



# COMMUNICATION AND INFORMATION ON IONIZING RADIATION AS A TOOL FOR SOCIAL CONSENSUS AROUND THE CONSTRUCTION OF NEW REPOSITORIES FOR RADIOACTIVE WASTE IN POLAND

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## 1. Introduction

The reliable information should be shaped and delivered by the experts, but the role of mass media is very important, as well. Appropriate communication and information should also accompany all the actions towards development of such nuclear facilities like radioactive waste repositories. The greatest fear of the public is caused by geological disposal of high level waste, however the location of near-surface repositories provokes protests of local communities, too.

## 2. National Radioactive Waste Repository in Rożan

- The only place of disposal of radioactive waste in Poland.
- NRWR is located at the former military fort (covering an area 3.045 ha)
- According to the classification of IAEA, it is a surface landfill for final disposal of short-lived, low and intermediate level waste and sealed radioactive sources.
- It is also used for temporary storage of long-lived waste, mainly alpha-radioactive, waiting to dispose them in a deep geological repository.



The results have shown that the knowledge about ionizing radiation and radioactive waste is rather low. People accept the methods offered by nuclear medicine their acceptance is based on the trust to the doctors, but not understanding the phenomena connected with IR. The media inform, but very often the information is not professional and facts are exaggerated. Moreover, the media are not considered as independent. The knowledge and positive attitudes towards the IR mostly depends on the age; it is independent on place of living, gender and education.



National Radioactive Waste Repository in Rożan

## 6. Communication, information and participation

Appropriate way for communication with the society is a very important and necessary condition for development of the repositories in the country. Long term and proactive public involvement may improve the quality of decisions taken by the government and decisive institutions.

## 3. Closing up the repository in Rożan

Due to the fact that the repository in Rożan will be closed in 2024 - 2029 because of depleted storage capacity, Poland started work on finding location for the new repository of low-and intermediate-waste.

## 6a. IPPA project - Implementing Public Participation Approaches in Radioactive Waste Disposal

In order to meet this requirement, the Reference Group, which organized a dialogue in Poland concerning selection of the site for the near surface repository was established in the frames of Euratom IPPA Project. One of the activities of RG was organizing the public hearing, the subject of which was: Do we need a new repository for radioactive waste? First of all the hearing was intended to inform all the stakeholders of status of preparations for the construction of a new disposal site.

## 4. Development of underground research laboratory

There is a Polish Underground Storage Program (PURL) initiative, which is a common idea of research institutions responding to the needs of the national economy and sustainable development. It is intended to continue the research and development of deep repository undertaken in Poland in the late 90s of last century.

The collected results of the research will be used to indicate the location and construction of a deep geological repository for spent nuclear fuel and high-level radioactive waste in the future.



The public hearing, the subject of which was: Do we need a new repository for radioactive waste?

Meeting of RG

European workshop in Szentes, Hungary

## 5. Mental models of ionising radiation

The “mental model” approach was employed to investigate public understanding of ionizing radiation in participating countries. The studies on mental models in Poland were conducted according to the protocol proposed by work package leader and agreed with all consortium members. There were interviewed 16 people living in different places in Poland and pursuing different professions.

## 6b. The project: "Developing a methodology to evaluate the safety and identify the optimal location of a shallow disposal of low and intermediate level radioactive waste"

The consortium working on the project agreed to collect and verify, analyze and evaluate the available archival materials, and carry out the necessary additional research that will enable selection of the optimal location of the shallow repository for low and intermediate level waste. To carry out preliminary studies, the approval of the public is necessary. Therefore, the information campaign and plan of communication with local communities of the potential localizations were elaborated. Some educational activities about ionizing radiation and its consequences are included as well, to dispel the concerns about the actual hazard related to radioactive waste disposal. Many information actions were foreseen to start dialogue with the public to obtain the social consent of site selection.

**Responders**  
16 people;  
Age range  
17 -59

**Gender**  
Female: 7 (43.75%)  
Male: 9 (56.25%)

**Place of living**  
Big city: 7 (43.75%)  
Small town: 4 (25%)

**Education**  
Higher: 7 (43.75%)  
Secondary: 7(43.75%)

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