



UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

Consultation meeting on the priorities for implementation of the ENPI Shared Environment Information System (SEIS) project
Brussels, 11-12 November 2010

“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

BELARUS

1. Environmental Management Structure

The Ministry of Natural Resources and the Environment Protection (Minpriroda) is responsible for the state policy in the field of the environment protection and rational use of natural resources, hydrometeorological activity, coordination of the activity of other state institutions and local executive bodies; environment control, information on the state of the environment and measures for its rehabilitation.

Other state institutions also fulfill environmental protection functions.

The Ministry of Health is responsible for the quality of atmosphere air in dwelling and industrial buildings, quality of food and drinking water.

The Ministry of Agriculture and Food is responsible for protection of soil and agricultural plants.

The Ministry of Forestry monitors the state of forests in the protected areas and outside their borders.

The Ministry of Interior controls mobile sources of the atmosphere pollution.

The Ministry of Housing and Municipal Services is responsible for municipal water supply, drinking water quality, waste water treatment, collection and processing of municipal solid waste, including waste from enterprises.

The Ministry for Emergency Situations is responsible for prevention and elimination of consequences of emergencies.

The Ministry of Statistics and Analysis collects statistical data on the state of the environment and pollution caused by enterprises, and maintains appropriate database.

The Administration of the President is responsible for management of protected areas (reserves, sanctuaries and national parks).

There are other governmental institutions contributing to the environment protection and natural resources use, such as the Committee for Land Resources, Geodesy and Cartography under the Council of Ministers (maintains Land Cadastre), the State Customs Committee

(protects unique species of flora and fauna from illegal export, protects citizens and the environment from illegal import of hazardous materials).

According to the provision on Minpriroda this ministry is authorized to regulate and coordinate activity of other Republican state administration bodies, local executive and regulatory bodies, organizations in the field of ecological safety provision, environmental protection and rational use of natural resources, hydrometeorological activity, regulation of impact on climate.

2. Multilateral environmental agreements (MEA) and obligations

Data on the participation of Belarus in the MEA and the programs listed in Table 1

Table 1. Belarus participation in the MEA and programs

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, 29 May, 1992)	11.06.1992	11.05.2000 (Rt)
Kyoto Protocol (Kyoto, 1997)		26.08.2005 (Rt)
Convention for the Protection of the Ozone Layer (Vienna, 1985)	22.03.1985	20.06.1986 (At)
Montreal Protocol on Ozone Depleting Substances (Montreal, 1987)	22.01.1988	31.10.1988 (At)
London Amendment		10.06.1996 (Rt)
Copenhagen Amendment		13.03.2007 (At)
Montreal Amendment		13.03.2007 (At)
Peking Amendment		13.03.2007 (At)
Convention on Biological Diversity (Rio-de-Janeiro,1992)		08.09.1993 (Rt)
Cartagena Protocol (Montreal, 2000)		11.09.2003 (Ac)
United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (Paris, 1994)		29.08.2001 (Ac)
Convention on POPs (Stockholm Convention)		03.02.2004 (Ac)
Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel, 1989)		10.12.1999(Ac)
Convention on Wetlands of International Importance (Ramsar Convention)		25.08.1991 (EIF)
Convention Concerning the Protection of the World Cultural and Natural Heritage		12.10.1988 (Rt)
International Convention for the Regulation of Whaling		

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)		08.11.1995 (EIF)
Convention on the Conservation of Migratory Species of Wild Animals		01.09.2003 (EIF)
Agreement on the Conservation of Populations of European Bats		
Agreement on the Conservation of African-Eurasian Migratory Water-birds		
Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area		
International Convention for the Prevention of Pollution from Ships		07.04.1994 (EIF)
FAO Global Forests Resources Assessment		Participates
Regional		
Convention on Long-Range Transboundary Air Pollution (Geneva, 1979)	14.11.1979	13.06.1980 (Rt)
Protocol on Reduction of Eutrophication, Oxidation and Formation of Ground Ozone		
Protocol on Persistent Organic Pollutants (Aarhus, 1998)		
Protocol on Heavy Metals (Aarhus, 1998)		08.06.1989(At)
Protocol on Further Reduction of Sulphur Emissions (Oslo, 1994)		
Protocol on Limitation of Emissions of Volatile Organic Compounds or their Transboundary Fluxes (Geneva, 1991)		
Protocol concerning the Control of Emissions of Nitrogen Oxides or their Transboundary Fluxes (Sofia, 1988)		08.06.1989(At)
Protocol on the Reduction of the Sulphur Emissions or their Transboundary Fluxes by at least 30 per cent (Helsinki, 1985)	09.07.1985	10.09.1986 (At)
Protocol on a Long-Term Financing of a Joint EMEP Program	28.09.1984	04.10.1985 (At)
Convention on the Protection and Use of Trans-boundary Waters and International Lakes		29.05.2003 (Ac)
Amendment		
Protocol on Water and Health		22.04.2009 (Ac)
Convention on the Transboundary Effects of Industrial Accidents		25.06.2003 (Rt)
Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus, 1998)	16.12.98	09.03.2000 (Ap)
Amendment		
Protocol on Pollutant Release and Transfer		

Register		
Convention on Environmental Impact Assessment in a Transboundary Context	26.02.1991	10.11.2005 (At)
Amendment 1		
Amendment 2		
Protocol on Strategic Environmental Assessment		
Convention on the Conservation of European Wildlife and Natural Habitats		
Subregional		
Reporting to the Inter-state Statistical Committee of the Commonwealth of Independent States		Yes

a) Reporting under the global MEAs

Belarus is a party to 10 global conventions and three Protocols to it.

Implementing its obligations in the Framework UN Convention on Climate Change and Kyoto Protocol Belarus prepared in 2009 the Fifth National Report and other reporting documents, which are uploaded to the Convention's site (http://unfccc.int/national_reports/).

Belarus ratified all four amendments under the Convention for the Protection of the Ozone Layer and Montreal Protocol. Annually the country provides data on ozone depleting substances (ODS) consumption to the Secretariat. The most recent is the report provided for 2009. Data is available on the Convention's site: <http://www.unep.org/ozone>

In 2009 Belarus submitted to the Secretariat of the Convention on Biological Diversity the Fourth National Report which is uploaded on the site of the Convention in Russian (<http://www.cbd.int/reports/search>). Three previously submitted reports are also uploaded on this site.

At present the Third national report on the implementation of the Convention to Combat Desertification is under preparation. The reports for 2002 and 2006 are uploaded on the site of the Convention in Russian and English (<http://www.unccd.int/cop/reports/centraleu.php>).

The last national report on hazardous wastes transboundary movement and their disposal is dated 2006. The report is published online at the following address: http://www.minpriroda.by/dfiles/000263_930980_Bazel_otchet_2006.doc in Russian and English.

Despite that Belarus is the party to the Convention on Persistent Organic Pollutants, it did not provide national report that cover time period from 2003 through 2006.

Under the Ramsar Convention on Wetlands of International Significance Belarus presents the national reports on implementation of the Convention requirements on a regular basis. The latest report for 2008 was provided in English and is available online at the Convention site: <http://www.ramsar.org>.

In line with the provisions of the Convention on International Trade in Endangered Species of Wild Fauna and Flora Belarus presents both annual and biannual reports on this activity. The latest reports were prepared for 2007 and for 2007-2008, respectively. The text of biannual reports in English is available online at the Convention's site: <http://www.cites.org>.

Belarus has prepared and presented to the UN Food and Agriculture Organization (FAO) the report “Global Assessment of Forest Resources 2010», which is available in English online at: <http://www.fao.org/forestry/20262-1-158.pdf>

Belarus on a regular basis presents reports on implementation of the Agreement on the Conservation of Populations of European Bats not being the party to the Convention on the Conservation of Migratory Species of Wild Animals. The latest report for 2008 in English is presented online at the site: http://www.eurobats.org/documtnts/national_reports.htm.

Information is submitted to the secretariats of other Conventions and Protocols according to the set frequency, volume and format, and the environmental information is exchanged in the framework of bilateral agreements.

b) Reporting under the regional MEAs

Belarus is the party to five regional conventions and four protocols to them.

The country implements its obligations under the UNECE Convention on Long-Range Transboundary Air Pollution and three Protocols to it. The information on submission of annual data is available online at the Convention’s site: <http://www.unece.org/env/lrtap/>.

Aimed at implementation of the Convention on the Protection and Use of Transboundary Watercourses and International Lakes Belarus prepared in both Russian and English and presented in March 2010 the Brief report in line with the Protocol on Water and Health. The report is available at the Convention’s site: <http://www.unece.org/env/water/>.

Being the party to the UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters Belarus on a regular basis is reporting on the progress achieved to the Meeting of the Parties to the Convention, and participates in the meetings of its working bodies as well. The latest report for 2008 in English, French and Russian is available online at the Convention’s site: <http://www.unece.org/env/pp/>.

Under the Convention on Environmental Impact Assessment in a Transboundary Context Belarus is regularly providing reports on this activity. The latest report for the period 2003-2009 was presented in Russian in June 2010 and is available online at the Convention’s site: <http://www.unece.org/env/privet.htm>.

c) Reporting under the sub-regional MEAs

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

At present the country has a well developed legal system with a great number of normative documents. The Ministry of Natural Resources and Environment Protection develops environmental legislation trying to make it compatible with legal environmental norms of the EU. However, much is to be done for harmonization of the national legislation with the environmental norms of EU.

The basic environmental law in the country is a framework Law on the environment protection adopted in 1992 with amendments of 2002. It sets principles and environmental goals and identifies objects (environment) and subjects (physical and juridical persons, administrative-territorial unit and the State) and their relationships. It also reflects basic directions in the state environmental policy and management: the rights and duties of persons and public organizations; setting of environmental norms, standards and certifications; requirements for designing, construction, reconstruction, closure and elimination of constructions which impact the environment. The Law includes chapters concerning environmental impact assessment, environmental expertise, special protected natural areas, environmentally unfavorable territories, environmental monitoring, registration and information.

The Law on the protection of the atmospheric air (1997) is aimed at protection and improvement of the air quality. It regulates norms of air quality and requirements to protect atmosphere during designing, construction, reconstruction and exploitation. It envisages economic instruments, the state database on negative impacts on the air, monitoring and control.

The Law on protection of ozone layer (2001) regulates the State activity, defining the competence of the Council of Ministers, Ministry of Natural Resources and the Environment Protection and local authorities. It includes economic instruments; licensing of activities connected with use of the ozone depleting substances; movement of these substances and products containing ozone depleting substances; the ozone layer monitoring; control and responsibility for legislation violation.

The Law on wastes (1993, with amendments of 2002) sets a legal basis for wastes processing and is aimed at prevention of wastes negative impact on the environment and human health. Its main provisions describe relationships between the national norms and international agreements on wastes; the ownership rights on wastes; requirements for waste management; the competence of the central and local authorities: classification and certification of waste; processing of harmful waste; reporting, control and etc.

The Law on special protected areas (2000) defines a legal basis for functioning and protection of special protected natural areas. It contains provisions on categories of protected areas (reserve, national park, sanctuary and natural monument), management, competence of the state authorities, protection regime, scientific research in special protected natural areas, public participation in a decision-making process, financial matters, the state control and responsibility for the legislation violation and compensation for damage.

The country has developed and cross-sectoral programs, including national sustainable development strategy for the period up to 2020, main directions of energy policy until 2020, the State Programme on multifunctional use of forests up to 2015, the State plan for the development of forest management by 2015.

At present according to the Government's assignment the Concept of the State Program for Environmental Monitoring Development for 2011-2015, which envisages implementation of more than 80 activities, was developed and submitted to the Council of Ministers.

Normative documents on the environment protection (internal normative documents, rules, regulations, instructions) are prepared and proposed by ministries and approved by a resolution of the Council of Ministers or by an order of the Ministry of Natural Resources and Environment Protection or other ministries.

4. Monitoring

Monitoring is carried on within the framework of the National System of Environmental Monitoring (NSEM) established in 1993. At present NSEM includes 11 organizationally independent types of environmental monitoring, in particular:

- monitoring of lands;
- monitoring of surface water;
- monitoring of ground water;
- monitoring of the atmosphere;
- monitoring of the ozone layer;
- monitoring of flora;
- monitoring of forests;
- monitoring of fauna;
- radiation monitoring;
- geophysical monitoring;
- local environmental monitoring.
- integrated monitoring of ecosystems in special protected areas;
- system of socio-hygienic monitoring and forecasting extremely natural and man-made.

Basic directions of the environmental monitoring development according to the President's decree № 251 of 18 April 2006 "The State Program for development of the National system of the environmental monitoring in the Republic of Belarus for the period 2006-2010" are as follows:

- appropriate technical and methodic level of the environmental monitoring;
- harmonization of the environmental monitoring system in compliance with international requirements;
- informational support in implementation of international environmental obligations;
- creation of optimal observation network of the environmental monitoring;
- development of local environmental monitoring at sites seriously polluting atmosphere, surface and ground water, soils (self-monitoring of enterprises);
- functioning of the informational system of environmental monitoring on the basis of modern information technologies, its integration with international nets and programs.

Full scale observations of atmospheric air are carried on in 18 cities, as well as at the station of a complex background monitoring "Berezinskiy reserve". The budget of 2010 provided funds to purchase 9 complex air monitoring stations for seven industrial centers. So, all towns with population exceeding 100 thousand residents by the end of 2010 will be covered by stationary observations of the air quality.

In addition to observations of standard pollutants, 3 stations in Minsk and 4 stations in other industrial centers conduct observations of concentrations of PM₁₀ and ground ozone, in most towns – benz(a)pyrene.

Automatic stations of the air monitoring are introduced in large sources of emissions into the atmosphere: in 2008 3 stations were obtained for Minsk, Vitebsk and Mogilev. Automated systems to control emissions into the atmosphere were installed at 13 enterprises.

In 2009 5 enterprises installed automatic stations for air emissions monitoring purchased at the expense of enterprises. The stations were metrologically certified by Gosstandart. Six more enterprises carry on preparations to install such stations. Mostly they are enterprises of energy, glass industry, cement production, metallurgy.

In 2010 funds are allocated to equip 2 monitoring stations on the northern and eastern borders of the country (Braslav and Mstislavl) for assessment of atmospheric precipitations (chemical composition and acidity).

A draft program for the next 5 years envisages further installation of automatic stations for monitoring of air and emissions, enlargement of the control for PM₁₀ and PM_{2,5}, ground ozone in the atmosphere of cities, build up a second-level EMEP station based on Berezinskiy biosphere reserve and the station "Vysokoe".

In the field of surface water monitoring observation programs are implemented on the main transboundary rivers (Zapadnaya Dvina, Dnieper, Neman, Zapadny Bug, Pripiat). Within the framework of bilateral cooperation joint sampling and intercalibration with laboratories from Lithuania, Poland, Ukraine and the Russian Federation were carried out, and a regular information exchange was arranged.

Taking into consideration an increasing contribution of diffused sources, it was envisaged to perform their inventory and correction of the monitoring net on the basis of unbiased assessment of the diffused sources impact.

In 2010 one enterprise of housing and communal services introduced the first in the country automated control system of the incoming and discharged wastewater composition, as well as regulation of technological parameters of wastewater treatment. This system allows reacting quickly on accidental wastewater discharges, optimizing the process of a biological treatment.

Within the framework of land monitoring an annual observation complex is carried on in order to detect and assess processes connected with changes in soils fertility/productivity under the impact of water and wind erosion, and to assess chemical pollution of soils by heavy metals and persistent organic pollutants. Basic directions of further soil monitoring development are aimed at introducing a system of registration of degraded lands in compliance with obligations of Belarus in the UN Convention to Combat Desertification.

In Belarus there are permanent monitoring programs in the regions impacted by the Chernobyl accident and further measures are taken to implement a full scale research program to study radiation impact on human health, biodiversity and environmental situation in the polluted areas.

An observation program for radiation monitoring in the regions not impacted by the accident in the Chernobyl Nuclear Power Station is under implementation.

Analytical control in the field of the environment protection is carried on to assess quantitative and qualitative characteristics of pollutants in the air emissions and discharges into surface and ground water, as well as to define land pollution (including soil) and wastes composition. The state analytical control is carried on by territorial analytical laboratories and by a special monitoring and analytical inspection of Minpriroda.

Upgrading and development of a methodic base of environmental measurements is one of the priority activities in the analytical control and environmental monitoring. This activity is implemented by Minpriroda in a close contact with the State Committee for Standardization and includes:

- analysis and comparison of the national and international methodic bases for environmental measurements;
- development of measuring methods and the state standards in Belarus, on the basis of adaptation of international standards (ISO);
- expert assessment of new measuring methods to identify their compliance with the requirements of environmental measurements;
- inventory and classification of measuring methods and state standards allowed to be applied in environmental measurements;
- maintain a list of measuring methods allowed for use in environmental measurements;
- to inform specialists of enterprises and organizations involved in environmental measurements on amendments and changes in the methodic base of environmental measurements.

5. Environmental data and information exchange

In the framework of the National system of the environmental monitoring (NSEM) an information system is functioning which provides information exchange among types of monitoring; analysis, correlation and compilation of information on the state of the environment, forecast of changes under the impact of natural and anthropogenic factors. All this information is submitted to the state authorities, juridical and physical persons, as well as to the international organizations in compliance with the obligations of Belarus in international agreements.

The information system of NSEM combines the information- analytical centers of various types of environmental monitoring and the Central information-analytical centre (<http://ecoinfoby.net>) which was established by the Minpriroda decree No. 286 dated 20.12.2000 and functions on the basis of the environmental monitoring division which is under “Belarus scientific and research center “Ecology””.

The main tasks of the Center are:

- to maintain the State register (list) of the observation points of the environmental monitoring in Belarus;
- to collect and store database of a combined monitoring information and analytical information submitted by analytical centers of various types of monitoring;
- in coordination with Minpriroda to define requirements for a combined ecological information submitted by information-analytical centers;
- to make decisions on matters in its competence which are obligatory for implementation by the information-analytical centers for different types of environmental monitoring;
- to participate in environmental data exchange with the system of monitoring and forecasting natural and technogenic emergencies and with the system of social and hygiene monitoring;
- to compile a complex information on the state of the environment, to submit it to the state bodies and institutions, other juridical persons and citizens, as well as to the international organizations after approval by Minpriroda;
- to make environmental assessments and to develop forecasts of the environment state and the impact of natural and anthropogenic factors on the basis of NSEM environmental information;

- to prepare information, reports, bulletins and other analytical documents on matter within its competence;
- to prepare and publish reviews on the state of the environment based on the observation results within NSEM, and to upload them in the Internet;
- to maintain the NSEM site functioning in the Internet;
- to upgrade technologies and methods for information collection and analysis, to do work on digital ecologic mapping and to establish geoinformation systems.

Modern technical and program devices are introduced in the Central information-analytical center and in 11 information-analytical centers of monitoring for collection, analyses and operative submission of the environmental information in the format required by different users. The State environmental database is permanently loaded with the results of annual monitoring observations. Operative and analytical environmental information is regularly submitted to the state authorities, juridical persons and citizens.

Due to installation of the automatic air monitoring stations the information-analytical center for air monitoring arranged collection of data from continuous air pollutants measurements. New specialized program products were developed within the automated system which allow to trace daily changes in the air pollutants including the time of maximum accumulation. They also improved processing and analyses of the surface water monitoring data related to hydrochemical and hydrobiological indicators.

The responsibility for data presenting and exchange is established by the regulatory legal acts, which envisaged data exchange and sharing by ministries of environment, health, water resources, agriculture, industry, institutions occupied with environmental information, institutes on ecology/environment, hydrometeorological services, statistics departments.

The main informational analytical center has been granted licenses for implementation of works on digital environmental area mapping and establishment of geo-informational systems (GIS). GIS technologies are applied with use of modern multifunctional software products. The analysis of GIS capabilities, most widely used under the addressing of environmental, nature protection and tasks a-like, allowed formation of software core of GIS NSEM on the basis of ESRI software. The selection of ArcInfo and ArcView GIS as the baseline GIS products ensures the possibility for implementation of a number of works of various levels of information generalization – from concrete objects, cities and administrative district and oblasts areas through river basin areas and the Republic as a whole. The important stage in GIS NSEM establishment was the stage of collection and processing of cartographic information, which includes: basic topography map of the Republic of Belarus; 118 thematic rasterized maps that characterize natural, natural-resources specificities of the area, as well as specificities of land use and economic management; environmental maps in vector format. The cartographic base for GIS NSEM is the digital topographic map of the Republic of Belarus scaled 1:500000 made in F20S format and converted via intermediate format to the ArcInfo format.

The Main Information Analytical Center and 13 information analytical centers of monitoring types ensures the completion with results of annual monitoring observations of data bases of the State Data Fund on the Environmental State and Impact. Environmental information in line with the established periodicity is presented to the state bodies, legal persons and citizens.

The Internet-sites of the monitoring system are maintained (<http://ecoinfoby.net>), (<http://rad.org.by>), (<http://belgosles.mlh.by>), (<http://ozone.bsu.by>) in order inform a wide audience on the state of the environment and on the sources with a negative impact on the environment. This information is also uploaded on the site of Minpriroda (www.minpriroda.by).

There are 21 sites on environmental theme acting in the country in addition to the above listed (list of sites – Annex 1).

A list of regime information includes Reviews (quarterly, semiannual) and short Yearbooks which are disseminated in the electronic forms according to the list of distribution.

Every day the radio and TV present the daily forecast of the air pollution in Minsk. Information on the current state of the air in Minsk and daily concentrations of PM10 in Minsk, Mogilev, Vitebsk, Gomel and Zhlobin are daily uploaded on the site of Minpriroda.

Analytical environmental information is delivered quarterly to the district executive committees and to Minsk city executive committee, and the information on violations of the environmental legislation is submitted to the sectoral ministries for reaction. The information on the exceeding norms of air pollution is weekly submitted to the telegraph agencies “BELTA”, “Interfax”, TV and republican newspapers.

The National environmental portal is functioning in the country in Russian (www.priroda.org). It contains different sectors including environmental legislation in Belarus, catalog of environmental Internet resources (special protected areas, NGOs and projects, international organizations and funds), reference book of NGOs in Belarus, documents on matters concerning the environment and natural resources use, meetings and conferences documents, activities of ecologists. The portal is user friendly.

6. Data Comparability

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

Data, published in publications disseminated inside the country (for instance, environmental bulletins) could also be considered as comparable with data from other countries, when they are presented in absolute values (for example, data on emissions into the air basin, concentrations of pollutants in atmospheric air, water objects, soil), but they could not be comparable with data of European countries, if they are presented in units and shares of maximum permissible concentrations. In particular, data on wastes are incomparable with data of EU countries as the wastes classificatory used is not matching the pan-European.

7. Environmental assessment

In 2005 the National Report on the state of the environment in Republic of Belarus was published (http://www.minpriroda.by/ru/site_menu/napravlenia/mejdunsotr/doclad). The report included the following sectors:

- air quality;
- the state of surface and ground water;
- land resources and soils;
- the state of flora;
- the state of fauna;
- the state in geological sphere, impact of mineral resources mining;
- sanitary state of the environment and its impact on human health;
- wastes management;
- the state of the historic, cultural and natural heritage;

- impact of the enterprises activity on the environment;
- environmental situation in the regions;
- environmental policy and the state regulation of nature use.

In compliance with the obligations in the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters it is planned to prepare and publish by the end of 2010 the National Report on the state of the environment in Belarus (bilingual). The National Reports are prepared and published every 5 years and related to the implementation of the countries' obligations.

In addition, environmental assessment reports are published annually in the ecological bulletin "The State of the Nature in Belarus". This publication is in fact a report on the state of the environment and includes information on climatic and hydrological characteristics of the year, on air quality and the state of the ozone layer, state and use of natural water, mineral and raw materials resources, land resources and soils, forests, fauna and flora, wastes generation and utilization.

The content of the environmental bulletin is given below:

- Chapter 1. Social and economic situation and human health
- Chapter 2. Climatic and hydrological characteristics of the year
- Chapter 3. Air quality and the ozone layer
- Chapter 4. Natural water
- Chapter 5. Land resources and soils
- Chapter 6. Mineral and raw materials resources
- Chapter 7. Forests
- Chapter 8. Fauna
- Chapter 9. Protection of landscape and biological diversity
- Chapter 10. Green plantations and natural ecosystems in cities
- Chapter 11. Industrial and municipal wastes
- Chapter 12. Management of the nature use and protection
- Chapter 13. Regional environmental problems

Information contained in the bulletin covers the whole country. Regional environmental problems are presented in a separate chapter. The environmental assessment is carried on the basis of the indicators recommended by the Guidelines for application of environmental indicators in the countries of Eastern Europe, Caucasus and Central Asia. Statistic reports on the environmental state and environmental activities, the data from cadastres (water, air, land, flora and fauna, wastes), observations results of NSEM, as well as social-hygiene monitoring information are used for the environmental assessment.

In 2009 an annual environmental review was prepared and uploaded on the Inter-site of the Central information-analytical center and on the site of Minpriroda. The assessment of air and surface water was implemented using indicators recommended by the mentioned Guidelines (number of days with exceeding norms of air quality in towns, indicators reflecting oxygen regime, nutrients content, etc.).

In 2010 in addition to the bulletin "The state of the environment in Belarus" the following annual assessment reports were prepared and published:

- State Water Cadastre. "Water resources, their uses and water quality"2009.
- Actual water use and wastewater discharge in the Republic of Belarus within the framework of the water cadastre 2009;

- The State report “Sanitary-epidemiologic situation in the Republic of Belarus” – 2009. Statistic publication.

The National Statistics Committee publishes annually statistic publication “Environment Protection in the Republic of Belarus” which contain information on the state of the environment and natural resources use. The data on water resources use, forests use, pollutants emissions in the air, wastes management, environmental expenditures, geological search and etc. are presented reflecting dynamic changes for several years. The basic indicators cover the whole country, regions, districts and separate towns. It is published in Russian and English. The National Statistics Committee has its own Web-page in the Internet (<http://www.belstat.gov.by>), where information is uploaded in Russian and English on the official publications of the National Statistics Committee with short annotations and the dates of their publishing.

Minprorida annually publishes the book “The National System of the Environmental Monitoring in the Republic of Belarus: observation results” (has manuscript rights). The book contains the basic observation results received from different types of monitoring:

- land monitoring;
- surface water monitoring;
- ground water monitoring;
- air monitoring;
- ozone layer monitoring;
- forests monitoring;
- monitoring of fauna;
- geophysical monitoring;
- radiation monitoring;
- local monitoring;
- complex monitoring of ecosystems in special protected areas;
- system of social and hygiene monitoring and forecasting of emergencies of natural and technogenic character.

This publication covers a wide range of topics, contains complex materials reflecting the state of the environment in the country.

Quarterly bulletins “Exceeding norms of pollutants emissions/discharges from the enterprises of Belarus” are published in the country and uploaded on the site <http://www.ecoinfoby.net/>.

8. Gaps in information, shortcomings and obstacles

It is expedient to upload the national reports and communications, made by the country to implement its international environmental obligations at the Ministry of Nature Protection site.

Environmentally related sites of the Republic of Belarus

- www.belgeo.by – Scientific Research Geological Republican Unitary Enterprise “BELGEO”;
- www.geologiya.org – Geological-Prospecting Republican Unitary Enterprise “Belgeologia”;
- <http://geology.org.by> - Republican Unitary Enterprise “Belarusian Scientific Research Geological-Prospecting Institute”;
- www.kosmoaerogeology.by – Scientific Production Republican Unitary Enterprise “Kosmoaerogeologia”;
- <http://www.pogoda.by> – Official informational site for Hydrometeorological Centre of the Republic of Belarus;
- <http://ecoinfoby.net> – National Environmental Monitoring System of the Republic of Belarus (NEMS);
- <http://www.cricuwr.by> – Republican Unitary Enterprise “Central Scientific Research Institute of Integrated Water Resources Use”;
- <http://mus-eco.com> – Institution “State Museum of Nature and Ecology of the Republic of Belarus”;
- <http://www.belnic.ecoinfoby.net> – Republican Unitary Enterprise “Belarusian Scientific Research Center ‘Ecology’”;
- <http://www.aarhusbel.com> – Aarhus Center of the Republic of Belarus;
- www.climate-by.com – site of the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus for informational support of the Republic of Belarus under the UNFCCC and the Kyoto Protocol;
- <http://www.soz.minpriroda.by> – site of the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus on implementation of the Stockholm Convention on Persistent Organic Pollutants in Republic of Belarus;
- <http://www.center.gov.by/biznes/> – site of the National Center of Legislation and Legal Studies of the Republic of Belarus “Improvement of Business Climate in the Republic of Belarus”;
- <http://hbc.bas-net.by/bcb/> – site “Botanic Collections of Belarus”;
- <http://hbc.bas-net.by/plantae/> – site “Plants of Belarus”;
- <http://biosafety.org.by> – site of the National Coordination Center for Biosafety of the Republic of Belarus;
- <http://www.touragency.by> – site of the National Agency for Tourism;
- <http://www.ptushki.org> – site of NGO "APB BirdLife Belarus";
- <http://www.ecoproject.by> – site of the International Public Organization “Ecoproject Partnership”;
- <http://wildlife.by> – site of the “RIFTUR” Publishings;
- <http://fauna.iatp.by> – site of the Republican Magazine “World of Animals”.