seminars, ad hoc courses on the topics of the proposal, etc., where possible.

Quality assurance, Open Access and Infrastructures[2]

Proposals must clearly identify the infrastructures required to perform the research and belonging to the following three categories: (1) irradiation platforms and contamination sites (2) databases, sample banks and cohorts, (3) analytical platforms (including 'omics ones), models and tools.

The applicant to the call should document the expertise in using such infrastructures.

Proposals must demonstrate the appropriateness of the approaches, techniques or infrastructures that they plan to use, in terms of feasibility, reliability, quality assurance and traceability of the results to be generated in relation to the objectives of the project (e.g. reliable dose quantification, common standards for omics). A Data Management Plan (DMP), and if applicable, a Sample Management Plan (SMP), should be included in the proposal (http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-data-mgt_en.pdf).

Social science and Humanities

Social Sciences and Humanities (SSH) are given an enhanced role as a cross-cutting issue. Even if proposals do not belong to the SSH relevant sub-topic, they may contain contributions from the SSH disciplines.

[2] Please also refer to Annex E. Infrastructures

2. APPLICATION

Proposals must fulfil the following **eligibility criteria. Proposals not meeting these requirements will be rejected without further review**:

2.1 GENERAL CRITERIA

- Joint proposals (in English), must be submitted to the online submission website (https://secure.pt-dlr.de/ptoutline/app/concert2017) no later than **02 May 2017 at 17:00 CEST** (Brussels local time). The server will not accept proposals after this time.
- Information on how to submit proposals electronically is available in "Guidelines for applicants" and "Proposal template" on the CONCERT website (http://www.concert-h2020.eu/en).
- The proposals should respect the appropriate format and limits on length described in the "Guidelines for Applicants" and "Proposal template" on the CONCERT website (http://www.concert-h2020.eu/en).
- If possible, projects are expected to start between October and November 2017, depending on successful evaluation and thereafter grant negotiation. However, the project has to be finished not later than **29 February 2020**. No extension will be allowed.
- The call is open to research partners from all over the world (persons, groups and entities subject to EU financial sanctions are barred from participation, cp. EURATOM Work Programme 2014 – 2015, p. 38, fn. 33[3]).

2.2 ELIGIBLE ORGANISATIONS

- The following organisations are eligible to be funded:
  - Beneficiaries of CONCERT (see list of Beneficiaries in Annex A);
  - Linked Third Parties of CONCERT (see list of Linked Third Parties in Annex A);
  - Third Parties:
    - Higher education establishments and other academic research institutions, in particular:
      - Research oriented radiation protection institutions;
    - Clinical/public health sector organisations, in particular those employing research teams working in hospitals/public health and/or

[3] http://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/euratom/h2020-wp1415-_euratom_en.pdf

other health care settings. Participation of Medical Doctors in the research teams is encouraged;

- Enterprises (all sizes of private companies). Participation of small and medium-size enterprises (SMEs) is encouraged.

- Third Parties may participate in transnational projects if they are able:
  - to secure their own funding (without asking for any financial support);
  - or to receive a financial support from a CONCERT Beneficiary organisation or one of their Linked Third Parties (See Annex A and B).

  Such partners are considered as full project partners.

  Participants that do not belong to any of the organisations listed in Annex A are strongly encouraged to contact their respective national organisation participating in CONCERT (CONCERT Beneficiary organisations or their Linked Third Parties) before starting the preparation of their proposal, to explore funding solutions if they want to be funded. It is recommended that each project states at submission how the funding of Third Parties is planned.

2.3 CONSORTIUM COMPOSITION

- Each consortium must nominate a **project coordinator** among the project's principal investigators. For practical administrative reasons it is recommended that the coordinator belongs to a CONCERT Beneficiary organisation or one of their Linked Third Parties. The project coordinator will represent the consortium externally and towards the JCS and CONCERT coordination, and will be responsible for its internal scientific management (such as controlling, reporting, intellectual property rights (IPR) issues and contact with the JCS).
- Each project partner will be represented **by one principal investigator only**. Within a joint proposal, each project partner's principal investigator will be the contact person.
- Each principal investigator can submit only one proposal as project coordinator.
- Only transnational projects will be funded.
- Each proposal must involve **at least three legal entities**. **Each of the three must be established in a different EU Member State or Euratom Programme associated country**. All three legal entities must be independent of each other.
- There should be at least one external entity (non-CONCERT beneficiary or LTP) to the current CONCERT consortium, participating in a proposal.
- The number of participants and their research contribution should be appropriate for the aims of the transnational research project and reasonably balanced in terms of international participation. Each transnational collaborative project should represent the critical mass to achieve ambitious scientific goals and should clearly demonstrate an added value from working together.

2.4 FUNDING

- The funding of Beneficiaries and their Linked Third Parties follows the rules of the CONCERT Grant Agreement.
- The costs of Third Parties may be covered by financial support provided by a Beneficiary or Linked Third Party. Financial support may cover the costs of the Third Party entirely or partially. Third Parties may also participate using their own resource. Third Parties considering to participate using their own resources are strongly advised to contact their respective national organisation participating in CONCERT (CONCERT Beneficiary or their Linked Third Parties) before starting the preparation of their proposal in order to explore funding solutions (see Annex B Financial Call Conditions). It is recommended that each project states at submission how the funding of Third Parties is planned.
- The total budget available for this second CONCERT transnational Call for proposals is 6.98 M€. CONCERT decided to allocate the funds available for the second call as follows: 80% to topic 1 and 20% to topic 2, respectively.
- CONCERT intends to fund up to three projects in topic 1 and up to two projects in topic 2, respectively.
- CONCERT considers that proposals with total eligible cost up to 1.86 M€ for topic 1 and up to 0.69 M€ for topic 2 would allow the specific challenges of the open CONCERT RTD calls to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.
- Funding is awarded for the duration of the project (see above General criteria) according to CONCERT financial call conditions, and no extension will be allowed.
- See Annex B for more details on the CONCERT funding regulations.

2.5 FURTHER INFORMATION

If you need additional information, please contact the JCS, or your national CONCERT beneficiary organisation (see http://www.concert-h2020.eu/en).

3. EVALUATION

The evaluation of the joint transnational project proposals will be organised as follows:

3.1 FORMAL CHECK OF PROPOSALS

The JCS will check all proposals to ensure that they meet the call's formal criteria (date of submission; number and category of partners and participating countries; inclusion of at least one external entity (non-CONCERT beneficiary or LTP) to the current CONCERT consortium, participating in a proposal; inclusion of all necessary information in English; appropriate limits on length). Proposals passing eligibility check will be forwarded to the Peer Review Panel[4] (PRP) members for evaluation. Proposals not meeting the formal criteria will be declined without further review.

3.2 PEER-REVIEW OF PROPOSALS

The reviewers of the PRP will carry out the evaluation according to specific evaluation criteria (see below), using a common evaluation form. The evaluation of submitted proposals will be aligned on the scoring system and criteria given in the European Commission's Work Programme.

A scoring system from 0 to 5 will be used to evaluate the proposal's performance with respect to the different evaluation criteria. Scoring system: 0: fails or missing/incomplete information; 1: poor; 2: fair; 3: good; 4: very good; 5: excellent. The overall threshold, applying to the sum of the three individual scores, will be 10.

1. **Excellence**
    a. **Clarity and pertinence of the objectives**
    b. **Credibility of the proposed approach and methodology**
    c. **Soundness of the concept**
    d. **Innovative potential**
    e. **Competence and experience of participating research partners in the field(s) of the proposal (previous work in the field, specific technical expertise)**
2. **Impact**
    a. **Potential of the expected results to add to the scientific evidence base to improve radiation protection and, consequently, its regulation**
    b. **Added-value of transnational collaboration: gathering a critical mass, sharing of resources, harmonization of data, sharing of specific know-how and/or innovative technologies, etc.**
    c. **Added-value for competence building in the European radiation protection research community and the European radiation protection regulatory system**.

[4] Peer Review Panel: international reviewers that will review the applications according to their expertise.

d. **Effectiveness of the proposed measures to exploit and disseminate the project results (including management of intellectual property rights - IPR), to communicate the project, and to manage research data where relevant**

3. **Quality and efficiency of the implementation**

a. **Coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks, resources and time-frame**

b. **Scientific competence and complementarity of the participants within the consortium**

c. **Involvement of young scientists (MSc, PhD, Post-Doc…), when applicable**

d. **Appropriateness of the management structures and procedures, including risk and innovation management**

e. **Concept for sustainability of infrastructures initiated by the project, when applicable**

f. **Budget and cost-effectiveness of the project (rational distribution of resources in relation to project's activities, partners' responsibilities and time frame)**

Each proposal will be evaluated by at least three PRP members, who will make first a written evaluation. Each proposal will be then discussed by all the PRP members in a final PRP meeting to agree on one ranking list per topic. A final consensus report will be written for each proposal.

4. FUNDED PROJECT

4.1 FINAL DECISION ON FUNDING

Separate ranking lists will be established for each topic (topics 1 and 2). A final decision, subject to budgetary consideration, will be made by the CONCERT Management Board, which is committed to follow the ranking lists established by the PRP. The CONCERT Management Board will fund up to three projects in topic 1 and up to two projects in topic 2. If budget is available, the CONCERT Management board will follow the ranking lists afterwards.

Please refer to Annex B for detailed explanations on contracting and funding process.

The funding decision is final and no complaint will be accepted or treated by the CONCERT consortium.

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4.2 FUNDED PROJECT CONSORTIUM AGREEMENT

It will be the responsibility of the project coordinator of the winning consortium to draw up a funded project Consortium Agreement (CA) suitable to their own group in order to manage the delivery of the project activities, finances, intellectual property rights (IPR) and to avoid disputes which might be detrimental to the completion of the project.

All the project partners must sign the funded project CA and send it to the CONCERT coordinator. The call winning consortium is strongly encouraged to sign this funded project CA before the official project start date, and in any case the funded project CA has to be signed no later than six months after the official project start date. Further instructions will be provided by the JCS and CONCERT coordinator to the coordinators of the projects selected for funding.

5. REPORTING REQUIREMENTS

Each project coordinator, on behalf of all participating partners, should submit to the JCS a brief mid-term and final scientific progress report of the transnational project (in English) by filling out a template provided by JCS stating the scientific progress, the goals that have been met, and corrective measures set in case that the annual project plan has not been fulfilled. In addition, project coordinators could be asked to present the project results during CONCERT meetings (Review Seminars).

In case of ANY significant changes in the work program or the consortium composition, the coordinator must inform as quickly as possible the JCS, who will inform the CONCERT coordination, to decide upon the proper action to be taken.

ANNEX A. CONCERT BENEFICIARIES AND THEIR LINKED THIRD PARTIES

Consult also in CONCERT website (http://www.concert-h2020.eu/en) the list of CONCERT Beneficiaries and their Linked Third Parties.

CONCERT Beneficiaries:

- BUNDESAMT FUER STRAHLENSCHUTZ, BfS, Germany, the Coordinator
- SATEILYTURVAKESKUS, STUK, Finland
- STUDIECENTRUM VOOR KERNENERGIE/CENTRE D'ETUDE DE L'ENERGIE NUCLEAIRE, SCK CEN, Belgium
- AGENCE NATIONALE DE LA RECHERCHE, ANR, France
- DEPARTMENT OF HEALTH, DH-PHE, United Kingdom
- COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES, CEA, France
- UNIVERSITA DEGLI STUDI DI PAVIA, UNIPV, Italy
- ASSOCIATION MELODI, France
- ALLIANCE EUROPENNE EN RADIOECOLOGIE, ALLIANCE, France
- NERIS PLATFORM ASSOCIATION, NERIS, France
- EUROPEAN RADIATION DOSIMETRY GROUP E.V., EURADOS, Germany
- INSTITUT DE RADIOPROTECTION ET DE SURETE NUCLEAIRE, IRSN, France
- STRALSAKERHETSMYNDIGHETEN, SSM, Sweden
- CENTRO DE INVESTIGACIONES ENERGETICAS, MEDIOAMBIENTALES Y TECNOLOGICAS, CIEMAT, Spain
- ORSZAGOS KÖZEGÉSZSÉGÜGYI KÖZPONT, OKK-OSSKI, Hungary
- MAGYAR TUDOMANYOS AKADEMIA ENERGIATUDOMANYI KUTATOKOZPONT, MTA EK, Hungary
- NATIONAL CENTRE OF RADIOBIOLOGY AND RADIATION PROTECTION, NCRRP, Bulgaria
- HELMHOLTZ ZENTRUM MUENCHEN DEUTSCHES FORSCHUNGSZENTRUM FUER GESUNDHEIT UND UMWELT GMBH, HMGU, Germany
- MEDIZINISCHE UNIVERSITAET WIEN, MUW, Austria
- AGENZIA NAZIONALE PER LE NUOVE TECNOLOGIE, L'ENERGIA E LO SVILUPPO ECONOMICO SOSTENIBILE, ENEA, Italy
- ISTITUTO SUPERIORE DI SANITA, ISS, Italy
- NORWEGIAN RADIATION PROTECTION AUTHORITY, NRPA, Norway
- RIJKSINSTITUUT VOOR VOLKSGEZONDHEIDEN MILIEU*NATIONAL INSTITUTEFOR PUBLIC HEALTH AND THE ENVIRONMENTEN, RIVM, Netherlands
- FUNDACAO PARA A CIENCIA E A TECNOLOGIA, FCT, Portugal
- INSTITUT ZAMEDICINSKA ISTRAZIVANJA I MEDICINU RADA, IMROH, Croatia
- STATNI USTAV RADIACNI OCHRANY, SURO, Czech Republic
- INSTITUTUL DE FIZICA ATOMICA, IFA, Romania
- GREEK ATOMIC ENERGY COMMISSION, EEAE, Greece
- VUJE AS, VUJE, Slovakia
- TARTU ULIKOOL, UT, Estonia
- RADIATION PROTECTION CENTRE, RPC, Lithuania
- LATVIJAS UNIVERSITATE, UL, Latvia
- ITA-SUOMEN YLIOPISTO, UEF, Finland

- GŁÓWNY INSTYTUT GÓRNICTWA, GIG, Poland
- MINISTERIO DE ECONOMÍA Y COMPETITIVIDAD, MINECO, Spain
- AGÊNCIA PORTUGUESA DO AMBIENTE IP, APA, Portugal
- INSTITUT JOZEF STEFAN, JSI, Slovenia
- EIDGENOESSISCHES DEPARTEMENT DES INNERN, FOPH, Switzerland

CONCERT Linked Third Parties:

- STOCKHOLMS UNIVERSITET (SU), affiliated or linked to MELODI
- MUTADIS CONSULTANTS SARL (MUTADIS), affiliated or linked to NERIS
- DANMARKS TEKNISKE UNIVERSITET (DTU), affiliated or linked to NERIS
- UNIVERSITA DEGLI STUDI DI MILANO (UMIL), affiliated or linked to NERIS
- RUDER BOSKOVIC INSTITUTE (RBI), affiliated or linked to EURADOS
- INSTITUTO SUPERIOR TECNICO (IST), affiliated or linked to EURADOS
- SEIBERSDORF LABOR GMBH (SL), affiliated or linked to EURADOS
- PHYSIKALISCH-TECHNISCHE BUNDESANSTALT (PTB), affiliated or linked to EURADOS
- THE HENRYK NIEWODNICZANSKI INSTITUTE OF NUCLEAR PHYSICS, POLISH ACADEMY OF SCIENCES (IFJ PAN), affiliated or linked to EURADOS
- EUROPEAN NUCLEAR SAFETY TRAINING AND TUTORING INSTITUTE (ENSTII), affiliated or linked to IRSN
- CENTRE D'ETUDE SUR L'EVALUATION DE LA PROTECTION DANS LE DOMAINE NUCLEAIRE (CEPN), affiliated or linked to IRSN
- FUNDACIO CENTRE DE RECERCA EN EPIDEMIOLOGIA AMBIENTAL - CREAL (CREAL), affiliated or linked to CIEMAT
- KARLSRUHER INSTITUT FUER TECHNOLOGIE (KIT), affiliated or linked to HMGU
- HELMHOLTZ-ZENTRUM DRESDEN-ROSSENDORF EV (HZDR), affiliated or linked to HMGU
- FORSCHUNGSZENTRUM JULICH GmbH (Juelich), affiliated or linked to HMGU
- GSI HELMHOLTZZENTRUM FUER SCHWERIONENFORSCHUNG GmbH (GSI), affiliated or linked to HMGU
- NORGES MILJO-OG BIOVITENSKAPLIGE UNIVERSITET (NMBU-IMT), affiliated or linked to NRPA
- UJV REZ, a.s. (NRI), affiliated or linked to SURO
- CESKE VYSOKE UCENI TECHNICKE V PRAZE (CTU), affiliated or linked to SURO
- INSTITUTUL NATIONAL DE CERCETARE -DEZVOLTARE PENTRU FIZICA SI INGINERIE NUCLEARA "HORIA HULUBEI" (IFIN-HH), affiliated or linked to IFA-MG

ANNEX B. FINANCIAL CALL CONDITIONS

1 Overview

Proposals must include the estimated eligible total costs of the action. These estimated eligible total costs are used to calculate the maximum grant amount awarded through this call.

CONCERT aims at funding 100% of the action's total eligible costs following a mixed mode model (split in two portions). This grant will cover on the one side 69% of the action's total eligible costs under H2020 rules. The grant is meant to supplement a national co-fund on the other side. The national co-fund must be provided by CONCERT Beneficiaries or their Linked Third Parties and cover 31% of the action's total eligible costs.

Participants may further supplement the action's budget with their own funds or funds from other sources.

The funds for the grant awarded by CONCERT through this call are provided in accordance with the applicable EURATOM and EU regulations and the provisions of the Grant Agreement Number — 662287 — CONCERT. The co-financing principle as set out in Article 125(3) Regulation 966/2012 and Article 183 Commission Delegated Regulation 1268/2012 applies.

Consequently, actions are co-funded through a EURATOM contribution (EURATOM co-fund, 69%), which will be awarded through this call. The EURATOM co-fund is contingent of a national contribution (national co-fund, 31%). The national co-fund may be provided as follows:

- CONCERT Beneficiaries or their Linked Third Parties participating directly in the action provide the national co-fund through their own resources (e.g. personnel or use of equipment, infrastructure, or other assets) or in-kind contributions from third parties, provided the respective costs are eligible according to Grant Agreement Number — 662287 — CONCERT (see below 2 for details);
- CONCERT Beneficiaries or their Linked Parties provide the national co-fund through financial support to Third Parties participating in the action (see below 3 for details).

On behalf of CONCERT, CONCERT coordinator will conclude a CONCERT Grant Contract with each one of the coordinators of the call winning consortia. The CONCERT Grant Contract will specify

- The scope of the action and deliverables (with associated time table) expected from the CONCERT grantees;
- The amount of EURATOM funding to be granted to the grantees, with the foreseen payment schedule;
- The amount of co-fund resources to be spent by the grantees on the proposed research project, with the related expected justifications (in case of Third Parties receiving financial support from Beneficiaries or Linked Third Parties: e.g. grant contracts, grant approval letters, or administrative acts).

The Grant provided through this call is paid out to Beneficiaries and Linked Third Parties by means of a reimbursement in accordance with the applicable EURATOM and EU regulations

and the provisions of the Grant Agreement Number — 662287 — CONCERT. Beneficiaries and Linked Third Parties provide financial support to Third Parties. Financial support to Third Parties may be made in form of advance payments.

2 Beneficiaries and Linked Third Parties

Beneficiaries and Linked Third Parties are funded according to the rules of the Grant Agreement Number — 662287 — CONCERT and CONCERT's internal rules concerning the distribution of funds. Beneficiaries or Linked Third Parties use their own resources or in-kind contributions from third parties to implement the action. The actually incurred costs must be eligible under the Grant Agreement Number — 662287 — CONCERT (cp. in particular Articles 6, 10, 11, 12, 13, 14 Grant Agreement Number — 662287 — CONCERT). The grant reimburses 69% of these costs. The grant is paid out by the BfS as the Coordinator of CONCERT according to the rules of the Grant Agreement Number — 662287 — CONCERT.

CONCERT Beneficiaries and Linked Third Parties are referred to Annex 1 of the Grant Agreement for details of the funding scheme.

3 Third Parties

Only eligible Third Parties can receive a grant. The provisions for eligibility set out in the EU's/EURATOM's Rules for Participation (cp. Art. 10 Regulation 1290/2013) apply mutatis mutandis. Generally, only entities from EURATOM Member States and Associated Countries[5] are eligible.

In exceptional cases, entities from countries other than EURATOM member states and Associated Countries can be eligible for funding. Consortia with such an entity demonstrate that this entity's contribution is essential to the action (Art. 10. para. 2 Regulation 1290/2013; Annex I: General Conditions to the EURATOM Work Programme 2014 - 2015).

Other entities may participate, provided they use their own resources or secured funding from other sources. They are, however, not eligible for funding[6].

Eligible Third Parties are funded according to the following scheme:

- CONCERT Beneficiaries or Linked Third Parties provide financial support to Third Parties. Financial support consists of the national co-fund: This covers 31% of the action's eligible costs. The legal basis for these payments will be co-funding contracts with the Third Parties or whatever legal form national laws prescribe. Each Third Party within the call-winning consortium will have to conclude national funding contracts with a CONCERT Beneficiary or Linked Third Party. The national co-fund is awarded according to the national laws governing the respective CONCERT Beneficiary or Linked Third Party. This might require a separate procedure. The present call does not involve a decision regarding the national co-fund.

[5] According to the European Commission, the only current Associated Countries are Switzerland and the Ukraine (cp. the information provided in the European Commission's H2020 Online Manual).
[6] Persons, groups and entities subject to EU financial sanctions must not participate.

- EURATOM co-fund (this is also called cascade funding, cp. p. 139 AMGA). This will cover 69% of the financial support to the call-winning consortium. CONCERT Beneficiaries or Linked Third Parties administer the grant awarded through this call and will be reimbursed for their financial support to Third Parties according to Articles 6.2 C, 15.1, and 15.2 Grant Agreement Number — 662287 — CONCERT.
- The maximum amount of financial support provided to Third Parties (EURATOM co-fund and national co-fund) must not exceed 300,000 €.

The costs eligibility criteria for proposals for financial support of Third Parties shall be subject to the rules of H2020. In particular, the costs eligibility rules foreseen under Articles 6.1, 6.2 A, B, D, E, 10, 11, 12, 13 of the H2020 Model Grant Agreement, apply by analogy to the support granted under the CONCERT Grant Contract and to the national funding rules for the support granted as "national co-fund".

Annex C sets out the cost eligibility rules.

The CGC will also provide for the transfer of the following legal obligations to Third Parties:

- The European Commission has the right to carry out checks, reviews and audits.
- The European Anti-Fraud Office (OLAF) may carry out investigations.
- The European Court of Auditors (ECA) may carry out audits.
- The European Commission may carry out interim and final evaluations of the impact of the action.
- Third Parties must avoid a conflict of interests.
- Third Parties must keep confidential all confidential information.
- Third Parties must promote the action and ensure the visibility of EU funding.
- Third Parties must accept the indemnity of the European Commission for certain matters and its own liability for damages sustained by the European Commission.

The obligations are further specified in Annex D.

ANNEX C. COSTS ELIGIBILITY RULES FOR PROVIDING FINANCIAL SUPPORT TO THIRD PARTIES

The following rules shall apply mutatis mutandis to the funding of Third Parties. The rules shall apply as follows:

- Any reference to Beneficiaries shall be read as a reference to Third Parties;
- Any reference to the period set out in Article 3 shall be read as a reference to the duration of the project;
- Any reference to Annex 1 or Annex 2 of the Grant Agreement shall be read as a reference to the applicant consortiums proposal, and, where applicable, its budget.

Article 6.1 General conditions for costs to be eligible

'Eligible costs' are costs that meet the following criteria:

(a) for actual costs:

(i) they must be actually incurred by the beneficiary;

(ii) they must be incurred in the period set out in Article 3, with the exception of costs relating to the submission of the periodic report for the last reporting period and the final report (see Article 20);

(iii) they must be indicated in the estimated budget set out in Annex 2

(iv) they must be incurred in connection with the action as described in Annex 1 and necessary for its implementation;

(v) they must be identifiable and verifiable, in particular recorded in the beneficiary's accounts in accordance with the accounting standards applicable in the country where the beneficiary is established and with the beneficiary's usual cost accounting practices;

(vi) they must comply with the applicable national law on taxes, labour and social security, and

(vii) they must be reasonable, justified and must comply with the principle of sound financial management, in particular regarding economy and efficiency;

(b) for unit costs:

(i) they must be calculated as follows:

- {amounts per unit set out in Annex 2 or calculated by the beneficiary in accordance with its usual cost accounting practices (see Article 6.2, Point A)
- multiplied by
- the number of actual units};

(ii) the number of actual units must comply with the following conditions:

- the units must be actually used or produced in the period as set out in Article 3;
- the units must be necessary for implementing the action or produced by it, and
- the number of units must be identifiable and verifiable, in particular supported by records and documentation (see Article 18);

(c) for flat-rate costs:

(i) they must be calculated by applying the flat-rate set out in Annex 2, and

(ii) the costs (actual costs or unit costs) to which the flat-rate is applied must comply with the conditions for eligibility set out in this Article.

Article 6.2 Specific Conditions for costs to be eligible

Costs are eligible if they comply with the general conditions (see above) and the specific conditions set out below for each of the following budget categories:

A. direct personnel costs;

B. direct costs of subcontracting;

[…]

D. other direct costs;

E. indirect costs;

[…]

'Direct costs' are costs that are directly linked to the action implementation and can therefore be attributed to it directly. They must not include any indirect costs (see Point E below).

'Indirect costs' are costs that are not directly linked to the action implementation and therefore cannot be attributed directly to it.

A. Direct personnel costs

Types of eligible personnel costs

A.1 **Personnel** costs are eligible, if they are related to personnel working for the beneficiary under an employment contract (or equivalent appointing act) and assigned to the action ('costs for **employees (or equivalent)**'). They must be limited to salaries (including during parental leave), social security contributions, taxes and other costs included in the remuneration, if they arise from national law or the employment contract (or equivalent appointing act).

Beneficiaries that are non-profit legal entities[7] may also declare as personnel costs additional remuneration for personnel assigned to the action (including payments on the basis of supplementary contracts regardless of their nature), if:

(a) it is part of the beneficiary's usual remuneration practices and is paid in a consistent manner whenever the same kind of work or expertise is required;

(b) the criteria used to calculate the supplementary payments are objective and generally applied by the beneficiary, regardless of the source of funding used.

Additional remuneration for personnel assigned to the action is eligible up to the following amount:

(a) if the person works full time and exclusively on the action during the full year: up to EUR 8 000;

(b) if the person works exclusively on the action but not full-time or not for the full year: up to the corresponding pro-rata amount of EUR 8 000, or

[7] For the definition, see Article 2.1(14) of the Rules for Participation Regulation No 1290/2013: '**non-profit legal entity**' means a legal entity which by its legal form is non-profit-making or which has a legal or statutory obligation not to distribute profits to its shareholders or individual members.

(c) if the person does not work exclusively on the action: up to a pro-rata amount calculated as follows:
{{EUR 8 000
divided by
the number of annual productive hours (see below)},
multiplied by
the number of hours that the person has worked on the action during the year}.

A.2 The **costs for natural persons working under a direct contract** with the beneficiary other than
an employment contract are eligible personnel costs, if:

(a) the person works under the beneficiary's instructions and, unless otherwise agreed with the beneficiary, on the beneficiary's premises;
(b) the result of the work carried out belongs to the beneficiary, and
(c) the costs are not significantly different from those for personnel performing similar tasks under an employment contract with the beneficiary.

A.3 The **costs of personnel seconded by a Third Party** against payment are eligible personnel costs, if the conditions in Article 11.1 are met.

A.4 **Costs of owners** of beneficiaries that are small and medium-sized enterprises ('SME owners') who are working on the action and who do not receive a salary are eligible personnel costs, if they correspond to the amount per unit set out in Annex 2 multiplied by the number of actual hours worked on the action.

A.5 Costs of '**beneficiaries that are natural persons**' not receiving a salary are eligible personnel costs, if they correspond to the amount per unit set out in Annex 2 multiplied by the number of actual hours worked on the action.

Calculation

Personnel costs must be calculated by the beneficiaries as follows:

{{hourly rate
multiplied by
the number of actual hours worked on the action},
plus
for non-profit legal entities: additional remuneration to personnel assigned to the action under the conditions set out above (Point A.1)}.

The number of actual hours declared for a person must be identifiable and verifiable (see Article 18).

The total number of hours declared in EU or Euratom grants, for a person for a year, cannot be higher than the annual productive hours used for the calculations of the hourly rate. Therefore, the maximum number of hours that can be declared for the grant is:

{the number of annual productive hours for the year (see below)
minus

total number of hours declared by the beneficiary for that person in that year for other EU or Euratom grants}.

The 'hourly rate' is one of the following:

(a) for personnel costs declared as actual costs: the hourly rate is the amount calculated as follows:
{actual annual personnel costs (excluding additional remuneration) for the person
divided by
number of annual productive hours}.

The beneficiaries must use the annual personnel costs and the number of annual productive hours for each financial year covered by the reporting period. If a financial year is not closed at the end of the reporting period, the beneficiaries must use the hourly rate of the last closed financial year available.

For the 'number of annual productive hours', the beneficiaries may choose one of the following:

(i) 'fixed number of hours': 1 720 hours for persons working full time (or corresponding pro rate for persons not working full time);

(ii) 'individual annual productive hours': the total number of hours worked by the person in the year for the beneficiary, calculated as follows:
{annual workable hours of the person (according to the employment contract, applicable
collective labour agreement or national law)
plus
overtime worked
minus
absences (such as sick leave and special leave)}.

'Annual workable hours' means the period during which the personnel must be working, at the employer's disposal and carrying out his/her activity or duties under the employment contract, applicable collective labour agreement or national working time legislation.

If the contract (or applicable collective labour agreement or national working time legislation) does not allow to determine the annual workable hours, this option cannot be used;

(iii) 'standard annual productive hours': the 'standard number of annual hours' generally applied by the beneficiary for its personnel in accordance with its usual cost accounting practices. This number must be at least 90% of the 'standard annual workable hours'.

If there is no applicable reference for the standard annual workable hours, this option cannot be used.

For all options, the actual time spent on **parental leave** by a person assigned to the action may be deducted from the number of annual productive hours;

(b) for personnel costs declared on the basis of unit costs: the hourly rate is one of the following:
  (i) for SME owners or beneficiaries that are natural persons: the hourly rate set out in Annex 2 (see Points A.4 and A.5 above), or
  (ii) for personnel costs declared on the basis of the beneficiary's usual cost accounting practices: the hourly rate calculated by the beneficiary in accordance with its usual cost accounting practices, if:
    - the cost accounting practices used are applied in a consistent manner, based on objective criteria, regardless of the source of funding;
    - the hourly rate is calculated using the actual personnel costs recorded in the beneficiary's accounts, excluding any ineligible cost or costs included in other budget categories.

      The actual personnel costs may be adjusted by the beneficiary on the basis of budgeted or estimated elements. Those elements must be relevant for calculating the personnel costs, reasonable and correspond to objective and verifiable information;

    and
    - the hourly rate is calculated using the number of annual productive hours (see above).

B. **Direct costs of subcontracting** (including related duties, taxes and charges such as non-deductible value added tax (VAT) paid by the beneficiary) are eligible if the conditions in Article 13.1.1 are met.

D. Other direct costs

D.1 **Travel costs and related subsistence allowances** (including related duties, taxes and charges such as non-deductible value added tax (VAT) paid by the beneficiary) are eligible if they are in line with the beneficiary's usual practices on travel.

D.2 *The **depreciation costs of equipment, infrastructure or other assets** (new or second-hand) as recorded in the beneficiary's accounts are eligible, if they were purchased in accordance with Article 10.1.1 and written off in accordance with international accounting standards and the beneficiary's usual accounting practices.*

*The **costs of renting or leasing** equipment, infrastructure or other assets (including related duties, taxes and charges such as non-deductible value added tax (VAT) paid by the beneficiary) are also eligible, if they do not exceed the depreciation costs of similar equipment, infrastructure or assets and do not include any financing fees.*

*The costs of equipment, infrastructure or other assets **contributed in-kind against payment** are eligible, if they do not exceed the depreciation costs of similar equipment, infrastructure or assets, do not include any financing fees and if the conditions in Article 11.1 are met.*

The only portion of the costs that will be taken into account is that which corresponds to the duration of the action and rate of actual use for the purposes of the action.

D.3 **Costs of other goods and services** (including related duties, taxes and charges such as nondeductible value added tax (VAT) paid by the beneficiary) are eligible, if they are:

(a) purchased specifically for the action and in accordance with Article 10.1.1 or
(b) contributed in kind against payment and in accordance with Article 11.1.

Such goods and services include, for instance, consumables and supplies, dissemination (including open access), protection of results, certificates on the financial statements (if they are required by the Agreement), certificates on the methodology, translations and publications.

D.4 **Capitalised and operating costs of 'large research infrastructure**[8]**'** directly used for the action are eligible, if:

(a) *the value of the large research infrastructure represents at least 75% of the total fixed assets (at historical value in its last closed balance sheet before the date of the signature of the Agreement or as determined on the basis of the rental and leasing costs of the research infrastructure*[9]*);*
(b) *the beneficiary's methodology for declaring the costs for large research infrastructure has been positively assessed by the Commission ('**ex-ante assessment**');*
(c) *the beneficiary declares as direct eligible costs only the portion which corresponds to the duration of the action and the rate of actual use for the purposes of the action, and*
(d) *they comply with the conditions as further detailed in the annotations to the H2020 grant agreements.*

E. Indirect costs

Indirect costs are eligible if they are declared on the basis of the flat-rate of 25% of the eligible direct costs (see Article 5.2 and Points A to D above), from which are excluded:

(a) costs of subcontracting and
(b) costs of in-kind contributions provided by third parties which are not used on the beneficiary's premises and

[8] '**Large research infrastructure**' means research infrastructure of a total value of at least EUR 20 million, for a beneficiary, calculated as the sum of historical asset values of each individual research infrastructure of that beneficiary, as they appear in its last closed balance sheet before the date of the signature of the Agreement or as determined on the basis of the rental and leasing costs of the research infrastructure.

[9] For the definition, see Article 2(6) of Regulation (EU) No 1291/2013 of the European Parliament and of the Council of 11 December 2013 establishing Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020) (OJ L 347, 20.12.2013 p.104)-('Horizon 2020 Framework Programme Regulation No 1291/2013'): 'Research infrastructure' are facilities, resources and services that are used by the research communities to conduct research and foster innovation in their fields. Where relevant, they may be used beyond research, e.g. for education or public services. They include: major scientific equipment (or sets of instruments); knowledge-based resources such as collections, archives or scientific data; e-infrastructures such as data and computing systems and communication networks; and any other infrastructure of a unique nature essential to achieve excellence in research and innovation. Such infrastructures may be 'single-sited', 'virtual' or 'distributed'.

(c) costs of providing financial support to third parties;

(d) not applicable.

Beneficiaries receiving an operating grant[10] financed by the EU or Euratom budget cannot declare indirect costs for the period covered by the operating grant.

ARTICLE 10 — PURCHASE OF GOODS, WORKS OR SERVICES

10.1 Rules for purchasing goods, works or services

10.1.1 If necessary to implement the action, the beneficiaries may purchase goods, works or services.

The beneficiaries must make such purchases ensuring the best value for money or, if appropriate, the lowest price. In doing so, they must avoid any conflict of interests (see Article 35).

The beneficiaries must ensure that the Commission, the European Court of Auditors (ECA) and the European Anti-Fraud Office (OLAF) can exercise their rights under Articles 22 and 23 also towards their contractors.

10.1.2 Beneficiaries that are 'contracting authorities' within the meaning of Directive 2004/18/EC[11] or 'contracting entities' within the meaning of Directive 2004/17/EC[12] must comply with the applicable national law on public procurement.

10.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under Article 10.1.1, the costs related to the contract concerned will be ineligible (see Article 6) and will be rejected (see Article 42).

If a beneficiary breaches any of its obligations under Article 10.1.2, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

[10] For the definition, see Article 121(1)(b) of Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union and repealing Council Regulation (EC, Euratom) No 1605/2002 (OJ L 218, 26.10.2012, p.1) ('Financial Regulation No 966/2012'): 'operating grant' means direct financial contribution, by way of donation, from the budget in order to finance the functioning of a body which pursues an aim of general EU interest or has an objective forming part of and supporting an EU policy.

[11] Directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004 on the coordination of procedures for the award of public work contracts, public supply contracts and public service contracts (OJ L 134, 30.04.2004, p. 114).

[12] Directive 2004/17/EC of the European Parliament and of the Council of 31 March 2004 coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors (OJ L 134, 30.04.2004, p. 1).

ARTICLE 11 — USE OF IN-KIND CONTRIBUTIONS PROVIDED BY THIRD PARTIES AGAINST PAYMENT

11.1 Rules for the use of in-kind contributions against payment

If necessary to implement the action, the beneficiaries may use in-kind contributions provided by third parties against payment.

The beneficiaries may declare costs related to the payment of in-kind contributions as eligible (see Article 6.1 and 6.2), up to the third parties' costs for the seconded persons, contributed equipment, infrastructure or other assets or other contributed goods and services.

The third parties and their contributions must be set out in Annex 1. The Commission may however approve in-kind contributions not set out in Annex 1 without amendment (see Article 55), if:

- they are specifically justified in the periodic technical report and
- their use does not entail changes to the Agreement which would call into question the decision awarding the grant or breach the principle of equal treatment of applicants.

The beneficiaries must ensure that the Commission, the European Court of Auditors (ECA) and the European Anti-Fraud Office (OLAF) can exercise their rights under Articles 22 and 23 also towards the third parties.

11.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the costs related to the payment of the in-kind contribution will be ineligible (see Article 6) and will be rejected (see Article 42).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 12 — USE OF IN-KIND CONTRIBUTIONS PROVIDED BY THIRD PARTIES FREE OF CHARGE

12.1 Rules for the use of in-kind contributions free of charge

If necessary to implement the action, the beneficiaries may use in-kind contributions provided by third parties free of charge.

The beneficiaries may declare costs incurred by the third parties for the seconded persons, contributed equipment, infrastructure or other assets or other contributed goods and services as eligible in accordance with Article 6.4.

The third parties and their contributions must be set out in Annex 1. The Commission may however approve in-kind contributions not set out in Annex 1 without amendment (see Article 55), if:

- they are specifically justified in the periodic technical report and

- their use does not entail changes to the Agreement which would call into question the decision awarding the grant or breach the principle of equal treatment of applicants.

The beneficiaries must ensure that the Commission, the European Court of Auditors (ECA) and the European Anti-Fraud Office (OLAF) can exercise their rights under Articles 22 and 23 also towards the third parties.

12.2 Consequences of non-compliance
If a beneficiary breaches any of its obligations under this Article, the costs incurred by the third parties related to the in-kind contribution will be ineligible (see Article 6) and will be rejected (see Article 42).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 13 — IMPLEMENTATION OF ACTION TASKS BY SUBCONTRACTORS
13.1 Rules for subcontracting action tasks
13.1.1 If necessary to implement the action, the beneficiaries may award subcontracts covering the implementation of certain action tasks described in Annex 1.

Subcontracting may cover only a limited part of the action.
The beneficiaries must award the subcontracts ensuring the best value for money or, if appropriate, the lowest price. In doing so, they must avoid any conflict of interests (see Article 35). The tasks to be implemented and the estimated cost for each subcontract must be set out in Annex 1 and the total estimated costs of subcontracting per beneficiary must be set out in Annex 2. The Commission may however approve subcontracts not set out in Annex 1 and 2 without amendment (see Article 55), if:

- they are specifically justified in the periodic technical report and
- they do not entail changes to the Agreement which would call into question the decision awarding the grant or breach the principle of equal treatment of applicants.

The beneficiaries must ensure that the Commission, the European Court of Auditors (ECA) and the European Anti-Fraud Office (OLAF) can exercise their rights under Articles 22 and 23 also towards their subcontractors.

13.1.2 The beneficiaries must ensure that their obligations under Articles 35, 36, 38 and 46 also apply to the subcontractors.
Beneficiaries that are ‘contracting authorities’ within the meaning of Directive 2004/18/EC or ‘contracting entities’ within the meaning of Directive 2004/17/EC must comply with the applicable national law on public procurement.

13.2 Consequences of non-compliance
If a beneficiary breaches any of its obligations under Article 13.1.1, the costs related to the subcontract concerned will be ineligible (see Article 6) and will be rejected (see Article 42).

If a beneficiary breaches any of its obligations under Article 13.1.2, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

ANNEX D. LEGAL OBLIGATIONS OF THIRD PARTIES

The following rules contain obligations for the beneficiaries that will apply mutatis mutandis to third parties. The rules will be transferred through the CONCERT Grant Contract and the applicable national funding mechanisms.

ARTICLE 22 — CHECKS, REVIEWS, AUDITS AND INVESTIGATIONS — EXTENSION OF FINDINGS

22.1 Checks, reviews and audits by the Commission

22.1.1 Right to carry out checks

The Commission will — during the implementation of the action or afterwards — check the proper implementation of the action and compliance with the obligations under the Agreement, including assessing deliverables and reports.

For this purpose the Commission may be assisted by external persons or bodies.

The Commission may also request additional information in accordance with Article 17. The

Commission may request beneficiaries to provide such information to it directly.

Information provided must be accurate, precise and complete and in the format requested, including electronic format.

22.1.2 Right to carry out reviews

The Commission may — during the implementation of the action or afterwards — carry out reviews on the proper implementation of the action (including assessment of deliverables and reports), compliance with the obligations under the Agreement and continued scientific or technological relevance of the action.

Reviews may be started **up to two years after the payment of the balance**. They will be formally notified to the coordinator or beneficiary concerned and will be considered to have started on the date of the formal notification.

If the review is carried out on a third party (see Articles 10 to 16), the beneficiary concerned must inform the third party.

The Commission may carry out reviews directly (using its own staff) or indirectly (using external persons or bodies appointed to do so). It will inform the coordinator or beneficiary concerned of the identity of the external persons or bodies. They have the right to object to the appointment on grounds of commercial confidentiality.

The coordinator or beneficiary concerned must provide — within the deadline requested — any information and data in addition to deliverables and reports already submitted

(including information on the use of resources). The Commission may request beneficiaries to provide such information to it directly.

The coordinator or beneficiary concerned may be requested to participate in meetings, including with external experts.

For **on-the-spot** reviews, the beneficiaries must allow access to their sites and premises, including to external persons or bodies, and must ensure that information requested is readily available.

Information provided must be accurate, precise and complete and in the format requested, including electronic format.

On the basis of the review findings, a '**review report**' will be drawn up.

The Commission will formally notify the review report to the coordinator or beneficiary concerned, which has 30 days to formally notify observations ('**contradictory review procedure**'). Reviews (including review reports) are in the language of the Agreement.

22.1.3 Right to carry out audits

The Commission may — during the implementation of the action or afterwards — carry out audits on the proper implementation of the action and compliance with the obligations under the Agreement.

Audits may be started **up to two years after the payment of the balance**. They will be formally notified to the coordinator or beneficiary concerned and will be considered to have started on the date of the formal notification.

If the audit is carried out on a third party (see Articles 10 to 16), the beneficiary concerned must inform the third party.

The Commission may carry out audits directly (using its own staff) or indirectly (using external persons or bodies appointed to do so). It will inform the coordinator or beneficiary concerned of the identity of the external persons or bodies. They have the right to object to the appointment on grounds of commercial confidentiality.

The coordinator or beneficiary concerned must provide — within the deadline requested — any information (including complete accounts, individual salary statements or other personal data) to verify compliance with the Agreement. The Commission may request beneficiaries to provide such information to it directly.

For **on-the-spot** audits, the beneficiaries must allow access to their sites and premises, including to external persons or bodies, and must ensure that information requested is readily available.

Information provided must be accurate, precise and complete and in the format requested, including electronic format.

On the basis of the audit findings, a '**draft audit report**' will be drawn up.

The Commission will formally notify the draft audit report to the coordinator or beneficiary concerned, which has 30 days to formally notify observations ('**contradictory audit procedure**'). This period may be extended by the Commission in justified cases.

The '**final audit report**' will take into account observations by the coordinator or beneficiary concerned. The report will be formally notified to it.

Audits (including audit reports) are in the language of the Agreement.

The Commission may also access the beneficiaries' statutory records for the periodical assessment of unit costs or flat-rate amounts.

22.2 Investigations by the European Anti-Fraud Office (OLAF)

Under Regulations No 883/201311 and No 2185/9612 (and in accordance with their provisions and procedures), the European Anti-Fraud Office (OLAF) may — at any moment during implementation of the action or afterwards — carry out investigations, including on-the-spot checks and inspections, to establish whether there has been fraud, corruption or any other illegal activity affecting the financial interests of the EU.

22.3 Checks and audits by the European Court of Auditors (ECA)

Under Article 287 of the Treaty on the Functioning of the European Union (TFEU) and Article 161 of the Financial Regulation No 966/201213, the European Court of Auditors (ECA) may — at any moment during implementation of the action or afterwards — carry out audits.

The ECA has the right of access for the purpose of checks and audits.

22.5 Consequences of findings in checks, reviews, audits and investigations — Extension of findings

22.5.1 Findings in this grant

Findings in checks, reviews, audits or investigations carried out in the context of this grant may lead to the rejection of ineligible costs (see Article 42), reduction of the grant (see Article 43), recovery of undue amounts (see Article 44) or to any of the other measures described in Chapter 6.

Rejection of costs or reduction of the grant after the payment of the balance will lead to a revised final grant amount (see Article 5.4).

Findings in checks, reviews, audits or investigations may lead to a request for amendment for the modification of Annex 1 (see Article 55).

Checks, reviews, audits or investigations that find systemic or recurrent errors, irregularities, fraud or breach of obligations may also lead to consequences in other EU or Euratom grants awarded under similar conditions ('**extension of findings from this grant to other grants**').

Moreover, findings arising from an OLAF investigation may lead to criminal prosecution under national law.

22.5.2 Findings in other grants

The Commission may extend findings from other grants to this grant ('**extension of findings from other grants to this grant**'), if:

a) the beneficiary concerned is found, in other EU or Euratom grants awarded under similar conditions, to have committed systemic or recurrent errors, irregularities, fraud or breach of obligations that have a material impact on this grant and
b) those findings are formally notified to the beneficiary concerned — together with the list of grants affected by the findings — no later than two years after the payment of the balance of this grant.

The extension of findings may lead to the rejection of costs (see Article 42), reduction of the grant (see Article 43), recovery of undue amounts (see Article 44), suspension of payments (see Article 48), suspension of the action implementation (see Article 49) or termination (see Article 50).

22.5.3 Procedure

The Commission will formally notify the beneficiary concerned the systemic or recurrent errors and its intention to extend these audit findings, together with the list of grants affected.

22.5.3.1 the findings concern **eligibility of costs**: the formal notification will include:

a) an invitation to submit observations on the list of grants affected by the findings;
b) the request to submit **revised financial statements** for all grants affected;
c) the **correction rate for extrapolation** established by the Commission on the basis of the systemic or recurrent errors, to calculate the amounts to be rejected if the beneficiary concerned:
    i. considers that the submission of revised financial statements is not possible or practicable or
    ii. does not submit revised financial statements.

The beneficiary concerned has 90 days from receiving notification to submit observations, revised financial statements or to propose a duly substantiated **alternative correction method**. This period may be extended by the Commission in justified cases.

The amounts to be rejected will be determined on the basis of the revised financial statements, subject to their approval.

If the Commission does not receive any observations or revised financial statements, does not accept the observations or the proposed alternative correction method or does not approve the revised financial statements, it will formally notify the beneficiary concerned the application of the initially notified correction rate for extrapolation.

If the Commission accepts the alternative correction method proposed by the beneficiary concerned, it will formally notify the application of the accepted alternative correction method.

22.5.3.2 If the findings concern **improper implementation** or a **breach of another obligation**: the formal notification will include:

a) an invitation to submit observations on the list of grants affected by the findings and
b) the flat-rate the Commission intends to apply according to the principle of proportionality.

The beneficiary concerned has 90 days from receiving notification to submit observations or to propose a duly substantiated alternative flat-rate.

If the Commission does not receive any observations or does not accept the observations or the proposed alternative flat-rate, it will formally notify the beneficiary concerned the application of the initially notified flat-rate.

If the Commission accepts the alternative flat-rate proposed by the beneficiary concerned, it will formally notify the application of the accepted alternative flat-rate.

22.6 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, any insufficiently substantiated costs will be ineligible (see Article 6) and will be rejected (see Article 42).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 23 — EVALUATION OF THE IMPACT OF THE ACTION

23.1 Right to evaluate the impact of the action

The Commission may carry out interim and final evaluations of the impact of the action measured against the objective of the Euratom programme.

Evaluations may be started during implementation of the action and up to five years after the payment of the balance. The evaluation is considered to start on the date of the formal notification to the coordinator or beneficiaries.

The Commission may make these evaluations directly (using its own staff) or indirectly (using external bodies or persons it has authorised to do so).

The coordinator or beneficiaries must provide any information relevant to evaluate the impact of the action, including information in electronic format.

23.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the Commission may apply the measures described in Chapter 6.

ARTICLE 23a — MANAGEMENT OF INTELLECTUAL PROPERTY

23a.1 Obligation to take measures to implement the Commission Recommendation on the management of intellectual property in knowledge transfer activities

Beneficiaries that are universities or other public research organisations must take measures to implement the principles set out in Points 1 and 2 of the Code of Practice annexed to the Commission Recommendation on the management of intellectual property in knowledge transfer activities.

This does not change the obligations set out in Subsections 2 and 3 of this Section.

The beneficiaries must ensure that researchers and third parties involved in the action are aware of them.

23a.2 Consequences of non-compliance

If a beneficiary breaches its obligations under this Article, the Commission may apply any of the measures described in Chapter 6.

ARTICLE 35 — CONFLICT OF INTERESTS

35.1 Obligation to avoid a conflict of interests

The beneficiaries must take all measures to prevent any situation where the impartial and objective implementation of the action is compromised for reasons involving economic interest, political or national affinity, family or emotional ties or any other shared interest (‘**conflict of interests**’).

They must formally notify to the Commission without delay any situation constituting or likely to lead to a conflict of interests and immediately take all the necessary steps to rectify this situation.

The Commission may verify that the measures taken are appropriate and may require additional measures to be taken by a specified deadline.

35.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43) and the Agreement or participation of the beneficiary may be terminated (see Article 50).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 36 — CONFIDENTIALITY

36.1 General obligation to maintain confidentiality

During implementation of the action and for four years after the period set out in Article 3, the parties must keep confidential any data, documents or other material (in any form) that is identified as confidential at the time it is disclosed ('**confidential information**').

If a beneficiary requests, the Commission may agree to keep such information confidential for an additional period beyond the initial four years.

If information has been identified as confidential only orally, it will be considered to be confidential only if this is confirmed in writing within 15 days of the oral disclosure.

Unless otherwise agreed between the parties, they may use confidential information only to implement the Agreement.

The beneficiaries may disclose confidential information to their personnel or third parties involved in the action only if they:

a) need to know to implement the Agreement and;

b) are bound by an obligation of confidentiality.

This does not change the security obligations in Article 37, which still apply.

The Commission may disclose confidential information to its staff, other EU institutions and bodies or third parties, if:

a) this is necessary to implement the Agreement or safeguard the EU's financial interests and;

b) the recipients of the information are bound by an obligation of confidentiality.

Under the conditions set out in Article 4 of the Rules for Participation Regulation No 1290/2013, the Commission must moreover make available information on the results to other EU institutions, bodies, offices or agencies as well as Member States or associated countries.

The confidentiality obligations no longer apply if:

a) the disclosing party agrees to release the other party;

b) the information was already known by the recipient or is given to him without obligation of confidentiality by a third party that was not bound by any obligation of confidentiality;
c) the recipient proves that the information was developed without the use of confidential information;
d) the information becomes generally and publicly available, without breaching any confidentiality obligation, or
e) the disclosure of the information is required by EU or national law.

36.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 38 — PROMOTING THE ACTION — VISIBILITY OF EU FUNDING

38.1 Communication activities by beneficiaries

38.1.1 Obligation to promote the action and its results

The beneficiaries must promote the action and its results, by providing targeted information to multiple audiences (including the media and the public) in a strategic and effective manner.

This does not change the dissemination obligations in Article 29, the confidentiality obligations in Article 36 or the security obligations in Article 37, all of which still apply.

Before engaging in a communication activity expected to have a major media impact, the beneficiaries must inform the Commission (see Article 52).

38.1.2 Information on EU funding — Obligation and right to use the EU emblem

Unless the Commission requests or agrees otherwise or unless it is impossible, any communication activity related to the action (including in electronic form, via social media, etc.) and any infrastructure, equipment and major results funded by the grant must:

a) display the EU emblem and
b) include the following text:
   - *For communication activities: "This project has received funding from the Euratom research and training programme 2014-2018 under grant agreement No 662287".*
   - *For infrastructure, equipment and major results: "This [infrastructure][equipment][insert type of result] is part of a project that has received funding from the Euratom research and training programme 2014-2018 under grant agreement No 662287".*

When displayed together with another logo, the EU emblem must have appropriate prominence.

For the purposes of their obligations under this Article, the beneficiaries may use the EU emblem without first obtaining approval from the Commission.

This does not, however, give them the right to exclusive use.

Moreover, they may not appropriate the EU emblem or any similar trademark or logo, either by registration or by any other means.

38.1.3 Disclaimer excluding the Commission responsibility

Any communication activity related to the action must indicate that it reflects only the author's view and that the Commission is not responsible for any use that may be made of the information it contains.

38.2 Communication activities by the Commission

38.2.1 Right to use beneficiaries' materials, documents or information

The Commission may use, for its communication and publicising activities, information relating to the action, documents notably summaries for publication and public deliverables as well as any other material, such as pictures or audio-visual material that it receives from any beneficiary (including in electronic form).

This does not change the confidentiality obligations in Article 36 and the security obligations in Article 37, all of which still apply.

However, if the Commission's use of these materials, documents or information would risk compromising legitimate interests, the beneficiary concerned may request the Commission not to use it (see Article 52).

The right to use a beneficiary's materials, documents and information includes:

a) **use for its own purposes** (in particular, making them available to persons working for the Commission or any other EU institution, body, office or agency or body or institutions in EU Member States; and copying or reproducing them in whole or in part, in unlimited numbers);

b) **distribution to the public** (in particular, publication as hard copies and in electronic or digital format, publication on the internet, as a downloadable or non-downloadable file, broadcasting by any channel, public display or presentation, communicating through press information services, or inclusion in widely accessible databases or indexes);

c) **editing or redrafting** for communication and publicising activities (including shortening, summarising, inserting other elements (such as meta-data, legends, other graphic, visual, audio or text elements), extracting parts (e.g. audio or video files), dividing into parts, use in a compilation);

d) **translation**;

e) giving access **in response to individual requests** under Regulation No 1049/2001, without the right to reproduce or exploit;

f) **storage** in paper, electronic or other form;

g) **archiving**, in line with applicable document-management rules, and

h) the right to authorise **third parties** to act on its behalf or sub-license the modes of use set out in Points (b), (c), (d) and (f) to third parties if needed for the communication and publicizing activities of the Commission.

If the right of use is subject to rights of a third party (including personnel of the beneficiary), the beneficiary must ensure that it complies with its obligations under this Agreement (in particular, by obtaining the necessary approval from the third parties concerned).

Where applicable (and if provided by the beneficiaries), the Commission will insert the following information:

"© – [year] – [name of the copyright owner]. All rights reserved. Licensed to the Euratom under conditions."

38.3 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 46 — LIABILITY FOR DAMAGES

46.1 Liability of the Commission

The Commission cannot be held liable for any damage caused to the beneficiaries or to third parties as a consequence of implementing the Agreement, including for gross negligence.

The Commission cannot be held liable for any damage caused by any of the beneficiaries or third parties involved in the action, as a consequence of implementing the Agreement.

46.2 Liability of the beneficiaries

46.2.1 Conditions

Except in case of force majeure (see Article 51), the beneficiaries must compensate the Commission for any damage it sustains as a result of the implementation of the action or because the action was not implemented in full compliance with the Agreement.

Each beneficiary is responsible for paying the damages claimed from it.

46.2.2 Amount of damages - Calculation

The amount the Commission can claim from a beneficiary will correspond to the damage caused by that beneficiary.

46.2.3 Procedure

Before claiming damages, the Commission will formally notify the beneficiary concerned:

- informing it of its intention to claim damages, the amount and the reasons why and
- inviting it to submit observations within 30 days.

If the Commission does not receive any observations or decides to claim damages despite the observations it has received, it will formally notify **confirmation** of the claim for damages and a **debit note**, specifying the amount to be recovered, the terms and the date for payment.

If payment is not made by the date specified in the debit note, the Commission may **recover** the amount:

a) by '**offsetting**' it — without the beneficiary's consent — against any amounts owed to the beneficiary concerned by the Commission or an executive agency (from the EU or Euratom budget)

   In exceptional circumstances, to safeguard the EU's financial interests, the Commission may offset before the payment date specified in the debit note;

b) by **taking legal action** (see Article 57) or by **adopting an enforceable decision** under Article 299 of the Treaty on the Functioning of the EU (TFEU), Article 106a of the Euratom Treaty and Article 79(2) of the Financial Regulation No 966/2012.

If payment is not made by the date in the debit note, the amount to be recovered (see above) will be increased by **late-payment interest** at the rate set out in Article 21.11, from the day following the payment date in the debit note, up to and including the date the Commission receives full payment of the amount.

Partial payments will be first credited against expenses, charges and late-payment interest and then against the principal.

Bank charges incurred in the recovery process will be borne by the beneficiary, unless Directive 2007/64/EC applies.

ANNEX E. Infrastructures

Most of the infrastructures needed for research in radiation protection exist across Europe. CONCERT will promote the visibility of those infrastructures. One of the roles of CONCERT is to ensure the availability of and facilitate ready access to the state-of-the-art research infrastructures required to support the research efforts of radiation protection researchers. The priority is done in order to promote the use of mature infrastructures and avoid unnecessary duplication.

Infrastructures include so-called large infrastructures such as exposure facilities and contaminated sites, databases (including cohorts), sample banks and analytical platforms.

Article 1: Quality assurance

Proposals need to describe the envisaged approaches of the research project. This description should include the quality assurance of the results to be generated, as well as their feasibility and reliability. For example, the use of models or tools for reliability of the received dose, the use of common standards for omics analysis, etc. It should also include a Data Management Plan (DMP) and if applicable a Sample Management Plan (SMP).
(http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-data-mgt_en.pdf).

Partners who apply to the CONCERT call must be involved in a quality approach to guarantee their results.

Projects which require external or internal dose/radioactivity assessment must demonstrate proper quality assurance in radioactivity or dosimetry measurements and their traceability to International System of Units.

CONCERT funded projects using analytical platforms, such as proteomics, genomics, chemical and radiological analysis, will agree to include recognized standards to guarantee the results of the project. Particularly, the maturation of the so-called 'omics technologies and systems biology may offer novel opportunities for European radiation protection research. As the quality of the technologies and supporting managerial and technical support varies widely, information on quality assurance system around those analytical methods must be described.

Proposals which include efforts with harmonization practices and intercomparison will be preferred.

A Data Management Plan (DMP) is requested. It should include how and where data will be stored and how it can be accessed. The costs of these activities should be included in the project budget, together with a Sample Management Plan (SMP) if applicable.

The costs of Quality Assurance processes including DMP, SMP, Standard Operating Procedures (SOP), traceability, intercomparisons, and standards for testing or checking references, should be clearly identified separately and included in the project budget.

Article 2: Open Access

Open access refers to the practice of providing online access to scientific information that is free of charge to the end-user and reusable https://www.openaire.eu/support/faq#ifaqCat-20 .

The use of STORE (www.storedb.org), or a similar open access data archive, as a repository for data linked to all publications arising from EU-funded projects in radiation protection research should be required where appropriate in line with the recent guidelines for H2020 supported projects.
(http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-pilot-guide_en.pdf).

Research data will preferably be housed in the STORE database, which offers four options for storage: (1) unlimited open access; (2) access only to a pre-defined group of users; (3) access only upon demand; (4) access via link to a database containing the data.

For those partners who do not wish to house their data in STORE, the data must be stored in a secured, searchable, clearly identified database with long-term access, and the partners must agree to provide access to the database post-publication. CONCERT funded projects will agree to provide all resulting data, together with clear supporting metadata, in order to ensure the potential re-use of the data generated and to harmonize field practices as far as practicable (field sampling protocols etc.).

CONCERT recommends the re-use of archived material and/or data if possible. Applicants will be required to indicate whether some or all of the proposed work can be carried out using archived material and/or data. Justification must be provided for those projects which intend to generate material and/or data which are already available in open databases such as STORE.

Where appropriate, the creation of an open sample bank is highly encouraged and should preferably be localized on the site of one partner in the proposal. It is strongly recommended that the data and information describing the sample should be housed in the STORE database, which will be further developed to meet the needs of all platforms during the course of CONCERT. It is also recommended that this material be made available for re-use in the future.

New prospective cohorts, as well as the development of new collections of biological material that will be necessary to support radiation research in the next decades can be envisaged, but preferably if housed in STORE.

The costs of all data and sample banking activities (for at least 5 years post-CONCERT) can be included in the project budget, provided that they fulfil the general eligibility conditions of H2020[5]

Article 3: Infrastructures

The open approach of CONCERT involves the use of infrastructures which fulfil recommended criteria. Infrastructures will be integrated into a searchable available database AIR²D² (http://www.concert-infrastructures.eu/home) that can be updated to include new candidates. If the infrastructure to be used in the project is not yet in AIR²D² database, an extensive description of the infrastructure and its selection criteria should be provided in the proposal.

[5] ARTICLE 6 — ELIGIBLE AND INELIGIBLE COSTS of the AGA

In order to provide evaluators with sufficient information to critically assess the feasibility of the proposed studies, proposals must demonstrate the appropriateness of the approaches, techniques or infrastructures that they plan to use, in terms of feasibility, reliability, quality assurance and traceability of the results to be generated in relation to the objectives of the project.

The costs for using infrastructures in the project can be included in the proposal, provided that they fulfil the general eligibility conditions of H2020[6]

[6] ARTICLE 6 — ELIGIBLE AND INELIGIBLE COSTS of the AGA