Launch of the "PIANOFORTE" European partnership: research and education for radiation protection

Paris, June 13, 2022. The European Partnership for Radiation Protection Research will contribute to improving the protection of the public, workers, patients and the environment from environmental, occupational and medical exposure to ionizing radiation. It brings together 58 partners representing 22 European Union countries as well as the United Kingdom and Norway, and is coordinated by the French Institute for Radiation Protection and Nuclear Safety (IRSN). It is co-financed by the European Union’s EURATOM program and the Member States of the participating countries. Through the research activities that will be carried out within its framework, PIANOFORTE will contribute to the implementation of European policies such as the European plan to combat cancer, the green pact for growth, and the implementation of the roadmap for reducing industrial and natural risks.

Launched on June 14, 2022 in Paris, the PIANOFORTE research partnership has the ambition to improve knowledge and promote innovation in the field of radiation protection for the benefit of better protection of the public, patients, workers and the environment in all scenarios of exposure to ionizing radiation.

Through the scientific challenges it will address, this partnership aims to contribute to priority European policies such as the fight against cancer (European Cancer Action Plan), the protection of health from environmental risks (Green Pact for Growth) and finally the improvement of anticipation and resilience in disaster situations (implementation of the Sendai Framework for Disaster Risk Reduction).

Within this partnership, at least three calls for proposals, open to the entire European research community for radiation protection, will be organized between 2023 and 2025. They will focus on the following four themes:

- improving patient radiation protection in relation to the use of ionizing radiation in the medical field
- a better comprehension of variability of individual response to exposure to ionizing radiation
- the study of mechanisms involved in chronic exposure to low doses of ionizing radiation
- the improvement of anticipation capacities and resilience in nuclear or radiological crisis situations and post-accident management.

Particular attention will be paid to the involvement of all stakeholders (authorities, civil society, radiation protection practitioners, experts, etc.) in the priority setting of the scientific topics that will be the subject of calls for tender and with respect to the question of translating this research into actual impact for strengthened radiation protection. The objective is to meet and integrate the expectations of the wide set of radiation protection stakeholders as best as possible. This partnership also specifically aims to build bridges with research activities carried out at European level in the "non-Euratom" fields, in particular in the health sector.

Beyond these research activities, PIANOFORTE will contribute to maintaining a sustainable capacity of expertise in radiation protection in Europe, which is internationally recognized, in particular by promoting the availability, use and sharing of existing state-of-the-art research infrastructures at the European level as well as by implementing education and training activities.

The partnership will build on previous work, and in particular on the results of the European joint program CONCERT conducted under the H2020 framework program which ended in 2020. It will also benefit from the achievements of other European projects just completed or in progress such as MEDIRAD, HARMONIC, RadoNorm or SINFONIA.

To date, PIANOFORTE involves 58 partners from 22 EU countries as well as the UK and Norway. It mobilizes public partners (public research organizations, authorities in the field of radiation protection, universities) but also the six European research platforms in radiation protection (MELODI, EURADOS, EURAMED, NERIS, ALLIANCE and SHARE). This initial consortium is expected to expand with the entities that will be selected in the framework of the open calls for tenders organized during the partnership.

The partnership will last 5 years and is expected to end in 2027. The estimated budget for PIANOFORTE is 46 million euros, 65% of which will be financed by the European Union and the rest by the partner countries. IRSN is the coordinator of the partnership.