



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

# Improving Actions to Prevent Major Industrial Accidents

**ALEXEY ALESHIN**

Chairman

Federal Environmental, Industrial and Nuclear Supervision Service



# Structure of Executive Bodies in the Russian Federation

**President of the Russian  
Federation**

**Government of the  
Russian Federation**

**Federal Environmental, Industrial and Nuclear  
Supervision Service  
(ROSTECHNADZOR)**



Gosgortekhnadzor  
of Russia

Rostekhnadzor

Department of  
Energy Supervision,  
Ministry of Energy

Gosatomnadzor  
of Russia



## Organizational Chart of Rostechnadzor

**Chairperson**

**Deputy Chairs (7)**

**15 HQ Departments  
660 persons**

### **Territorial Departments**

6 Interregional Territorial Departments for  
Supervision of Nuclear and Radiation  
Safety (942 persons)

23 Territorial Departments for  
Industrial and Environmental  
Supervision (6930 persons)

**5 Technical Support Organizations**



# **Rostekhnadzor's basic mission in industrial safety regulation is**

improving the level of protection of vital interests of the individual, society and state against accidents in hazardous production facilities and their consequences.



## **Rostekhnadzor's functions within the state regulatory system of industrial safety**

Legal regulation

Licensing and authorizing activities

Control and supervisory activities



## System of legal regulation in the field of industrial safety



**Federal Law of 21.07.1997 № 116-FZ  
“On Industrial Safety of Hazardous Production Facilities”**

**Legal basis of  
industrial safety  
assurance**



**Other federal laws:  
"On Subsoil", "On State Regulation in the Field of Extraction and Use of Coal, on  
Specifics of Social Protection of Coal Industry Workers' Organizations", "On Gas  
Supply in the Russian Federation", the Urban Development Code of the Russian  
Federation, "On Licensing of Individual Types of Activities", "On Compulsory Civil  
Liability Insurance of the Owner of a Hazardous Facility for Injury in an accident in  
the Hazardous Facility” etc**

**Sectoral issues;  
design, construction;  
licensing;  
supervision;  
insurance;  
responsibilities**



**Decrees of the President of the Russian Federation, ordinances and  
orders of the Government of the Russian Federation**

**Rules, provisions,  
authority issues,  
procedural issues**



**Rostekhnadzor acts:  
federal codes and rules,  
safety guides**

**Technical and  
organizational  
requirements for  
specific types of  
facilities and activities  
(rules, instructions);  
recommendations on  
implementation of such  
requirements**



## Results of Rostekhnadzor's rule-making activities in the area of industrial safety regulation



**Federal Laws**

**32 federal laws adopted**



**Acts of the Government of  
the Russian Federation**

**48 acts of the Government  
of the Russian Federation  
adopted**



**Federal Codes and Rules**

**140 federal codes and  
rules approved**



**Safety Guides**

**122 safety guides  
approved**

**TOTAL: 342**





## Areas of Rostekhnadzor's Regulatory Activities

### Supervision of industrial safety

- Oil and gas industry;
- Chemical and petrochemical industry;
- Explosive facilities of storage and processing of plant raw material;
- Lifting constructions;
- Boiler facilities.

### Mining supervision

- Mining industry;
- Metallurgical industry;
- Coal Mining Industry.

### State energy supervision

- Thermal power plants, heat-generating plants and networks;
- Hydropower plants and hydraulic engineering structures;
- Electrical networks;
- Consumer power plants and energy efficiency and saving.

### Federal supervision in the field of nuclear energy (civil facilities)

- Nuclear power plants and research nuclear facilities;
- Industrial nuclear reactors;
- Facilities for spent nuclear fuel and radioactive waste;
- Nuclear power plants of vessels (exception the navy);
- Radiation hazardous facilities;
- Manufacturers of equipment for nuclear facilities.

### State construction supervision

- Extremely hazardous, technically complex and unique facilities;
- Facilities of capital construction;
- Activities of self-regulatory organizations in area of construction.

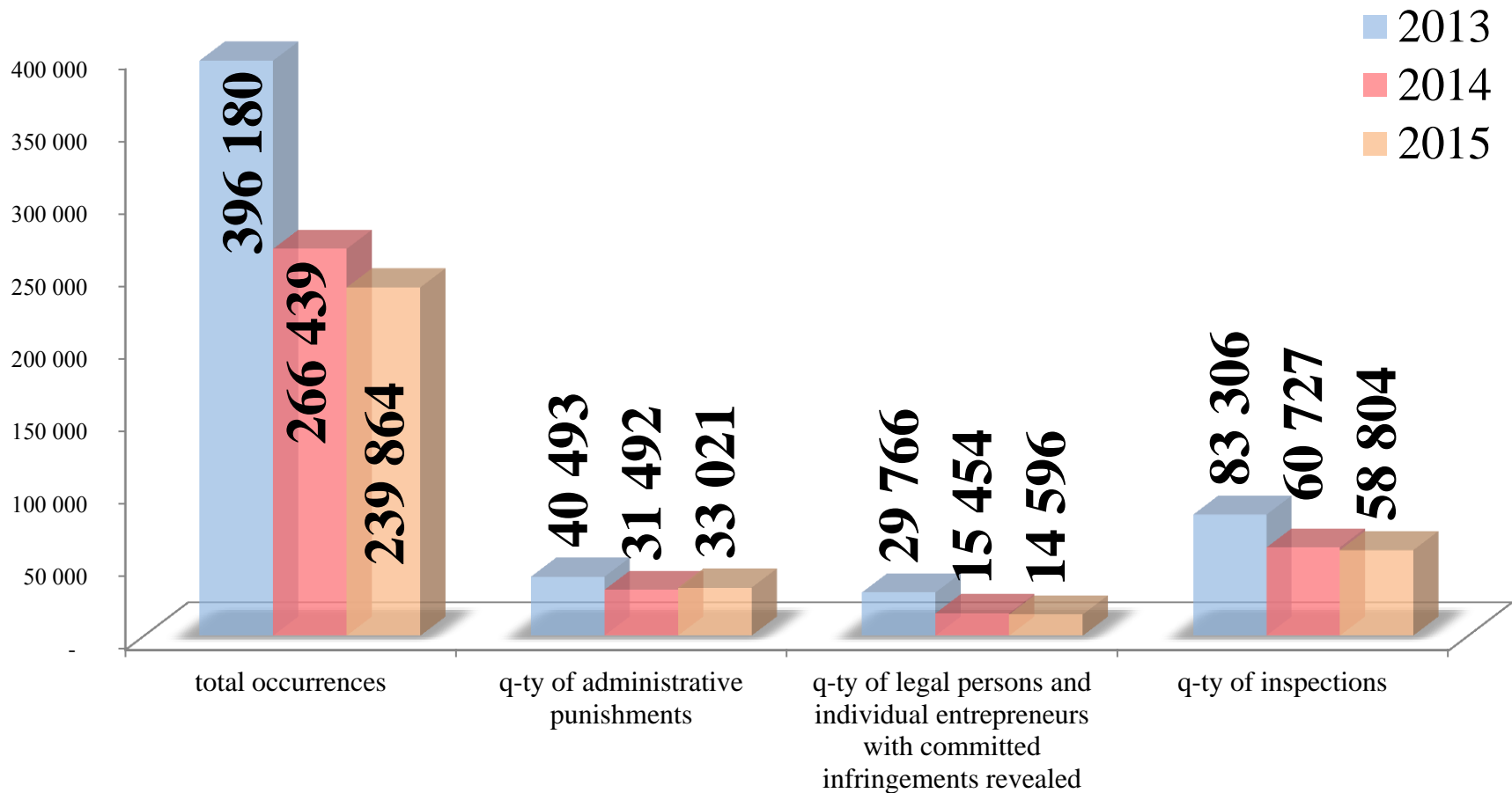


## HAZARD CLASSES OF HAZARDOUS PRODUCTION FACILITIES

	Description	Frequency of inspections	Q-ty of registered HPFs
<b>Hazard Class I</b>	Extremely hazardous facilities	Permanent state supervision regime, scheduled inspection once during a year	2015
<b>Hazard Class II</b>	Highly hazardous facilities	Scheduled inspection once during a year	7639
<b>Hazard Class III</b>	Medium hazardous facilities	Scheduled inspection once every 3 years	89841
<b>Hazard Class IV</b>	Low hazardous facilities	No scheduled inspections	71008



## RESULTS OF ROSTECHNADZOR'S INDUSTRIAL SAFETY REGULATORY SUPERVISION IN 2013 TO 2015





## **Risk-informed Supervision**

### **Static Model**

**Control and supervisory activities are carried out in accordance with the hazard classes of hazardous production facilities**

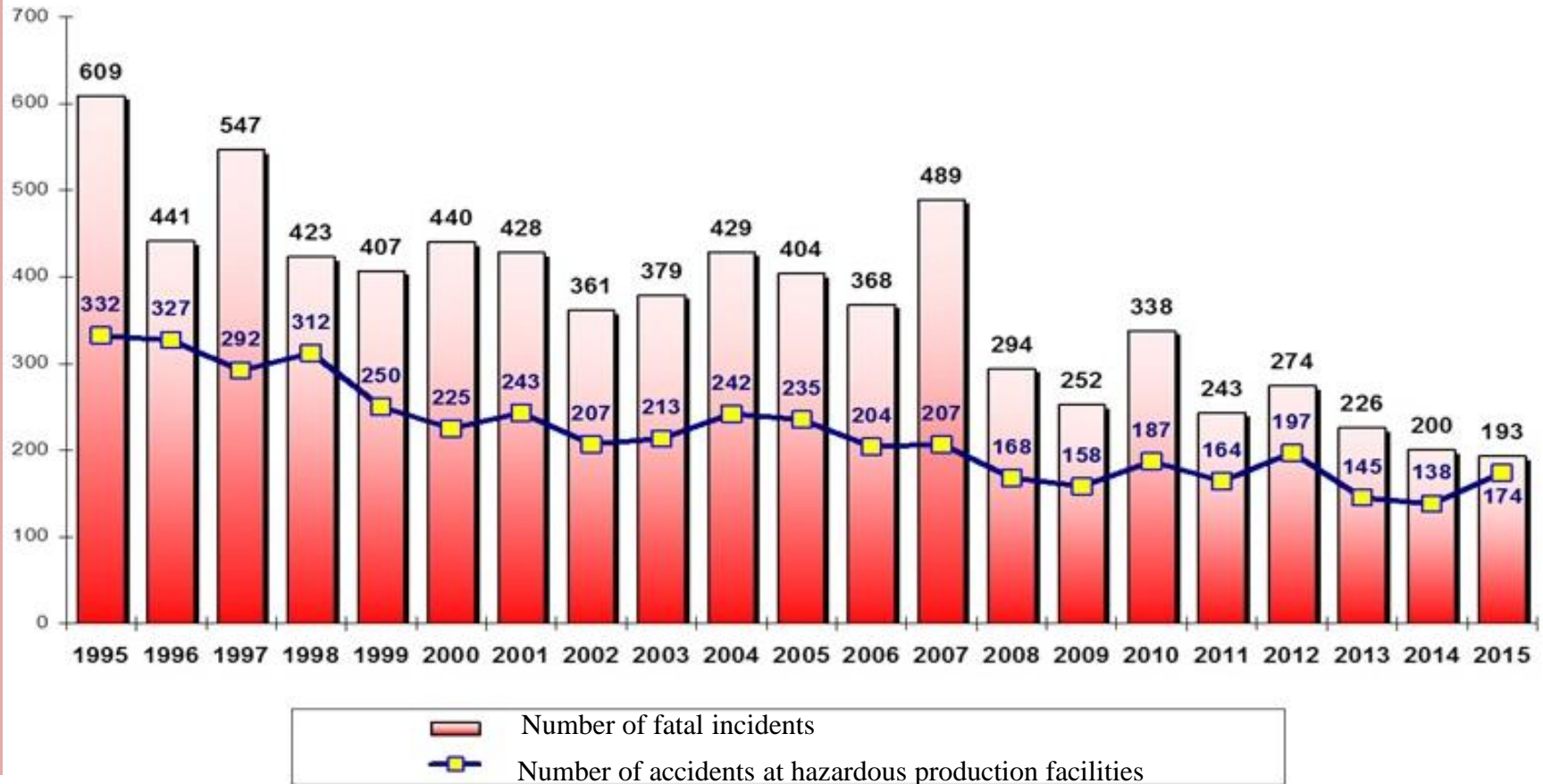
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### **Dynamic Model**

**In addition to static model, supervisory and control activities are carried out with due account taken of accident and incident statistics, violations of safety requirements, technical state of a facility, including remote monitoring data**



## EVOLUTION OF ACCIDENT RATE AND FATALITIES IN HAZARDOUS PRODUCTION FACILITIES IN 1995 TO 2015





# International Cooperation

## Multilateral cooperation within international organizations and associations:



- International Atomic Energy Agency (IAEA)
- BRICS (Brazil, Russia, India, China, South Africa)
- Organisation for Economic Co-operation and Development (OECD)
- International Organization for Transportation by Rope (O.I.T.A.F.)
- United Nations Economic Commission for Europe (UNECE)
- Organization for Co-operation between Railways (OSJD)
- Arctic Council
- United Nations Industrial Development Organization (UNIDO)
- Interstate Council for Industrial Safety of the CIS
- Commission for Coordination of Cooperation between Governmental Bodies of Energy Supervision of CIS Members States

## Bilateral cooperation with industrial safety authorities

China, Poland, Tajikistan, Belarus, Norway, Kyrgyzstan, Armenia



## Bilateral cooperation with nuclear regulatory authorities





## **Priority tasks to improve industrial safety regulatory system:**

- Development of risk-informed supervision tools
- Introduction of remote forms of control, and development of supervisory authorities' consulting function
- Formation of public control institutions
- Ensuring continuous revision of safety requirements to keep up with latest technology
- Development of draft Basics of State Policy in the field of industrial safety in the Russian Federation for the period of up to 2025 and beyond
- Improvement of certification procedures for HPF managers and staff
- Improvement of quality of industrial safety review and competence of persons performing industrial safety review
- Development of international cooperation



# THANK YOU FOR YOUR ATTENTION



[www.en.gosnadzor.ru](http://www.en.gosnadzor.ru)  
*(English version of Rostekhnadzor official website)*