

## Editorial

This third Special Issue of AIR<sup>2</sup> finally unveils the long-awaited results of the second CONCERT call. The entire process underpinning the tender and the six selected projects are presented in this newsletter. There is no doubt that very interesting results will be produced by the end of this EJP.

Dr Laure Sabatier, CEA

## The floor to...

CONCERT successfully finished its 2nd call for proposals to support multidisciplinary and transnational research projects. Submitted proposals had to combine innovative approaches in the field of radiation protection in line with the SRAs of the European radiation protection research platforms and the research priorities of the joint programming by CONCERT, resulting in two main topics: **Topic 1**–

*Understanding human health effects from ionising radiation and improving dosimetry* and **Topic 2**– *Radioecology, emergency and social sciences and humanities*. Submitted proposals were required to integrate education and training activities with universities and make optimal use of existing research infrastructures.

**CONCERT is pleased to announce the results of the second Open Transnational Call for proposals on “Radiation Protection Research in Europe”**

An international peer review panel (PRP), composed of 13 independent experts, evaluated the project proposals to identify the most promising and excellent projects and guarantee a fair and independent evaluation. Among the 24 eligible project proposals,

15 were recommended for consideration for funding by the PRP, including 13 for Topic 1 and two for Topic 2.

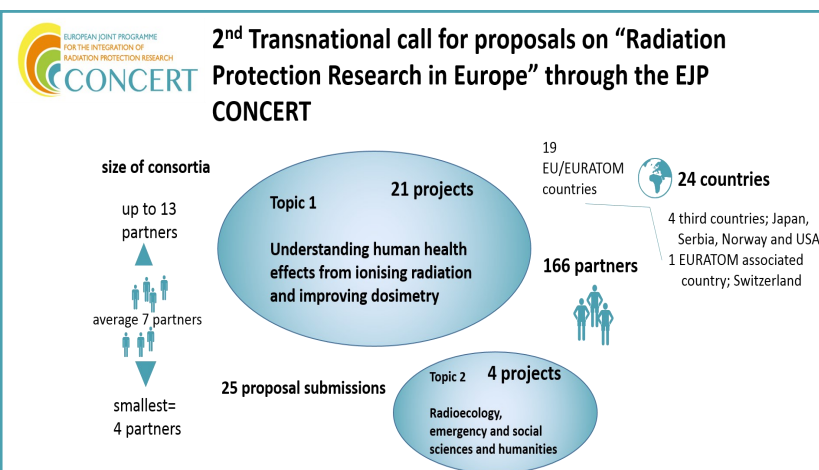
Given the total available budget and taking

into consideration the preannounced budget allocated to the two topics by the CONCERT Management Board, six projects could be funded, the four highest ranked projects in Topic 1 (LEU-TRACK, PODIUM, SEPARATE, VERIDIC) and the two ranked projects in Topic 2 (ENGAGE, SHAMISEN-SINGS).

It is with pleasure that we announce that all CONCERT Grand Contracts of the 2nd CONCERT call have been concluded and the funding of all Third Parties involved in the six projects has been successfully executed (including cross-border cash-funding).

The implementation of open calls within the CONCERT European Joint Programme (the first and only EJP to date to have open calls) was a challenging, but important feature. The CONCERT partners have demonstrated

with both open calls their wish to foster broad, international collaboration. This goal has been successfully achieved. We are looking forward to following the results of the nine total international research projects funded by the two CONCERT calls.



### Overview of submission statistics for the 2nd CONCERT call

The available funding for this call was 6.98 M€. The call for proposals was open from March 1, 2017 to May 2, 2017 and attracted 25 consortia. The proposals were submitted by 166 partners from 89 institutions in 24 countries. Twenty-one proposals responded to Topic 1 and four to Topic 2.

**WP1: CONCERT Project coordination & management (Bfs)**

**WP4: Organization and management of CONCERT open RTD Calls (ANR)**



**Special Issue 3**

**February 2018**



**Future events:**

**20<sup>th</sup> February 2018**

[Open Information and Networking Day of the European Radiation Protection Research Platforms](#), Munich, Germany

**21<sup>st</sup> February 2018**

- CONCERT MB Meeting  
- Extraordinary and ordinary MELODI EOGA and General Assembly, Munich, Germany

**12-15 March 2018**

Workshop MELODI-CONCERT  
“Individual Radiosensitivity and Radiosusceptibility”

Live video participation for talks and brainstorming

Inscriptions:

[maryline.dinotoarruda@cea.fr](mailto:maryline.dinotoarruda@cea.fr)

Deadline: 8 March 2018

**WP 6 News:**

**AIR<sup>2</sup>D<sup>2</sup>:**

- Please complete the online [form\(s\)](#) to register your infrastructure(s) in the database.

- A new option to feature your infrastructure is now available: [add document](#).

**Contents:**

**Project 1** [LEU-TRACK](#)

**Project 2** [PODIUM](#)

**Project 3** [SEPARATE](#)

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**Project 5** [ENGAGE](#)

**Project 6** [SHAMISEN-SINGS](#)

**WP1 & WP4** [2<sup>nd</sup> Call Analysis](#)

**Next issue**

**March 2018**



## The role of extracellular vesicles in modulating the risk of low-dose radiation-induced leukaemia

**B**asic mechanisms responsible for low-dose radiation-induced carcinogenesis and evaluation of the health risks attributable to low-dose exposure represent key research lines identified in the MELODI Strategic Research Agenda. In line with these priorities, the LEU-TRACK project proposes to study basic mechanisms of low-dose radiation-induced leukaemia by focusing on the role of crosstalk between the bone-marrow microenvironment and stem-cell compartment in initiating the leukemic process.

duce bone marrow damage, by influencing the communication between various cellular components of the bone marrow, and thus modulate low-dose radiation-induced leukaemia.



Photo: Kitty Jendrolovics/OKI

**Katalin Lumniczky**

- To perform a detailed and systematic analysis of EV cargo using multiple omics techniques and complex phenotypical approaches with the aim of identifying radiation exposure biomarkers that potentially indicate an increased risk for leukaemia development.
- To correlate blood-derived EV markers identified in experimental animals with markers present in human leukaemia patients treated with prophylactic irradiation.

The consortium proposes to emphasise training and educational activities by organizing satellite meetings for students in association with annual radiation research and radiation protection meetings, as well as a one-week training course dedicated to theoretical aspects of radiation leukemogenesis and the major experimental techniques used to study it.

It is anticipated that the project will provide a better understanding of the pathways and/or mechanisms of low-dose radiation-induced carcinogenesis and contribute to the better evaluation of the risks associated with low doses. This will help to improve risk perception, disease prevention, healthcare, and in the long run, therapy development.

Direct radiation-induced damage to the haematopoietic stem-cell pool is believed to be the major driver in the development of the disease after exposure to higher doses, but radiation-induced leukaemia at low doses probably involves additional mechanisms, distinct from those at high doses. Extracellular vesicles (EVs) are major vehicles of intercellular communication due to their complex cargo. The project aims to investigate the mechanisms and pathways by which bone marrow-derived EVs may induce bone marrow damage, by influencing the communication between various cellular components, and thus modulate low-dose radiation-induced leukaemia.

The complexity of the proposed research necessitates the participation of highly experienced research teams and the use of highly specialized infrastructures. The LEU-TRACK consortium has been assembled to fulfil these requirements and consists of four partners (OKI, Hungary; PHE, UK; HMGU and GUF, Germany). The members of the consortium plan to focus their research activities on the following main objectives:

- To investigate the mechanisms and pathways by which bone marrow-derived EVs may in-



Photo: Kitty Jendrolovics/OKI

**Group photo taken during the kick-off meeting in Budapest, November 2-3, 2017. Left to right: C. Badie, F. Rödel, K. Lumniczky, S. Tapio, L. Cruz Garcia, T. Szatmári.**



**LEU-TRACK partners**



### ID Card:

#### Partners:

1. National Public Health Institute (OKI)
2. Public Health England (PHE)
3. Helmholtz Zentrum München, German Research Center for Environmental Health (HMGU)
4. Goethe-University, Frankfurt am Main (GUF)

#### Duration:

28 months  
(1/10/2017-31/01/2020)

#### Total budget:

€ 1,335,922

#### Infrastructures:

Exposure platforms:  
Small-Animal Radiation Research Platforms at OKI and GUF

#### Databases:

Data obtained on leukemia incidence in mice and protein and miRNA profiles of EVs will be stored in a common database during the project

#### Sample banks:

Various organs collected from irradiated and/or EV-treated mice will be collected during the project

#### Cohorts:

Exploration of the possibility to establish a future cohort of leukemia patients treated with radiation for identification/validation of EV-related molecular markers

#### Models:

CBA mice

#### Tools:

Proteomics mass spectrometry in cooperation with the HMGU Proteomics Core Facility  
nCounter® Technology and pyrosequencing analysis performed at PHE for miRNA profiling in EVs and detection and quantification of somatic mutations.

#### Open Access of produced data:

Yes, through [STORE](#)

#### Internet link:

Under development

#### Contact:

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#### Related to:

MELODI  
ALLIANCE  
EURAMED

Photo: LEU-TRACK project





## Personal Online Dosimetry Using computational Methods

Individual monitoring of workers exposed to external ionizing radiation is essential for the application of the ALARA principle and the follow up of legal dose limits. However, there are still large uncertainties in personal dosimetry, especially concerning neutrons and nonhomogeneous fields.

The objective of this project is to improve occupational dosimetry using an innovative approach: the development of an online dosimetry application based on computer simulations, without the use of physical dosimeters.

Because of the limited time frame, we will simultaneously use an intermediate approach with pre-calculated fluence to dose conversion coefficients for phantoms of various statures and postures. This will comprise the first step towards online dosimetry based on simulations.



Photo: Filip Vanhavere/SCK•CEN

Filip Vanhavere



Photo: Lara Struelens/SCK•CEN

Group photo during the kick-off meeting on January 26, 2018 at SCK•CEN, Belgium

Operational quantities, protection quantities, and radiosensitive organ doses (e.g. eye lens, brain, heart, extremities) will be assessed based on the use of modern technology, such as personal tracking devices, flexible individualized phantoms, and scanning of the geometrical set-up. Combined with fast simulation codes, the aim is to perform real-time personal dosimetry.

We aim to achieve this by developing an online application in which we will individually calculate the occupational doses, instead of measuring them with one or more dosimeters. This will require that the spatio-temporal radiation field, including its energy and angular distribution, be known. We will use input from fixed dose monitors and capture real movements of exposed workers and transfer this information to the calculation application.

We will apply and validate the methodology for two situations for which improvements in dosimetry are urgently needed: workplaces in which neutrons are used and interventional radiology. The legal framework to introduce this or similar techniques as an official dosimetry method will also be established.

The availability of the proposed online personal dosimetry application shall overcome the problems that arise from the use of current passive and active dosimeters.

Such limitations include uncertainty in assessing neutron and photon doses when part of the body is shielded, the delay in calculating the doses, and the situation in which workers incorrectly position dosimeters. In addition, it will increase worker awareness and improve application of the ALARA principle.



Photo: PODIUM project

PODIUM partners

### ID Card:

#### Partners:

1. Belgian Nuclear Research Centre (SCK•CEN)
2. Universitat Politècnica de Catalunya (UPC)
3. Helmholtz Zentrum München, German Research Center for Environmental Health (HMGU)
4. Lund University Sweden (LU)
5. Public Health England (PHE)
6. Greek Atomic Energy Commission (EEAE)
7. St. James's Hospital Ireland (SIH)

#### Duration:

24 months  
(1/01/2018-31/12/2019)

#### Total budget:

€ 1,399,930

#### Infrastructures:

##### Exposure platforms:

Nuclear calibration labs in SCK•CEN and PHE,  
Interventional radiology rooms in hospitals in Ireland, Sweden and Greece

##### Models:

Voxel phantoms from SCK•CEN, HMGU, and UPC

##### Tools:

Monte Carlo codes, such as MCNP, GEANT, PHITS, etc.

#### Open Access of produced data:

Yes, to be set up later

#### Internet link:

To be set up later

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#### Related to:

EURADOS  
EURAMED



## Systemic Effects of Partial-body Exposure to Low Radiation Doses

**R**adiation effects are not confined to directly irradiated tissues. The contribution of systemic “out-of-target” effects to the risk of long-term health problems following radiation exposure is largely unknown. This level of uncertainty of the risk is problematic from the radiation protection standpoint, as workplace, environmental, and medical exposures frequently involve partial body exposures to low-dose irradiation.



Some of the “SEPARATE” collaborators. Up: Anna Saran and Mariateresa Mancuso (ENEA). Down (from left to right): Soile Tapio (HMGU), Fiona Lyng (DIT), Munira Kadhim (OBU). The kick-off meeting will take place in Rome, March 14-15.

The risks posed by such exposure for cancer and non-cancer endpoints can only be evaluated for radiation protection purposes if there is a plausible and consistent mechanism for the development of low-dose irradiation-induced health problems, a dose-response relationship that allows risk assessment, and response biomarkers available for molecular epidemiological analysis.

The SEPARATE project, funded under the H2020 CONCERT project, is divided into five complementary work packages to study each of these points. The partners are committed to disseminating the project results to the various stakeholders and complementing research activities with a suitable education and training programme. The consortium (ENEA, HMGU, OBU and DIT) will be assisted by an external Management Board composed of two members, Professor Charles Limoli (University of California, Irvine, CA) and Doctor Karl Butterworth (Queen's University Belfast, UK).

The project aims to perform *in vivo* research focused on the analysis of the effects on brain, heart, and liver following exposure of the lower third of the body, whilst the target organs are shielded.

A reverse biology approach is proposed to test five main hypotheses:

**Hypothesis 1a** – Partial body irradiation (PBI) evokes changes in the transcriptome and proteome of tissues outside of the radiation field. **Hypothesis 1b** – Analysis of global gene and protein expression changes in out-of-field tissues will identify the pathway(s) involved in signalling between irradiated and non-irradiated tissues. **Hypothesis 1c** – Differentially expressed non-coding RNAs (miRNAs) will point to candidate mediators of out-of-target effects *in vivo*. **Hypothesis 1d** – Validated changes in tissue coding and non-coding RNAs and proteins after PBI will indicate new radiation biomarkers. **Hypothesis 1e** – Exosomes and connexin proteins play an important role in long-range radiation signalling *in vivo*, in addition to mediating the bystander effects observed *in vitro*.

SEPARATE aims to address the relevance of out-of-target effects, from those observed after controlled radiation exposure in the laboratory to the dynamic exposure experienced by humans in typical radiation-exposure scenarios, and deliver a detailed mechanistic understanding of the processes governing the associated risks. By focusing on the mechanisms of risk posed by low-dose PBI, the research programme of SEPARATE specifically addresses several important challenges and long-term goals of the CONCERT low-dose radiation research and radiation protection programme. The work plan is particularly aligned with the MELODI and EURADOS strategic research agendas.

The complementary expertise of the team members will allow an integrated approach by targeting the key cellular and molecular mechanisms involved in out-of-target effects relevant for cancer and non-cancer diseases at low and intermediate radiation doses and in various mammalian systems, bringing progress well beyond the current state-of-the-art.



Anna Saran

Photo: Erasmo Gaudiomonte



### ID Card:

#### Partners:

1. Agenzia Nazionale per le Nuove Tecnologie, l'Energia e lo Sviluppo Economico Sostenibile (ENEA)
2. Helmholtz Zentrum München, German Research Center for Environmental Health (HMGU)
3. Oxford Brookes University (OBU)
4. Dublin Institute of Technology (DIT)

#### Duration:

28 months  
(1/10/2017-31/01/2020)

#### Total budget:

€ 1,741,655

#### Infrastructures:

Exposure platforms:  
X-ray irradiation facilities at the ENEA, Rome

#### Databases:

We will use a common database for the project to facilitate data integration

#### Analytical platforms:

Proteomics platform at HMGU: QExactive HF mass spectrometer (Thermo Scientific) online coupled to Ultimate 3000 nano-RSLC (Thermo Scientific)

Raman spectroscopy at the FOCAS Research Institute, DIT core facility

#### Open Access of produced data:

Yes, through [STORE](#)

#### Internet link:

Under development

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#### Related to:

MELODI  
EURADOS  
EURAMED



SEPARATE partners

Photo: SEPARATE project



**Special Issue 3**  
February 2018



## Validation and Estimation of Radiation skIn Dose in Interventional Cardiology

In interventional cardiology (IC), the skin of patients may be exposed to high doses of radiation, resulting in tissue reactions (skin burns) following single or multiple procedures. As the number and complexity of IC procedures have been steadily growing, patient-specific dose calculations in IC have been identified as a top-priority topic by EURADOS, EURAMED, and ICRP Committee 3.

necessary to calculate MSD and 2D-dose distribution (tube voltage, filtration, beam orientation, table position, back-scatter factor, table attenuation, air KERMA-to-skin dose conversion coefficient, etc.).



Photo: Marija Majer/RBI

Jeremie Dabin

- The recording (format and content) of MSD values and 2D-dose distributions in the RDSR

Second, we will develop and test protocols for the acceptance testing and QC of SDC software, including:

- Comprehensive calibration of field dosimeters to be used for software benchmarking, including the estimation of associated uncertainty.
- Acceptance testing of online and offline software under simple irradiation conditions.

- QC tests of the software in clinical settings that reproduce complex cardiac procedures, such as chronic total occlusions (CTO).

Third, we will establish interventional reference levels (RL) and the frequency of high-dose procedures, as well as dose-reduction strategies, through multi-centric data collection.

The project is supported by the European Federation of Organisations for Medical Physics (EFOMP) and we will seek collaboration with the European Society of Cardiology (ESC) to ensure optimal dissemination of results.

Online (or offline) software has been developed to tackle this issue and estimates the maximum skin dose (MSD) to the patient during (or after) IC procedures. However, the ability and accuracy of such skin dose calculation (SDC) software to estimate MSD and 2D-dose distributions markedly differ between vendors and the reporting and accuracy of the MSD estimate in the Radiation Dose Structured Report (RDSR) is neither systematic nor harmonised. In addition, there are currently no accepted testing or quality control (QC) protocols of such systems.

This project thus focuses on the harmonisation of RDSR and the validation of SDC software products in IC to optimise the radiation protection of patients.

First, we will propose standards for digital dose reporting, including:

- A complete list of parameters

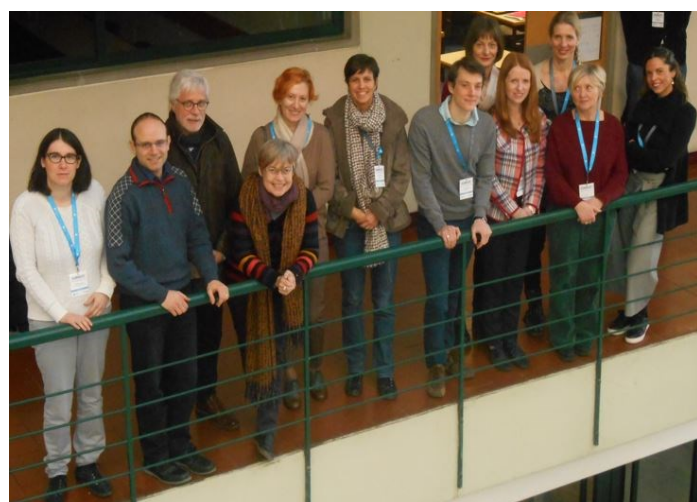


Photo: Marija Majer/RBI

Group photo during the VERIDIC kick-off meeting on February 4th and 5th, 2018 in Lisbon.



VERIDIC partners

### ID Card:

#### Partners:

1. Belgian Nuclear Research Centre (SCK•CEN)
2. Paris Sud University Hospitals (APHP)
3. Centre d'Assurance de qualité des Applications Technologiques dans le domaine de la Santé (CAATS)
4. French Alternative Energies and Atomic Energy Commission (CEA)
5. University Hospital of Geneva (HUG)
6. Greek Atomic Energy Commission (GAEC)
7. Vinca Institute of Nuclear Sciences (VINCA)
8. Veneto Institute of Oncology (IOV-IRCCS)
9. University Hospital Limerick (UHL)
10. Institut Ruder Boškovic (RBI)

#### Duration:

24 months  
(1/02/2018-1/02/2020)

#### Total budget:

€ 705,100

#### Infrastructures:

##### Exposure platforms:

X-ray irradiation facilities at the Laboratoire Nationale Henri Becquerel (LNE-LNHB) of CEA.

The Laboratory for Nuclear Calibrations (LNK) of SCK•CEN.

##### Databases:

A multicentric database of structured radiation-dose reports of high-dose cardiac therapeutic procedures to be established

#### Open Access of produced data:

Yes, to be set up later

#### Internet link:

<https://www.researchgate.net/project/VERIDIC-Validation-and-Estimation-of-Radiation-skin-Dose-in-Interventional-Cardiology>

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#### Related to:

EURADOS  
EURAMED



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Photo: VERIDIC project

## Enhancing stakeholder engagement in radiation protection

**S**takeholder engagement and informed decision-making are central elements for the governance of radiological risk. However, the practical implementation of stakeholder engagement in radiation protection is confronted with multiple challenges and a continuously evolving landscape of actors that produce radiation protection knowledge, along with the communication means and tools they use.

The ENGAGE consortium brings together social sciences and humanities researchers and radiation protection experts from nuclear safety and radiation protection authorities, leading research institutes in radiation



Photo: SCK•CEN

**Catrinel Turcanu**

protection, public health organisations, non-governmental organisations, and academia, representing 14 organisations from 10 European countries.

Together, ENGAGE partners will identify and refine relevant aspects for stakeholder engagement in each of the three exposure situations. They will analyse European commonalities and national idiosyncrasies, share experiences and approaches, and identify knowledge gaps.

Through its research and innovation activities, the project will provide information to facilitate the engagement of stakeholders in radiation protection

in ways that relevant stakeholders find meaningful and legitimate. It will contribute to improving the governance of radiological risk and, as a result, radiation protection itself. Project beneficiaries include radiation protection platforms, policy makers, civil society stakeholders, and the public.

The ENGAGE project addresses the subtopic “Models, tools and rationales for stakeholder engagement and informed decision-making in radiation protection research, policy and practice for situations involving exposures to ionising radiation”, under Topic 2 (Radioecology, emergency and social sciences and humanities) of the 2017, second CONCERT Call.



Photo: Sylvia Claeys/SCK•CEN

**Representatives of ENGAGE partners met during a two-day kick-off meeting in Brussels, on November 27-28, 2017.**

The recently launched CONCERT project ENGAGE focuses on “ENhancinG sTAkeholder participation in the GovernancE of radiological risks for improved radiation protection and informed decision-making”. The project will identify and address key challenges and opportunities for stakeholder engagement concerning three situations of exposure to ionising radiation: the medical use of ionising radiation, post-accident exposure, and indoor exposure to radon. ENGAGE will:

- Address the questions of why, when, and how stakeholders are engaged in radiation protection issues.
- Develop novel approaches to analyse stakeholder interactions and engagement and provide guidance to meet the challenges and opportunities identified in response to (a).
- Investigate the processes for enhancing the culture of radiation protection and their role in facilitating stakeholder engagement and develop guidelines for the further development and enhancement of the radiation protection culture.
- Provide recommendations and build a joint knowledge base for stakeholder engagement in radiation protection.



**ENGAGE partners**



### ID Card:

#### Partners:

1. Belgian Nuclear Research Centre (SCK•CEN)
2. Centre d'étude sur l'Evaluation de la Protection dans le domaine Nucléaire (CEPN)
3. Institut Jozef Stefan (JSI)
4. Barcelona Institute for Global Health (ISGlobal)
5. Institute for Radiological Protection and Nuclear Safety (IRSN)
6. Université Franche-Comté (UFC)
7. Greek Atomic Energy Commission (EEAE)
8. University of Milan (UMIL)
9. Federal Office of Public Health (FOPH)
10. VUJE, Inc.
11. Bundesamt für Strahlenschutz (Bfs)
12. Horia Hulubei National Institute for R&D in Physics and Nuclear Engineering (IFIN-HH)
13. Université de Liège (ULG)

Subcontracted: Milan Vidmar Electric Power Research Institute (EIMV)

#### Duration:

24 months  
(20/11/2017-19/11/2019)

#### Total budget:

€ 777,442

#### Open Access of produced data:

Yes (project website with open-access publications)

#### Internet link:

<http://engage-concert.eu>

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ENGAGE secretariat

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#### Related to:

MELODI  
ALLIANCE  
NERIS  
EURADOS  
EURAMED  
Social Sciences and Humanities

Photo: ENGAGE project



**Special Issue 3**  
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## Involving citizens in dosimetric and health surveillance

**S**HAMISEN-SINGS, built upon the recommendations of the EC-OPERRA funded SHAMISEN project, aims to enhance Citizen Participation in preparedness for, and recovery from, a radiation accident through novel tools and APPs that support communication and data collection on radiation measurements, health and well-being indicators.

The specific objectives are to:

1. Interact with stakeholders to assess their needs and their interest in contributing to dose and health assessment, and evaluate how new technologies could best fulfill their needs. In particular, consider lessons from current issues in Fukushima related to lifting evacuation orders and medical care for vulnerable population;
  2. Review existing APPs for citizen-based dose measurements, and establish minimum standards of quality;
  3. Review existing APPs/systems to monitor health and wellbeing and provide feedback to users, and develop a core protocol for a citizen-based study on health, social and psychological consequences of a radiation accident;
  4. Build upon existing tools to develop the concept/guidelines for one or more APPs that could be used to:
- monitor radiation: to allow citizens to measure dose, empowering them by providing information about their own doses in different settings, as well as contribute to radiation assessment after an accident, including visualisation of radiation conditions;
  - log behavioural and health information to be used, with appropriate ethics and informed consent, for citizen science studies.
  - provide a channel for practical information, professional support

and dialogue about health, wellbeing and radiation protection.



Elisabeth Cardis Liudmila Liutsko

5. Assess the ethical challenges and implications of both the APPs and citizen science activities through a consensus workshop.

SHAMISEN-SINGS brings together an experienced multi-disciplinary and multi-national consortium to answer important objectives of the CONCERT call: to improve countermeasures for nuclear emergency preparedness and provide important knowledge on stakeholder engagement in radiation protection, including a critical assessment of benefits and challenges of citizen science. By taking a practical ethics approach, fostering co-reflection between natural and social scientists, it will strengthen integration of social science in radiation protection. It will also provide an independent channel for collection and management of data for use by authorities for decision making, assessment of doses, evaluation of health/social condition and health surveillance in general, and support the implementation of BSS.

Collage: Liudmila Liutsko /ISGlobal



SHAMISEN SINGS participants (partners and experts)



### ID Card:

#### Partners:

1. Barcelona Institute for Global Health (**ISGlobal**)
2. Instituto Superiore di Sanità (**ISS**)
3. Fukushima Medical University (**FMU**)
4. Institute for Radiological Protection and Nuclear Safety (**IRSN**)
5. Belgian Scientific Institute of Public Health (**WIV-ISP**)
6. Centre d'étude sur l'Evaluation de la Protection dans le domaine Nucléaire (**CEPN**)
7. Norwegian University of Life Sciences (**NMBU**)
8. Universitat Autònoma de Barcelona (**UAB**)

#### 4 external experts:

- **Philippe Pirard** (Santé Publique France, FRANCE)
- **Vadim Chumak** (National Research Center for Radiation Medicine, National Academy of Medical Sciences, UKRAINE)
- **Oleg Bondarenko** (National Aviation University, UKRAINE)
- **Natalia Novikava** (ISEI-BSU, BELARUS)

#### Duration:

27 months  
(1/10/2017-1/01/2020)

#### Total budget:

€ 757,498

#### Infrastructures:

##### Observatory sites:

Chernobyl, Fukushima and other countries

#### Open Access of produced data:

Yes, to be set up later

#### Internet link:

<http://radiation.isglobal.org/index.php/en/shamisen-sings-home>

#### Contact:

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#### Related to:

MELODI  
NERIS  
EURADOS  
EURAMED  
Social Sciences and Humanities



**Special Issue 3**  
**February 2018**

## Analysis of the 2<sup>nd</sup> CONCERT Call 2017

**P**roject proposals within the second CONCERT call had to address two main topics (each with three sub-topics). The project proposals had to fall within one of the topics and answer one or more sub-topics within one of the topics, when appropriate (see also: [http://www.concert-h2020.eu/en/Calls/Transnational\\_Call\\_2017](http://www.concert-h2020.eu/en/Calls/Transnational_Call_2017)). CONCERT decided to allocate the funds available for the second call (6.98 M€) as follows: 80% to Topic 1 and 20% to Topic 2.

With respect to the concept of open calls, consortia submitting proposals to this call had to integrate **at least one** external entity (non-CONCERT beneficiary or LTP) as a partner in their project consortium.

For the second CONCERT call, 25 proposals were submitted. One proposal was found to be ineligible. The size of the consortia varied from four partners for the smallest to 13 for the largest, with an average of seven partners per proposed consortium. In addition to 19 EU/EURATOM countries, four third countries participated; Japan, Serbia, Norway, and USA; and one EURATOM-associated country; Switzerland.

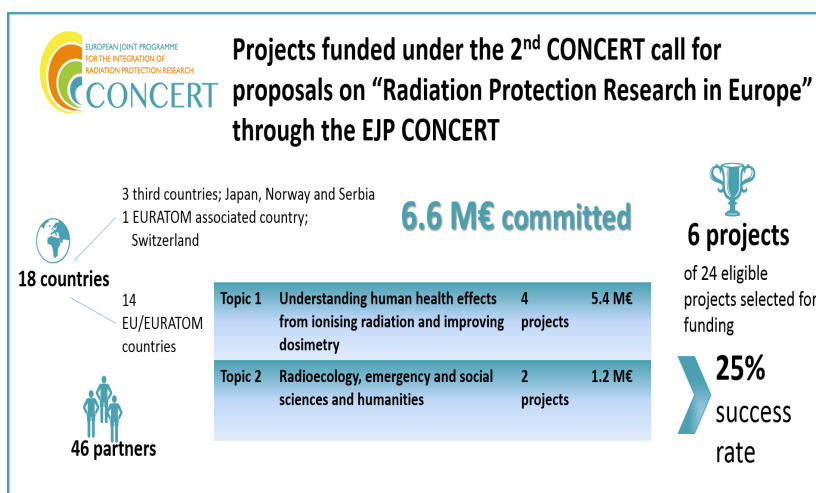
The total budget of the six highest ranked projects (ENGAGE, LEU-TRACK, SEPARATE, SHAMISENSINGS, PODIUM and VERIDIC) that were selected and recommended for funding by the PRP, add up to approximately 6.7 M€. CONCERT is committed to approximately 6.6 M€. The remaining 2% are provided by partners/countries bringing their own resources to the projects. From this budget, 5.2 M€ is going to Topic 1 and 1.4 M€ to Topic 2. Hence, 79% of the second CONCERT-call budget is used for funding

transnational research projects in Topic 1, and 21% in Topic 2.

Based on the initial applications, the 46 partners of the six funded projects come from 14 EU/EURATOM countries, three third countries; Japan, Norway and Serbia, and one EURATOM-associated country; Switzerland. The projects respond together to all six subtopics of the two scientific areas.

As decided by the CONCERT Executive Board, an **Independent Observer** was invited and integrated in the second CONCERT call evaluation processes and participated according to H2020 guidelines for Independent Observers. In the observers report, the high quality of the PRP and evaluation procedure itself were emphasised. Additionally, the large effort required for the implementation of open calls (cost-benefit ratio) was noted.

The PRP itself was overall impressed with the outstanding character of the submitted proposals, especially in terms of transnational collaboration, underlining the increasing importance of transnational networks.



**General overview of CONCERT's 2nd call results and projects funded**

**WP1: CONCERT Project coordination & management (BfS)**

**WP4: Organization and management of CONCERT open RTD Calls (ANR)**



### Future events:

#### CONCERT Short Courses

**19-23 February 2018**

Radiation Protection:  
Basics and Applications  
Forschungszentrum Jülich, Germany

**Contact:**

Ralf Kriehuber  
[r.kriehuber@fz-juelich.de](mailto:r.kriehuber@fz-juelich.de)

**5-16 March 2018**

Assessment of long-term radiological risks from environmental releases: modelling and measurements, Technical University of Denmark

**Contact:**

Kasper Andersson  
[kgan@dtu.dk](mailto:kgan@dtu.dk)

**12-16 March 2018**

EURADOS Training course on Application of Monte Carlo Methods for Dosimetry of Ionizing Radiation, KIT, Germany

**Contact:**

Bastian Breustedt  
[Bastian.breustedt@kit.edu](mailto:Bastian.breustedt@kit.edu)

**12-23 March 2018**

Two-week training course on radiation-induced effects with particular emphasis on genetics, development, teratology, cognition, cancer as well as space-related health issues, SCK•CEN, Belgium

**Contact:**

Sarah Baartout  
[sbaatout@sckcen.be](mailto:sbaatout@sckcen.be)

#### Other Events

**27-28 February 2018**

[ISBER European Biospecimen Research Symposium](#)

International Society for Biological and Environmental Repositories, Luxembourg

**11-15 June 2018**

[EPRBioDose 2018](#), Munich, Germany

**22-25 August 2018**

[ERR 2018](#), Pecz, Hungary

**1-5 October 2018**

[3rd ERPW](#), Rovinj Rovigno, Croatia

[See also on CONCERT website](#)

