

National Progress Report: Hungary

March 31, 2016

Since the 2014 Nuclear Security Summit (NSS), Hungary has strengthened nuclear security implementation and contributed to the global nuclear security regime by accomplishments in the following areas:

1. Sustainable implementation of the fundamental principles of nuclear security and meeting the intent of recommendations contained in the IAEA Nuclear Security Series

- The internationally accepted basis of physical protection in Hungary is represented by the Law-Decree 8 of 1987, which promulgated the Convention on Physical Protection of Nuclear Materials (CPPNM) approved by the International Atomic Energy Agency (IAEA) in 1979 and by the Act LXII of 2008, which promulgated the Amendment to the Convention signed on 8 July 2005 in a diplomatic conference organized by the IAEA.
- The Hungarian nuclear security regulatory framework was revised between 2008 and 2011, in full compliance with the IAEA recommendations and guidance. The conduct of the National Threat Assessment and the determination of Design Basis Threats (DBTs), and the subsequent regulatory procedures of licensing and inspection of the newly established physical protection plans of nuclear facilities, nuclear and other radioactive material license holders were completed by the end of 2012. The DBTs are updated on an annual basis.
- At the request of the Government of Hungary, a full scope International Physical Protection Advisory Service (IPPAS) mission started on the 27th of May 2013 to review the physical protection systems of nuclear and radioactive materials and associated activities and facilities in Hungary. The IPPAS team concluded that the physical protection systems at the visited sites have been significantly enhanced in line with the IAEA recommendations and guidance.
- As a contribution to global level confidence building and transparency, Hungary made the National Review part of the 2013 IPPAS report publicly available.
- *Hungary has been providing experts in the field of nuclear security to support IAEA IPPAS missions as IPPAS team members/team leaders. Additionally, Hungarian experts actively participate in IAEA technical and consultancy meetings for the development of the guidance and recommendations provided by the IAEA Nuclear Security Series documents.*
- *In order to implement the suggestions and recommendations of the IPPAS mission team, a national Action Plan has been launched for the period up until 2017. A follow-up IAEA IPPAS mission has already been requested by the government of Hungary for the year of 2017.*

- *Hungary will increase self-assessment activities to identify gaps in the security culture on all levels of nuclear security.*
- *Hungary will further develop its domestic training capabilities in nuclear security and seeks to contribute to regional and international training courses organized by the IAEA.*

2. Strengthening Nuclear and Other Radioactive Material Security

- Hungary supports both the IAEA Code of Conduct on the Safety and Security of Radioactive Sources and the IAEA Guidance on Export and Import. The import and export-related provisions of the Code and the Guidance are implemented in the national legislation, typically as binding regulations.
- Hungary is also implementing the provisions of the UN Security Council Resolution 1540 (2004) and the International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT).
- Hungary has revised the safety requirements of radioactive materials and introduced new requirements for the end-of-life management of high activity sealed sources in 2015 calling for the tacking back guarantee from the producers as a condition for licensing.
- Replacing high activity sealed sources in medical use to non-radioactive technology is in progress (teletherapy Co-60 sources will be out of use in the coming years).
- Hungary participated in the workshop on NSS' Gift Basket "Enhancing Radiological Security" (Oslo, 18-19 January 2016.)
- *The regulatory tasks of safety, security and safeguards of nuclear and other radioactive materials were integrated into the competency of the Hungarian Atomic Energy Authority (HAEA) in 2015. The HAEA intends to increase the synergy between the safety, security and safeguards to achieve a more effective regulatory overview of these materials.*
- *Hungary will participate actively in multinational programs to sustain the improved level of security of its high category radioactive sources.*

3. Minimizing Nuclear and other Radioactive Materials

- In 2013, Hungary completed the repatriation of all research reactor fuel containing highly enriched uranium (HEU) to the Russian Federation with the support of the US Government through the Global Threat Reduction Initiative (GTRI) project. The expertise gained from the

project was shared with other States planning similar exercise through IAEA support activities in 2015.

- *Hungary will take every effort to reduce the use of high activity radioactive sources in medical applications by linear accelerator technology to the technically and economically feasible extent.*
- *Hungary will facilitate the final deposition of unused nuclear and other radioactive materials by establishing the necessary policies and economical support.*

4. Countering Nuclear Smuggling

- Hungarian experts actively participate in the work of the Nuclear Forensics International Technical Working Group (ITWG). The twentieth annual meeting of ITWG was hosted by the Hungarian Academy of Sciences, Center for Energy Research in June 2015, Budapest.
- Under the Global Initiative to Combat Nuclear Terrorism (GICNT) a Nuclear Forensics Working Group Workshop and Tabletop Exercise “Csodaszarvas: Mystic Deer” was hosted by the Government of Hungary in Budapest, on October 14-16 2014. The workshop and exercise showcased key concepts contained in the GICNT document, Nuclear Forensics Fundamentals for Policy Makers and Decision Makers, and will promote participants’ practical application of the fundamental capabilities outlined therein.
- The regulation for the national response measures regarding nuclear and other radioactive material out of regulatory control has been revised in 2015. A new governmental decree 490/2015. (XII. 30.) on the actions to be performed in connection with missing, found and seized nuclear and other radioactive material and related information” is in force since 1st of January 2016. The new regulation is in line with the IAEA recommendation NS-15 and related guidance.

5. Collaborating with International Organizations

- Cooperation is ongoing between the IAEA Office of Nuclear Security and the HAEA in the field of nuclear security for organizing regional training activities, fostering research and development, implementation of advanced techniques and procedures and exchange of information related to the security of nuclear and other radioactive materials and facilities in Hungary. In the framework of the cooperation, several IAEA regional events have been organized including:

- "Regional Workshop on Nuclear Security Culture in Practice", from 18 to 20 February, 2014;
 - "Regional Training Course on Protective and Preventive Measures against Sabotage", from 23 to 27 June, 2014
 - "Regional Training Course on a Practical Introduction to Nuclear Forensics" from 11 to 15 August 2014;
 - "Subregional Meeting to Familiarize Member States in Eastern Europe and Central Asia with the Nuclear Security Information Management System" from 4 to 7 November 2014.
 - Hungary participates in the IAEA Incident and Trafficking Database (ITDB) programme, where HAEA serves as national Point of Contact for ITDB. Representatives of HAEA participate at regular ITDB meetings.
- *HAEA is a member of the European Nuclear Security Regulators Association (ENSRA) since 2010. By representing the chairmanship of ENSRA in 2015, Hungary continued to promote the information exchange regarding Physical Security of Nuclear Power Plants and Nuclear Material, sharing experience in 'Best Practice' in order to maintain High Standards of security among ENSRA members.*

6. Domestic and regional training activities

- Hungary has been participating in the activities of the IAEA Nuclear Security Training and Support Centres Network (NSTSC Network).
- Hungary started to establish a Nuclear Security Support Centre (NSSC) on the basis of the Hungarian Academy of Sciences Centre for Energy Research (HAS CER) in 2012, which started its activity in 2014. The IAEA and HAS CER already signed a cooperation agreement in 2012 in order to support the IAEA in developing guidelines and organizing trainings in the field of nuclear forensics. The Óbuda University was invited to contribute to the training activities within the national NSSC. HAEA supports the development of training materials by this university to be used by the national NSSC and training will be offered to nuclear security staff of facility operators and material holders.
- *Hungary will continue to welcome fellowship students and host scientific visits in the topic of nuclear security and physical protection.*

7. Information security and cyber security measures concerning nuclear facilities

- Hungary signed the Multinational Statement on Nuclear Information Security during the 2014 summit.
- Hungary has developed a comprehensive, systematic and graded approach for the classification of any type of sensitive national information and the management thereof in line with the consequences of the disclosure thereof.
- In 2014, new requirements were introduced into the domestic regulation concerning the programmable systems of nuclear facilities. As a result, the design base threats of the facilities have been revised including cyber threats in 2015.
- A “National Cyber Security Workshop” was organized for the Hungarian facilities in June 2014 with 30 participants.
- Based on the IAEA recommendations and guidance, Hungary has prepared a national guideline, entitled „Protection of programmable systems and components in nuclear facilities”.
- HAEA has established a dedicated group of experts to deal with the regulatory overview of the protection of programmable systems associated with the use of atomic energy.
- *Hungary will assess the establishment of information sharing network of information security incidents.*