



**РОСЭНЕРГОАТОМ**

ЭЛЕКТРОЭНЕРГЕТИЧЕСКИЙ ДИВИЗИОН РОСАТОМА

# INTERNATIONAL SCIENTIFIC AND TECHNICAL COOPERATION (ISTC): EFFICIENT WAY TO GET NEW KNOWLEDGE AND EXPERIENCE

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[www.rosenergoatom.ru](http://www.rosenergoatom.ru)

# «Enjoy your steam!»

## Russian nuclear power is 60 years

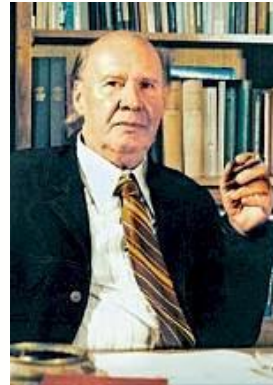
27 June 1954 – power startup of the world's first plant (5 MW AM-1 type uranium-graphite reactor)



I.V. Kurchatov



N.A. Dollezhal,  
Chief Designer



D.I. Blohintsev,  
Scientific Leader, FEI  
Institute Director



Obninsk NPP



# An accident **ANYWHERE** is an accident **EVERYWHERE**

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Global nuclear safety mode is an institutional, legal and engineer **system to provide safe operation of the world's nuclear installations.**

**One of the fundamental principles of the global nuclear safety mode is international cooperation that:**

- requires establishing and keeping close relations with nuclear partners in other countries and related international organizations
- is based upon information and experience exchanges

# Global safety mode includes the following elements:

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- **International conventions:** establish common obligations and security and safety mechanisms
  - Convention on Early Notification of a Nuclear Accident – 1986
  - Convention on Assistance in Case of a Nuclear Accident or Radiological Emergency – 1987
  - Convention on the Physical Protection of Nuclear Material – 1987 as amended in 2005
  - **Convention on Nuclear Safety (CNS) – 1994 – Basic Convention for the operator's activity**
  - Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management – 2001
  - Vienna Convention on Civil Liability for Nuclear Damage 1997
  - Convention on Supplementary Compensation for Nuclear Damage 1998 (not ratified)
  - Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, 1997) (not ratified)
- **Multilateral and bilateral cooperation:** improve safety due to applied consistent approaches, and higher quality and efficiency of safety reviews and inspections.



## REA ISTC Targets

- Strengthen reputation, form a favourable external environment for operating and developing in the global business community;
- Use world's best practice in technological, engineer and administrative areas, and human factor practices, due to exchange of operating experience, knowledge and technologies, including those for implementation of the business projects overseas;
- Improve safety culture;
- Apply R&D safety-related results, review and analyze them, and learn lessons to avoid duplication of activities and to reduce costs;
- Use international managerial historically-positive solutions;
- Fulfill the international obligations of the Russian Federation as applied to the operator.



# REA Involvement in Activities of International Organizations



**IAEA**

Intergovernmental organization  
Participant level - RF



**WANO**

International organization  
Participant level – operator



**OECD NEA**

Intergovernmental organization  
Participant level – RF



# Bilateral Cooperation

## Operators



NAEK «Energoatom»



Electricite de France



Iberdrola



## Cooperation with Nordic Countries

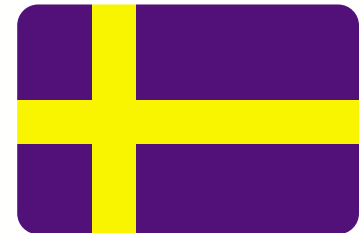
Technical assistance to Kola and Leningrad plants



**Counterpart: Radiation  
and Nuclear Safety  
Center of Finland  
(STUK)**



**Counterpart: Radiation  
Protection Authority /  
Institute for Energy  
Technology (IFA/NRPA)**



**Counterpart: Swedish  
Radiation Safety  
Authority (SSM)**

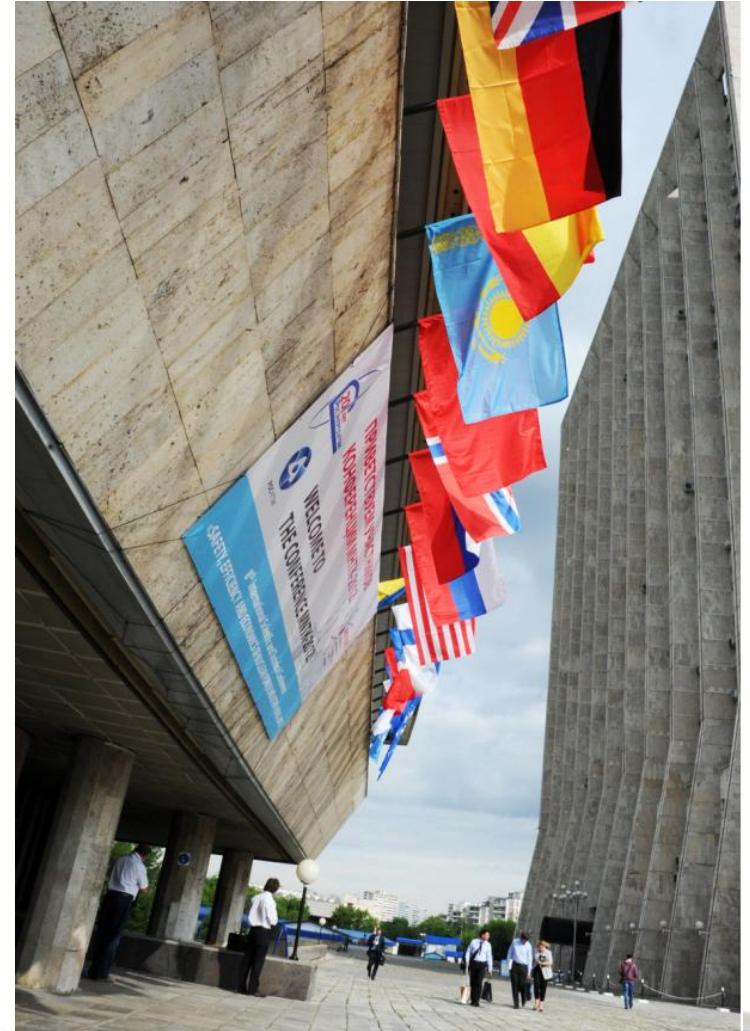




# Results of MNTK-2012 Session 4

## Conclusions made by MNTK participants

1. Existing international cooperation formats, institutes and instruments are not to be principally changed and newly established – instead, they are to be used in a different way and more efficiently.
2. Main international organizations are being under reformation with regard to Fukushima lessons (WANO Action Plan approved by BGM, IAEA Nuclear Safety Action Plan).
3. Essence of the international cooperation is to establish, ensure, develop and maintain the global safety mode.
4. A new phase of the nuclear power development is real cooperation.



# Session 4 «International cooperation to ensure plant operation safety»

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The following presentations on the work results will be given within MNTK-2014 Session 4:

- EdF – French energy company
- EdF Materials Ageing Institute (MAI)
- WANO MC
- IAEA
- OECD NEA

The following topics will be discussed:

- Post-Fukushima lessons
- Nuclear liability
- Safety culture
- Services provided at foreign VVER-type plants

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# Thank you for attention!

