

NUCLEAR MATERIALS PROTECTION AND NATIONAL SECURITY

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Since 2002 the states had more attention to threat transfer of nuclear weapons and transferring information related to weapons production. However, in the third Millennium there was a huge threat of nuclear terrorism. The starts of creation nuclear security Fund in NSS 2014, slogan, which was a progress in preventing nuclear terrorism.

Currently nuclear terrorism targets include: nuclear power, research reactors and uranium concentrate production, processing enterprises, storage and reprocessing facilities for spent fuel. Another scenario is radiological terrorism which contains capturing the vehicle carrying nuclear fuel or waste with high level of radiation.

Sabotage upon nuclear facility does not require such a deep scientific and technical knowledge even to manufacture a nuclear bomb. Sufficient penetration is enough to an object group of insurgents with small arms and explosives. The cooling system also can become a target for sabotage also if they destroy the probability of radioactive emission.

Terrorists may try to destroy maintain systems of the reactor, systems of water supply, control and protection in order to cause a thermal explosion of the reactor. Even if attackers do not achieve the explosion of reactor and just stop it, anyhow it has large-scale economic and socio-political consequences.

The research analyzes show the significant part of nuclear materials poorly protected and is vulnerable to abduction or sale on the black market. The international atomic energy Agency (IAEA) has a documentary evidence of more than hundred cases of theft or loss of highly enriched uranium and plutonium.

The analysis of the publication of the report «Index NTI» in January 2014 provoked a lively discussion about priority measures of ensuring nuclear security. For example, the Republic of Belarus took the 9th position at total scores, Kazakhstan 15th place and RF-18, however, the criteria of «the provision of security measures and control» Belarus is on 4th place, after the United States, Canada and Britain, Kazakhstan and Russia are on the 9th rating.

The issue of control and physical protection of nuclear materials to reach consensus on effective Global system is one of the most important discussions in 21 century.

1. NTI Nuclear Materials Security Index, second edition, January 2014.
2. The U.S.-Russia Initiative to Prevent Nuclear Terrorism Newsletter:
December 2013 - February 2014. Harvard University, March 13, 2014.