FEDERAL ENVIRONMENTAL, INDUSTRIAL AND NUCLEAR SUPERVISION SERVICE OF RUSSIA (ROSTECHNADZOR)

State Regulation of Nuclear and Radiation Safety in the Russian Federation

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Deputy Chairman of Rostechnadzor

35 CSS meeting

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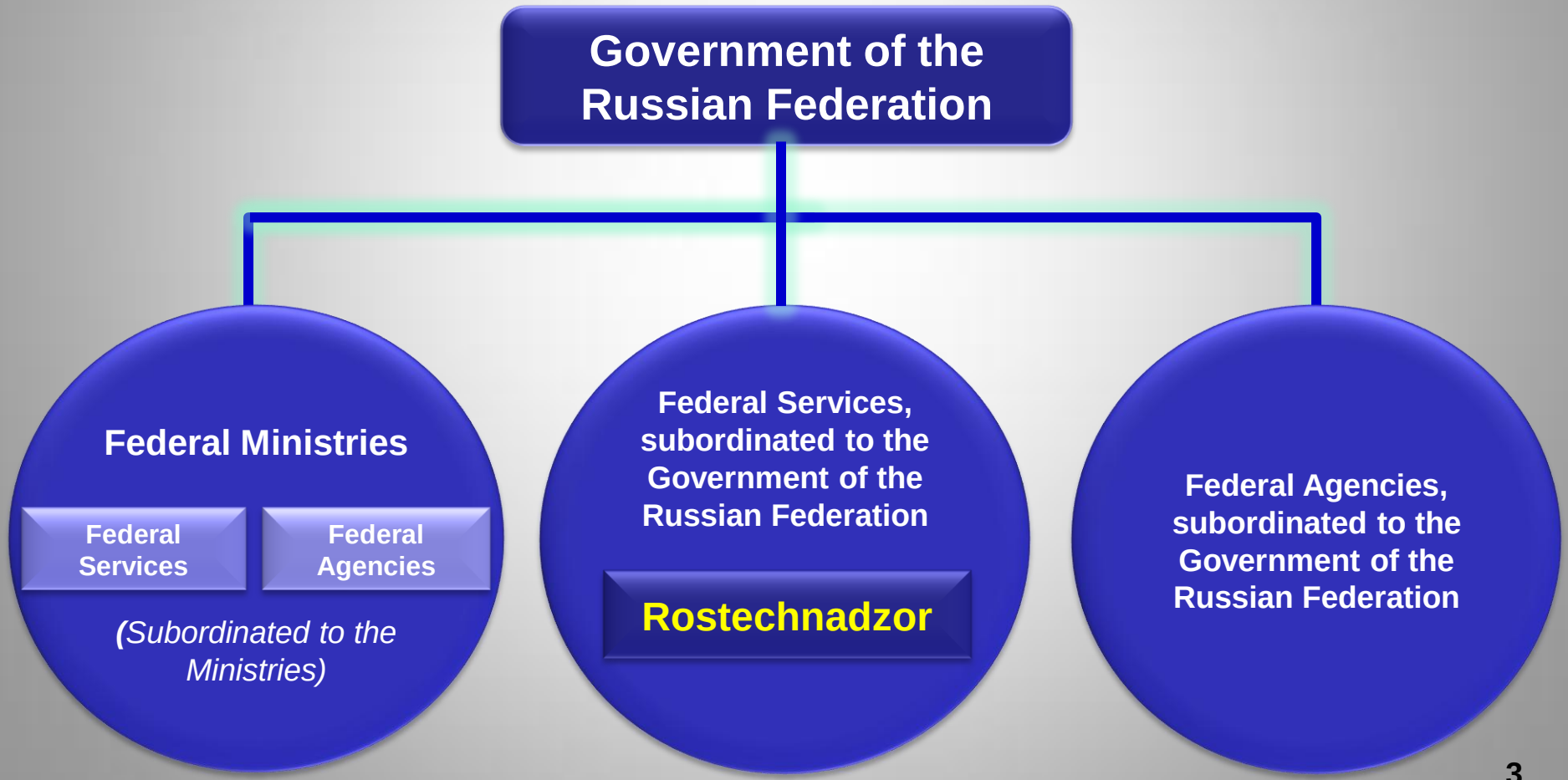
Main objectives of nuclear and radiation safety regulation

- Establishment and maintenance of conditions of comprehensive protection of the society and state from inadmissible radiation impact

- Prevention of uncontrolled proliferation and use of nuclear material and radioactive substance

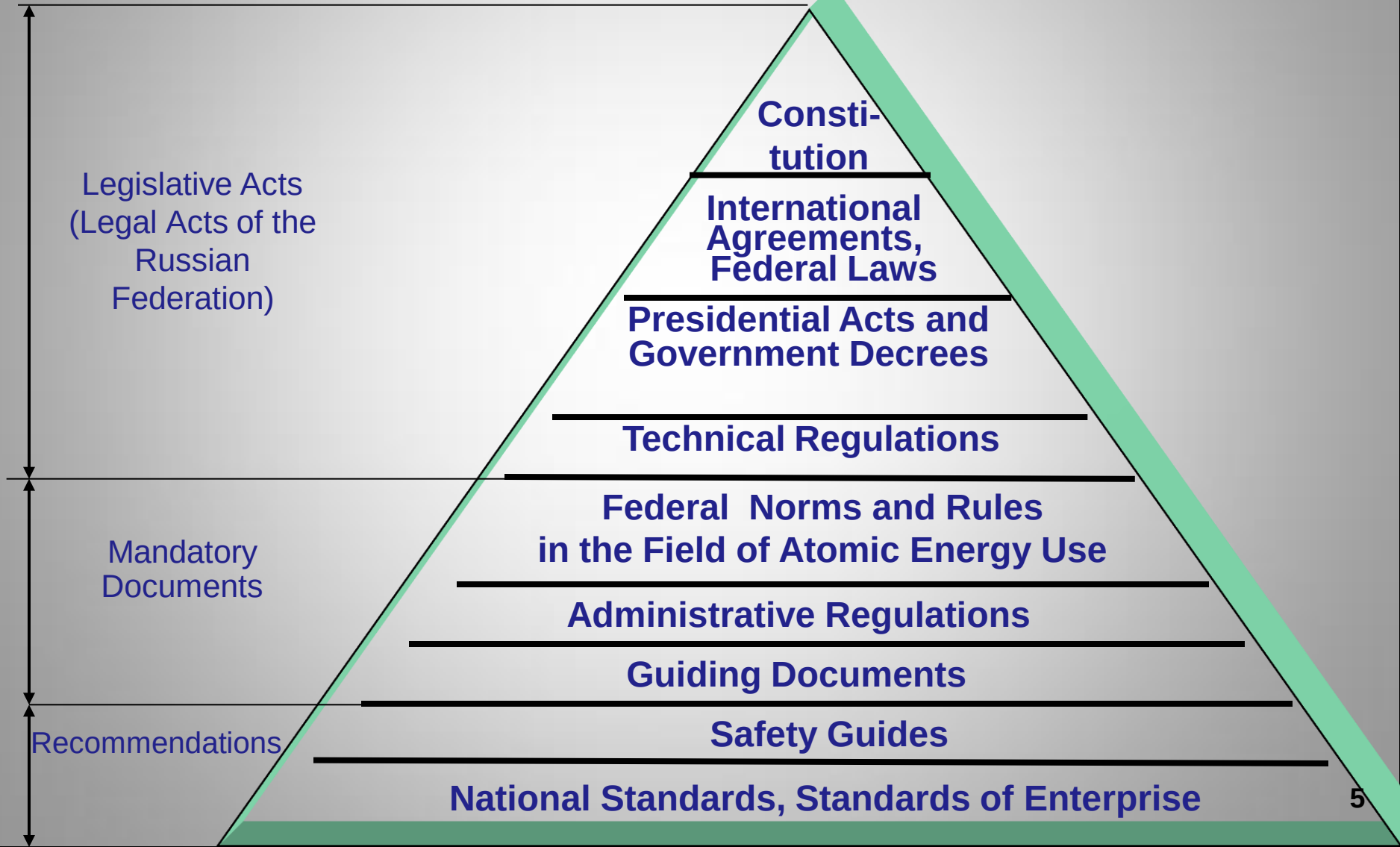
Structure of the executive authorities in the Russian Federation



Main Nuclear Safety Regulatory Functions

1. Development and enactment of safety regulations in the use of atomic energy
2. Licensing of activities in atomic energy use, including organization of safety reviews
3. Supervision of nuclear and radiation safety of nuclear installations, including supervision of nuclear materials accounting, control and physical protection

Structure of the Legislative and Regulatory Documents



Federal Law "On atomic energy use"

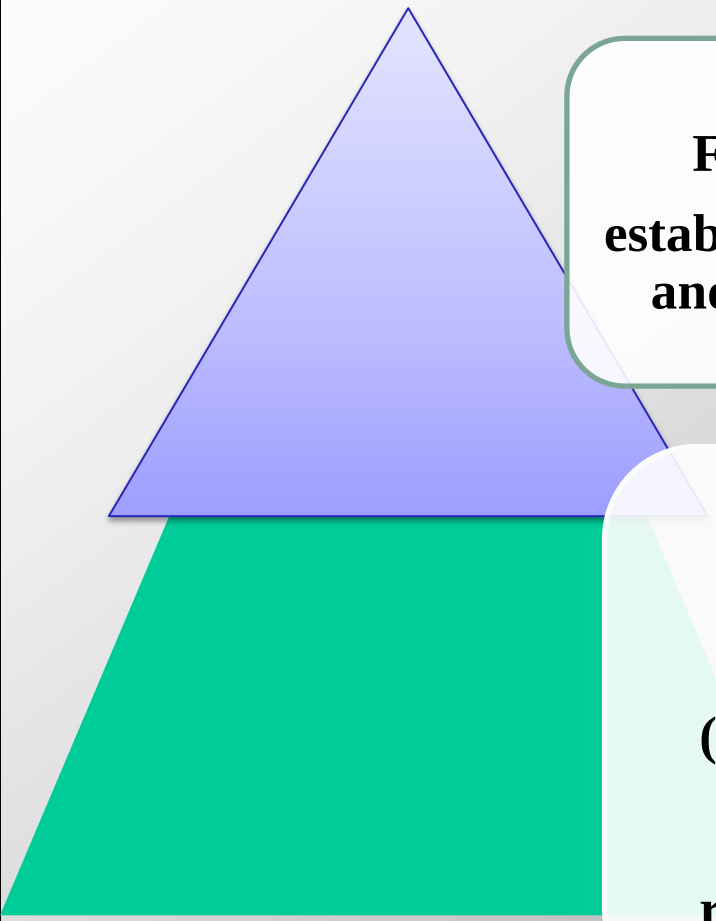
1. • Establishes legal and regulatory framework in the field of atomic energy use
2. • Highlights its priority over other Federal Laws, which cover atomic energy use
3. • Defines independence of regulatory body and its authorities
4. • Defines fulfillment of international obligations by the Russian Federation
5. • Broadens the scope of Federal Norms and Rules in the field of atomic energy use. Adds new type of documents – Safety Guides in the field of atomic energy use
6. • Other aspects of nuclear and radiation safety regulation

Federal Law "On Atomic Energy Use"

Federal Norms and Rules in the field of atomic energy use (Federal Norms and Rules)

- Are obligatory for all the legal entities and individuals on the territory of the Russian Federation
- Are approved and implemented by the state safety regulatory bodies within their competence
- The procedure for development and approval of Federal Norms and Rules is established by the Russian Government

System of Federal Norms and Rules



1st level:

Federal Norms and Rules

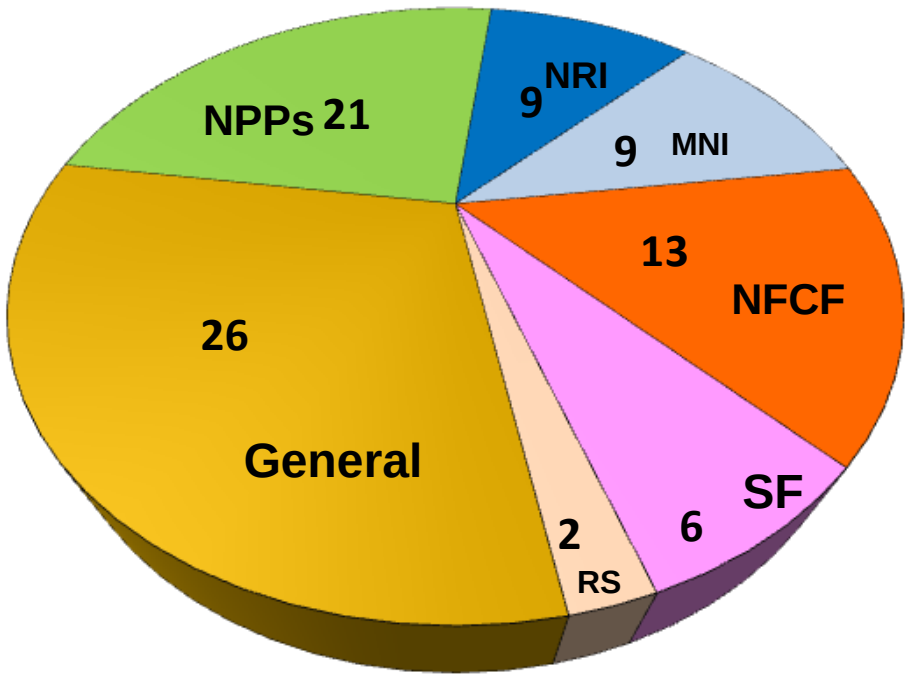
establishing objectives, principles and general requirements for safety (analog to SF-1)

2nd level:

Federal Norms and Rules

establishing requirements for siting, design (construction), operation and decommissioning of nuclear facilities, its systems, elements as well as physical protection, accounting and control of radioactive materials, management of radioactive waste (analog to Safety Requirements)

Federal Norms and Rules



- General Regulatory Documents (26)
- Nuclear Power Plants (21)
- Nuclear Research Installations (9)
- Marine Nuclear Installations (9)
- NFCF (13)
- Storage facilities (6)
- Radiation sources (2)

Total: 86

**43 Federal Norms and Rules are at different stages of development, applicable to different facilities and activities:
14 new documents and 29 documents under revision**

Compliance of Federal Norms and Rules legal and regulatory framework with IAEA Safety Standards

1

- 2009 IRRS Mission and 2013 Follow-up Mission concluded compliance of Federal Norms and Rules requirements with IAEA Safety Standards

2

- However, the new IAEA Safety standards shall be considered during the revision of current legal and regulatory framework.

Consideration of IAEA Safety Standards during the revision of Federal Norms and Rules

Safety Issues in NP	Original name of the document	IAEA Safety Standards
Safety of Nuclear Power Plants	*** General Provisions for safety of NPP (revision of NP-001-97)	**SSR-2/1** on Design of NPP **SSR-2/2** on Commissioning and Operation of NPP
Emergency preparedness and response	*** Provisions for procedure of emergency notification, sharing of information, response to provide assistance to NPP in case of radioactive accident (revision of NP-005-98)	**GS-R-2** Preparedness and Response for a Nuclear or Radiological Emergency **GSG-2** Criteria for Use in Preparedness and Response for a Nuclear or Radiological Emergency **GSR-3** Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards
Transport of radioactive material	*** Safety provisions for transportation of radioactive material (revision of NP-053-04)	**SSR-6** Regulations for the Safe Transport of Radioactive Material.
Safety of radioactive sources	*** Provisions for physical protection of radioactive substance, radioactive sources and storage facilities (revision of NP-034-01)	**RS-G-1.9** Categorization of Radioactive sources **NSS 11** Security of Radioactive Sources

Compliance of Federal Norms and Rules with IAEA Safety Standards

Safety aspects	Original name of the document	IAEA Safety Standards
Safety of Nuclear Power Plants	**NP-001-97** General Provisions for safety of NPP	**NSR-1** Design of NPP **NSR - 2** Operation of NPP (superseded)
Waste management	**NP-019-2000** Gathering, processing, conditioning of liquid radioactive waste **NP-020 –2000** Gathering, processing, conditioning of solid radioactive waste **NP-021 – 2000** Gaseous radioactive waste management **NP-055-04** Disposal of radioactive waste: principles, criteria, general requirements	**GSR-5** Predisposal Management of Radioactive waste **SSR-5** Disposal or Radioactive Waste
Decommissioning of Facilities	**NP-012-99** Provisions for decommissioning of NPPs	**WS-R-5** Decommissioning of Facilities Using Radioactive Material

Compliance of Federal Norms and Rules with IAEA Safety Standards

Safety aspects	Original name of the document	IAEA Safety Standards
Safe Transportation of Radioactive Material	**RB-039-07** Safety assurance for the transport of radioactive material (Advisory material for the NP-053-04 – "Safety provisions for the transport of radioactive material")	**TS-G-1.1** Advisory Material for the IAEA Regulations for the Safe Transport of Radioactive Material
Account and control of Nuclear material	**NP-030-12** General provisions for account and control of nuclear material **NP-083-07** Requirements for security systems of nuclear material, nuclear installations and storage facilities	**INFCIRC/153** On the Non-proliferation of nuclear weapons **INFCIRC/225** Nuclear security recommendations on physical protection of nuclear material and nuclear facilities.
Safety of radioactive sources	**NP-038-02** General provisions for safety of radioactive source	**GSR-3** Radiation protection and safety of Radiation sources - Interim Edition(BSS)

Safety Guides in the field of atomic energy use

Safety Guides are intended to facilitate the implementation of Federal Norms and Rules requirements

These documents contain recommendations how to comply with requirements set up by the Federal Norms and Rules for all nuclear facilities, including safety assessment and review.

84 Safety Guides were approved

20 Safety Guides are at different stages of drafting

IAEA Integrated Regulatory Review Service (IRRS) Missions to the Russian Federation

IRRS Mission
November, 2009

- 25 Recommendations
- 34 Suggestions
- 5 Good Practices

Action Plan of Rostechnadzor
March, 2011

- **46 activities**
- **29 R&D in SEC NRS**

IRRS Follow-up Mission
November, 2013

+ 2 Additional Modules

SCOPE

- **Responsibilities and Functions of the Government**
- **Global Nuclear Safety Regime**
- **Responsibilities and Functions of the Regulator**
- **Management System of the Regulatory Body**
- **Authorization**
- **Review & Assessment**
- **Inspection**
- **Enforcement**
- **Development of Regulations & Guides**

- **Tailored Module to Address the Regulatory Implications of the Fukushima Accident**
- **Module "EPR"**

IRRS Follow-up Mission

- **Implementation status of recommendations and suggestions resulted from IRRS Mission**
- **New observations**

	Recommendations	Suggestions	Good Practices
IRRS Mission-2009 results	25	34	5
Closed	10	15	
Closed on the basis of progress made	8	7	
Remain Open in 2013	7	12	
IRRS Follow-up Mission-2013 results	5	8	5

Action Plan of Rostechnadzor – 2014

Good Practices identified during IRRS Follow-up Mission

Effective contribution of the Russian Federation to the development of measures and programs that may strengthen the global safety regime in the wake of the Fukushima-Daiichi accident

Benchmarking of nuclear power plant assessment and inspection with foreign regulatory bodies

Systematic emergency exercise evaluation methodology

Detailed regulations on the contents of licensee emergency plans

Rostechnadzor proactive approach to revise the national regulations for transport of radioactive material with due consideration of the simultaneous revision of the relevant IAEA Safety Standards

Thank you for attention!