



UNITED NATIONS
ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC



Expert Consultation Meeting on Transboundary Air Pollution in North-East Asia

9-10 July 2012, St. Petersburg, Russian Federation

Overview of current activities and future plans of major scientific frameworks on transboundary air pollution in Russian Federation



Mrs. Kristina Volkova,
Scientific researcher,
Scientific Research Institute for atmospheric air
protection (SRI Atmosphere), St.Petersburg,
RUSSIAN FEDERATION



Focal points of ecological development in RF (former USSR)

In 1922 the first value of **maximum allowable concentration (MAC)** for sulfur-containing gas was introduced.

The National Service for Observation and Control of Environmental State was created in 1970s on the basis of hydrometeorological stations.

In 1980 **the law “On protection of atmospheric air”** was accepted.

In 1991 **Environmental Protection Act** legalized the system of emissions fees for stationary and mobile air pollution sources, water pollution, and solid waste disposal.

During the early 1990s **the Ministry of environmental protection** was created.

The Uniform state system of environmental monitoring (USSEM)



Global environmental monitoring system

Uniform state system of environmental monitoring (USSEM)

Observational points

Observational stations

Observational centers

Environmental monitoring

Territorial authorities

Regional authorities

Central authorities

Monitoring of natural objects

Ground water

Surface land

Surface waters

Mineral and raw materials resources of subsurface

Forests

Wild animals

Fishery

Sanitary ecological monitoring



Roshydromet (Federal service for hydrometeorology and environmental monitoring)

Functions:

management of the state property and **rendering** of the state services in the field of hydrometeorology,
environmental monitoring,
supervision of work on active impact on geophysical processes.

It includes:

22 territorial bodies of Federal Hydrometeorology and Environmental Monitoring Service (UGMS),
9 managements on hydrometeorology and environment monitoring,
17 Scientific Research Institutes working under Roshydromet,
71 centers for hydrometeorology and environment monitoring,
1871 meteorological stations and 3102 posts (in 2009).

State monitoring network of air pollution in RF

685 stations in operation in 2010



Measuring characteristics:

- average concentration of impurity in air;
- average quadratic deviation of concentration of impurity in air;
- maximum single concentration of impurity.



Network of stations of supervision transboundary atmospheric pollution

EMEP

selection and the analysis of tests of atmospheric aerosols, gases (nitrogen and sulfur dioxides) and an atmospheric precipitation are in operation

4 stations

EANET

sampling of atmospheric air and precipitation and the analysis of the main acid-forming substances.

4 stations



Ministry of Natural Resources and Environment of the Russian Federation

status of federal executive authority

Services falling under its jurisdiction:

- The Federal Service for Hydrometeorology and Environmental Monitoring,
- The Federal Service for Supervision of Natural Resource Management,
- The Federal Agency for Water Resources
- The Federal Agency for Subsoil Management



Law “On protection of atmospheric air”, 1980

The main principles:

- clarified rules about **prohibition of commissioning** of any production objects – new, existing and/or reconstructed if they become sources of pollution or other negative impacts on atmospheric air during use ;
- established **rationing of maximum permissible concentration** of polluting substances not only on the territory of settlements as it was earlier, but in all territory of the USSR;



Environmental Protection Act, 1991

The main principles:

- **regulated fees collecting** from all polluters independently of their institutional position whether government-owned or private;
- **established pollution fees** for atmospheric emissions;
- **required** all polluters **to have licenses** that fixed fees for allowed and above-limit pollution

International cooperation



The Convention on LRTAP (Geneva, Switzerland, 1979)

USSR ratified it in 1980.

RF is the participant of three Protocols:

- The protocol of 1985 on sulfur,
- The Protocol of 1988 on oxides of nitrogen,
- The EMEP Protocol of 1988



The Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, Finland, 1991).

RF signed the Convention in 1991, but has not yet ratified.

Nevertheless, Russia is guided by provisions of the Convention and it is fixed, in particular, in the Goskomecology relevant provision «On assessment of impact of planned economic and other activity on environment in the Russian Federation»



The United Nations Framework Convention on Climate Change (UNFCCC or FCCC) of 1992 (Rio de Janeiro).



United Nations
Framework Convention on
Climate Change

RF has ratified it in 1994.

The Kyoto Protocol of 1997:

- bound to reduce emissions of four GHG and two groups of gases (hydrofluorocarbons and perfluorocarbons).
- established the flexible mechanisms of international relationship in part of investment and trade emissions.

In spite of benefit of trade in quotas of SO₂ reduction emissions and considerable amount of bids its application in Russia is not widely in use.



Russian Federation is also a participant of The **Acid Deposition Monitoring Network in East Asia (EANET)** cooperation.



EANET partially covers Russian territory: it includes Siberian and Far East regions. South-Eastern part of Asian Russia was equipped by appropriate instruments for performing measurements with accordance with EANET program. 4 stations are currently in operation.



The Convention on Persistent Organic Pollutants (Stockholm, Sweden, 2001)



RF signed it in 2002 and ratified in 2011.

It has to minimize technologies and preclude manufacture of such pollutants and assist in liquidation of stockpiled materials, waste and equipment containing such substances.



Thank you for your attention!

