

The Role of information centres in Communication with the Public on Radioactive Waste Management

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ABSTRACT

For the purpose of informing the public, the Fund has established two Information Centres on radioactive waste, in Dvor and Zagreb. The goal of establishing the Information Centres is to provide comprehensive information to different age groups in an accessible and understandable way, and to involve the public in the project's progress.

By organizing various activities, in the fields of education, health, agriculture, and social services, as well as participating in public events, the number of visitors has increased. The results of a survey of the population in the Municipality of Dvor showed that 80% of respondents had heard of the Information Centre on radioactive waste in Dvor.

At Information Centres, visitors can use virtual reality to tour facility for receiving, classifying, pre-processing, treating, and storing radioactive waste. The content of the Information Centre includes a 3D model of the Centre for the management of radioactive waste under construction with a view of the storage space, and an enlarged view of the concrete tank with barrels of radioactive waste.

The fund regularly posts news about activities held at the Information Centres on its website, www.czrao.hr, and Facebook page.

Keywords: *public relations, communication, local community, building trust, education*

1 INTRODUCTION

The management of radioactive waste is one of the key issues that, in addition to technical and safety aspects, also requires a continuous approach to public communication.

Given the public's often insufficient information and concerns, transparent communication and the involvement of the local community are fundamental to building trust regarding the establishment of the Radioactive Waste Management Centre.

In this context, Information Centres play an important role as a link between the expert community and the general public. They provide access to verified information and offer a space for education and active public participation.

To inform the public and actively involve them in the project to establish the Radioactive Waste Management Centre, the Fund has established two information centres on radioactive waste, in Zagreb and Dvor.

Their purpose is to provide comprehensive and understandable information to various target groups and to enable continuous communication with the local community and the wider public.

This paper analyses the role of the information centres in public communication, using examples of activities aimed at informing, educating, and engaging the public during the project to establish the Radioactive Waste Centre. It places a special emphasis on strengthening trust and transparency in the process of communicating about radioactivity and radioactive waste management.

2 INFO CENTRE IN DVOR

The Information Centre on Radioactive Waste in Dvor was opened in 2022 with the goal of informing the local population about radioactivity and radioactive waste management. [1]

The primary purpose of the Information Centre is to provide comprehensive and understandable information to various age groups, with an emphasis on transparent communication and the active involvement of the local community throughout the project to establish the Radioactive Waste Management Centre.



Figure 1 Information Centre on Radioactive Waste in Dvor

Visitors are provided with modern technologies, such as virtual and augmented reality, through which they can learn about the processes of receiving, processing, and storing radioactive waste, and learn interesting facts about radioactivity and radioactive waste management through augmented reality content. [1]

A special emphasis is placed on interactivity and an educational approach, including a 3D model of the future storage in Radioactive Waste management Centre with an enlarged display of the

concrete cask (RCC) with barrels of radioactive waste, as well as an insight into the site's geological characteristics, presented through a core sample display.

Additionally, visitors have access to information about the natural radiation levels at the Radioactive Waste Management Centre site, further ensuring transparency and keeping the local community informed. [1]



Figure 2. Interior of the Information Centre on Radioactive Waste in Dvor – perspective A



Figure 3. Interior of the Information Centre on Radioactive Waste in Dvor - perspective B

In addition to the permanent exhibit, the Information Centre in Dvor actively conducts a series of activities aimed at different groups, with educational programs for students playing a special role.

Organized visits from elementary schools are conducted in cooperation with elementary schools in the Sisak - Moslavina County. During these visits, students attend a short lecture on radioactivity, the operation of the Krško Nuclear Power Plant, and radioactive waste management. After the lecture, students have the opportunity to apply their knowledge through an educational augmented reality game focused on the proper management of radioactive waste, further supporting their understanding of this complex topic.



Figure 4: Lecture for elementary school students in the Information Centre



Figure 5: Augmented reality game

In addition to educating elementary school students, the Information Centre also organizes activities aimed at the local community, such as expert workshops on topics like pruning fruit trees, evaluating the quality of honey and sausages, and meetings between citizens and experts, which facilitate direct communication and the exchange of information.

Additionally, health programs are conducted, such as organizing free mammogram screenings for the local population and educational lectures.

Through continuous information, educational programs, and the inclusion of different age groups especially children and young people, the Information Centre in Dvor is a key tool in building trust, reducing concerns, and strengthening transparency in the process of establishing the Radioactive Waste Management Centre.

The results of a public opinion survey conducted in the Dvor municipality further confirm the effectiveness of the communication activities carried out. According to the survey, 80% of respondents are aware of the existence of the Information Centre on Radioactive Waste in Dvor. [2]

The results of the survey also show that the activities conducted, such as educational programs and workshops for the local population, have an impact on citizens' level of information. This confirms the importance of a continuous and targeted approach to communication with the public as a key element in building trust.

3 INFORMATION CENTRE IN ZAGREB

The Information Centre on Radioactive Waste in Zagreb is located within the Nikola Tesla Technical Museum, with the goal of informing, educating, and engaging the general public on the topic of the generation and management of radioactive waste, as well as establishing a Radioactive Waste Management Centre. The Fund has been collaborating with the Museum since 2016, when the Information Corner on radioactive waste was introduced to the public. In 2022, it was expanded into an Information Centre with additional interactive exhibits. [3]



Figure 6: Information Centre on Radioactive Waste in Zagreb

The primary purpose of the Information Centre is to make the complex topic of radioactivity and radioactive waste management accessible to a wider audience in an interesting and understandable way.

Unlike the Information Centre in Dvor, which is primarily aimed at the local community, the Information Centre in Zagreb plays an important role in informing the wider public, including museum visitors, students, and tourists.

At the Information Centre, visitors can use modern technologies, such as virtual and augmented reality, to tour the facility for receiving, classifying, pre-treating, treating, and storing radioactive waste. [3]

A special emphasis is placed on the interactivity of the content, where visitors are guided through the educational material by virtual characters, including the famous scientist Marie Curie, who explain the basic concepts of radioactivity in an accessible way. [3]



Figure 7: Virtual reality content

The educational exhibit includes multimedia interactive screens, animations, quizzes, and educational games tailored to different age groups. Visitors are also presented with a 3D model of the future storage in Radioactive Waste Management Centre. [4]



Figure 8: Interactive screen at the Information Centre in Zagreb

In addition to its permanent exhibit, the Information Centre in Zagreb actively participates in public events and manifestations, thereby further bringing the topic of radioactive waste management closer to the public.

For example, participation in the Night of the Museums event provides access to a large number of visitors who, through interactive and educational content, have the opportunity to learn about the topics of radioactivity and radioactive waste management.

Through a combination of modern technologies, interactive approaches, and participation in public events, the Information Centre in Zagreb is an important communication tool for informing the general public and contributes to a better understanding of topics related to the management of radioactive waste in the Republic of Croatia.

4 CONCLUSION

The information centres on radioactive waste in Dvor and Zagreb play a key role in the Fund's communication with the public, providing information related to the topic of radioactive waste management. While the Information Centre in Dvor is primarily focused on the local community, with an emphasis on education and activities that include all age groups, The Information Centre in Zagreb provides an opportunity to inform the wider public, including museum visitors, students, and tourists, through interactive and educational content and participation in public events.

Through a combination of modern technologies, interactive approaches, workshops, educational games, and public events, both information centres provide access to verified information, encourage active citizen participation, and strengthen trust in the process of establishing the Radioactive Waste Management Centre.

The results of a public opinion survey in the Municipality of Dvor show that 80% of respondents are aware of the existence of the Radioactive Waste Information Centre in Dvor, which indicates the significant reach of the activities conducted and their positive impact on the local community's level of information.

The combination of educational programs, interactive content, and continuous communication with the public proves to be an effective approach for increasing awareness, strengthening trust, and ensuring transparency in the field of radioactive waste management, and contributes to the development of an informed public.

REFERENCES

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