

# Implementation of the Amendment to the CPPNM in the Slovak Republic

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# Introduction

- The commitment of the Slovak Republic in the area of physical protection results from the accession to the Convention on the Physical Protection of Nuclear Material, which was signed by the Government of Czechoslovak Socialist Republic on February 8, 1987.
- The governmental resolution of the Slovak Republic No. 394/2007 approved the Amendment to the Convention on the Physical Protection of Nuclear Material.
- The ratification document was deposited with the Depositary on 7 March 2013.
- Amendment to the Convention entered into force on 8 May 2016.

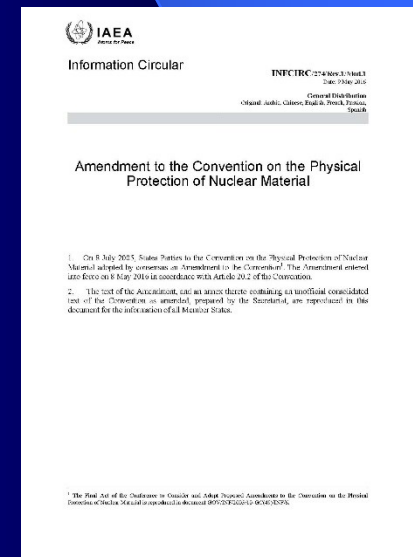
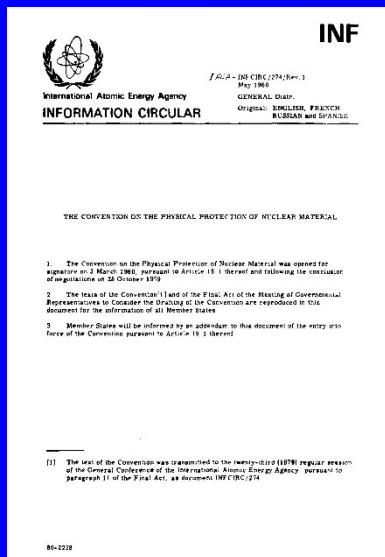
# Physical Protection Legislative Framework

- The legislative framework in Slovakia is represented by the Act No. 541/2004 Coll. on the peaceful use of nuclear energy (the Atomic Act) and on alterations and amendments to some other acts.
- Main requirements to physical protection are described in § 26 of the Atomic Act.
- Regulation No. 51/2006 Coll. on details concerning requirements upon provision for physical protection lays down details of requirements on the provision of physical protection, including classification of nuclear facilities or nuclear materials in categories of physical protection provision.
- Regulation No. 57/2006 Coll. on details concerning the requirements on transport of radioactive materials in article 6 describes detailed requirements on physical protection of radioactive materials during transport.

# Implementation of the Amendment

- The representatives of Nuclear Regulatory Authority of the Slovak Republic (UJD) actively participated in Amendment to CPPNM preparatory meetings and in the Conference in July 2005.
- Therefore, some of the requirements of the Amendment had been implemented to the Slovak legislative framework even before it entered into the force.

The experience has shown that the implementation of requirements and fundamental principles has three main steps. First step rests in transposition of these requirements into legislative documents. This step is more-less accomplished.



# Legislative implementation

- Some changes and additions to articles 1, 1A, 2, 2A, 5, 6, 7, 11A, 11B, 13A, 14 and 16 have been included into the Atomic Act and respective Regulations. Those changes which could not be implemented in the Atomic Act and respective Regulations were carefully analysed and step by step put into practice. The UJD in cooperation with license holders gradually implemented the Amendment requirements into relevant physical protection documents, mainly into physical protection plans.
- In 2016 UJD amended the Regulation No. 57/2006, namely the requirements to physical protection. UJD also prepared the revision of the Atomic Act and (all) Regulations, this revision will complete the implementation of the Amendment into national legislative framework. In the following text, the implementation of fundamental principles is described.

# Legislative Implementation

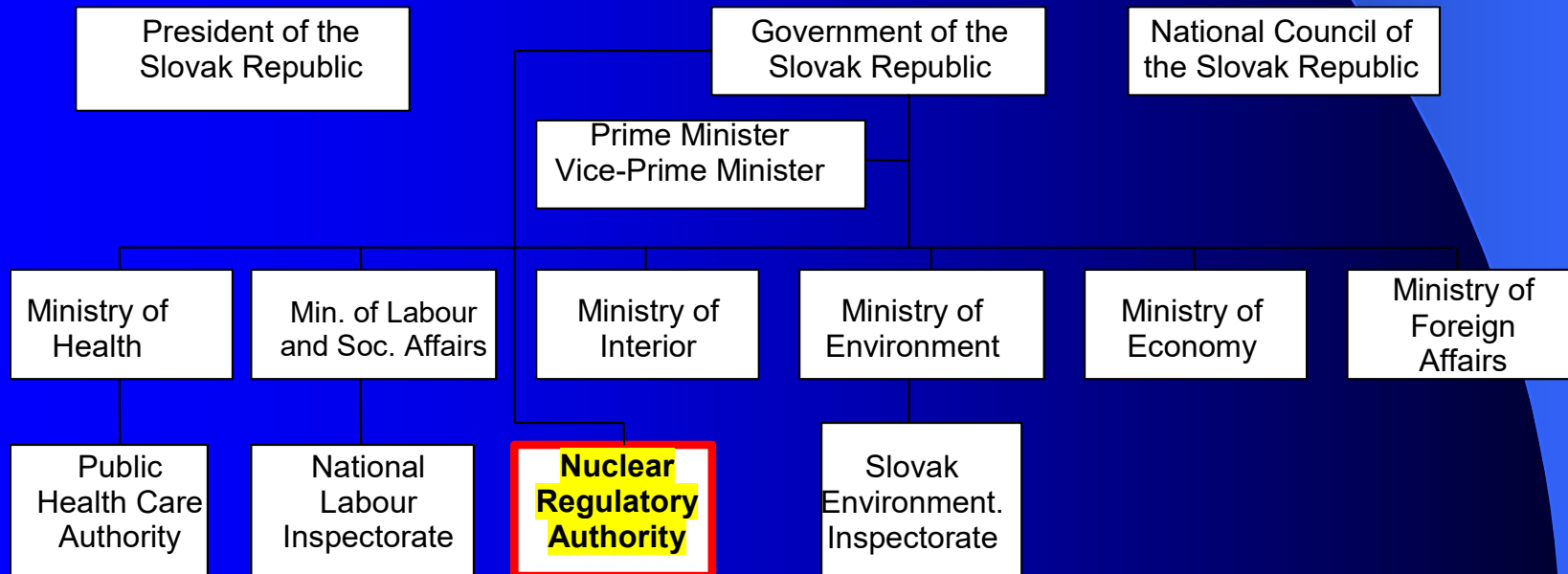
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- **FUNDAMENTAL PRINCIPLE A: Responsibility of the State**
  - The state is responsible for the threat assessment and design basis threat (DBT) specification. The state transferred the responsibility for physical protection to license holder in the Atomic Act up to the level described in DBT. The responsibility for above DBT threats rests with the state.
- **FUNDAMENTAL PRINCIPLE B: Responsibilities During International Transport**
  - For this principle the same conditions apply as in the preceding principle.
- **FUNDAMENTAL PRINCIPLE C: Legislative and Regulatory Framework**
  - Legislative framework is represented by the Atomic Act, respective Regulations and DBT.

# Legislative Implementation

(continued)

- **FUNDAMENTAL PRINCIPLE D: Competent Authority**
  - The UJD is a fully independent state regulatory body with clearly defined responsibilities and its own budget.



# Legislative Implementation

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- **FUNDAMENTAL PRINCIPLE E: Responsibility of the License Holders**
  - Responsibility of license holders is fully described in the legislative framework, UJD decisions and DBT.
- **FUNDAMENTAL PRINCIPLE F: Security Culture**
  - Security culture has already been included in the Atomic Act as a part of nuclear safety culture. UJD included the nuclear security culture into the revision of the Atomic Act.
- **FUNDAMENTAL PRINCIPLE G: Threat**
  - According to the Slovak Government Decision No. 229/2009 UJD established an interdepartmental working group, which annually evaluates the threat to nuclear materials and nuclear facilities. According to the threat the working group determines the DBT.



# Legislative Implementation

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- **FUNDAMENTAL PRINCIPLE H: Graded Approach**
  - Physical protection requirements are based on a graded approach, the Atomic Act and Regulations take into account the evaluation of the DBT, the attractiveness, the nature of the material and potential consequences associated with the unauthorized removal of nuclear material and with the sabotage against nuclear material or nuclear facilities.
- **FUNDAMENTAL PRINCIPLE I: Defence in Depth**
  - The requirements for physical protection reflect a concept of several layers – guarded, protected and inner/vital areas, and procedures of physical protection to prevent a theft and sabotage.

# Legislative Implementation

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- **FUNDAMENTAL PRINCIPLE J: Quality Assurance**
  - All procedures, activities and measures have to follow, in compliance with the legislative framework, the quality assurance programs. The license holder is obliged to establish and maintain a complex quality assurance system.
- **FUNDAMENTAL PRINCIPLE K: Contingency Plans**
  - The license holder is obliged, according to the respective legislative framework, to prepare appropriate contingency/emergency plans and regularly perform exercises with law enforcement authorities.

# Legislative Implementation

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- **FUNDAMENTAL PRINCIPLE L: Confidentiality**
  - The requirements for protection of confidential information are described in Atomic Act. According to this act the UJD publishes the list of confidential information, disclosure of which shall compromise the physical protection. Additionally, to this list UJD in Atomic Act defined sensitive information, which is also to be protected from an unauthorized publication.
- Most of the requirements described in the Amendment to CPPNM have been already in some way implemented. After the revision of the Atomic Act and respective regulations all items will be fully reflected in the legislation.

# Putting the requirements into practice

- Second step, the acceptance of the changes resulting from the changing legislative framework by the license holder, is the most important and demanding one.
- This step requires the change of thinking of all personnel and employees, not only the security staff, but also as all stakeholders. Consequently,
- UJD organized more than 10 national training courses/workshops on physical protection/nuclear security issues, in order to raise the awareness on the importance of implementation of all requirements and fundamental principles.
- The UJD also initiated several discussions with the license holders, in order to explain new requirements to them.

# Putting the requirements into practice

## (continued)

- Important role is also played by the interdepartmental working group mentioned above and its outputs, the threat assessment document and DBT. This platform is a very helpful tool, which supports the implementation of the requirements on physical protection/nuclear security.
- In April 2017 the UJD organized national workshop on Nuclear Security Culture Self-assessment. The Slovak Electric, joint stock company has prepared the nuclear security culture self-assessment project, which started in October this year. First results will be available in the beginning of next year.
- The UJD and the license holders are still in the process of improving of understanding the nuclear security as a complex issue with a strong influence on and contribution to safe operation of nuclear installations.

# Requirements maintaining and strengthening

- Third step requires the actions for strengthening and control of completion of said requirements. The UJD performs regularly inspections focused on fulfilment of these requirements and on the implementation process of them.
- Besides inspections and enforcement, the UJD also counts with the results of nuclear security culture self-assessment project that started recently.
- According to our experience, the process of implementation of the CPPNM Amendment is a long distance running. It is important to pay continued close attention to this process, bearing in mind all the obstacles and complications that accompany this process.

# Conclusion

- The process of implementation of the Amendment to CPPNM started in Slovakia more than ten years ago. During this period the UJD gained a lot of positive and also negative experiences. We have seen that the physical protection/nuclear security issues stand a little in the shadow of nuclear safety.
- By patient explaining we have achieved that the licensees and stakeholder's awareness on the importance of a strong and balanced physical protection/nuclear security system is seen as important as the nuclear safety.
- And there are new challenges for the physical protection and nuclear security to implement. Technical progress has brought new threats to nuclear installations security. Mainly cyber threat and unmanned aerial vehicles, commonly known as drones represent the latest challenges to physical protection systems.

**ANY QUESTIONS**

**DO YOU HAVE?**