



# NUCLEAR SECURITY SUMMIT 2014

## NATIONAL PROGRESS REPORT

### NETHERLANDS

MARCH 2014

#### 1. SUPPORT FOR CPPNM AND ICSANT

The Netherlands deposited its instruments of ratification of the 2005 Amendment to the Convention on the Physical Protection of Nuclear Material (CPPNM) on 17 April 2011. Although the 2005 Amendment has not yet entered into force, legislation, regulations and policies of the Netherlands have been developed in accordance with the amended CPPNM.

The Netherlands has cooperated with the International Atomic Energy Agency in organising outreach activities aimed at the entry into force of the CPPNM as amended. The Netherlands reported on its compliance in accordance with article 14.1 of the CPPNM.

The Netherlands deposited its instruments of ratification of the International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT) on 30 June 2010.

#### 2. STRENGTHENED NATIONAL NUCLEAR AND RADIOLOGICAL MATERIAL SECURITY SYSTEM

Current Dutch rules and regulations are based on the IAEA Nuclear Security Series documents, in particular the Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities INFCIRC/225/Rev.4 and parts of Rev.5.

The Netherlands strengthened its domestic rules on physical protection requirements by means of the Ministerial Order on the Security of Nuclear Facilities and Fissionable Materials, which came into force on 1 January 2011. An updated order will come into force in 2014, incorporating all applicable parts of INFCIRC/225/Rev.5. A national Design Basis Threat (DBT) relating to the longer-term physical threats to the nuclear sector was introduced in 2008 and adopted in 2011. As of June 2012, all nuclear facilities had implemented the measures required. A DBT concerning cyber security for the Dutch nuclear sector was introduced in 2013. It is expected to be fully implemented on 31 March 2014. The nuclear operators were actively involved in the discussion on the design and the implications of the physical DBT and DBT cyber security.

The 2012 Ministerial Order on the Security of Radioactive Materials further strengthened requirements on securing radioactive sources. As far as radioactive sources are concerned, the Netherlands follows Euratom regulations. In addition, the IAEA Code of Conduct on the Safety and Security of Radioactive Sources and the IAEA Guidance on Export and Import of Radioactive Sources are implemented in the Dutch legal framework where applicable.

To assess the effectiveness of the physical protection system and test the interfaces between the contingency planning of the operators and the State, several force-on-force exercises have been conducted in the Netherlands, involving all nuclear sites and all relevant state organisations.



### 3. CONTRIBUTION TO THE IAEA'S NUCLEAR SECURITY-RELATED ACTIVITIES

The Netherlands actively contributes to the development of the Nuclear Security Series, most recently by participating in the Nuclear Security Guidance Committee.

The Netherlands has contributed financially to the IAEA Nuclear Security Fund every year since 2002. Its contribution for 2014 will be €1,000,000. The Netherlands has continued to advocate an increase in the IAEA's budget for nuclear security.

The Netherlands also contributes expertise in forensics and other areas to the IAEA in the interests of the global nuclear security framework and nuclear security services. It has hosted three regional training courses and a train-the-trainers course on physical protection, as well as on security culture, DBT, protection against sabotage and identifying vital areas.

The Netherlands has received International Physical Protection Advisory Service (IPPAS) missions on four occasions (2005, 2008, 2009 and 2012), covering all its nuclear installations. The general conclusion of the last mission in 2012 was that a firmly grounded physical protection regime exists in the Netherlands and appropriate physical protection measures are in place at nuclear facilities. Two recommendations for further improvement were made: (1) the incorporation of all applicable parts of INFCIRC/225/Rev.5 and (2) to develop a Design Basis Threat for cyber security. As mentioned above, both will be implemented in 2014.

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

As part of the NSS Troika (NL, ROK, US) the Netherlands initiated the "Strengthening Nuclear Security Implementation" initiative. Together with a large number of NSS participating States, the Netherlands has subscribed to the initiative's Joint Statement. (For the actual implementation of the commitments contained in the Joint Statement, see paragraph 2 of this progress report).

The Netherlands participates in the Global Initiative to Counter Nuclear Terrorism (GICNT) and in the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction. It currently chairs the GICNT Nuclear Detection Working Group. It provides financial support to the Global Threat Reduction Initiative and cooperates with the 1540 Committee.

In 2012 the Netherlands hosted the international table-top exercise @tomic 2012, an international exercise on the prevention of (the threat of) nuclear/radiological terrorism. It also included a cyber security and forensics component. In February 2014 the Netherlands hosted a follow-up exercise: @tomic 2014. This latter exercise was organised by the National Coordinator for Security and Counterterrorism (NCTV) and the Ministry of Foreign Affairs, together with the Netherlands Forensic Institute, the Ministry of Economic Affairs, INTERPOL, the IAEA, the European Commission, UNICRI, the EU CBRN Risk Mitigation Centres of Excellence and Europol.

The Netherlands also supports the following NSS gift baskets: the Canadian initiative on supporting the 1540 committee, the Indonesian legislation implementation kit, the Jordanian Counter Nuclear Smuggling gift basket, the UK initiative on cyber security and the US initiative on radioactive sources.

The Netherlands initiated the Nuclear Forensics gift basket and intends to hand-over the results to the 2014 Summit. (See also paragraph 7).

### 5. CONTRIBUTION TO MINIMISATION OF HEU

The Netherlands has converted all its nuclear reactors, including research reactors, to use LEU fuel. Dutch industry intends to use only LEU targets for the production of medical radioisotopes as soon as technically feasible. Almost all HEU has been removed from the reactor site and disposed of.



## 6. ESTABLISHMENT OF A CENTRE OF EXCELLENCE

The Reactor Institute Delft of Delft University of Technology (one of the IAEA Collaborating Centres) started a Master's programme in nuclear security in October 2012. It was developed with partner institutions in the UK, Germany, Norway, Austria and Greece, and is aligned with and supported by the IAEA. It is open to qualified students from all IAEA member states. There are plans to establish a centre of excellence (CoE) on nuclear security in Delft some two years after the first cohort of students have completed the Master's programme. The Netherlands supports the international CoE network coordinated by the IAEA and will contribute to improving cooperation between centres of excellence in the region.

The Centre for Conflict and Security Law (CCSL), based in Utrecht and Sheffield, is researching the development of an international regulatory system for nuclear and radiological security and corresponding domestic legal frameworks. It has also initiated research collaboration in this area with other members of its EU academic and research network, in accordance with its ambition to become a CoE on this issue.

In the week before the NSS, the Nuclear Knowledge Summit will take place in Amsterdam and The Hague. Scientists, experts and NGO representatives will examine the challenges of nuclear security in the longer term and the scope for regional cooperation.

## 7. ENHANCED EFFORTS IN COMBATING ILLICIT TRAFFICKING IN NUCLEAR AND RADIOLOGICAL MATERIALS

The Netherlands participates in international information sharing on illicit trafficking in nuclear material through contributions to the IAEA ITDB, IAEA NUSEC and GICNT IAG, as well as through bilateral cooperation.

Since 2011, the Dutch government and the Netherlands Forensic Institute (NFI) developed, together with other countries, a comprehensive programme to foster cooperation among nuclear and forensic institutes worldwide. It includes: (1) the development of a glossary of internationally accepted definitions and rules on both nuclear and forensic science; (2) an education and training curriculum; (3) an interactive website providing a platform for discussion and exchanging knowledge; and (4) a survey of best practices to investigate nuclear security events. The National Coordinator for Security and Counterterrorism has organised table-top exercises on nuclear forensics, cyber security and incident response.

## 8. STRENGTHENED COOPERATION BETWEEN GOVERNMENT AND NUCLEAR INDUSTRY

Raising security awareness in the nuclear sector is a priority for the Dutch government. To this end, three leading Dutch nuclear operators have each been awarded a €1 million grant to further develop and improve security measures. Furthermore, the Netherlands, together with the IAEA and the World Institute for Nuclear Security (WINS), organised a meeting of nuclear industry and institution CEOs in November 2010 with the objective of putting nuclear security high on the industry's agenda. The IAEA and the WINS concluded that this concept is useful and merits application in other countries. WINS has consequently organised another seminar in Amsterdam in November 2013 on the effective integration of physical protection and cyber security.

The government involves Plant Security Managers and Information Officers when adjustments of national nuclear security policies take place. They are consulted in order to understand their vision and profit from their experience. Nuclear operators are also consulted in policy evaluations in order to understand implementation practices better. In these consultations the different positions of responsibility of the regulator and operators are respected.