# **Norwegian Nuclear Action Plan**

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www.nrpa.no

# Two main objectives in the Nuclear Action Plan 2013-2017

- Reduce the risk of accidents at and pollution from nuclear facilities
- Prevent radioactive and fissile material from falling into the wrong hands

The Nuclear Action Plan's geographical area has mainly been Northwest Russia. Activities in the former Soviet republics will also be included.

# Important focus areas in the Nuclear Action Plan

Emergency preparedness	Environmental monitoring	Nuclear power plants
Non-proliferation and physical security	Cooperation with authorities in Russia, Ukraine and Central- Asia	Spent nuclear fuel and radioactive waste
	Radioactive sources	

# **Organization of the Nuclear Action Plan**

### Ministry of Foreign Affairs (MFA)

Leads the work and is the responsible ministry.

### Norwegian Radiation Protection Authority (NRPA)

Directorate for the MFA inter alia follow-up of the Nuclear Action Plan.

### **Project leaders**

Organisations/enterprises like NGOs, Office of the County Governor in Finnmark, Institute for Energy Technology.

- Yearly allocation from the State budget.
- Funds are allocated through application. Requirements to reporting, financial management etc.
- MFAs advisory committee: Discuss applications and issues related to the Nuclear Action Plan, meet approx. 6 times a year.

# Distribution of funds under the Nuclear action plan 1995 – 2014

### Total 1,9 billion NOK



# Sub-strategy 2013-2017 for improved safety at Russian Nuclear Power Plants

- **1.** Decommissioning objectives:
- Stimulate and support decommissioning work.
- Close dialogue and contact with Nordic countries and IAEA.
- Support to NGO's contributes to raise awareness on challenges of decommissioning of nuclear power plants.
- Support to projects that increase knowledge on the possibilities for energy conservation and development of power production based on alternative sources to nuclear power.

# Sub-strategy 2013-2017 for improved safety at Russian Nuclear Power Plants

- 2. Coop between regulatory authorities objectives:
- A close cooperation on emergency preparedness, including exercises.
- Support the establishment of licensing procedures/ criteria, and the dev. of safety analysis & EIA.
- Continue Nordic-Russian nuclear safety cooperation
- Strengthen the supervisory authorities' role with regard to the nuclear power industry.
- Closely follow the development of new Russian NPPs, including floating NPPs and nuclear-powered vessels.

# Sub-strategy 2013-2017 for improved safety at Russian Nuclear Power Plants

### 3. Safety Measures - objectives:

- The risk of incidents and accidents should be kept as low as possible, while the reactors are in operation.
- The safety measures must not contribute to prolong the lifetime of the reactors.
- Follow-up of previous projects, maintenance and upgrading of supplied equipment.
- Mainly focus on the Kola and Leningrad NPPs.
- Development of/ exercising on guidelines/ procedures for safe operation.

# **Regulatory Cooperation**



### Norway-Russia

- Mapping of contaminated regions Andreeva Bay
- Development of normative documents based on international guidelines
- Assurance of environment, health and safety during cleanup of nuclear legacy.
- Emergency exercises and environmental monitoring

# **Russia: Measures and results**



122 **nuclear submarines** are taken out of service in NW-Russia. Funded scrapping of 5 subsmarines and handling of the spent nuclear fuel.



**«RTGs»** = highly radioactive sources used as «battery» in Russian lighthouses. Funded removal of 251 RTGs and replacement with solar panel systems. Around 1000 RTGs were placed along the Russian coast.



Funded safety measures at Kola NPP and Leningrad NPP.





Prelimenary work for transport of spent nuclear fuel from the previous naval base in **Andreeva Bay**.

Final destination of the spent nuclear fuel: Mayak-plant in Sibir.

Environmental monitoring. **Joint Norwegian-Russian expeditions** to nuclear submarine K-27 in Kara Sea in 2012 and to nuclear submarine K-159 in Barents Sea in 2014. Low levels.

# Emergency preparedness. Exercise Barents Rescue 2010.

Bilateral agreement for notification and exchange of information since1993. Regional cooperation with Norwegian and Russian authorities since 1996.



### Russia:

# Funded safety measures at **Kola NPP** and **Leningrad NPP**.



### Ukraine:

Increased focus on **safety and security at NPPs**, regards to the Norwegian Priminister Solberg's initiative at the Nuclear Security Summit, April 2014

## **Nuclear Action Plan - Animation videoes**

### http://www.atomhandlingsplanen.no/#en

**The Civil Society** 

# **Nuclear Power Plants** Ø