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Consultation meeting on the priorities for implementation of the ENPI Shared Environment Information System (SEIS) project
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“SEIS state of play in the ENP East region” as part of the European Commission funded project to EEA “Towards a Shared Environment Information System (SEIS) in the European Neighbourhood Countries”

COUNTRY PROFILES

RUSSIAN FEDERATION

1. *Environmental Management Structure*

The Ministry of Natural Resources and the Environment of the Russian Federation (MNRE) is the federal executive body that performs functions on elaboration of the state policy and legal regulation in the sphere of nature use, environmental monitoring and protection, as well as ecological safety. MNRE individually implements legal regulation, develops and presents to the Government of the Russian Federation drafts of the federal constitutional laws, federal laws, and acts of the President of the Russian Federation and the Government of the Russian Federation on the following issues:

- water bodies use and protection;
- protection, use and reproduction of wildlife species and their habitats;
- specially protected areas;
- protection of the environment and provision of the ecological safety;
- atmospheric air protection;
- production and consumption wastes management (except radioactive);
- improvement of economic mechanism for regulation of nature use and environmental protection.

The unit inside the MNRE that determines the environmental policy is the Department of the State Policy and Regulation in the Sphere of Environmental Protection and Ecological Safety. The primary tasks of the Department include the participation in the elaboration of the state policy and legal regulation in the sphere of study, use, reproduction and protection of natural resources, including forests in specially protected areas, wildlife species and their habitats, in the sphere of hydrometeorology and related fields, monitoring of the environment and its pollution, as well as elaboration and implementation of the state policy and regulations in the sphere of environmental protection, including issues related to specially protected areas.

MNRE has the following subordinate executive bodies, which are independent legal persons:

- Federal Service of Hydrometeorology and Environmental Monitoring (Roshydromet);

- Federal Supervisory Natural Resources Management Service (Rosprirodnadzor);
- Federal Service of Ecological, Technological and Nuclear Surveillance (Rostekhnadzor) (it was re-assigned under the direct subordination to the Government of the Russian Federation from the authority of MNRE since June 23, 2010);
- Federal Agency of Water Resources (Rosvodresourtsy).

Roshydromet is the federal executive body that provide state services in the field of hydrometeorology and related fields, monitoring of the environment and its pollution.

Roshydromet carries out:

- state accounting of surface waters and operating the state water cadastre with regard to surface water bodies;
- operating the unified state data fund on the state of the environment and its pollution;
- operation of the state observatory network, including organization and discontinuation of activity of permanent and mobile observation stations, determination of their dislocation;
- state monitoring of atmospheric air;
- state monitoring of surface water bodies;
- state monitoring of the continental shelf, state of the exclusive economic zone of the Russian Federation (within its competence);
- raising awareness of users (consumers) by providing information on the state of the environment, its pollution, on forms of providing this information and on organizations that perform informational support;
- provision of emergency information on hazardous natural phenomena, on actual and forecasting drastic changes of weather and environmental pollution which could threaten life and health of population and cause damage the environment.

Roshydromet is ensuring the implementation of the Russian Federation obligations under the international treaties, which it is part to, including the UN Framework Convention on Climate Change.

Rosprirodnadzor is the federal executive body that performs functions on control and survey in the sphere of nature use, as well as in the field of environmental protection (within its competence). It is carrying out control and surveillance:

- in the field of protection, use and reproduction of wildlife species, located in the specially protected areas of the federal significance, as well as their habitats;
- in the field of organization and operation of specially protected areas of the federal significance;
- of use and protection of water bodies;
- of compliance with the Russian Federation legislation and international norms and standards in the field of the marine environment and natural resources of marine waters, in the exclusive economic zone and at the continental shelf;
- of compliance with the requirements of the Russian Federation legislation in the field of environmental protection, including in the area of the atmospheric air protection and waste management (except radioactive wastes).

Rostekhnadzor is the federal executive body that performs functions on control and survey in the sphere of environmental protection related to mitigating the adverse technogenic impact. It:

- adopts regulations for wastes generation and limits for their disposal;
- perform the state accounting of objects that cause adverse impact on the environment and atmospheric air;

- maintains the state cadastre of wastes and the state accounting in the field of waste management, as well as carries out passportization (inventory) of hazardous wastes.

Rosvodresourtsy is the federal executive body that provides state services in the sphere of water resources. It carries out:

- state monitoring of water bodies;
- development of automated systems of collection, processing, analysis, storage and release of information on the state of the water bodies, water resources, regime, quality and use of waters in the Russian Federation in general, in its regions and in river basins.

In addition to MNRE and its organizations a number of other executive bodies have different levels of responsibility for the environment and natural resources.

The Federal Service of Surveillance in the Sphere of Consumer Protection and Human Well-Being (Rospotrebnadzor) of the Ministry of Health Protection and Social Development of the Russian Federation (MHSD) performs observation and control for implementation of requirements of the Russian Federation's legislation in the field of sanitary-epidemiological well-being of population, including safety of drinking water by sanitary-hygienic and microbiological parameters, water quality in recreational zones, as well as control of indoor air quality.

Rospotrebnadzor is also responsible for the adoption of maximum permissible concentrations of pollutants in the atmospheric air, soil, surface and marine waters by sanitary-hygienic parameters.

The Federal Service of the State Registration, Cadastre and Cartography (Rosregistry) keeps the State Land Cadastre, ensures land resources management and performs the state control over the land use and protection.

2. Multilateral Environmental Agreements (MEAs) and relevant obligations

Data on the Russian Federation participation in MEAs and programmes is provided in Table 1.

Table 1. Russia's participation in MEAs and programmes

MEA/Programme	Date of signature	Date of ratification (Rt), accession (Ac), approval (Ap), adoption (At), entry into force (EIF)
Global		
UN Framework Convention on Climate Change (New-York, May 29, 1992)	11.03.1999	18.11.2004 (Rt)
Kyoto Protocol (Kyoto, 1997)	11.03.1999	18.11.2004 (Rt)
Convention on Protection of Ozone Layer (Vienna, 1985)	22.03.1985	18.06.1988 (Rt)
The Montreal Protocol on Substances That Deplete	29.12.1987	10.11.1988 (Rt)

the Ozone Layer (Montreal, 1987)		
London Revision		13.01.1992 (Rt)
Copenhagen Revision		14.02.2005 (Rt)
Montreal Revision		14.02.2005 (Rt)
Beijing Revision		14.02.2005 (Rt)
Convention on Biological Diversity (Rio-de-Janeiro, 1992)	13.06.1992	05.04.1995 (Rt)
Cartagena Protocol (Montreal, 2000)		
UN Convention on Combating Desertification (Paris, 1994)		29.05.2003 (Ac)
Convention on Persistent Organic Pollutants (Stockholm, 2001)	22.05.2002	
Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel, 1989)	22.03.1990	31.01.1995 (Rt)
Convention on Wetlands of International Significance (Ramsar, 1992)		11.02.1977 (EIF)
Convention Concerning the Protection of the World Cultural and Natural Heritage (Paris, 16.11.1972)		12.10.1988 (Rt)
International Convention for the Regulation of Whaling (Washington DC, 02.12.1946)		10.11.1948 (Ac)
Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (Washington DC, 1973)		13.01.1992 (Rt)
Convention on Migratory Species of Wild Animals (Bonn, 1979)		
Agreement on the Conservation of Populations of European Bats (EUROBATS)		
Agreement on the Conservation of Small Cetaceans of the Baltic, North East Atlantic, Irish and North Seas (ASCOBANS)		
Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA)		
International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978 (MARPOL 73/78)		25.05.1980 (EIF)
Convention on the Conservation of Antarctic Marine Living Resources (Canberra, 1980)	11.09.1980	26.05.1981(Rt)
Protocol on Environmental Protection to the Antarctic Treaty (Madrid, 1991)		
Global Forest Resources Assessment (FAO)		Participates
Regional		
UNECE Convention on Long-range Transboundary Air Pollution (Geneva, 1979)	13.11.1979	22.05.1980 (Rt)
Protocol on Long-Term Financing of the Cooperative Programme for Monitoring and Evaluation of the Long-Range Transmission of Air Pollutants in Europe (EMEP) (Geneva, 28.09.1984)	28.09.1984	21.08.1985 (At)
Protocol on the Reduction of Sulphur Emissions or Their Transboundary Fluxes by at Least 30 per	09.07.1985	10.09.1986 (At)

Cent (Helsinki, 1985)		
Protocol concerning the Control of Emissions of Nitrogen Oxides or their Transboundary Fluxes (Sofia, 1988)	01.11.1988	21.06.1989 (At)
Protocol concerning the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes (Geneva, 1991)		
Protocol on Further Reduction of Sulphur Emissions (Oslo, 1994)	14.06.1994	
Protocol on Heavy Metals (Aarhus, 24.06.1998)		
Protocol on Persistent Organic Pollutants (Aarhus, 24.06.1998)		
Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (Gothenburg, 30.11.1999)		
Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Helsinki, 1992)	18.03.1992	02.11.1993 (At)
Amendment to Articles 25 and 26 of the Convention (Madrid, 28.11.2003)		
Protocol on Water and Health (London, 17.06.1999)	17.06.1999	31.01.1999 (At)
Convention on the Transboundary Effects of Industrial Accidents (Helsinki, 17.03.1992)	18.03.1992	02.11.1993
Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus, 1998)		
Amendment on Public Participation in Decisions on Deliberate Release into the Environment and Placing on the Market of Genetically Modified Organisms (GMO Amendment) (Almaty, 25-27 May 2005)		
Protocol on Pollutant Release and Transfer Registers (Kyiv, 21.05.2003)		
Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, 1991)	06.06.1991	
First Amendment to the Espoo Convention (Sofia, 26-27 February 2001)		
Second Amendment to the Espoo Convention (Cavtat, 1-4 June 2004)		
Protocol on Strategic Environmental Assessment (Kiev, 21.05.2003)		
Convention on the Conservation of European Wildlife and Natural Habitats (Bern, 19.09.1979)		
Sub-regional		
Framework Convention on the Protection of the Marine Environment of the Caspian Sea (Tehran, 2004)	04.11.2003	12.08.2006 (EIF)
Reporting for the Interstate Statistics Committee of the Commonwealth of Independent States		Data is provided
Convention on the Protection of the Marine		05.10.1998 (Rt)

Environment of the Baltic Sea Area (HELCOM) (Helsinki, 1992)		
Convention on the Protection of the Black Sea Against Pollution (Bucharest, 1992)	21.04.1992	16.11.1993 (Rt)
Arctic Monitoring and Assessment Programme (AMAP)		Participates

Environmental information on MEAs is provided to the secretariats of the agreements and protocols with required periodicity in the form of questionnaires, reports and national communications.

(a) Reporting under global MEAs and programmes

Russia is the party to 12 global agreements and two protocols to them.

The Fifth National Communication on Climate Change in Russian was prepared and submitted to the UNFCCC Secretariat in February 2010 which can be found on the Convention site (http://unfccc.int/national_reports/). The previously presented communications could also be found on this site.

In May 2009, in the framework of the implementation by the Russian Federation of its obligations under the UNFCCC, the National Cadastre of Anthropogenic Greenhouse Gases Emissions and Absorptions for 1990-2007 was provided to the convention secretariat. Moreover, under the work of the Intergovernmental Panel on Climate Change (IPCC) the Russian experts participated in the development of the Fifth IPCC Assessment Report, as well as specific IWGCC reports, like “Management of risks and extreme phenomena to improve adaptation to climate change” and “Renewable Energy Sources and Mitigating Climate Change Consequences”.

For the implementation of the Vienna Convention and Montreal Protocol data of observation of the general ozone content carried out at 28 Russian ozone-measurement stations, was regularly provided to the WMO World Ozone and UV Data Centre (WOUDC) under the Environment Service of Canada. Data provided by Russian stations is daily reflected on the WOUDC map (http://exp-studies.tor.ec.gc.ca/e/ozone/Curr_allmap.htm). Moreover, the Russian Federation annually presents to the Secretariat data on ozone depleting substances according to the established by the secretariat form. Data is available at the Convention’s site (http://ozone.unep.org/Data_Reporting/Data_Access/).

In 2008 the Russian Federation National Report on Earth Ozone Layer Scientific Studies and the analytical note “On outcomes of research and experimental works on searching for accessible alternatives for Freon HFU-113” were submitted to the secretariat of the Montreal Protocol.

In 2009 the Russian Federation presented to the CBD secretariat the Fourth National Report, the complete text of which is available online in Russian on the CBD site, while the conclusion and findings are available in English (<http://www.cbd.int/reports/search>). Three previously provided reports are also presented online at this site, as well as at the site of the Center of the Wildlife Protection (<http://ruschm.org/konvenciya/rossiiskie-dokumenty/nacionalnye-doklady/>).

In 2006 the third Report of the Russian Federation on Desertification was submitted to UNCCD. It is presented online in English at the UNCCD site

(<http://www.unccd.int/cop/reports/centraleu/centraleu.php>) as well as at the site of the Center of the Wildlife Protection (<http://ruschm.org/konvenciya/rossiiskie-dokumenty/nacionalnye-doklady/>).

The Russian Federation has not ratified the Convention on Persistent Organic Pollutants.

Aimed at the implementation of the requirements of the Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, in 2006 the national reports on transboundary and transit movements of hazardous wastes and their disposal for 2003 and 2004 were provided to the Convention secretariat. The information from the reports is available online at <http://www.basel.int>.

Under the Ramsar Convention on Wetlands of International Significance the Russian Federation on a regular basis provides national reports on implementation of the Convention requirements. The last report for 2008 was provided in English and is available on the Convention's site: <http://www.ramsar.org>.

In line with the provisions of the Convention on International Trade in Endangered Species of Wild Fauna and Flora, the Russian Federation presents both annual and biannual reports on its activities. The latest reports were prepared for 2008 and for 2005-2006, respectively. The text of the biannual report in English as well as information on provision of annual reports is available on the Convention site: <http://www.cites.org>.

The Russian Federation, on a regular basis, submits reports on the implementation of the Agreement on the Conservation of Populations of European Bats, although it is not a Party to the Convention on Migratory Species of Wild Animals. The latest report for 2008 is presented online on the site: http://www.eurobats.org/documtnts/national_reports.htm.

The country prepared and presented to the UN Food and Agriculture Organization the report "Global Forest Resources Assessment 2010", which is available in English online at: <http://www.fao.org/forestry/20262-1-158.pdf>.

(b) Reporting under the regional MEAs

The Russian Federation is a party to four regional conventions and five protocols to them.

In line with the regulations adopted under the Convention on Long-range Transboundary Air Pollution the Russian Federation, on a regular basis, submits to the secretariat data on emissions of sulphur compounds and nitrogen oxides, which are available on the Convention's site at: <http://www.unece.org/env/lrtap/ic/reports.htm>. It reports transboundary pollutants transfer monitoring data to the UNECE data bank.

The Russian Federation presented in March 2010 a Brief report in Russian on the implementation of the Protocol on Water and Health to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes. The report is available on the Convention's site at: <http://www.unece.org/env/water/>.

The Russian Federation implements the provisions of the Convention on the Protection and Use of Transboundary Watercourses and International Lakes in the frameworks of seven agreements on joint use and protection of transboundary water bodies with riparian states (Belarus, Kazakhstan, China, Mongolia, Ukraine, Finland and Estonia). There is a regular

hydrology and hydrochemistry information sharing between the Russian Federation and these states, as well as agreements on water resources use regimes, coordination of anti-flood activities and arrangements in cases of emergencies and on water resources distribution.

The Russian Federation is neither a party to the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters nor to the Protocol on Pollutant Release and Transfer Registers to this Convention. It has not ratified the Convention on Environmental Impact Assessment in a Transboundary Context.

In general the Russian Federation implements its reporting obligations under MEAs. At the same time, national communications and reports presented to the international community on MEAs' implementation have not been uploaded on the MNRE web site and, therefore, are not easily available for stakeholders and wider public.

(c) Reporting under the sub-regional MEAs and programmes

Russia is a party to three sub-regional conventions and is a member of the Arctic Monitoring and Assessment Programme (AMAP).

Implementing the requirements of the Framework Convention on the Protection of the Marine Environment of the Caspian Sea the country elaborated in 2003 the National Caspian Action Plan of the Russian Federation in the area of nature use and environmental protection for the period up to 2007 in English and Russian. Both versions are available online (www.caspianenvironment.org). In 2007 the Plan was revisited and adopted at the level of the subjects of the Russian Federation located in the Caspian Sea basin.

The network organizations of Roshydromet regularly (up to six times a year) carry out works on the Caspian Sea monitoring in coastal areas, northern and central parts of the Caspian. The monitoring outputs are available online (<http://www.oceanography.ru>).

Aimed at the implementation of the obligations under the Convention on the Protection of the Black Sea Against Pollution the network organizations of Roshydromet four times annually carry out works on the Black Sea monitoring in coastal waters of Sochi, Tuapse, Novorossiysk, Anapa and Gelendzhik. The monitoring results are published online (<http://www.oceanography.ru>) and submitted to the secretariat of the Convention.

Implementing the obligations under the Convention on the Protection of the Marine Environment of the Baltic Sea Area the network organizations of Roshydromet regularly perform monitoring of hydrological, hydrochemical and hydrobiological parameters in waters of the eastern part of the Gulf of Finland and Neva Bay. Monitoring results are available online (<http://www.oceanography.ru>) as well as are submitted to the secretariat of the Convention.

At all three seas scientific organizations of Roshydromet, the Academy of Sciences and some others implement regular oceanographic, hydrochemical and hydrobiological studies. The findings of these studies are stored in the data base of the Unified State Ocean Monitoring System (<http://www.oceaninfo.ru>), (http://www.esimo.ru/srbd_data/index.jsp) and submitted to the secretariats of the Conventions.

The AMAP Programme is one among five work activities of the Arctic Council established in 1991. The main task of the Programme is the development of joint scientific reports by experts (including Russian ones) on the impact on the environment and humans of

persistent organic pollutants, radioactivity, climate change and other challenges. The AMAP materials are available online at:(<http://amap.no>).

Each year, the Interstate Statistical Committee of the Commonwealth of Independent States (CIS STAT) provides data on environmental protection, which are placed in the annual statistical compilation issued in Russian and English languages. Information about the publications of the CIS-STAT is available at <http://www.cisstat.com>.

3. Environmental legislation

The main legal environmental document in the Russian Federation is the Federal Law “On environmental protection” of 10.01.2002. Among others there are the following requirements set forth by this Law:

- the right of every citizen for access to reliable information on the state of the environment, as well as participation of citizens in decision-making concerning their rights for favourable environment;
- establishment of procedures for the state environmental monitoring, development of the state system of observation of the state of the environment and its operation.

In line with the Law, the state environmental monitoring is implemented aimed at the observation of the state of the environment, including in areas of anthropogenic impact sources, and of the impact of these sources on the environment, as well as aimed at provision of the state, legal and physical persons with reliable information necessary for prevention and (or) mitigating unfavorable consequences of changes in the state of the environment.

The responsibilities of state bodies of the Russian Federation dealing with environmental protection include the preparation and dissemination of the annual state reports on the state and protection of the environment.

The Russian Federation Water Code, adopted on 03.06.2006 № 74-FZ, in its article 78 says that the state monitoring of water bodies is the system of regular observations for hydrological, hydrogeological and hydrochemical parameters. It implies collection, transmission and processing of obtained information for a timely identification of negative processes, forecasting of their development, prevention of adverse consequences and evaluation of efficiency of water protection measures implemented.

According to the Resolution of the Government of the Russian Federation of 23.08.2000, № 622 “On endorsement of the state service for observation for the state of the environment”, the major tasks of the Service include:

- provision of observations for the state of the environment, assessment of its changes and forecasting of hazardous phenomena and factors;
- provision of state bodies of the Russian Federation, subjects of the Russian Federation and local administrations with data on actual state of the environment, its pollution, as well as information on current and forecasted changes in its state;
- provision of concerned organizations and citizens with current and urgent information on changes in the environment;
- ensuring the completeness and reliability of information on the state of the environment and comparability of this information all over the country territory, and optimization of use of on-land, aviation and space observation systems;
- presentation of necessary information to the Unified State Data Fund on the state of the environment and its pollution;

- provision of the coordinated operation of federal and territorial observation networks for the state of the environment with similar international and national systems.

The Resolution of the Government of the Russian Federation of 31.03.2003 “On the establishment and implementation of the state environmental monitoring adopted the Regulation of the same name which regulates the interaction of federal ministries and agencies participating in environmental monitoring.

Significant number of legal documents have been developed in the Russian Federation that address specific environmental protection problems and issues, such as the Land and Forest Codes, and federal laws on the protection of atmosphere air and on specially protected areas. However, the country lacks the unified legal database where all legal and regulatory documents on environmental protection could be available for free access.

4. Monitoring

The state environmental monitoring network is based on the net of permanent observation points, which are established in cities and in water bodies both in areas with increased anthropogenic impact and in non polluted areas.

The ongoing environmental monitoring system is intended at addressing the following tasks:

- observation of pollution levels of atmosphere, soils, waters and sedimentation of rivers, lakes, reservoirs and seas by physical, chemical, and hydrobiological (for water bodies) parameters aimed at studying of pollutants distribution spatially and timely, assessment and forecasting of the state of the environment, identification of effectiveness of activities on its protection;
- provision of state executive bodies, economic entities and population with systemized and urgent information on pollution levels changes (including radioactive) of atmospheric air, soil and water;
- provision of organizations concerned with data and information for making recommendations in the field of environmental protection and rational natural resources use, elaboration of economic development plans with consideration of the state of the environment.

The following types of observation are performed at the state environmental monitoring network:

- air pollution in cities and industrial hubs;
- soil pollution with pesticides and heavy metals;
- pollution of inland surface waters and seas;
- transboundary transition of substances polluting atmosphere;
- integrated observations for natural environment pollution and vegetation state;
- chemical composition and acidity of atmospheric precipitation and snow coverage;
- background environmental pollution;
- radioactive pollution.

Atmospheric air pollution observations in Russia are performed in 250 cities and settlements by Roshydromet bodies (90%) and MHSD of Russia (10%). In the majority of cities the concentrations of from 4 through up to 38 substances are measured. At the same time, not all cities that should be covered with the monitoring network are having such possibilities. Thus, a number of cities that are capitals of the subjects of the Russian Federation do not have observations regularly carried out. The observations for atmospheric air pollution in Norilsk are

discontinued. The share of Norilsk industrial enterprises emissions in total emissions in the country is around 10%, however. In Moscow, Saint-Petersburg and some other cities the municipal authorities perform air pollution monitoring with their own networks.

Observations of pollution of inland surface waters by hydrochemical parameters are implemented by Roshydromet and Rosvodresourcy. The observations cover 1,190 water bodies and concentrations of 116 ingredients are measured. Moreover, the Rosvodresourcy territorial bodies perform the monitoring of groundwaters.

Observations of pollution of inland surface waters by hydrobiological parameters are performed by Roshydromet in five hydrographic regions at 74 water bodies. The observation programme covers from 2 to 6 parameters.

Observations of marine environment pollution by hydrochemical parameters are taking place in coastal areas of 11 seas surrounding the Russian Federation territory. Up to 24 ingredients are identified in samples taken.

The observation net for atmospheric transboundary transmission includes 4 stations in the European part of the Russian Federation (EMEP programme) and 4 stations in the Asian part of the Russian Federation (EANET program).

The selection and analysis of samples of atmospheric aerosols, gases (nitrogen and sulfur dioxides) and atmospheric precipitation are carried out under EMEP. The sampling of atmospheric air and precipitation, and analysis of basic acidifying substances is performed under the EANET (Acid Deposition Monitoring Network in East Asia – EANET) which was established for monitoring of acid depositions and their effect on the state of natural ecosystems in the eastern part of the Asian region (http://geo.tsu.ru/resources/meteo_res/dynamic.pdf).

Observation for the chemical composition and acidity of precipitation are performed at 142 stations. Precipitation samples are analyzed for 12 components.

The system of pollution control of snow layer at the territory of Russia is performed at 565 points. The concentrations of basic ions and pH values are identified in the samples.

The network for observation of soil pollution by pesticides is located on agricultural lands, particular forest areas, recreational zones and coastal areas. Soil sampling is performed in entities located at the area of 38 subjects of the Russian Federation. 24 pesticides and their metabolites are identified in the samples taken.

To assess soil pollution with toxicants of industrial origin, the sampling is taking place annually in 66 cities, and in 101 cities samples are taken once in five years. Up to 25 ingredients of industrial origin are identified.

The network of integrated pollution monitoring of natural environment and state of vegetation has 30 observation points. Observations are made: around big industrial enterprises, where serious damages to forests on significant areas are reported; in forests referred to as natural monuments, and; in areas of the construction of new big industrial enterprises whose emissions/discharges are likely in to result in forest damage and fall.

There are 5 stations of integrated background monitoring in the Russian Federation which are located at the areas of five biosphere reserves. The monitoring programme of these stations includes measuring the background content of sulphur dioxide, nitrogen dioxide, sulphates, lead,

benz(a)pyrene in atmospheric air, concentrations of ammonium nitrogen, nitrites, total nitrogen and sulphur in atmospheric precipitation (http://geo.tsu.ru/resources/meteo_res/dynamic.pdf).

Due to the preparations for the Winter Olympic Games in Sochi in 2014, the integrated system of environmental monitoring of the Sochi National Park and adjacent areas is currently under establishment. The system includes 6 automated stations and 3 automated posts for control of atmospheric air with continuous measurement up to 12 parameters (including PM₁₀, PM_{2.5} and surface ozone), 2 automated points for water control with continuous measurement of up to 11 parameters and a center for data processing. Moreover, the monitoring of soil, vegetation and biota objects in the environment will take place.

Observations of radioactive environmental situation at the stationary network are performed at 1,285 points.

The country has a system of monitoring the state of forests and their losses from natural and anthropogenic factors.

In addition to the state monitoring system there is a number of systems established according to the decisions of administrations of big megalopolises for control of air and surface waters pollution, mainly.

5. Environmental data and information sharing

Data obtained as a result of carrying out all types of environmental monitoring at the costs of the state budget is referred to as the state informational resource. It is handled by regional information and analytical centers (for instance, in Saint-Petersburg there is “Ecological Passport of the Saint-Petersburg area” performing such functions (http://www.dataplus.ru/Arcrev/Number_44/2_EcoPass.html)) and provided to territorial branches of federal executive bodies for inclusion into the Unified state data fund on the state of the environment, use by state executive bodies and making it available for public.

In the Russian Federation the operation of the Unified state data fund on the state of the environment and its pollution (USDF) is the responsibility of Roshydromet. The USDF catalog is a metadata database. The USDF catalog contains information on:

- types and availability of information;
- Areas covered by the data collection;
- periods of observations of each type of information;
- type of information carrier and its quantitative characteristics;
- details of the place of storage of each information type.

Legal and physical persons could obtain information on the composition and location of USDF data, but not the environmental data itself. The information is provided for free, upon written requests, during the month after the application. Preparation and publication of the bulletins on new acquisitions in hard copies and/or online is carried out by the Roshydromet quarterly. Information on newly introduced legislative, regulatory and guideline documents regarding USDF is provided in these bulletins. All information on USDF activity is available online at: <http://www.meteo.ru>.

The form for the environmental and nature protection information sharing is the process of preparation of annual state reports on the state and protection of the environment as well, which the various ministries and agencies are taking part in. In this case the representatives from the ministries and agencies are sharing information through the Interagency Work Group on the

preparation of materials for the state report, and the process of information sharing is regulated with the relevant Resolution of the Government of the Russian Federation.

At the same time the regular and systemized sharing of ecological data among the federal ministries and agencies is not observed. Each organization, as a rule, has its web-site or Internet-portal, where it uploads information deemed as necessary by it. Moreover, many ministries and agencies (MNRE, Roshydromet, Rovodresoursy, Ministry of Emergency Situations, MHSD, Rosleskhoz, Rosregistry) issue reports on their activity, where it is possible to find environmental information.

The environmental information sharing in the subjects of the Russian Federation is better to a certain degree. Along with the bodies of the federal environmental protection agencies there are departments, divisions or branches on environmental protection under the governments (administrations) of the subjects of the Federation. One of the tasks of these bodies is the coordination of activity of the environmental protection entities in the subject of the Federation. Therewith, many of them issue the reports on the state and protection of the environment, environmental bulletins and other documents in their respective areas. Aimed at this the interagency commissions are established, which regulate environmental data sharing among all environmental protection organizations acting in the subject of the Federation.

6. Environmental Internet-portals

There are few environmental Internet-portals acting in the Russian Federation. The Russian “National Portal ‘Nature’” (<http://www.priroda.ru>) and “All-Russian Ecological Portal” (<http://www.ecoport.ru>) could be considered as the most sufficient in information.

The “National Portal ‘Nature’” was established in 1999 by the National Information Agency “Natural Resources” (NIA-Priroda) with the support of UNEP/GRID-Arendal, under the program of informational-analytical support of the MNRE of Russia. The Portal contains analytical materials on the natural resources policy, nature use, environmental safety, and public participation in environmental movement. At the present time the Portal is maintained in-house and at the own resources of the NIA-Priroda.

The “All-Russian Ecological Portal” has sections of environmental news, environmental events calendar, eco-dictionary, environmental articles and some other. The biggest interest is represented by the portal’s section “Environmental laws and documents”, which provides access to documents through inserting into box a part of the name or description of the required document.

The portal of observation data and scientific information for general use on the state of the ocean (Russian part) joins informational units of over 10 Russian agencies that participate in the “Unique State Ocean Monitoring System” programme (<http://www.oceaninfo.ru>).

Portal related to the analysis of climatic changes based on the meteorological observations (<http://www.climatechange.su>) is providing quarterly and annual bulletins on the territory of Russia.

Also, there is the Federal State Statistics Service site (http://www.gks.ru/wps/portal/OSI_OS#), to which the environmental data of this service are uploaded. At this, the data on the specially protected areas, number of basic game animals, fresh water use, amounts and emissions of particular pollutants into atmosphere, generation, use and neutralization of wastes are available as the regulated tables only. Data on amounts of the

sewage water discharges, including by the types of economic activity, and intake of contaminants with sewage into the water bodies is available as both the regulation tables and the data bases.

Generally, the Internet-portals meet the modern technical requirements, but their comprehension in the environmental materials (assessment reports, reviews, and bulletins) obtained at the costs of the federal budget, and their ability in content revealing, but not confining with their names only, leave much to be desired.

7. Comparability of Information

Data contained in the reports on MEAs implementation, as a rule, is comparable with the data from the other countries, as these reports are prepared on the basis of the formats developed by the secretariats of these conventions.

Data in the annual surveys on the state of the environment and ecological bulletins could also be considered as comparable with the data from the other countries, when it is presented in absolute values (for example, the data on the emissions into the air basin, the concentrations of the pollutants in the atmospheric air, water bodies, soil), but could not be comparable with the data of the European countries, if they are presented in units or proportions of the maximum permissible concentrations.

8. Environmental assessments

The Russian Federation in the later two decades prepares and issues the annual state reports on the state and protection of the environment. Their issuing is regulated with the Resolution of the Government of the Russian Federation adopted back in 1993. Below the content of the latest report for 2009 is provided.

Part I. Environmental quality and the state of the natural resources

1. Atmospheric air
2. Surface and underground waters. Marine waters
3. Soils and land resources
4. Use of the minerals and the subsoil protection
5. Radioactive situation
6. Climatic and other specificities of the year. Natural disasters

Part II. State of the flora and fauna

Specially protected areas

1. Flora, including forests
2. Fauna, including fish resources
3. Red Book of the Russian Federation and Red Books of the subjects of the Russian

Federation

4. Specially protected areas

Part III. Impact of ecological factors on the conservation of the cultural heritage

Part IV. Impact of the basic types of economic and other activity on the environment

1. Basic types of economic activity
 - Minerals development
 - Processing productions
 - Energy, gas and water production and distribution
 - Agriculture, hunting and forestry
 - Transport and communication
 - Presentation of the other communal, social and personal services

2. Armed Forces of the Russian Federation
3. Impact of the rocket and space technique on the environment
- Part V. Environmental situation in regions
 1. General characteristic of environmental pollution in the subjects of the Russian Federation
 - Waste generation and management
 - Industrial and transport accidents and catastrophes
 2. Environmental situation in regions
 - Central Federal Okrug
 - Northern-Western Federal Okrug
 - Southern Federal Okrug
 - Near-Volga Federal Okrug
 - Urals Federal Okrug
 - Siberian Federal Okrug
 - Far-Eastern Federal Okrug
- Part VI. State regulation of environmental protection and nature use
 1. State environmental policy
 2. Provision of environmental safety
 3. Environmental protection legislation
 4. State ecological control and state control for use and protection of particular types of natural resources
 5. Enforcement of nature protection legislation by prosecutor bodies
 6. State environmental expertise
 7. Environmental monitoring
 8. Economic regulation and funding of nature protection activity
 9. International cooperation
 10. Science and technique in addressing problems of environmental protection and provision of ecological safety
 11. Informational support of environmental protection activity
 12. Environmental education, enlightenment and training
- Conclusion

The report is the enough solid document, in the preparation of which up to 40 ministries, agencies, scientific and public organizations were involved in various years. MNRE is the competent authority on the preparation of the report and coordinates activity of the organizations that participate in its compilation through the Interagency Work Group on the preparation of materials to the state report, annually established according to the Minister's Order. After its development the report is submitted to the Government of the Russian Federation for making the decisions on it, including those related to its replication.

In recent years, right up to 2008, the report was printed in 1,000 copies in Russian and was than submitted to the Administration of the President, the Government, the federal ministries and agencies, administrations of the subjects of the Federation, environmental and scientific organizations. In 2009 the official circulation of the report was decreased through 500 copies; however it was published as the short variant without Part VI "State regulation of environmental protection and nature use" in two numbers of the monthly magazine "State Management of Resources" with circulation of 3,000 copies in Russian as well. Starting 2003 the texts of the annual reports "On the state and protection of the environment of the Russian Federation" in Russian are uploaded to the site of the MNRE (www.mnr.gov.ru/part/?pid=776). Only once the report for 1993 was translated into English.

The national reports on the state and protection of the environment after the adoption of UNECE Guidelines on the application of environmental indicators and assessment reports based on them, a number of environmental indicators is used fully or partially, such as pollutants emission into atmospheric air, atmospheric air quality in urban settlements, green-house gases emissions (in the national communication on climate change), renewable resources and fresh waters outtake, loses and re-use and reverse supply of fresh waters, contaminated sewage waters, drinking water quality, lands withdrawal from productive turnover and a number of others. However, use of the environmental indicators does not have system recommended by the administrations, and is of the fragmented character. To a large extent it happens because the structure of the state report is strictly linked to the aforementioned Resolution of the Government on its preparation and printing, which is not revisited for over 15 years. By nowadays no document was issued that regulate use of environmental indicators. It is necessary to make decision on the preparation of the special test report based on the environmental indicators. Otherwise, the environmental data integration with the European Union countries would be problematic.

The MNRE also publishes the “Annual national reports on the state of water resources of the Russian Federation”, which, in particular, have sections that characterize findings of the monitoring of the surface water bodies and the underground waters, water use by the economic activities and other. The latest report for 2008 was issued with a small circulation of 50 copies in Russian and is uploaded (as for the previous years too) to the MNRE’s site (http://www.mnr.gov.ru/files/part/4490_gosdoklad_po_vodn_resursam_za_2008_g.pdf).

In addition to the aforementioned reports MNRE through its website (<http://www.mnr.gov.ru/part/?pid=1218>) distributes the national environmental bulletin with the regularly updated information, mostly contained orders of the Ministry on environmental protection activity.

Rostekhnadzor publishes the “Annual of Emissions of Harmful Substances (Pollutants) into the Atmospheric Air of the cities and regions of the Russian Federation in Russian”. The circulation of this Annual is 400 copies. It is also available online at: <http://www.nii-atmosphere.ru>.

The significant informational resource belongs to Roshydromet, which annually issues “Review of the state and pollution of the environment in the Russian Federation” by natural environs (atmospheric air, surface and marine waters, soils). However, the only reports uploaded to the Roshydromet site are “Reviews of the state and pollution of the environment in the Russian Federation” (<http://www.meteorf.ru>). Other documents are only presented with their names. Also the monthly information on accidental and extremely high pollution of the environment and radioactive situation is available at the site.

- A number of documents is available online at the websites of the Roshydromet institutes:
- at the site of the Voeikov Main Geophysical Observatory (<http://voeikovmgo.ru>): “Annual of the state of atmospheric air pollution in cities at the territory of Russia”;
 - at the site of Scientific Production Association “Typhon” (<http://www.typhon.obninsk.ru>): “Annual of soils pollution with toxicants of industrial origin”, “Annual of pesticides monitoring in natural environment objects of the Russian Federation”, “Annual of radiation situation at the territory of Russia and adjacent states”;
 - at the site of the State Oceanographic Institute (<http://www.oceanography.ru>): “Annual of marine waters quality per hydrochemical indices”, “Review of pollution of seas”;

- at the site of the Institute of Global Climate and Ecology (<http://www.igce.ru>): “Annual assessment reports on climate changes and their consequences at the territory of the Russian Federation”, “Review of background state of the natural environment at the CIS territory”.

Ministry of Emergency Situations annually issues the national report “On the state of protection of population and areas of the Russian Federation against emergencies of natural and technogenic character”, which has the chapter “Prevention of emergencies and reduce of adverse consequences for population and areas under their origin”. These reports are issuing in Russian in 700 copies. The reports, including the latest one for 2009, are available online at the Ministry’s site (<http://www.mchs.gov.ru>).

Sanitary-Epidemiological Service of the MHSD of Russia annually prepares and publishes in Russian the national report “On sanitary-epidemiological situation in the Russian Federation”. The report is presented on-line at <http://www.rospotrebnadzor.ru/documents/doclad>. The report has the specialized sections related to the hygiene of the atmospheric air, condition of the water bodies in places of water use by population in the small rivers and at the marine coast, drinking water supply, hygiene of soils, sanitary-epidemiological state of communal household objects, radiation situation in the country, irradiation with ionizing emission from natural sources.

The publications of the Federal State Statistics Service (FSSS) on the environmental protection are presented at <http://www.gks.ru>, which include:

- “Russian statistics annual”, which is published in Russian in 2,000 copies. The annual includes section “Natural resources and environmental protection”, where the data on the average monthly temperature of air, water resources, specially protected areas of the federal significance, fresh water use, including reverse and consecutive, amount of sewage and pollutants in it, amount of gross emissions into atmospheric air from stationary sources and amount of mostly distributed substances polluting atmosphere, disposal of substances polluting atmosphere caught by treatment facilities, and some other data, with majority provided in dynamics of long-term period (over 15 years). Sections “Production and distribution of energy, gas and water” and “Transport” contain data necessary for calculation of a number of environmental indices (energy balance, production of energy by power plants, shipments with all transport types, freight traffic, passenger traffic, availability of transport means, consumption of benzene and diesel fuel by motor transport etc.).
- Statistical compilation “Environmental protection in Russia” in 600 copies in Russian, where the information stated in the aforementioned Annual is presented more detailed. The compilation is supplemented with data on green house gases emissions, production and consumption wastes generation, use and neutralization, wildlife protection, state and protection of forest resources.
- Statistical bulletin “Basic indices of environmental protection” also in Russian in 65 copies.

The majority of subjects of the Russian Federation prepares and issues reports dedicated to natural resources and environmental protection theme. The national report on the state and protection of the environment of the Russian Federation serves as the model for such reports. At the same time each subject contributes to the unified model with changes and supplements characteristic for the region accounting its specificity. Such reports are usually issued with

circulation from 100 through 300 copies and are presented at the sites of the environmental organizations of these subjects.

As the instant the contents of the report “Natural resources and environmental protection of Kurgan oblast” is provided:

Introduction

1. State of the environment of Kurgan oblast
 - Hydrometeorological characteristics of the year
 - Atmospheric air quality
 - Surface waters quality
 - Biological diversity
 - Specially protected areas

2. Natural resources use
 - Use and protection of water resources
 - Sub-soils use
 - State and use of lands
 - Forest use, protection, conservation and reproduction
 - Use, protection, reproduction of wildlife species and aquatic bioresources

3. Impact of economic activity on the environment
 - Adverse impact on atmospheric air
 - Adverse impact of water bodies
 - Production and consumption wastes

4. Impact of environmental factors on population health
 - Hygiene of atmospheric air
 - Drinking water supply
 - Hygiene of soils
 - Sanitary radiation control
 - Natural focal diseases

5. Provision of environmental and radiation safety
 - Provision of safety under the chemical weapon storage and destruction
 - Provision of safety of hydrotechnical facilities
 - Storage of wastes of obsolete and banned pesticides
 - Provision of radiation safety and rehabilitation of polluted areas

6. Mechanisms of the state administration in the sphere of nature use
 - Formation of regulatory legal base
 - Financial economic mechanisms of nature use
 - State control in the environmental protection field (state environmental control)
 - State environmental expertise
 - State environmental monitoring
 - International and inter-regional cooperation

7. Scientific, educational and enlightenment activity
 - Scientific research and innovative activity in the sphere of environmental protection and natural resources use
 - Environmental education and enlightenment

- Public environmental movement

Findings, forecasts, recommendations

As resulting from the presented content, the representatives from the environmental bodies of the federal structures and the representatives from environmental organizations of Kurgan oblast jointly participated in the work on the report.

9. Gaps in information, shortcomings and obstacles

1. In the Russian Federation the significant amount of the state organizations perform the nature protection activity. Multi-levelness of the management and subordination (ministry, services, and agencies) results in duplicating of works in some cases. For instance, the specially protected areas are the subject of occupation of the MNRE, Rosprirodnadzor, and local administrations.

2. The Provision on the Roshydromet says that it is occupied with the state monitoring of the water bodies in part of the surface water bodies, it carries out the state accounting of the surface waters, and keeps the state water cadastre in part of the surface water bodies. The Provision on Rosvodresourtsy also has the record on carrying out the state monitoring of the water bodies and its organization, as well as the state accounting of the surface and underground waters and their use.

3. The national communications and reports provided to the international organizations on the implementation of the multilateral environmental agreements are rarely uploaded to the web-sites of the ministries and agencies who prepare them; therefore they couldn't be available for stakeholders and wider public.

4. The country lacks the unique state base with free access, where all regulatory legal environmental documents would be collected and be available for free access. At the same time, there is a number of commercial bases ("Garant", "Consultant plus", and others), where these documents are available on the fee basis.

5. The country has the state monitoring system based on the observation points of Roshydromet. This system is not completely equipped with the modern methods and technical means (for instance, the solid fine particles of small diameter in atmospheric air, concentrations of near-earth ozone and a number of other hazardous substances are not measured practically). At the same time a number of municipal and territorial entities, especially in big megalopolises, establish their own monitoring systems, which are way better equipped technically, use the automated systems for continuous measuring of the pollutants, and are familiar with the modern methods of analysis.

6. Information obtained under the implementation of all types of the environmental monitoring at the costs of the state budget, is referred to as the state informational resource, what is confirmed in the legislation of the Russian Federation. At the same time in a number of cases the analytical monitoring data is not always available for the concerned persons and the public. Often web-sites have only names of reviews, bulletins, and rarely – their content. The access to the materials themselves is restricted.

7. The country seems to not have the standardized system of environmental data sharing among ministries and agencies at the federal level. Such sharing, as a rule, is taking place

under the preparation of the annual reports on the state and protection of the environment in the Russian Federation.

8. Utilization of the environmental indicators does not have the system recommended by the UNECE guidelines on application of the environmental indicators and assessment reports based on them, and it is of the fragmented character. No document that regulates use of the environmental indicators was issued in the country at both the governmental and agency levels by the present time.

State Environmental Pollution Observation network

■ Stations of environmental pollution monitoring – 4,184; ■ including radiation – 1,280.

