Further integrating Radiation Protection research in the EU

This action should dwell on scientific outputs from past programmes in this field and add specific knowledge in areas of most promising research outcome or most significant contribution to peoples' health and environment protection and should consider the priorities as identified by the European Radiation Protection Platforms (MELODI, EURADOS, NERIS, ALLIANCE, EURAMED). The proposal should focus on lifting key uncertainties about the risks from low-dose radiation and resolving challenges these uncertainties pose for the implementation of Directive Euratom 2013/59. In particular, it should address people's exposures to radon in terms of risk assessment and mitigation. The proposal should also investigate innovative concepts to explain the varied responses of biological and ecological systems, due to their own diversity, to the diverse pathways by which radiation release energy to bio-molecules, cells and organ tissues and propose innovative ways to incorporate existing concepts into risk prevention, assessment and management, including stakeholder's involvement processes. The proposal should include shared experimental work between the European research infrastructures in radiation protection identified in previous programmes. It should also include the exchange of scientists in order to cross-fertilise teams and mutualise the best use of infrastructures. The benefit of the proposal for preservation of the integrative process of research teams having a regulatory mandate for radiation protection research and teams able to contribute to knowledge by their proximity with the wider research community will also be considered during evaluation.

At least 5% of the total action budget must be dedicated to Education and Training activities for PhD students, postdoctoral researchers and trainees supported through the action (see Conditions for the Call- Eligibility and admissibility conditions).

The Commission considers that proposals requesting a contribution from the Euratom Programme up to EUR 18.0 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Protecting people and the environment from the potentially harmful effects of ionising radiation remains a challenge in the context of expanding practices involving radiation in the EU, notably in the medical sector. It is also important for the harmonisation of EU planning of response to a potential radioactive contamination of territories, taking into account post-accident and existing situations of naturally occurring radioactive material. It remains important for the management of radioactive waste, for the safe implementation of nuclear installations' decommissioning. Scientific knowledge on which norms are based and adopted is progressing through the accumulation of knowledge on the effects of low-dose ionising radiation on peoples' health and the environment. Complexity of data handling, interpretation and exploitation requires a multidisciplinary approach of the field that includes radiobiology, dosimetry in specific fields, epidemiology, radioecology, radiation-based imaging and therapeutic techniques, emergency preparedness and human science and society.

This action will lead to the provision of more consolidated and robust science-based policy recommendations to decision makers in the area of radiation protection. This will be achieved by further integrating the radiation protection scientific community at EU level, leading to a better coordination of research efforts. In the long term, this knowledge will translate into additional or improved practical measures in view of the effective radiation protection of people and the environment.

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