

# National Progress Report: Sweden

March 31, 2016

Since the 2014 Nuclear Security Summit, Sweden has strengthened nuclear security implementation and built up the global nuclear security architecture by:

## **Strengthening Nuclear and Other Radioactive Material Security**

The Swedish Radiation Safety Authority has issued new requirements with the objective of strengthening physical protection at relevant sites. Measures to bar access of vehicles to the vicinity of nuclear power plants have been put in place. Decisions have been taken to arm guards at the sites of nuclear power plants. Operators of nuclear power plants are required to install bunkered independent core cooling systems for the event of station blackouts. These safety systems, along with required security measures, have to be in place by 2020.

## **Minimizing Nuclear and Other Radioactive Materials**

New license requirements have been introduced to strengthen the physical protection measures that have to be in place for highly radioactive sealed sources and materials in the medical, industrial and university sectors. Further decisions have been taken to strengthen security requirements for licensees possessing and using Cs-137 in medical applications. This is expected to lead to a technology shift away from the use of Cs-137.

Sweden converted its HEU-fueled research reactors to LEU in the 1990s. Today, Sweden does not have any HEU reactors in operation.

In a joint effort with the United States in 2012, Sweden transferred separated plutonium from historical Swedish nuclear research and development activities to the USA. The shipment was carried out under the Global Threat Reduction Initiative.

## **Countering Nuclear Smuggling**

The Swedish Radiation Safety Authority has, together with partners, arranged conferences for authorities from states in the Black Sea Region aiming at strengthening regional networks and interaction. Projects to strengthen national control of radioactive and nuclear materials and to

detect and respond to incidents of illicit trafficking have been implemented in cooperation with Georgia, Ukraine and Moldova. Together with partners in Georgia, USA and Poland, Sweden is preparing a conference in October 2016 in Tbilisi, Georgia, for states in the Black Sea region on the implementation of NSS commitments and objectives.

### **Supporting Multilateral Instruments**

Sweden ratified the International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT) on 18 August 2014. Sweden ratified the 2005 Amendment to the Convention on the Physical Protection of Nuclear Material (CPPNM) on 23 March 2012.

Sweden participates in international efforts to promote nuclear security, including the G7 Global Partnership and the Global Initiative to Combat Nuclear Terrorism. The Swedish Radiation Safety Authority carries out a number of projects aiming at strengthening security for nuclear and other radioactive materials and installations in cooperation with partners in Russia, Ukraine, Belarus, Georgia and Moldova. These projects are presented in a separate report: “Nuclear Security, Safety and Non-Proliferation: Sweden’s International Cooperation in 2015”.

### **Collaboration with International Organizations**

Sweden has regularly contributed to the IAEA Nuclear Security Fund. In 2015, Sweden participated in the two exercises “Pilot 2015” in support of the IAEA’s development of an exercise manual. In 2011, the IAEA carried out an International Physical Protection Advisory Service (IPPAS mission) in Sweden, and a new IPPAS mission will take place in 2016.

### **Partnering with External Stakeholders**

In 2015, authorities in Sweden, Norway and Finland started to develop agreements regarding information exchange with nuclear regulatory counterparts in Belarus. The agreements focus on emergency situations, including cases of nuclear terrorism and smuggling of radioactive and nuclear materials. Furthermore, the Swedish regulatory authority has, together with Finland, Norway and Russia, started to negotiate protocols to establish procedures to enhance the joint capacity to act in case of emergency. Sweden remains committed to strengthening ties at regional

and international levels to ensure the efficiency of authorities and their interaction related to the prevention, detection and response in the nuclear security domain.