

Consolidation of nuclear security capacities in Republic of Moldova

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The fact of approving by lot of states UNSCR-1540 (2004) shows that the world community has embarked on a long-term campaign to prevent non-state actors from acquiring and using weapon of mass destruction and related materials. Protection against theft or sabotage of nuclear/radioactive materials and facilities is a major focus for the Republic of Moldova, which has some experience in combating of illicit trafficking of nuclear materials. One of the important challenging needs for young, independent countries is to develop an efficient interagency, all players coordination for many-side implementation of UNSCR-1540. With the support of the Office of Nuclear Security (ONS) of IAEA in 2008 in the Republic of Moldova has been launched the Integrated Nuclear Security Support Plan (INSSP) and together with support of the DoE/NNSA, DTRA and NRC of the United States of America, European Commission and Swedish Radiation Safety Authority In Republic of Moldova were implemented many projects on strengthening nuclear security capacities and combating illicit traffic of radioactive/nuclear materials. The assistance consisted of:

Since the beginning of the implementation of IAEA INSSP, Moldova has achieved promising results in the context of strengthening security capabilities. Thus, the infrastructure for the points was strengthened, the system of physical protect detection of radioactive and nuclear materials at the border control ion of the nuclear and radiological facilities was strengthened.



- Border Stationary Monitoring Portal gamma and neutrons portals for detection of nuclear material and radioactive sources for Customs Service
- Mobile spectrometer with HPG detector "Microdetective" "Ortec";
- Mobile Spectrometers type "Identifinder", other types of detection and identification devices, neutron monitors and counters, personal and individual dosimeters, beta and alpha radiometers
- Human resources training and field exercises



INTERNATIONAL LEGAL INSTRUMENTS in

In present time it is in a final stage of the drafting the First respond plan in case of nuclear or radiological events connected to radioactive orphaned sources. By NARNRA were approved and tested procedures in case of response to FLO request. The NARNRA team is ready to response 7/24 on Hot-line communication for national FLO (+373 22 31 11 36)



During the mentioned period, the nuclear forensic capacity was created and which is under continues development process. The Republic of Moldova is a part of the ITWG and has participated in several CMX exercises and cooperates with EUSECTRA European Commission Joint Research Center and other Nuclear Research Centers abroad.

NUCLEAR SECURITY AREA

- Convention on the Physical Protection of Nuclear Material; Amendment to the Convention on the Physical Protection of Nuclear Material;
- UN Security Council Resolution 1540

NATIONAL RELEVANT LAWS AND REGULATIONS CONECTED TO NUCLEAR SECURITY

- Law No.132 from 08.06.2012 on safe deployment of nuclear and radiological activities;
- Law No. 68 on 13.04.2017 National Strategy on radioactive waste management with Action Plan 2017-2026;
- Law No 1163-XIV from 26.07.2000 "On the export, import, re-export and transit of strategic goods";
- Government Decision No. 608/03.07.2018 radiological protection and safety in activity of unshielded facilities;
- Government Decision No. 388/2009 on Radioactive Waste Management;
- Government Decision No. 1268. 23.11.2016 on security in nuclear and radiological activities;
- Government Decision No. 1017/2008 on National register of ionizing radiations sources and of legal or physical authorized persons; • Government Decision No. 153/28.02.2014 on State control and supervision of nuclear and radiological activities; Government Decision No. 434/16.07.2015 Safety transportation of radioactive material.



A special compartment is also the securing actions (removing) of the radioactive sources from the eastern part of the Republic of Moldova (Transnistria region).



NATIONAL STRUCTURE OF NUCLEAR SECURTY AREA

- NARNRA
- General Inspectorate of Border Police
- Custom Service
- General Inspectorate of Police
- General Inspectorate for Emergency Situations
- Information and Security Service

PHYSICAL PROTECTION OF NUCLEAR AND RADIOLOGICAL FACILITIES







In October this year was Decommissioned the Irradiator "Исследователь-1" type with 36 radioactive sources (type GIC-7-1) of the Co-60 from Research Institute from Tiraspol. Initial activity of radioactive sources over 5 700 Ci (1988).

Total number of radioactive sources removed from different facilities since 2011 year – about 3400 including Transnistria region (more 2300 items Co-60, Cs-137, Am-241; Pu-239, Ra-226)

CONCLUSION

With the valorous contribution of mentioned donors have been successfully launched and implemented in Republic of Moldova the nuclear security projects and actions. Among the main results we note the possibility to carry out the primary identification and advanced forensic investigations of nuclear materials, captured in actions of combating illicit trafficking in 2010, 2011, 2014 and 2016 years and enhancing of nuclear security of country at general.

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