JOINT ACTIONS OF THE REPUBLIC OF TAJIKISTAN (RT) AND USA IN THE FIELD OF WEAPONS OF MASS DESTRUCTION (WMD) NON-PROLIFERATION

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After declaration of independence, the RT became sovereign member of world community and along with carried out reforms on formation of democratic government, RT started to cooperate with international organizations such as UN, EU, IMF, UNESCO, WHO, IAEA and others in social and economic fields. After independence declaration a number of countries started to cooperate with RT on bilateral basis.

The first steps of the RT towards independence were complicated. Republic experienced Civil War (1992-1997yy). Civil war destroyed many infrastructures including service on ensuring the radiation protection of population and environment.

In 2003, under Tajik Academy of Sciences, a Nuclear and radiation safety agency (NRSA) was established and which is according to adopted RT Law “On radiation protection” (№42 from 01.08.2003 y.) is single state regulatory authority and officially assigned to cooperate with IAEA and donor countries in the field of ensuring nuclear and radiation safety of population and environment.

Due to RT joining to IAEA membership, signing of WMD Non-proliferation treaty, Safeguards agreement, additional protocol to Safeguards agreement, ratification of many conventions and agreements in the field of ensuring nuclear and radiation safety and peaceful use of atomic energy, the republic started to receive assistance in establishment and strengthening its infrastructure in this field.
In close cooperation with IAEA during recent years, a number of projects are implemented on establishment of legislative basis, information service, upgrading radiotherapy and nuclear medicine services, soli sciences, uranium industry wastes management, specialists’ preparation and training, etc.

Tajikistan is not nuclear country, but currently the sources of ionizing radiation (SIR) are widely used in medicine, industry, scientific and research areas, agricultural sectors and other fields. One of the key issues of ensuring safe use, storage and transportation of radioactive sources and their non-proliferation is establishment of state SIR database and carrying out its account and control. In this field our republic received and still is receiving appreciable assistance from USA Department of Energy and Nuclear Regulatory Commission (NRC). Starting from 2003, projects on ensuring intruder alarm and physical protection of sites with high radioactive sources were implemented in the republic. In the framework of this cooperation, the intruder alarms were installed in Republican Waste Disposal Site (RWDS, Faizabad region), Scientific Centre of Oncology under MoH RT, Gamma laboratory of Tajik National University. Extensive repairs were carried out in Building №20 of RWDS, where worked-out radioactive sources are disposed with total activity more than 80 kilocurie and Gamma laboratory building of Tajik National University. Concrete blocks fence was constructed in vulnerable places around RWDS high security zone.

In all these sites, the physical protection elements are installed in accordance with international requirements. Those elements includes video-surveillance, 24 hour record of all events in controlled premises and sites in the database, motion detectors for notification of guard personnel about intruder penetration, doors with dual lock, according to two keys use and etc.

Especially we would like to emphasize assistance from USA Department of Energy in carrying out orphan sources search. Search of orphan sources in Northern Tajikistan is completed and currently the searches are carried out in Southern Tajikistan. Under this project, two training courses were conducted, necessary equipment for searches realization were provided, “Niva-Shevrolet”
vehicle was provided through relevant IAEA regional project with the purpose of orphan sources search to Committee of Emergency Situation and Civil Defense under Government of RT. Search of orphan sources are carried out by representatives of Committee of Emergency Situation and Civil Defense, Ministry of Interior Affairs, Border Services of RT together with NRSA AS RT inspectors. In result of Northern Tajikistan search more than 500 orphan and sources kept in storages not corresponding to radiation safety norms were revealed which subsequently were transported and disposed in RWDS.

Cooperation with USA NRC also is successfully taking place. According to the agreement between USA NRC and NRSA AS RT in the RT 2 projects are implemented:

1. Inventory and establishment of SIR database in Tajikistan;
2. Introduction of Amendments and Additions to the Laws “On radiation safety” and “On licensing of separate kinds of activities”

In 2007, the NRSA by USA NRC support (agreement between NRSA and AdSTM Inc.company) started to establish national SIR database. Establishment of national database meant inspection of existing data about SIR availability in organizations by NRSA representatives by means of conducting inventory inspections and inputting checked information to RASOD database according to its requirements.

We would like to mention that sealed radioactive sources, unsealed radioactive sources, ionizing radiation generators and associated facilities were referred as SIR.

Inspectors of NRSA, NRSA branches, SE “Vostokredmet”, Dushanbe sanitary-epidemiological station and others participated in inventory process. In result of 250 organizations inspection, 1976 SIR were registered. From them 1130-sealed sources, 35 unsealed sources, 811-generators and 110 associated facilities of SIR.
From 1130 sealed sources, 774 sources were disposed in RWDS and 356 sources are in operation, including 62 sealed sources of 1 and 2 category sources which are used in medicine and scientific-research laboratories.

Amendments and additions to the RT Law “On licensing of separate kinds of activities” were introduced by the help of the project “Introducing amendments and additions to the law on licensing”. After long consultations with experts and harmonization with relevant authorities and ministries, it was adopted by Majlisi namoyandagon of Majlisi Oli RT (Tajikistan Parliament). Currently the regulation is prepared on the basis of this Law and in nearest future will be submitted to the Government for approval.

Amendments and additions to the RT Law “On radiation protection” were introduced, discussed with experts and after harmonization with relevant authorities and ministries will be submitted to the Majlisi namoyandagon of Majlisi Oli RT (Tajikistan Parliament) for approval.

Currently together with NRC, we are discussing the issues of further SIR database modernization, improving and preparation of some legislative documents, strengthening resource and technical infrastructure of NRSA and always we find good mutual understanding.