



# NUCLEAR SECURITY SUMMIT 2014

## NATIONAL PROGRESS REPORT

### POLAND

#### 1. (SUPPORT FOR MULTILATERAL INSTRUMENTS: CPPNM, ICSANT E.O.)

Poland ratified all relevant international nuclear security conventions and is a member of international initiatives and mechanisms aimed at strengthening nuclear security and preventing illicit trafficking of nuclear materials. In particular Poland:

- ratified the International Convention for the Suppression of Acts of Nuclear Terrorism as a deliverable for the Nuclear Security Summit (April 2010);
- is a party to the Convention on the Physical Protection of Nuclear Material and ratified the Amendment to the Convention in April 2007.

#### 2. (STRENGTHENED NATIONAL NUCLEAR AND RADIOLOGICAL MATERIAL SECURITY SYSTEM, INCLUDING MEASURES TO SHOWCASE THE EFFECTIVENESS OF THE NUCLEAR SECURITY EFFORTS)

All the nuclear and radiological materials are subject to strict and continuous control. To fulfill its international obligations, Poland runs the State System of Accounting for and Control of Nuclear Materials (SSAC), which significantly enhances the security of materials. Additionally, a register of radioactive sources is kept. The radioactive sources register contains data on more than 23,000 sources, including spent radioactive sources, information concerning their movement and related documents.

In an effort to optimize the security of nuclear facilities in Poland, a special team for developing proposals to strengthen the anti-terrorist security of the nuclear research reactor in Świerk was established within the Inter-Ministerial Team for Terrorist Threats. Finalization of its work is planned for the end of June 2014

#### 3. (CONTRIBUTION TO AND USE OF THE IAEA'S NUCLEAR SECURITY-RELATED ACTIVITIES AND SERVICES)

Poland has committed itself to ensuring that the highest nuclear security standards are observed in the development of its peaceful nuclear power program. At the request of the Government of Poland, an international team of senior safety experts met with representatives of the regulatory body of Poland in 2013 to conduct an Integrated Regulatory Review Service (IRRS) mission. The purpose of the peer review was to examine Poland's regulatory framework for nuclear and radiation safety, and its effectiveness. Based on the IRRS evaluation against the IAEA safety standards, the review team identified good practices as well as gaps which need to be addressed by the National Atomic Energy Agency (PAA). In consequence, the IRRS team offered several recommendations and suggestions on how to deal with the identified gaps.

In March 2013 Poland hosted an Integrated Nuclear Infrastructure Review (INIR) Mission. The Mission was organized to look at Phase 1 (with elements of Phase 2) of the development of the Polish nuclear power program (using the "Milestones" approach). The Mission report was published on the websites of the IAEA and the Polish Ministry of Economy. It contains five recommendations and six suggestions as well as six good practices. The Mission concluded that "Poland has made significant progress in the necessary infrastructure for the development of its National Nuclear Power Programme." The INIR team identified strengths in several nuclear infrastructure areas. The



report also found that Poland still has some work to do in Phase 1, but is simultaneously working on Phase 2. Moreover, the IAEA declared its readiness to assist Poland in further developing its infrastructure. Poland prepared a National Action Plan to implement the said recommendations and suggestions, and is continuing work on the Integrated Work Plan. The next INIR Mission will probably take place in early 2015, i.e. following the announcement of the technology tender by the investor/operator (PGE EJ1 Ltd.).

In 2013 efforts were launched to fully implement IAEA recommendations on the use and maintenance of Design Basis Threat. A national workshop on DBT implementation was held in Warsaw (organized in cooperation with the IAEA Office of Nuclear Security), followed by work of an interdepartmental working group that is tasked with drafting necessary amendments to the national nuclear security legal framework.

Additionally, invitation of the International Physical Protection Advisory Service is planned for year 2015.

#### 4. (SUPPORT FOR NUCLEAR SECURITY-RELATED INTERNATIONAL INITIATIVES)

The Republic of Poland participates in the work of the Global Initiative to Combat Nuclear Terrorism, the G-8 Global Partnership against the Spread of Weapons and Materials of Mass Destruction, as well as the Proliferation Security Initiative, which is aimed at curbing proliferation of WMDs.

Poland took active steps to protect the UEFA European Football Championships EURO 2012 against chemical, biological, radiological, and nuclear (CBRN) threats. A multidisciplinary approach to the issue made it possible to tap into the capacities of numerous competent services and institutions, and further enhance their interoperability, information management, and information exchange. In the course of preparations for EURO 2012, a CBRN Task Force, set up alongside the organizing Committee, supported a number of training activities that were carried out in the field of nuclear safety and radiological protection within the framework of the EURO 2012 Joint Action Plan with the IAEA, or in direct cooperation with the US. Moreover, both our US partners and the IAEA provided support in the form of radiation detection equipment. Drawing on this experience, Poland also contributed to the GICNT best practices document: Developing a Nuclear Detection Architecture Series: Volume 4 – Detection Within a State's Interior.

#### 5. (CONTRIBUTION TO MINIMIZING THE USE OF SENSITIVE NUCLEAR MATERIALS)

Under the Global Threat Reduction Initiative's Russian Research Reactors Fuel Return Program, Poland is removing high-enriched uranium (HEU) spent nuclear fuel (SNF) from the "EWA" and "MARIA" research reactors. Between September 2009 and September 2012, six SNF shipment operations were organized. In total 1584 HEU fuel assemblies have been transferred so far, containing 416.8 kg of uranium (including 151.9 kg of uranium-235) and 11.4 kg of plutonium. The radioactive waste from SNF reprocessing will be permanently disposed of in the Russian Federation. The remaining shipments of spent fuel are planned for 2014, and 2016. In 2014, 44 HEU spent fuel elements containing 10.4 kg of uranium-235 will be transferred. The last shipment is planned for 2016, when 51 fuel elements with 12.1 kg of uranium-235 will be returned to the Russian Federation. This will allow to eliminate all HEU fuel from the Polish territory.

In addition to GTRI, the Polish Government provided funding for repatriation of LEU fuel. There was a total of 2,595 fuel assemblies containing 201.3 kg of uranium (17.4 kg of U235) and 4.8 kg of plutonium.

Simultaneously, the "MARIA" reactor core conversion from HEU to LEU fuel began at the end of September 2012. By the end of 2013 half of the reactor core was loaded with LEU fuel. The conversion process will be completed in the third quarter of 2014.

#### 6. (ENHANCED EFFORTS TO COMBAT ILLICIT TRAFFICKING IN NUCLEAR AND RADIOLOGICAL MATERIALS)

To strengthen the national counter-proliferation capabilities, in April 2008 Poland established an Inter-Ministerial Committee for the Prevention of WMD Proliferation and Implementation of the Proliferation Security Initiative. Composed of representatives of 17 government agencies, it enables a better coordination of national policies. The Committee proved very useful in supporting co-operation between national agencies and their international



counterparts; facilitating information exchange, developing emergency response tools, and planning national and international exercises.

The Polish radiometric control system, which has been put in place at the country's borders, plays an important role in strengthening nuclear security, given Poland's geographical location at the intersection of main transit routes. Moreover, some parts of the Polish eastern border represent the external border of the European Union. The radiometric control system was established in the 1990s. It is maintained and operated mainly by the Polish Border Guard, which has at its disposal portal radiation monitors and handheld equipment. The Border Guard conducts radiometric checks not only at border crossings, but also inside the country, using handheld equipment. All collected information is immediately transmitted for analysis via a central computer system to the Border Guard Headquarters in Warsaw. The relevant data on incidents and trafficking are regularly shared with the International Atomic Energy Agency's Incident and Trafficking Database (ITDB) via the National Atomic Energy Agency (PAA). In 2013 alone the Border Guard conducted 15,926 interventions. In 2009, a Memorandum of Understanding, which set the framework for co-operation, was signed between the relevant Polish authorities and the US Department of Energy. Since 2009, the radiometric control system has been modernized thanks to Polish-US co-operation in the framework of the SECOND LINE OF DEFENSE program. Its aim is to enhance partner countries' capabilities to interdict illicit trafficking in nuclear and other radioactive materials across international borders. Assistance includes: equipment delivery, installation, service and training. With support from the US Department of Energy and the European Commission's Joint Research Center, a joint Polish-Ukrainian scenario-based exercise is scheduled for 2014. The scheme will focus on cooperation in responding to acts of illicit transfer of radioactive materials.

Throughout 2013 Poland and Croatia conducted a peer review on the implementation of UN Security Council Resolution 1540 with a view to identifying best practices and preparing a report for the UNSC.

## 7. (STRENGTHENED COOPERATION BETWEEN GOVERNMENT AND NUCLEAR INDUSTRY)

On 28 January 2014 the Council of Ministers adopted a resolution on the Polish Nuclear Power Program. The program sets out the scope of measures to be taken to safely use nuclear power in Poland. By 2030 10% of the country's power should come from nuclear plants. Under current estimations the construction of nuclear power plants with a total capacity of 6,000 MW will decrease the CO<sub>2</sub> emissions by 35 million tons per year. The National Atomic Energy Agency (PAA) continues its efforts to develop Polish regulatory infrastructure. As most of the legislative work has been completed over the last two years, the focus is now on developing human resources through staff recruitment and training.

As regards cooperation with the nuclear industry, the Government is currently engaged in close dialogue with more than 20 trade and industry associations, chambers of commerce, clusters and techno parks grouping private Polish companies that are interested in developing competences for the nuclear industry. The Government is also evaluating Poland's industrial capabilities/capacities (companies with nuclear experience or with sufficient potential to fulfill nuclear standards) in respect of its engagement in the NPP project.