

#22 Public Outreach Campaign on collecting orphaned ionizing radiation sources as an effective element of building and maintaining nuclear security detection architecture for detecting radioactive materials in illicit circulation

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1 Background and Goal

To reduce the amount of abandoned radioactive sources, minimize terrorist threats, as well as threats to life and health of citizens, in Ukraine there was launched the project "Public Outreach and Information Campaign about the Amnesty of Ionizing Radiation Sources (IRS)".



Donor	USA Department of Energy through Oak Ridge National Laboratory
Implementer	PU "Chornobyl Research and Development Institute", Ukraine
Beneficiary	State Agency of Ukraine on Exclusion Zone Management
Period	18 months
Aim	Preventing nuclear smuggling and reducing the nuclear terrorism threat
Place of realisation	Dnipropetrovsk region, as the region with the biggest probability of concentration of IRS

By today, orphaned IRS are detected in all regions of Ukraine. There were frequent cases when citizens owned IRS, which, for one reason or another, were not included in the state accounting system. However, people were afraid to surrender them, since there was a criminal liability for illegal possession and storage of such sources. Besides, people didn't know where they can surrender IRS. Fear and lack of information prompted people to dump IRS to landfills that are not suited for storing IRS and radioactive waste (RW).

In 2016 the changes to the Criminal Code of Ukraine were made that exempt from criminal liability for the voluntary handing over of radioactive materials. This has significantly simplified the process of IRS handing over, their registration, inspection and inclusion into the state register, transfer to controlled storage. However, even after this, there was no significant increase in the citizens' actions to hand over ionizing radiation sources. The reason is the lack of a balanced, target audience-oriented public outreach campaign in the regions.

Thus, with the support of the US Department of Energy and the Oak Ridge National Laboratory, the project "Public Outreach and Information Campaign on the Amnesty Program of Orphaned Ionizing Radiation Sources" was launched. Dnipropetrovsk region is chosen taking into account its developed industry, which is widely using radioactive sources, and therefore there is a high probability of getting them into illegal circulation.

The goal of the project is to raise public awareness of the danger of seizing and storing IRS, which will also increase the safety of life and health of the population and reduce the threat of radiation terrorism.

The tasks of the project:

- To develop a culture of behavior and a proactive stance on IRS handling of the public.
- To provide the information on decriminalization in the event of voluntary handing over of IRS (Article 265 of the Criminal Code of Ukraine) to the public.
- To secure the interaction of state authorities liable for responding to the findings of unaccounted IRS.
- To develop informational material for raising awareness of the population about IRS handling, which can be spread to other regions of Ukraine and used in public outreach campaigns in other countries.

2 Description of the campaign

Brand of the public outreach campaign

Name of the campaign: **STEP to Safety**

Descriptor: **Campaign on Radiation Awareness and Control**

Logo:



Target groups



Target Group No.1

In Ukraine, the responsible for collection and seizure of unaccounted IRS from the population are state institutions defined by Resolution of the Cabinet of Ministers of Ukraine No. 813, dated 2 June 2003. Thus, the operational staff of these services form the basis for the target audience, with which educational and informational work will be carried out within the frame of the project.

Thus, the target group No.1 consists of:

- employees of the State Emergency Service of Ukraine;
- employees of the National Police of Ukraine
- employees of the Security Service of Ukraine;
- officials of the State Environmental Inspectorate;
- employees (including managers) of the enterprises of the selected group (enterprises that use IRS);
- employees (including managers) of the specialized enterprises (State specialized enterprise Dnipropetrovsk State Interregional Special Integrated Plant, Ukrainian state industrial enterprise "Isotop").

Target group No. 2

The second group of people who can receive information about detected and orphaned IRS during the performance of their official duties, is formed on the basis of understanding of the organization of the life of territorial communities and the system of handling of solid domestic waste and secondary raw materials, and it is as follows:

- workers of medical institutions;
- civil servants, representatives of local state administrations;
- deputies;
- educators;
- servicemen of military units;
- employees of places for collection of secondary resources and metal bases;
- employees (including managers) of utility companies.

Target Group No. 3

The third target group consists of vulnerable categories: school-age children and students, since they lead an active lifestyle, travel a lot, have an interest in finding and discovering new locations near their places of residence and are interested in various subjects and things.

Because of active social position the representatives of public organizations included in this group too. So, this group consists of:

- schoolchildren;
- students of higher educational establishments and vocational schools;
- representatives of target public organizations (environmental, ecological, social) and activists;
- representatives of the Defense assistance society

Target Group No. 4

The fourth target group includes all other citizens who did not fall into the first three target groups, and covers the maximum number of population of the Dnipropetrovsk region.

Namely, Target group No. 4 consists of:

- housewives;
- retired population;
- rural population;
- urban population

Housewives and retired population are singled out, since they constitute a significant proportion of the entire population of the Dnipropetrovsk region – 1 million people. Besides, this category of population is characterized by certain peculiarities in the channels of communicating and spreading information

As a result of the campaign all target groups have to be aware about and measured upon the below awareness criteria.

Awareness criteria

- IRS is a dangerous item (including the danger of small components of IRS containing radioactive substances)
- Appearance of IRS and their characteristics (incl. IRS in everyday life)
- Actions to be taken in case of suspected detection of IRS (protection of personal life and health)
- Communications in case of suspected detection of IRS (list of relevant services that must be informed in case of suspected detection of IRS)
- Proactive position in case of IRS detection (the order of active actions to be performed in case of suspected detection of IRS, namely, to wait for the arrival of the relevant services, to show the location of the IRS detection, to provide exhaustive information, etc.)

Communication channels

Taking into account the objective and tasks, as well as defined target audiences, all communication channels available in the field of public relations will be used during the campaign. They can be split into four major clusters:

General – combine mass communication channels, aimed at a wide range of information consumers. Messages spread through the general communication channels are of public importance and are of general interest;

Specific – focused on specific target groups, but information spread can be made available to the general public and spread through mass communication channels;

Specialized – directed to a narrow circle of specialists. Information is provided through professional tools and on sites specially designed for communication of a specific target group;

Individual – aimed at different target groups, information is communicated through personal contact and interactive means of communicating information.

Content of the public outreach campaign

During the project there have been developed and produced the following communication materials.

General communication materials for all target groups:

- Educational film
- Social advertising videos (PSAs)
- Viral videos
- Radio shows and a radio contest
- Articles
- Printed materials

Communication materials for teenagers and youth (TG No. 3)

- Video game
- Methodological materials for a life safety lesson
- "Make Dad Learn the Rule" contest
- Comics based on a fantasy story
- Series of animated videos
- Flash mob
- Video competition

Communication materials for experts (TG No. 1–2)

- Project presentation
- Printed materials

Evaluation criteria and feedback

To evaluate the effectiveness of the public outreach campaign on the Amnesty Program for Orphaned Ionizing Radiation Sources, there will be used quantitative and qualitative evaluation criteria.

Qualitative evaluation criteria: questionnaires, sociological surveys, comparison of survey results in reference/pilot schools and other schools in the region, targeted interviewing/questioning of specialized divisions of the State Emergency Service of Ukraine and the National Police.

Quantitative indicators, used as a result of the campaign include: the coverage of the number of people with PR events, round tables, the number of views of cartoons, videos, social advertising, the number of video games downloads, the number of call to the hotline, the number of visits to the uatom.org website, audience coverage with TV and media, etc.

The pilot collection of orphaned IRS from population is also foreseen in frames of the project.

Expected outcomes of the Project

- Decreased nuclear terrorism threat
- Improved radiation safety of the population and environment
- Improved cooperation between the state authorities responsible for reaction in case of identification of orphaned IRS
- Created foundation for long-term comprehensive raising of public awareness of radiation safety

3 The Current Status of the Project

By today, the fully completed are five tasks that include the following:

- The IRS database of the Dnipropetrovsk region has been created and placed on the secured server;
- Departmental documents have been analyzed and there were created interdepartmental working groups, which provides the basis for establishing interagency dialogue and interaction in the implementation of the project.
- The recommendations as to improvement and update of the current regulatory and legal framework with regards to IRS management are developed;
- A detailed "Public Outreach and Information Campaign Plan" has been developed, identifying four target audiences, five public awareness criteria, criteria for assessing the success of the campaign, and all means and types of communication;
- The basic communication materials (including foto-and videobank) for the public outreach campaign are developed, tested on stakeholders and focus-groups and corrected taking into account the feedback received from stakeholders and focus-groups.

4 The Planned Activities

- Production of all communication activities;
- Launch and conducting of the public outreach campaign;
- Hold the pilot collection of IRS from the population;
- Analyze the campaign and develop the mechanism for the implementation of the project in other regions of Ukraine.

The start of the campaign is expected in 2020 and will last during 9 months.