

Nuclear security inspections; the Hungarian way

Hungary is rich in radioactivity related activities as there is a nuclear power plant operating with four reactors, a spent fuel interim storage facility, a research and a training reactors, and two radioactive disposal facilities next to the around four hundred radioactive source users. Because of the amount of possible inspection locations the Hungarian Atomic Energy Authority (HAEA), having all the regulatory rights in all nuclear related fields, had to introduce a multilevel nuclear security inspection system.

The Hungarian regulation states, that the HAEA has the duty of licensing, inspections and enforcement in all radioactivity related activities. In nuclear security the Hungarian National Police has a co-authority right, which means that for an approval during licensing their support is mandatory. The Police also has the right to carry out inspections with or without the HAEA.

Inside the HAEA the Section of Nuclear Security and Safeguards (SNSS) handles all the security licensing tasks and also carries out performance-based inspections in the facility level licensees. These inspections could be announced and unannounced, and usually have a three pillar structure: every time something is tested in relation with the detection or delay systems, with the response forces and also there is always a documentation verification. All the inspectors of this section have university degrees in energy engineering or security and continuously trained both on national and international courses.

Next to the dedicated security inspections there are around two hundred complex inspections where both radiation safety, material inventory and security are inspected. These are carried out by regional inspectors, members of the Section of Integrated Inspections (SII), whose main task is to carry out all the inspection related activities of all the licensees in two or three counties. Many of these regional inspectors has a background of radiation protection and were later trained in the other two fields. They are fully equipped to carry out the tasks with having their own radiation detectors and all the necessary logistical tools. To ensure that all the necessary fields are inspected they use a special, user friendly, check box type inspection format. Beyond being trained in the regulatory processes they are also capable to work with the mobile expert support teams in case of a lost or found radioactive source.

There is a regulated interaction between the two sections: the security license application containing the Physical Protection Plan, is evaluated and approved by the SNSS, and if it is not a facility level sites, the inspectors of the IIS will go and make an inspection there in accordance with their annual inspection plan. If any of the sections finds something different from the regulation or the approved Physical Protection Plans, their task is to carry out an enforcement action. If the regional inspectors discover a deviation in a high category radioactive source user, than the inspectors of SNSS can have a dedicated security inspection there with the participation of members of the National Police.

The future challenges and plans of the HAEA in nuclear security inspections, is to increase its personnel, maintain the efficiency of all the inspection individually, to increase the level of training for regional inspectors and to raise the number of dedicated inspection both on facility level and on the high category radioactive users' sites. With the help of these developments the HAEA can efficiently ensure and if necessary enforce the compliance with the regulations.

State

Hungary

Gender

Primary authors: Mr VIPLAK, Armand Máté; Ms HÓDOSI, Viktória

Presenter: Mr VIPLAK, Armand Máté

Track Classification: CC: National nuclear security inspections: training of inspectors, development

of procedures and managing findings