



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

# **Lessons Learnt from Fukushima Accident – Actions Implemented, in Progress, and Planned**

**V. Bezzubtsev, Deputy Chairman**

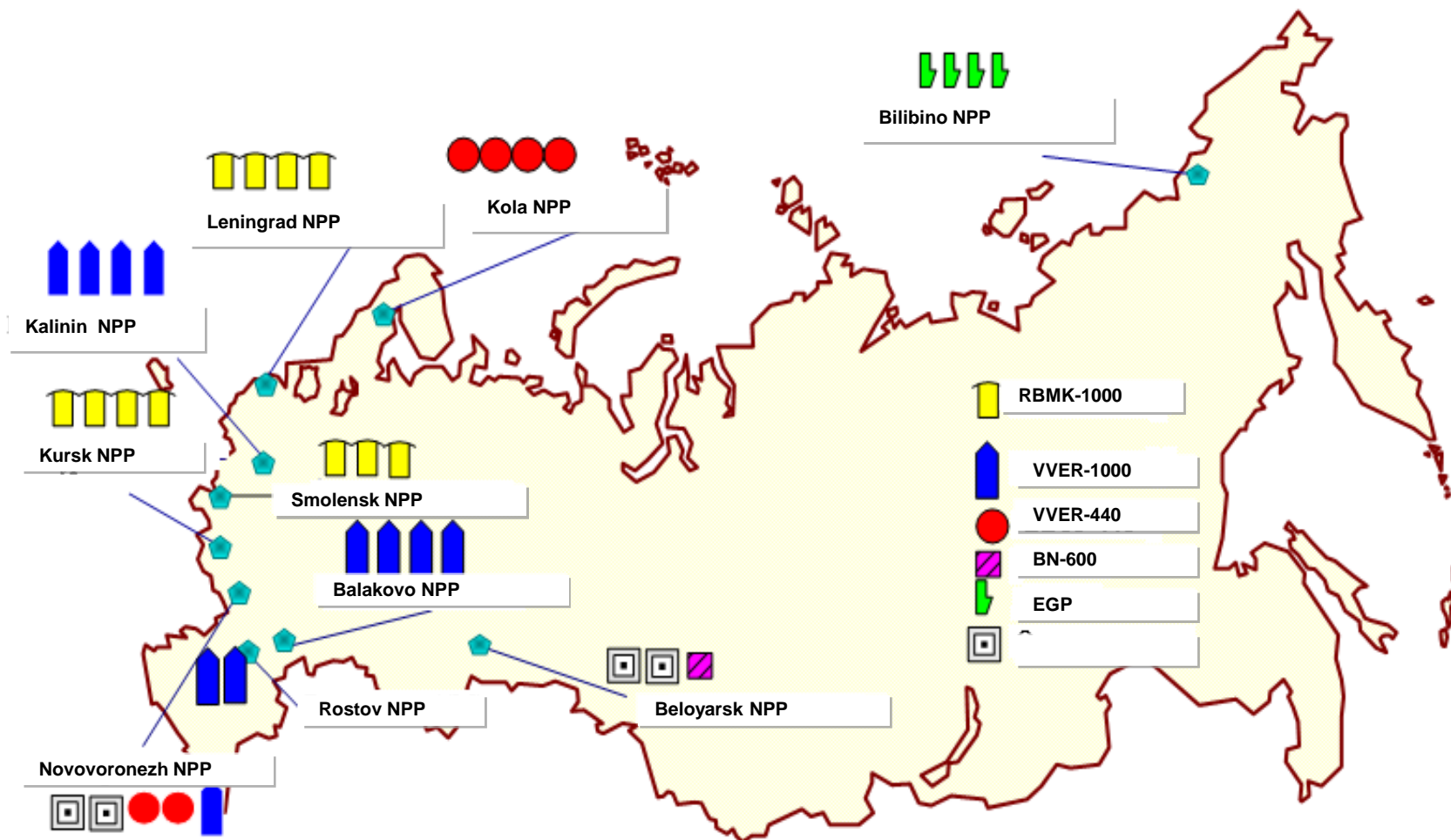
**Fukushima Conference on Nuclear Safety**

**Japan, Koriyama, December 15-17, 2012**



## Russian Operating NPPs

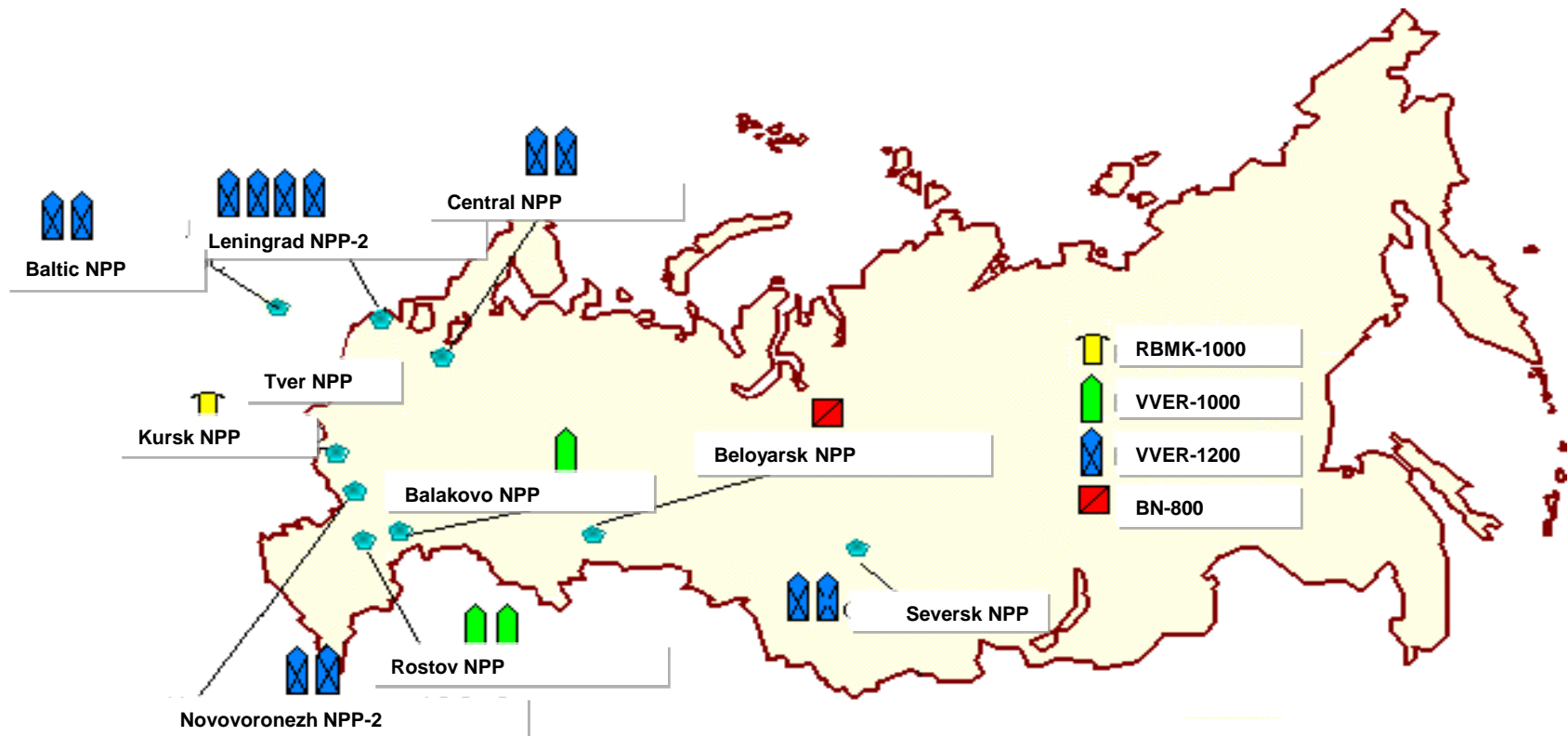
10 NPPs, 33 units,  $N_{\text{inst.}} \approx 25 \text{ GWt}$





## NPP Units with Siting or Construction Licenses

11 NPPs, 21 units,  $N_{inst} \approx 21.6$  GW





## **Actions Taken in Russia after Fukushima-Daiichi Accident**

- Prompt actions
- Actions taken during the first year
- Long-term actions



## **Prompt Actions**

- March 12, 2011 - emergency operations center established
- late March – early April, 2011 – inspections of all Russian NPPs, emergency exercises by scenarios comprising blackout and loss of heat sink
- June 2011 – operator completed proximate analysis of degree of protection of Russian NPPs from external effects; regulator developed requirements to stress tests of operating Russian NPPs
- June 2011 – Russian Federation submitted its proposals for amending Convention on Nuclear Safety and Convention on Early Notification of a Nuclear Accident to IAEA



## Actions Taken during First Year

- August 2011 – stress tests of operating Russian NPPs completed
- November 2011 Reports on stress tests reviewed
- **Principal conclusion: operating Russian NPPs meet established Russian safety requirements.**
- Program of safety improvement of operating NPPs developed (immediate, medium- and long-term measures)
- Russian regulatory framework in field of atomic energy use reviewed
- July 2011, November 2011 – Federal Law “On the Use of Atomic Energy” revised

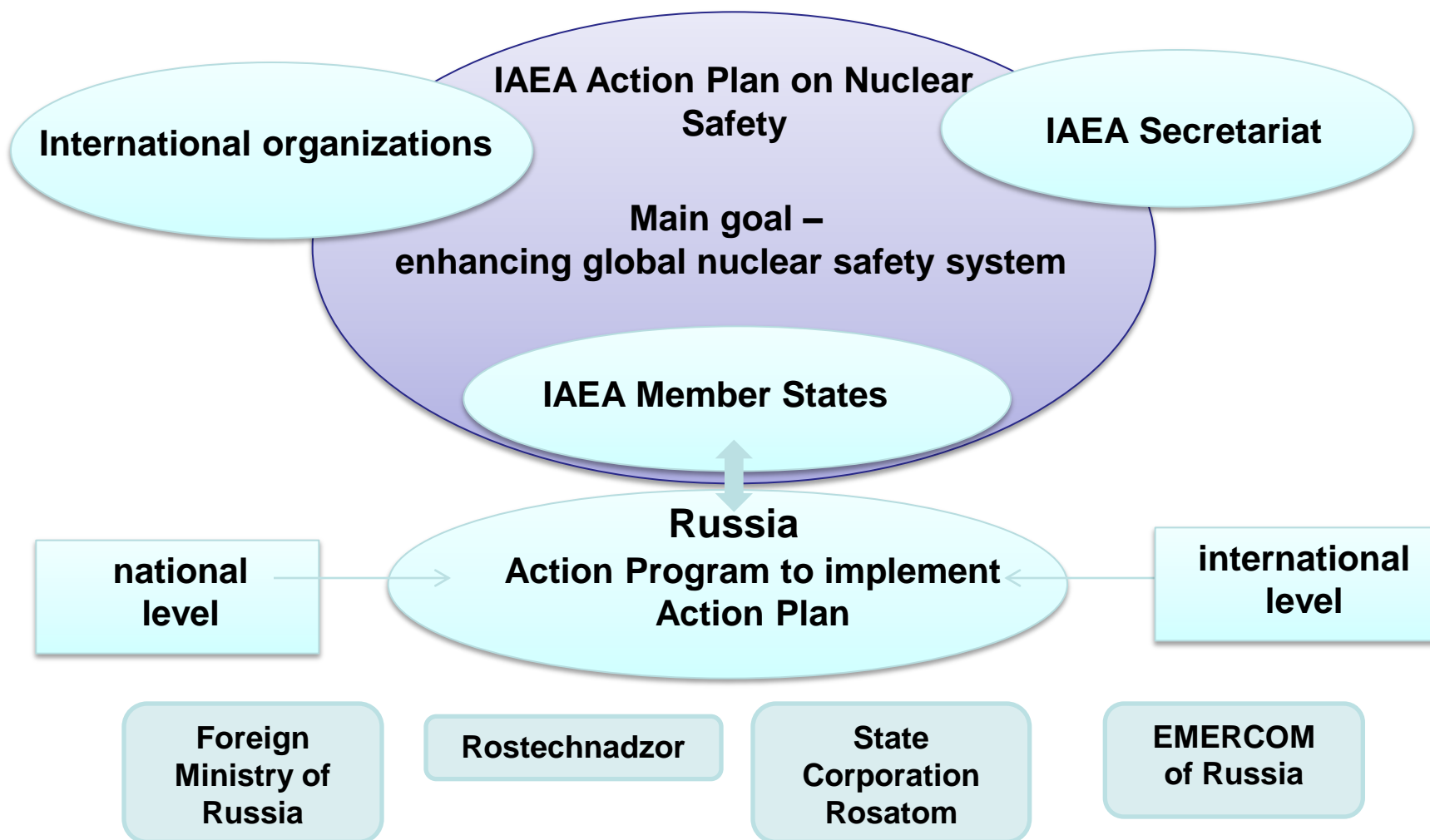


## **Actions Taken during First Year**

- Operator performed stress tests of Russian NPPs under construction or siting
- Regulatory body reviewed reports on stress tests performed
- Stress tests of 10 most powerful and potentially hazardous research reactors performed; relevant reports reviewed



## Implementation of IAEA Action Plan on Nuclear Safety in Russia





# **Lessons Learned from Fukushima-Daiichi Accident**

## **CONCLUSIONS**

- Need to update approaches to safety of nuclear plants
- Implementation of series of actions to improve safety
- Analysis of international and national legal and regulatory framework
- Safety analysis of NPPs and RRs under construction
- Contribution of international cooperation



# Federal Environmental, Industrial and Nuclear Supervision Service (Rostekhnadzor)

Thank you for your attention!