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**IMPLEMENTATION OF THE  
ADDITIONAL PROTOCOL  
IN UKRAINE**

# Milestones of Safeguards in Ukraine

- ◆ 24.11.1991 - Declaration of Parliament of Ukraine "About Non-Nuclear Status of Ukraine";
- ◆ January, 1995 - Safeguards Agreement with IAEA entered into force;
- ◆ January 1998 - Safeguards Agreement with IAEA under INFCIRC/153 entered into force;
- ◆ September, 2000 – Ukraine has signed of Additional Protocol;
- ◆ January, 2006 – AP entered into force;
- ◆ 2011 – getting safeguards broaden conclusion?

**Law of Ukraine on  
Nuclear Energy  
Utilization and Radiation  
Safety**

**Law of Ukraine on  
Ratification of the  
Addition Protocol**

**Law of Ukraine  
on Ratification of the  
Safeguards Agreement**

**SSAC requirements**

**NM  
measurement  
requirements**

**Regulations  
on  
NMA&C**

**NMA&C  
provisions  
plan**

**Procedures for  
safeguards  
implementation**

**Subsidiary  
Arrangements**

**Facility  
Attachments**

**Recommendations  
on small quantities  
NMA&C**

**Recommendations  
on physical  
inventory taking**

**Instruction on  
unified system of  
record keeping**

**Safeguards  
Regulations**

# **Law of Ukraine “On nuclear energy utilization and radiation safety”**

Art 67. State system of safeguards includes complex of technical and organization measures and cover all nuclear material used in peaceful purpose inside of Ukraine, under Ukrainian jurisdiction and control and including:

- ◆ **State System of Accounting and Control of Nuclear Material;**
- ◆ **State System of Export/Import Control**

# **Connection between the Additional Protocol and the Safeguards Agreement**

## **Art. 1**

**The provisions of the SA shall apply to AP to extent that they are relevant to and compatible with the provisions of the AP.**

**In cause of conflict between the provisions of the SA and the AP, the provisions of the AP shall apply.**

# AP – NEW SAFEGUARDS REGIME

## INFCIRC/153 (1972)

- Detailed reports on nuclear material and facilities
- Inspection of nuclear material and Design Information verification
- Quantity evaluation of inspection results

◆ **Conclusion:**  
assurance the  
absence of diversion  
of nuclear material

## INFCIRC/540 (1997)

- ☹ Declaration on nuclear material and activities related to nuclear program
- ☹ Complementary access
- ☹ Quality evaluation of inspection results

◆ **Conclusion:** assurance  
the absence of  
undeclared nuclear  
material and nuclear  
activities

# **AP – NEW SAFEGUARDS REGIME**

## **Implementation of AP means:**

- ◆ increasing of information which is providing by the State;
- ◆ broad access of inspectors.

## **Agency must take into account the need to:**

- ◆ avoid hampering the economic and technological development of Ukraine or international co-operation;
- ◆ respect health, safety, physical protection and other security provision in force and the rights of individuals;
- ◆ take every precaution to protect commercial, technological and individuals secret as well other confidential information, coming to its knowledge .

# PROVIDING INFORMATION. Articles 2,3

- ◆ Art. 2.a - Ukraine shall provide the Agency with a declaration containing according to fixed in article 3 time;
- ◆ Art. 2.b – Ukraine shall make every reasonable effort to provide the Agency with the needed information;
- ◆ Art. 2.c – Upon request by the Agency, Ukraine shall provide amplifications or clarifications of any information it has provided under this Article, in so far as relevant for the purpose of safeguards.



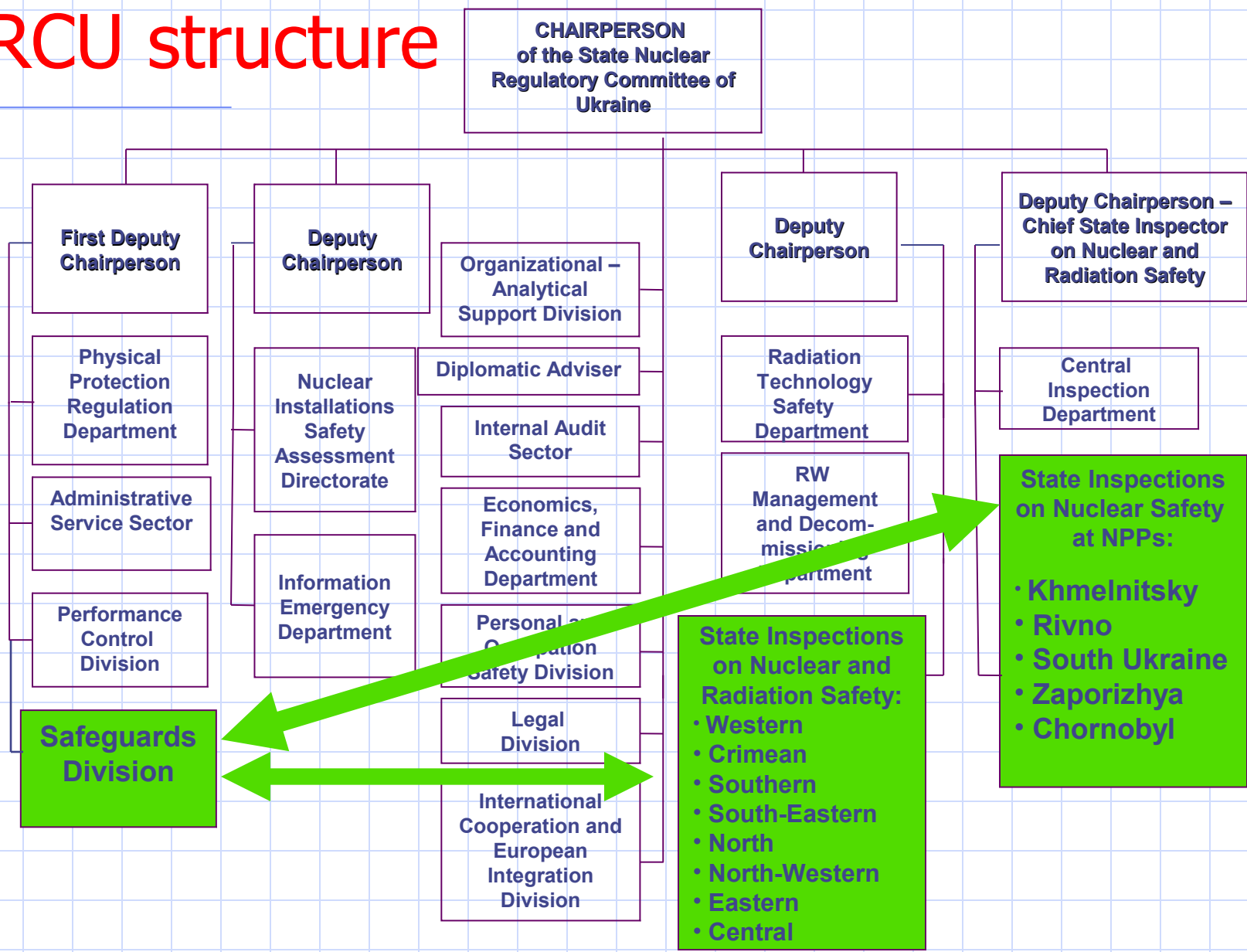
# List of Activities referred to in art. 2a(IV)

- (i) The manufacture of centrifuge rotor tubes or the assembly of gas centrifuges.
- (ii) The manufacture of diffusion barriers.
- (iii) The manufacture or assembly of laser-based systems.
- (iv) The manufacture or assembly of electromagnetic isotope separators.
- (v) The manufacture or assembly of columns or extraction equipment.
- (vi) The manufacture of aerodynamic separation nozzles or vortex tubes.
- (vii) The manufacture or assembly of uranium plasma generation systems.
- (viii) The manufacture of zirconium tubes.
- (ix) The manufacture or upgrading of heavy water or deuterium.
- (x) The manufacture of nuclear grade graphite.
- (xi) The manufacture of flasks for irradiated fuel.
- (xii) The manufacture of reactor control rods.
- (xiii) The manufacture of criticality safe tanks and vessels.
- (xiv) The manufacture of irradiated fuel element chopping machines.
- (xv) The construction of hot cells.

State Nuclear Regulatory Inspectorate is the competent authority of SSAC, which is responsible for AP implementation



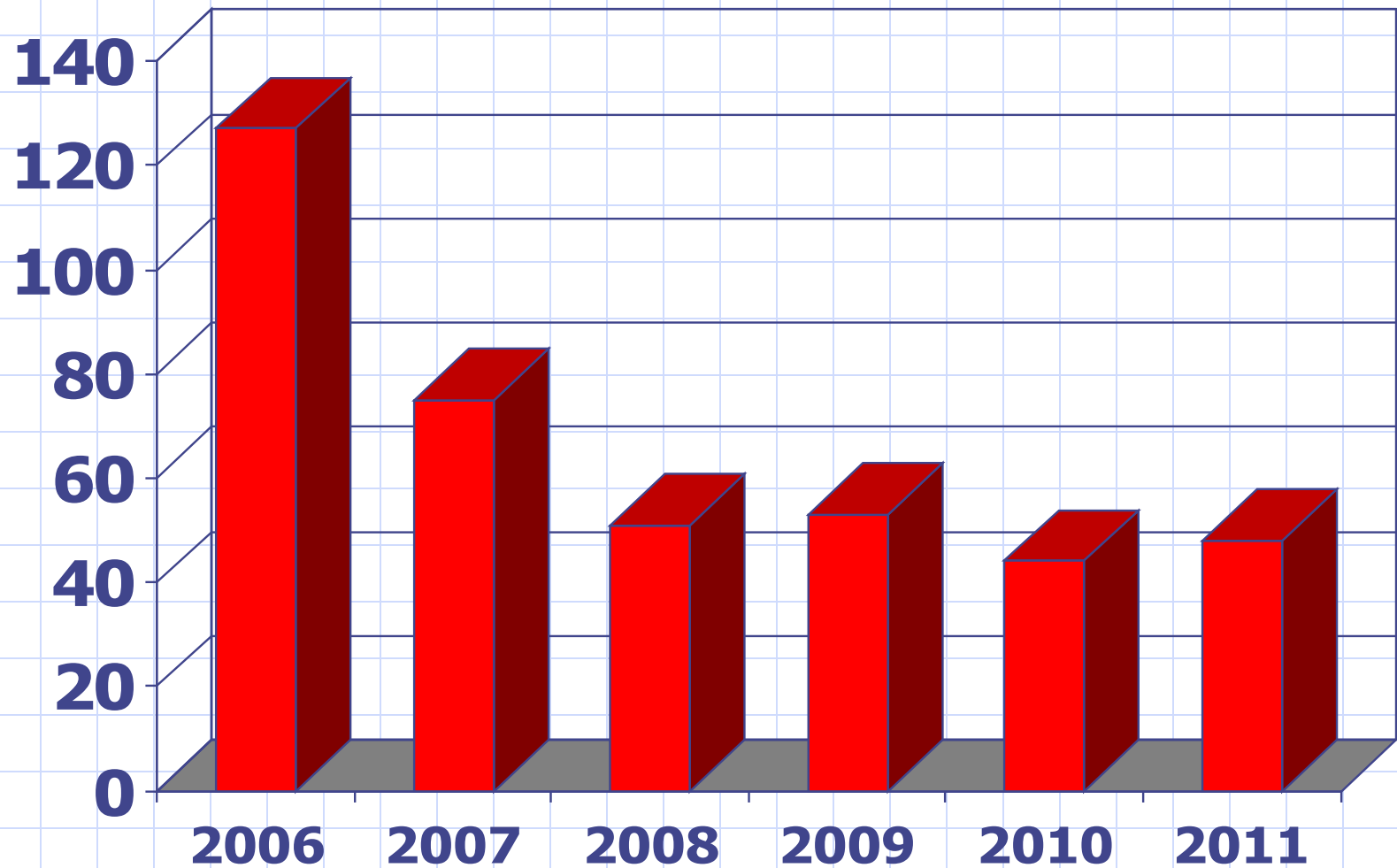
# SNRCU structure



# Road map for getting the safeguards broad conclusion

- ◆ Implementation of remote monitoring in NPP;
- ◆ Information about past activity on U conversion;
- ◆ Declaration on RW storage in the Chernobyl exclusion zone;
- ◆ Information about nuclear fuel cycle–related research and development activities;
- ◆ Status of past nuclear weapon infrastructure.

# Number of submitted Declarations



# Number of Complementary Accesses, carried out by IAEA:

