



Verifying Regulatory Effectiveness Through Inspection

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The Czech Republic



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Regulatory effectiveness - binding document

- Article 2A of CPPNM
- FUNDAMENTAL PRINCIPLE C Legislative and Regulatory Framework
- „The State is responsible for establishing and maintaining a legislative and regulatory framework to govern physical protection. This framework should provide for the establishment of applicable physical protection requirements and include a system of evaluation and licencing or other procedures to grant authorisation. This framework should include a **system of inspection of nuclear facilities and transport to verify compliance with applicable requirements and conditions of the licence** or other authorizing document, and to establish a means to enforce applicable requirements and conditions, including effective sanctions“.



Regulatory effectiveness - Czech approach

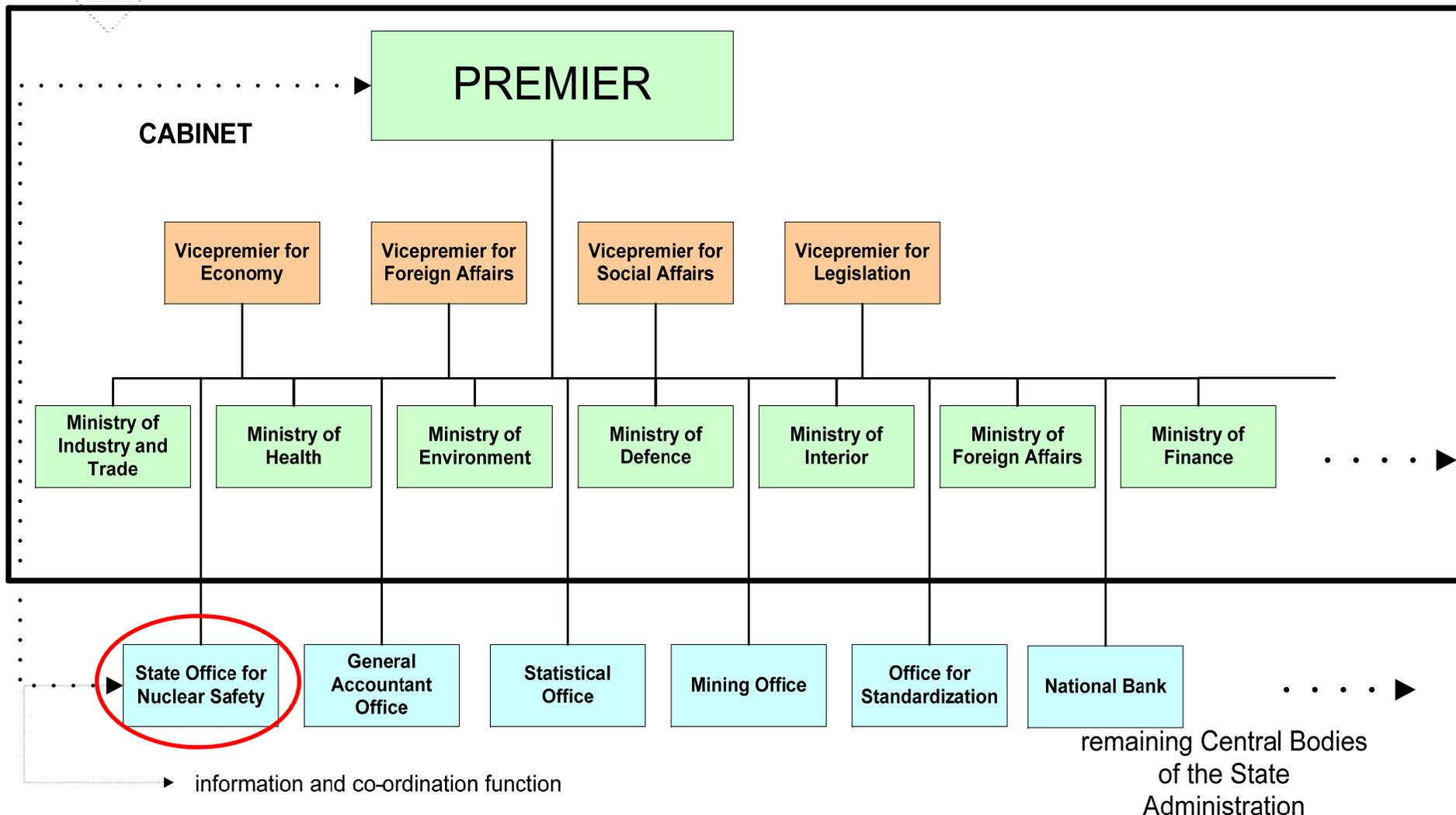
- **State Office for Nuclear Safety (SONS)** – Competent Authority
- To carry out State supervision of nuclear safety, safeguards, **physical protection**, radiation protection, emergency preparedness and to inspect the adherence to the fulfillment of the obligations arising out of the Atomic Act and other legislation.
- The assessment and inspection is an important part of the SONS activity. The SONS assesses physical protection from perspective administrative and technical procedures to issue licences for physical protection activities. The verification is carried out in the form of inspections performed by SONS inspectors. The legislative framework governing the performance of inspections is formed mainly by the Atomic Act, the Inspection Code and the Administrative Code.



Competent Authority - SONS



Position of the SONS within the state administration





CZECH REPUBLIC

Country Profile

- The **Czech Republic** is a medium size European country, with population about ten million people and in size about 80,000 square kilometers, capital city of Prague



- Consisting of the three historic regions of **Bohemia, Silesia and Moravia**, it is bordered by Poland to the northeast, Slovakia to the southeast, Austria to the south, and Germany to the west and northwest



COUNTRY PROFILE

NPP Dukovany





COUNTRY PROFILE

NPP Temelín

- ◆ VVER 1000 – 320, PWR
- ◆ 4 loops, 1 turbine
- ◆ full-pressure containment
- ◆ 3000 MWt each unit
- ◆ 1080 MWe each unit



COUNTRY PROFILE

Remaining nuclear installations

- **Other important nuclear installations in the Czech Republic are:**
 - ◆ Two experimental reactors located at the Nuclear Research Institute in Řež (in vicinity of Prague);
 - ◆ One training reactor operated by Faculty of Nuclear Science and Physical Engineering in Prague;
 - ◆ Low and intermediate institutional radioactive waste repository located in abandoned mine “Richard”;
 - ◆ High level waste storage located at the Nuclear Research Institute in Řež.



System of inspections

- The verifications are carried out in the form of inspections performed by SONS inspectors.
- The legislative framework governing the performance of inspections is formed mainly by the Atomic Act, the Inspection Code and the Administrative Code.
- Those Acts regulate the process of inspections, lay down rights and obligations of inspectors and inspected parties during the performance of inspection activities.
- Atomic Act defines the subject matter of the inspections, stipulates that the inspection activities are carried out by SONS inspectors and defines requirements which need to be fulfilled by a person in order to become an inspector.



System of inspections

Inspection activities performed by the SONS:

- **routine inspections** and planned specialized inspections (those are inspections anticipated in an internal SONS document called the “Plan of the inspection activities”, which is prepared for a calendar year),
 - NF I. category - 2x per year
 - NF II., III. category – 1x per year
 - NF under construction -1x per year
 - Categorized NM out of NF -1x per year
- **ad-hoc inspections**, inspections responding to a particular situation



System of inspections

In the case of the planned specialized inspections, a regular annual plan is developed based on:

- evaluated results of the inspections performed during a previous period;
- plan of the nuclear installation operation;
- evaluation and conclusions of routine inspections;
- conclusions of SONS assessment effort;
- independent analyses, findings from safety/security analyses.



Evaluation of inspection

- In case of deficiencies identified during the inspection activities the SONS is entitled to require the inspected person to remedy the situation,
- The SONS response to identified deficiencies is supposed to correspond to the seriousness of a situation,
- All findings of non-compliances have to be precisely described in the inspection report,
- Inspectors may solve minor deficiencies within the course of the inspections themselves,
- More significant findings need to be corrected by the inspected person within specified period of time and the inspected person is obliged to notify the measures undertaken to the SONS,
- SONS may restrict or suspend performance of the licensed activities in case of violation of obligations stipulated in the Atomic Act or in case of breach of conditions laid down in the license.

Example of inspection





Summary

SONS has available all the necessary means (legal and regulatory framework) to regulate and be effective enough, the nuclear security by :

- Establishment of Criteria
- Review and Assessment
- Inspection
- Authorisation
- Enforcement