



NUCLEAR SECURITY SUMMIT 2014

NATIONAL PROGRESS REPORT

BELGIUM

(MARCH 2014)

1. SUPPORT FOR CPPNM AND ICSANT

Belgium deposited its instrument of ratification of the 2005 Amendment to the Convention on the Physical Protection of Nuclear Material (CPPNM) on 22 January 2013. Although the 2005 Amendment has not yet entered into force, national legislation, regulations and policies have been developed in accordance with the amended CPPNM.

Belgium cooperates with the International Atomic Energy Agency (IAEA) in organising outreach activities aimed at the entry into force of the CPPNM as amended such as the Regional workshop on 7 and 8 November 2013 on facilitating adherence to and implementation of the 2005 Amendment for French-speaking African States.

Belgium has ratified the International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT) on 2 October 2009.

2. STRENGTHENED NATIONAL NUCLEAR AND RADIOLOGICAL MATERIAL SECURITY SYSTEM

REGULATORY FRAMEWORK

Belgium has recently strengthened and updated its legal and regulatory framework regarding physical protection. The new law and royal decrees have been adopted in compliance with the relevant international conventions, in particular with the CPPNM and its 2005 Amendment. In addition, they reflect the INFCIRC/225 document as revised and other documents from the IAEA Nuclear Security Series.

The restructuring process of the national physical protection regime calls for strengthened and improved response capabilities in case of a nuclear security incident. In this context, Belgium has enacted on 23 May 2013 a law modifying the Penal Code in order to bring it in conformity with the ICSANT and with the Amendment to the CPPNM. This law extends the scope of the sections of the Penal Code, which were only dedicated to the physical protection of nuclear materials, to include the physical protection of other radioactive materials. In addition, the law incorporates into the Penal Code the offences defined in the two conventions. Moreover, through this law, intrusion or attempted intrusion into the security areas of the Belgian nuclear sites becomes a criminal offence.

This enhanced legal and regulatory framework necessitates the restructuring of the physical protection systems of the nuclear facilities. This ongoing restructuring process is monitored by the Federal Agency for Nuclear Control (FANC), which is an independent public agency responsible for issues related to nuclear security, safety, radiation safety and for many aspects related to safeguards. The Government of Belgium has recently invited the Director General of the IAEA to send an IPPAS (International Physical Protection Services) mission to Belgium. This mission, scheduled for November 2014, will be able to assess to what extent the restructuring process which has begun is on the right track. It is in this perspective also that Belgium supports the NSS gift basket "Strengthening Nuclear Security Implementation".



DESIGN BASIS THREAT (DBT)

Belgium's Coordination Unit for Threat Analysis (CUTA) and the FANC have pooled their activities to update the Design Basis Threat for the nuclear sector nationwide. In particular, thanks to a fruitful collaboration with the stakeholders, the specific reference threat for each nuclear operator has been established.

ENHANCE NATIONAL NUCLEAR SECURITY CAPACITY

The FANC develops as far as possible a genuine nuclear security culture.

In this context, the FANC organizes domestic workshops on nuclear security issues, e.g. workshops devoted to the insider threat, the practical implementation of the new royal decrees and the crisis communication, intended to raise awareness for possible incidents.

Belgium extended the scope of the “stress-tests” (set up by the EU after the Fukushima accident) to malicious acts, such as cyber-attacks or other man-made events.

SECURITY OF RADIOACTIVE MATERIALS

Belgium stresses the need to protect all radioactive materials which are not nuclear materials by taking into account their potential danger and their attractiveness for criminals or terrorists. It is in this perspective that Belgium is currently elaborating its legal and regulatory framework.

CYBER SECURITY

Belgium is concerned about the increasing cybercrime, and encourages a better cooperation in the prevention of as well as the response to a cyber-attack. The cyber threat issue is rapidly evolving; therefore initiatives have to be taken. In this perspective and specifically for the nuclear sector, considering that a DBT addressing the cyber threat should be established in the upcoming years, the FANC will invite the other competent authorities to work on it.

Belgium also supports the UK initiative on Nuclear Information Security, which is one of the NSS gift baskets.

Furthermore, the Cyber Security Centre for Belgium, under the authority of the Prime Minister, is due to be established in the course of 2014.

THE “3 S”

Nuclear security is for Belgium an essential element of a responsible nuclear programme. In this context, securing nuclear material in Belgium has been, from the beginning, the purpose of a culture of constant vigilance. Nowadays, as demonstrated by the MYRRHA project, Belgium intends to take the “3S” (Safety, Security, Safeguards) into account starting from the design phase of its new facilities.

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

Belgium actively supports the IAEA's nuclear security action, and Belgian experts have participated in many of these activities. For instance, Belgium actively participates in the process of developing documents in the IAEA's Nuclear Security Series, notably in the Nuclear Security Guidance Committee; Belgian experts have participated in IPPAS missions in other States; Belgium also shares information on the illicit trafficking of nuclear and radiological materials by participating in the IAEA Incident and Trafficking Database.

In addition, since the 2010 Washington NSS, Belgium has contributed 300.000 USD annually to the IAEA Nuclear Security Fund. The same contribution is scheduled for 2014. This will bring the total amount of Belgian voluntary contributions to this Fund since 2010 to 1,5 million US\$.

Among the four IAEA workshops that Belgium hosted in the course of 2013, three were directly related to the nuclear security activities of the Agency. One of these workshops aimed at facilitating adherence to and implementation of the 2005 Amendment to the CPPNM for French-speaking African States. Another one was dedicated to the communication with the public in a nuclear and radiological emergency. The third workshop focused on dismantlement, decontamination, cutting, segmentation and demolition of Iraq Former Nuclear Facilities.



Other international training courses, e.g. on preparedness and response for CBRN, were also organized in Belgium.

4. SUPPORT FOR OTHER NUCLEAR SECURITY-RELATED INTERNATIONAL INITIATIVES

In order to strengthen the verification regime of the Preparatory Commission of the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), the Belgian Nuclear Research Centre (SCK•CEN) is collaborating with the Institute for Radioelements (IRE) and the Royal Meteorological Office, financed in the context of the EU Joint-Action V program, to study possible options to monitor and mitigate radioxenon stemming from isotope production sites.

Belgium is a partner country in the G8 Global Partnership and also participates in the Global Initiative to Combat Nuclear Terrorism.

Considering its participation in the Megaports Initiative and its willingness to contribute to its objectives, Belgium supports the NSS gift basket "Enhancing the Security of the Maritime Supply Chain".

Based on its existing practices and its desire to contribute to education and training in nuclear security matters, Belgium also supports the gift basket "Nuclear Security Training and Support Centres / Centres of Excellence".

5. CONTRIBUTION TO MINIMISATION OF SENSITIVE NUCLEAR MATERIALS

In order to reinforce our commitment to nuclear non-proliferation, Belgium subscribes to the internationally recognized policy to eliminate in time, when economically and technically feasible, the use of highly enriched uranium for civilian purposes.

In 2012, Belgium exchanged diplomatic notes with the United States to convert:

- the research reactor BR2 of the Nuclear Research Centre (SCK•CEN) at Mol to low enriched uranium, as soon as an appropriate high density fuel has been qualified for this purpose;
- the processing facility of the National Institute for Radioelements (IRE) at Fleurus for medical radio-isotopes to low enriched uranium.

In the framework of the first mentioned diplomatic notes, the SCK•CEN is participating in irradiation experiments for the qualification of the high density fuel which has to replace the HEU fuel, not only for its own reactor, but also for foreign reactors in France and the United States. As such, the SCK•CEN takes the lead in a broad international cooperation.

In the framework of the second mentioned diplomatic notes, the IRE has started the necessary research and development activities and technical investment studies to convert its processing facilities to LEU in close cooperation with the appropriate institutions of the United States. This conversion program is currently running on schedule. IRE is intensely communicating with the US administration on the progress of this project, e.g. through detailed quarterly reports. Belgium intends to report on the results of this program at the next Nuclear Security Summit in 2016.

In 2014, Belgium transferred to the United States significant quantities of excess HEU and separated plutonium, for which use was no longer foreseen, in collaboration with the appropriate institutions of the United States.