EXPERT EVALUATION

of environmental aspects of

The Programme Draft

«South-East Finland – Russia»

(in frames of the Programmes CBC 2014 – 2020)

The environmental report

Saint Petersburg

2014 г.
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Introduction

The aim of SOUTH-EAST FINLAND – RUSSIA ENI CBC Programme 2014-2020 is providing a higher level of environmental protection and integration of environmental aspects into development plans and programmes to achieve sustainability.

The goal of the environmental expert evaluation according to the Article 4 (VIII) of the draft ENI Transboundary Cooperation Guidelines in accordance with Directive 2001/42 / EU on environmental impact assessment of plans and programs, adopted by the European Union on June 27, 2001, is to provide analysis of the Programme Draft for its coherence with declared goals and analysis of the draft Programme for its compliance with the stated objectives (providing a higher level of environmental protection and integration of environmental aspects into development plans and programmes to achieve sustainability).

The following measures have been undertaken to produce the environmental report:

- consultations with environmental authorities and the public;
- provision of information to the authorities and the public regarding the Program;
- public discussion of the Programme Draft, analysis of expressed opinions and suggestions.

The latter was reflected in the present report.

Through the public hearings and discussions with environmental authorities the following items have been identified:

- the volume of the environmental report;
- environmental issues that need to be resolved;
- the level of specification of the report;
- the data that shall be collected;
- the methods to be used in development of the environmental report;
- consultations needed for the environmental report.

The environmental evaluation conducted in accordance with Directive on SEA (article 5.1 of the Directive and its annex 1) included, inter alia, the following aspects:

- Identification of environmental authorities in the Russian Program region;
- Discussion on whether the Russian legislation requires SEA or not.
1. SOUTH-EAST FINLAND – RUSSIA ENI CBC Program 2014-2020

1.1. Description of the Programme area

In the new programme cycle 2014-2020 the transboundary cooperation on external borders of the EU, including the partnership between Russia and Finland, will be implemented in frames of the European Neighborhood and Partnership Instrument (ENI).

The South-East Finland – Russia ENI CBC Programme 2014-2020 has been drafted jointly by the Finnish and Russian cooperation parties. The preparatory process for the programme was commenced in the summer 2013 with establishment of the Joint Programming Committee (JPC) composed of regional representatives of both participating countries.

The Programme Regions

The South-East Finland – Russia CBC programme’s core area for the period 2014–2020 includes the regions of Kymenlaakso (FI1C4), South Karelia (FI1C5) and South Savo (FI1D1) in Finland and Leningrad Region and City of Saint Petersburg in Russia. In the programme area, Finland and Russia share approximately 200 km of land and 130 km of sea border. The South-East Finland – Russia CBC programme’s core area covers 117 538,30 km². The total coverage is 85 900 km² on the Russian side and 32 000 km² on the Finnish side.

The adjoining regions include Uusimaa, Päijät-Häme, and North Savo, and the Republic of Karelia. The total area of the neighboring regions covers 36 188 km² on the Finnish side and 180 500 km² on the Russian side. These regions are not enlargements of the program area but regions that are able to develop their activities to Russia via the core program area, and vice versa.

City of Turku was included as a major economic and cultural centre due to its long-term relation with the City of St. Petersburg.

The total population of the program area is 7.0 million inhabitants. In terms of population density, there are high differences between the regions, where the City of Saint Petersburg is considerably more populated than other territories. The population density in Saint Petersburg is 3.390,94/km², in Leningrad Region 20,32/km², in Kymenlaakso 32/km², in South Karelia 18/km² and in South Savo 8,1/km². The EU average is 116. St. Petersburg is the fourth largest city in Europe after London, Moscow, and Paris. On the Finnish side, the core program area has approx. 466,000 inhabitants.
1.2. Synergies with environmental policies, strategies and programmes.

**Baltic Sea Strategy**

The EUSBSR is the first comprehensive EU strategy to target the region.

The eight EU countries that make up the Baltic Sea Region (Sweden, Denmark, Estonia, Finland, Germany, Latvia, Lithuania and Poland) face several common challenges which are reflected in the jointly-agreed Action Plan for the Strategy. It includes a number of priority areas to save the sea. The Strategy helps to mobilize all relevant EU funding and policies and coordinate the actions of the European Union, EU countries, regions, pan-Baltic organizations, financing institutions and non-governmental bodies to promote a more balanced development of the Baltic Sea Region. The Strategy improved cooperation between the regions and other partners, raise participation of Russian partners in such areas as environmental protection, water, and innovations.

**The Strategy of social and economic development of the North-West Federal District of Russia**

The strategy embraces all spheres of life in the district. The geographic location of the North-West Russia predetermines its active participation in securing economic links of Russia with the European Union. Being an internal instrument of the Russian Federation, the Strategy has an impact on the participation of Russian regions also in Russia- EU cross-border cooperation (CBC) programs.

According to the action plan of the strategy there are four main objectives:

- Create conditions for effective economic development
- Remove transport, energy, information, telecommunication and other infrastructure restrictions
- Social development
- Solve environmental problems

**Arctic Strategy**

Finland’s new Strategy for the Arctic Region defines a number of objectives for Finland’s Arctic policy. The strategy addresses local residents, education, research, the economy, infrastructure, the environment, stability and international cooperation in the Arctic.

Inherent in the perspectives created by the new strategy are the four pillars of policy out-lined by the Government: an Arctic country, Arctic expertise, Sustainable development and environmental considerations and International cooperation. Together, these elements define Finland’s role in the Arctic region. It is Finland’s objective to promote growth and actions to enhance competitiveness in the region with due regard to the local environment.
The Northern Dimension

The Northern Dimension is a joint policy between EU, Russia, Norway and Iceland. The Northern Dimension Policy was initiated in 1999 and renewed in 2006. The policy aims at providing a framework to:

- promote dialogue and concrete cooperation
- strengthen stability, well-being and intensified economic cooperation
- promote economic integration, competitiveness and sustainable development in Northern Europe.

The policy covers a broad geographic area, from the European Arctic and Sub-Arctic to the southern shores of the Baltic Sea, countries in the vicinity and from North-West Russia in the east, to Iceland and Greenland in the west.

The renewed Northern Dimension policy was launched at the Helsinki Summit in November 2006, which adopted a Northern Dimension Political Declaration and Northern Dimension Policy Framework Document. The renewed policy introduces a link between the Northern Dimension and the EU-Russia common spaces. Practical cooperation takes place within the Northern Dimension Partnerships.

Karelia CBC Program and Kolarctic CBC Program

Karelia ENI CBC Program area covers regions of Kainuu, North Karelia and Oulu in Finland and the Republic of Karelia in Russia.

The area covered by the Kolarctic CBC Programme comprises Lapland in Finland, Norrbotten in Sweden, Finnmark, Troms and Nordland in Norway and Murmansk Oblast, Archangelsk Oblast and Nenets Autonomous District in Russia.

Adjoining regions in Kolarctic CBC Programme are Northern Ostrobothnia in Finland, Västerbotten in Sweden and Republic of Karelia and Republic of Komi in Russia.

City of Saint Petersburg in Russia is selected as a major economic centre, which is included in the Programme.

The EU Programme «European Neighborhood and Partnership Instrument»

The European Regional Development Fund has funded CBC in the programme’s border regions (core area) since 1996 under the South-East Finland INTERREG II A programme 1996-1999. It was aimed on large-scale projects, increasing economic and commercial attractiveness of cooperation between the companies in the programme area.

The South-East Finland – Russia INTERREG III A programme, covering the period of 2000-2004, focused on developing border crossing points and transport links, maintaining and improving the state of the environment, supporting expertise and the conditions for cooperation and welfare.
In the period of programme cooperation, which terminated in 2006, cooperation on the external border of the EU between South-East Finland and Russia was based on the INTERREG III A Programme, which was operating in 2005-2006 as «Neighbourhood Programme South-East Finland- Russia». From 1996 projects in Russia were funded through the Programme of Technical Assistance (Tacis CBC SPF).

In 2005-2007 cooperation took place in frames of the Neighborhood Programme, Cross-border Cooperation «South-East Finland - Russia, 2005-2007».

The following years cross-border cooperation on the EU’s external border took place in the EU Programme «European Neighborhood and Partnership Instrument», Cross-border Cooperation «South-East Finland - Russia», 2007 – 2013. The first call for proposals took place at the end of 2009, the last (third) call for proposals in the fall of 2011.

The South-East Finland – Russia ENPI CBC Programme 2007-2013 allowed for funding of joint projects across the border from one financial source and with one administrative procedure. The management of the programme was based on equality and partnership between the participating countries.

According to The South-East Finland – Russia ENPI CBC Programme 2007-2013, in the period of 2008-2014 the main attention was focused on development of boxer crossing points, transportation links, preservation and improvement of the environment, creating conditions for cooperation.

The programme’s total project funding in St.Petersburg and the Leningrad region amounted to 42 865 000 euro. As a result, on the Russian the programme helped establish 90 new companies, create 309 new jobs, complete 112 researches, develop 644 joint modules of training courses and programmes, train 2 626 people, involve and train 400 volunteers.

Both the South-East Finland – Russia Neighbourhood Programme 2004-2006 and the South-East Finland – Russia ENPI CBC 2007-2013 have made a contribution to the developing and deepening of collaboration between participating adjacent regions. A large number of discussions and joint projects involving stakeholders on both sides of the border have emphasized that cooperation in the programme area can be intensified and optimized further through systematic cross-border cooperation. When CBC has already been active several years, also an in-creased involvement and support from the national level have been evident.

The South-East Finland–Russia ENI CBC Programme 2014-2020 (Draft) has been designed in accordance with the ENI Instruction, «The Strategic Document on Cross-Border Cooperation 2007 - 2013 - European Neighborhood and Partnership Instrument», EU Instruction № 951/2007 from 09.08.2007, which provided a plan for designing cross-border cooperation programs funded according to the EU Instruction № 1638/2008.

The Programme Draft meets the requirements of the European Neighborhood policy and Strategic Partnership EU-Russia in identified strategic goals.
1.3. Description and analysis of the Russian Programme area

The Programme area on the Russian side includes two subjects of The Russian Federation: Saint Petersburg (1 439 km²) and The Leningrad region (83 909 km²).

Geographically, the region falls into the zone of excessive precipitation. During the year the region receives precipitation unevenly: most (67%) fall during the warm period, and 33% – during the cold period. The annual precipitation averages at 550-650 mm. Weather conditions: annual mean temperature is circa - 5.2 C, July average - 17.7 C, January average - 6.5 C.

The regional territory is crossed by the river Neva. Its total length is 74 km, of which 38 km on the territory of St.Petersburg, mean water flow at the source is 2480 km³/s; width ranges from 400 to 600 meters with the average depth of 8-10 m (24 being the maximum).

St.Petersburg is situated on 44 islands formed by the Neva and other rivers. It is the major scientific, industrial, and transportation center of North-west Russia, connected to 12 railway lines and 5 highways. The city is divided to 19 administrative districts (rayons) which, in their turn, are subdivided into 111 municipalities.

The territory of surrounding St.Petersburg Leningrad region is adjacent to the Gulf of Finland. The total length of the coastal line is 330 km. More than 50% of the region’s territory is covered by forests, nature reserves, and parks.

The Leningrad region contains deposits of 26 kinds of minerals. Of 139 known deposits only 90 are extracted, including: Kingisepp phosphate ore deposit (225 357 thousand tones), Leningrad Oil Shale deposit (152 573 thousand tones), Pikalyovo Fluxing Limestone deposit (300 000 thousand tones).

A number of oil and gas pipelines pass the region. The oil pipeline «The Baltic Pipeline System» (BPS) connects the town of Yaroslavl’ to Primorsk; Pipeline BPS-2 connects the town of Unetch of the Bryansk region to Ust’-Luga. In Primorsk and Ust’-Luga there are oil terminals, which are used for exporting oil. Apart from that, there are petrochemical pipelines «Kstovo - Yaroslavl’ - Kirishi - Primorsk» and «Kirishi - St.Petersburg». In total, cerca 120 mln tones are piped through these systems annually.

General characteristic of the population

The population of the region as of 01.08.2014 is 6 924 724 people. St.Petersburg – 5 160 800 (annual growth of 1%), the Leningrad region – 1 763 924 people (decreases by circa 5,5% annually). The number of economically engaged people is circa 55-57% of the total inhabitants. There is a trend of increasing immigration (up to 100 000 per year).

The region is home to more than 80 ethnicities. The main ethnic group - Russians, amongst other groups are representatives of minor indigenous groups such as vepsians, votes, izhorians, karelians, ingrian finns. Average population age - 41,3 years.
St. Petersburg is administratively divided into 19 administrative districts (rayons) which, in their turn, are subdivided into 111 municipalities. The population of the Leningrad oblast’ is distributed unevenly, with the highest density in the areas adjacent to St. Petersburg. The region’s 31 town is home to almost two thirds of its entire population. Seven towns are medium-sized (more than 50,000 inhabitants): Vyborg, Gatchina, Tikhvin, Sosnovy Bor, Kirishi, Volkov, and Kingisepp. The Leningrad region is subdivided into 221 municipality.

In terms of unemployment St. Petersburg with its 1.1% takes the 2nd place after Moscow (0.8%) while the Leningrad region has - 4.3% (Russian average - 5.5%). Monthly average income in St. Petersburg amounts to 36 – 39 thousand rubles, while it is 20% lower in the Leningrad region. Salaries vary significantly depended on economic sector.

Average life expectancy in St. Petersburg is 73.1 years, in the Leningrad oblast - 69.4 years. Amongst negative public health indicators are high mortality at employable age (up to 20-25% of all deaths), high levels of oncological deceases and disabilities (including in children) compared to other regions.

The current state of regional economic development

The regional economy is diversified. The economy is based on industry, which contributes approximately 30% of the gross regional product (GRP).

St. Petersburg is one of the most important economic centers of Russia. At the base of St. Petersburg’s diversified industrial complex are factories that produce high-tech research-intensive science products and generally relying on research organizations from the region. The city is home to almost 10% of Russia’s scientific potential, more than 350 research institutions are functioning in the city. The major industries present in of St. Petersburg are energy and machine engineering, shipbuilding, electronics. Together with food processing and light (consumer good) industries they form the base for socio-economic development. St. Petersburg features more than 730 large and medium and more than 20,000 small industrial enterprises, working closely with the local research institutions.

The Leningrad region is a regional economic development leader in the Russian North-West. The main industries in the Leningrad region are machine and car building, shipbuilding, chemical and petrochemical, aluminum, and construction material industries. The output for production and technical purposes cover more than 85% of the total industrial production. Agriculture contributes 7% of the GRP. It specializes in dairy, meat, poultry, potato and vegetable farming.

The region is home to 360 large and medium, and 6,000 small farms. Transportation and logistics contributes further 15% to the GRP. More than 100 enterprises (including international) work in forestry, 22 enterprises work in wood processing. There are 3 paper mills, 9 cardboard and paper making factories, and wood chemical factory.

The regions constitutes a major Russian transportation node. It its core is the Russia’s largest port system, which includes «The Big Port of St. Petersburg» and the ports of Primors, Ust’-Luga, Vysotsk, and Vyborg. The total volume of cargo processed in 2012 - more than 136 mln tons (45-fold
increase between 2000 and 2011), which contributes 24% of the total cargo processed by all ports of Russia. The total length of navigable waterways exceeds 2,000 km. The domestic navigation is served by rivers Neva, Svir, Volkhov, and other. Volga-Baltic and White Sea-Baltic waterways also pass the region.

The total length of the region’s railways exceeds 2,400 km, the main directions are Moscow and surrounding regions of Russia, and the EU (Finland, Estonia). The region is served by more than 22.5 thousand km of highways, of which 5 have federal status («Russia», «Scandinavia», «Kola», «Pskov», «Narva») and 11 are considered regional throughways. Pipeline transportation is well developed in the region. The total length of gas mains exceeds 2,2 km; main oil pipelines - 600 km. The pipelines connect to the port system.

Evaluating the indicators of the region’s economic development it is important to note that they stayed stable until 2013. In the recent time the economy is slowing down. In 2012 the industrial development index (the index used to monitor changes in industrial production output) in St.Petersburg rose to 104,1 %, and in Leningrad region to - 105,7. In 2013 due to the crisis the index fell to 98,8% for St.Petersburg and to 93,2% in Leningrad oblast.

A special role in the regional development is played by the system of vocational training and higher education. It is one of the largest contributors to the city’s economy (80 000 employees and annual funding of 50 bln rubles) and provides education and training for 450 thousand students. At the moment the training structure of the higher education and vocational training system does not fully match the needs of the city economy. While the city needs well trained engineers and technicians, the education system responds to a higher demand for training in humanities. According to expert evaluation, in the mid-term future St.Petersburg will require additional 75-90 thousand specialists, most of whom with basic and post-secondary vocational training. In order to provide sustainable and effective development of the regional economy, the long-term economic policy should focus on the following areas:

- Development of the knowledge-based economy and high technology.
- Development of competitive environment in all areas of economy, improvement of business climate.
- Research and development support of innovational development, raising innovational activity of the economy.
- Raise investment attraction of the region and provide favorable conditions for investment.
- Raise efficiency of vocational training based on mid-term and long-term needs of the job market, aimed at development of the knowledge-based economy.
- Development and implementation of a modern model of economic management based on the principles of sustainable development; raising the quality of management of the economy of St.Petersburg and Leningrad region.
- Raising efficiency of management of state-owned property and land resources in the region.
- Development of cooperation of St.Petersburg and Leningrad region with other regions of Russia, and also with bordering Finnish regions to raise economic activity and achieve sustainable development.
Such an approach will contribute to growth of the high-tech research-intensive sector of the economy, which will become evident in the long-term perspective. This will also make the industrial and financial sectors of St.Petersburg more resilient to potential negative consequences caused by fluctuations in the global market of raw resources; raise the share of high-tech production and R&D.
1.4. **International treaties and legislation regarding SEA for CBC 2014-2020 Programme**

Mainly used for the SEA Directive EU:

- Directive number 2001/42/EU - the rules and procedures of SEA;
- Regulation (EU) № 1367/2006 of the European parliament and of the Council of 06.09.2006 on the application of the provisions of the Aarhus Convention on access to information, public participation in decision-making and access to justice in environmental matters to community institutions and bodies.

Russian Federation in 1991, signed a Convention on Environmental Impact Assessment in a Transboundary Context (ESPO Convention), but has not ratified it. In 2003 the Protocol on Strategic Assessment to the ESPO Convention was adopted (SEA Protocol), which came into force in 2010, but Russia by now has not joined.

In 2011, the list of orders of the President of the Russian Federation was signed, according to which it was mandated to ratify the ESPO Convention and the SEA Protocol.

The Principles of State Policy in the field of the environmental development of the Russian Federation for the period through 2030 contain articles regarding the need for a regulatory framework for introduction and application of SEA. Next order of the Government of the Russian Federation of 18.12.2012 №2423-p approved a plan of action to implement these Principles of State Policy, under which it was assumed that in 2013 Russia must prepare a draft federal law on the ratification of the ESPO Convention and the SEA Protocol.

Currently, the national legislation of the Russian Federation uses the concept of EIA (Environmental impact assessment). The objective of the EIA is to identify, analyze, and inclusion of the direct, indirect and other effects of the environmental impact of the planned economic and other activities, taking into account public opinion, the development of measures to reduce and prevent exposure (Article 1 №7-FZ "On Environmental Protection"). The position of the EIA approved by the Order of Goscomekologia 16/05/2000, № 372

SEA definitely has a wider range of coverage than the EIA, which is not prescribed by a range of activities, plans, programs, etc. Russian environmental legislation is constantly changing and improving.


The Law introduces the division of objects into categories that have a negative impact on the environment:
- objects that have a significant negative impact on the environment and related fields of application - of the best available technologies - the I category;
- objects that have a moderate negative impact on the environment – objects of the category II;
- objects that have a slightly negative impact on the environment, - objects of the category III;
- objects that have a minimal negative impact on the environment - objects of the category IV.

The use of best available techniques aimed at a comprehensive prevention and (or) minimization of environmental impact. Legal entities and individual entrepreneurs engaged in economic and (or) other activities at the facility of the Category I, will be required to obtain integrated environmental permit.

Integrated environmental permit - a document issued by the authorized federal executive branch entity or individual entrepreneurs engaged in economic and (or) other activities at the facility, has a negative impact on the environment, and contains mandatory requirements in the field of environmental protection.

It is proposed to implement norm-setting of environmental impacts based on available standards, transition to a system of notification-based environmental information provision from low and moderate impact entities. Mechanisms shall be created to promote best available technologies. A list of entities exerting a negative impact on the environment shall be developed together with a list of matching BAT. The law provides for state support activity for the implementation of best available technologies and other measures to reduce the negative impact on the environment can be performed by:

- providing tax benefits in accordance with the legislation of the Russian Federation on taxes and fees;
- providing benefits in respect of charges for negative impact on the environment in the order established by this Federal Law and adopted in accordance with the regulatory legal acts of the Russian Federation;
- allocation of funds the federal budget and the budgets of the Russian Federation in accordance with the budget legislation of the Russian Federation.

State support will be carried out, including the implementation of the following measures:

- implementation of the best available technologies;
- design, construction, reconstruction: recycling and drainage water supply; centralized wastewater (sewage), sewerage networks, local (individual objects of economic and (or) other activities) structures and equipment for waste, including drainage, water, recycling of liquid waste and sewage sludge; structures and installations for the capture and recycling of discharged pollutants, heat treatment and cleaning of gases prior to their release into the air, the beneficial use of associated gas;
- installation of equipment to improve fuel combustion modes; equipment for the use, transportation, disposal of waste production and consumption; automated systems, laboratories for the control of composition, volume or weight of waste water; automated systems, laboratories (stationary and mobile) to control the composition of pollutants and the...
volume or mass of air emissions; automated systems, laboratories (stationary and mobile) to
monitor the state of the environment, including environmental components.

Also in the process of adoption and amendment of the Basic Law "On Environmental Protection» - №7-FZ, which addresses the need for a strategic environmental assessment (procedures, "in which are identified, analyzed and taken into account the possible impact on the environment and public health and related their environmental, social and economic consequences "), strategic planning documents to the involvement of citizens and legal entities, and taking into account their comments and suggestions.
1.5. Alternative scenarios

The Programme would not be endorsed, and, consequently, not implemented. This will result in lost opportunities of continuation of successful Russian-Finnish cooperation in the fields of the environment, promotion of modern technologies and services; supporting environmental entrepreneurship and environmental projects (development plans) in the Russian Programme area. Apart from that, this can cause disruption of business and cultural ties that have been developing over years. Transboundary contacts between distant settlements will be disrupted. It is also important to take into account a usual lowering in environmental activity during economic crises, which can be observed today on both sides of the border.

The Programme would be endorsed and implemented, but the funding would be focused only on one of the areas (for example, Priority 3). In case of raising the funding in the area of the environment, a higher level of activity can be achieved in the field. Lowering the funding would lower possibilities for environmental projects.

The Programme would be endorsed but the funding will be provided only from the Finnish and the EU sides. Lack of funding from the Russian side would significantly lower effectiveness of the Programme. The Russian partners will not be on par with Finnish partners. Funding would be provided mainly for expert fees, and the level of interest of Russian enterprises and organizations in participating in the Programme and its events, as well as in concrete results, will be minimal.
1.6. Uncertainties and unexpected factors

In case of events of force majeure such as Acts of God or adoption of prohibitive legislation the cross-border cooperation can be hampered or terminated.

It is important to foresee the ongoing process of change of the Russian environmental legislation. Consequently it is important to allow corrections in the Programme documents as it progresses, as well as in decision making regarding the projects.
1.7. **Suggested actions for the prevention of harmful effects**

It is necessary to plan for prevention of harmful effects on the environment during the preparation of the Programme.

Shall the Programme adopt large infrastructural projects such as building roads and railways, including in vicinity of protected areas; construction of ports; planning tourist infrastructure etc, it is necessary to ensure compliance with the Russian environmental legislation, including:

- implementation of Environmental Impact Assessment (EIA) of proposed actions,

- ensure evaluation of project documentation with standard procedures of state environmental assessment and state project documentation evaluation.

All large projects of the Programme shall ensure special environmental measures that would help keep anthropogenic impact of their actions within allowed limits. The projects should also ensure monitoring of environmental impact.

Shall a negative impact of projects on the environment be determined, it is necessary to ensure corresponding events to remediate such impact (compensation of environmental damage, development of remediation measures to eliminate the damage etc).
2. The state of the environment and environmental trends

2.1. Environmental policy

At the moment the Russian state environmental policy is based on the following principles:

- sustainable development based on equal attention to economic, social, and environmental aspects and understanding of impossibility of further development rooted in environmental degradation;
- greater priority of life-sustaining functions of the biosphere compared to direct use of its resources;
- just distribution of profits from natural resource use and access to them;
- prevention of negative environmental consequences of economic activity, foreseeing long-term environmental impact;
- rejection of business and other projects that may have a negative impact on ecosystems;
- full payment for natural resource use and compensation to citizens and the environment for losses related to violations of environmental legislation;
- free access to environmental information;
- participation of the civil society, local authorities and business community in preparation, discussion and implementation of decisions related to environmental protection and sustainable resource use.
2.2. State of the environment

The quality of the environment of St. Petersburg and the Leningrad region is determined not only by their geographical position and the climate, but also by air and water pollution, land use, disposal of industrial and household waste, state of green areas, development of protected areas and other factors. The character of pollution and its consequences differ with the geo sphere - the atmosphere, surface and ground water, soil etc.

Quality of air

The level of atmospheric pollution in the city is determined by emissions of harmful substances (pollutants) into the air from stationary (factories, farms) and mobile (transport) sources.

The air quality in St. Petersburg is measured evaluated based on measurements taken by the Automated system of air quality monitoring (22 automatic stationary and 2 mobile stations) and 9 stationary posts. The data is compared to the Russian and European Union’s indicators of air quality.

In the Leningrad region the air quality is measured regularly only by stationary posts in the towns of Vyborg, Volkhov, Volosovo, Kingisepp, Kirishi, Luga, Svetogorsk, and Tikhvin. The air is polluted by emissions from factories (approximately 700 point sources), which contribute 14-15% of all emissions, and by transport that emits the greatest share - 80%. Water transport (mostly ships bound to St. Petersburg sea port) adds another 4%. At the same time, emissions of nitrogen oxides NOx and sulfur dioxide SO2 from maritime transportation are significant and account for more than 15% for NOx и 12.5% for SO2 of all the respective emissions in St. Petersburg.

The city atmosphere annually receives 540 000 tones of pollutants (data from 2013) of 466 kinds. The major share if total emissions is constituted by: nitrogen oxides NOx - 66 837 t. and carbon oxide CO - 369 850 t. Also substantial are emissions of benzopyrene, ammonia, formaldehyde and suspended matter.

At the same time, emissions of sulfur-containing compounds (sulfur dioxide, hydrogen sulfide) are constantly falling, due to improvements in quality of car fuel.

Analysis of air quality data in the towns of Leningrad region shows that the pollution level can be considered as «exceeding» in 3 towns: Vyborg, Kingisepp, and Luga. The pollution level is considered «relatively low» in Volkhov, Volosovo, Kirishi, Svetogorsk, and Tikhvin.

However, it is important to note, that the measurements of benzopyrene taken in 2012 showed that in Vyborg, Kingisepp, Kirishi, and Luga concentrations of this dangerous pollutant exceeded the standards set by the World Health Organization (WHO) by 1.6 - 1.9 times.
State of the water ecosystem

The water ecosystem of the programme area on the Russian side consists of the following parts: Onega lake - Svyr’ river - Lake Ladoga - Neva River - eastern part of the Gulf of Finland. This system is situated on the territory of an economically developed region, which causes its pollution.

Surface waters form in the drainage basin of 340 thousand km², including the territory outside Russia (22% of water drains into Neva from Finland).

The largest and busiest rivers are Neva, Narva, Luga, Syas’, Volkhov, Svyr’, Vuoksa.

At present the water in Lake Ladoga is characterized as moderately polluted, and the environmental situation in the lake is improving. The threat of the lake’s eutrophication that existed in the 90s, is over.

St. Petersburg is situated in the estuary of Neva, and the polluted water drained into the Neva from the Leningrad region and Karelia pass its territory.

Neva receives water (treated or not) from 35 large factories and 14 settlements (another 15 discharge sewage into the Neva’s tributaries).

There are 652 bodies of water on the territory of St. Petersburg, and 396 streams and rivers. Water covers 2.4% of the city area.

The city streams and waterways flow through areas with a lot of industry and intense transportation, which causes large volumes of discharge.

Significant contribution to the pollution of city rivers is provided by car and railway bridges, water transportation, surface run off, dumping of snow cleared from the streets.

The quality of water in Neva is lowered by a high content of heavy metals, organic substances, hydrocarbons and suspended matter.

Water quality in large rivers and their tributaries in the past years varied widely from «low pollution» to «polluted».

At present, only 20% of St. Petersburg waterbodies can be classified as conditionally clean.

In 2013 there have been two cases of extreme pollution of rivers, causing death of fish and other problems.

The main problems of the eastern part of the Gulf of Finland remain eutrophication and chemical pollution. In the past years concentrations of nitrates and phosphates has been decreasing, which is explained with completion of the international environmental project - construction of the main sewer for the Northern part of St. Petersburg.
Sediments in the Neva and its tributaries, Neva Bay, and Koporye bay contain pollutants in high concentrations. Large volume of sediments (approximately 4 mln m3) are classified as «critically polluted» and «highly polluted».

Large area of the eastern part of the Gulf of Finland water toxicity and sediment pollution is within accepted norms.

**Water supply and treatment**

Water in St.Petersburg and towns of the Leningrad region is supplied and treated by specialized organizations - vodokanals. Water supply and sewer systems outside major towns are outdated or absent, illegal artesian wells are used widely.

The State Unitary Enterprise «Vodokanal of St.Petersburg» provides water and collects wastewater of 5 mln people and tens of thousand organizations. «Vodokanal» is served by 9 waterworks, 15 sewage treatment plants, 3 sludge incineration facilities and 2 factories producing sodium hypochlorite, and more then 15 000 km of water and sewage pipelines.

St.Petersburg treats 98,4% of wastewater that is collected by Vodokanal. It follows recommendations of the Helsinki Commission on the Protection of the Baltic Sea: the concentration of phosphate in effluent does not exceed 0,5 mg/l. Vodokanal employs biomonitoring of water quality in Neva (with crawfish), quality of effluent (with crawfish) and contents of combustion gas released from the sludge incineration plant (with snails).

In spite of the general trend of decreasing water consumption in the region, its amounts supplied and used per capita substantially exceed (by 1.5 - 2 times) averages in Finland. Apart from that, existing water losses in pipelines are prohibitively high, amounting to 20-30% of all th eater pumped by waterworks.

**Quality of soils**

Soils of St.Petersburg are highly polluted, primarily with heavy metals (lead, zinc, cadmium), organic toxins and petrochemicals (more than 50% of the area).

Approximately 7-8% of the area is highly polluted and requires remediation (old industrial zones, old landfills, areas around highways).

Virtually all soils in the center of the city are highly polluted with benzopyrene, in some residential areas soils are polluted with dioxins,

Intensity of soil pollution on the territory of St.Petersburg is not even. The districts furthest from the center have the least polluted soils, similar quality is found in the northern and south-western parts of the city. There soil pollution is at «moderately dangerous» level. Soils in the north-western and north-eastern parts have a similar average level of pollution. This distribution can possibly be explained not only with industrial activity but also with prevailing winds from west and north-west.
Soils of the Leningrad region in the populated or industrial areas also contain high levels of heavy metals and benzopyrene. The concentrations are highest in residential areas. Around landfills the soils are classified as highly polluted.

The total area of the Leningrad region where soils are not or minimally polluted (concentration of each metal does not exceed natural by 1,25-2,0 times) covers 8 300 km² (approximately 10% of the territory) and in the past years remains constant.

**Biological zones (forests or recreational areas) are generally not polluted.**

In the last years in order to evaluate the quality of soils in areas that are at risk of technogenic pollution the following industrial centers have been researched: Pikalyovo, Vsevolozhsk, Tikhvin, Boxitogorsk, Sosnovy Bor, and Kirishi. The research also included the Leningrad region sections of «Scandinavia» and «Rossiya».

Soil quality measurements in the federal highway «Rossiya» (Leningrad region, from Shushary settlement to the regional border) and a 100-km section of «Scandinavia» highway showed that most of the soils have an acceptable level of pollution.

**State of green spaces**

The total area of public green spaces and city greenery covers approximately 8 000 ha (18% of the territory). There are 76 parks, 130 gardens, and 113 other green spaces. Almost 50% of all trees within the city limits show signs of weakening caused by pests and diseases.

St.Petersburg also maintains urban forests and forested parks. With those included, the total area of all green spaces covers more than 30% of the city territory.

More than 55% of the territory of the Leningrad region is covered with forests, that are characterized by a moderately positive transformation and do not cause concern. Green spaces in the industrialized areas suffer more.

**Noise pollution**

Noise pollution is an important urban environmental problem, especially for St.Petersburg. Here the level of noise pollution has grown substantially in the recent years and often exceeds accepted norms - 30% of the population live in the areas of elevated noise pollution.

Terrestrial and underground transportation, as well as water and air transportation are the main sources of noise pollution.

**Industrial and household waste**

**Solid household waste (SHW).**

The volumes of generated SHW are:
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- in St.Petersburg - above 10 mln m³ (from households - 8 mln. m³, organizations - 2 mln. m³)
- in the Leningrad region - above 3 mln. m³ (during the summer season the volumes raise by 50% due to the increase in rural population).

Annually the volume of generated household waste increases by at least 3%.

In the entire territory of the region selective collection of SHW is virtually absent, therefore recyclable resources come into waste together with food wastes and are not separated. Apart from that, the household waste contains dangerous substances such as lamps and other mercury-containing objects, power sources containing heavy metals, paints, medicines and expired household chemicals etc. All those can constitute up to 5 - 6% of the total mass of waste. The existing system of organized separate collection allows to separate only a small fraction of the dangerous waste (up to 70 tonnes).

The region is home to a number of businesses collecting recyclable materials: old paper, plastics and polymers, glass, car parts and old household appliances, mercury containing materials etc, but the market for recyclables is not developed.

The volume of processing of the SHW is insignificant - 10% in St.Petersburg and 5% in the Leningrad region.

Virtually all SHW is disposed of in the landfills situated in the Leningrad region, and most of those do not meet sanitary and environmental requirements. Landfills in different parts of the Leningrad region on average are filled up to 40%. Majority of the landfills receiving waste SHW from St.Petersburg by now have practically exhausted their capacity.

**Industrial toxic waste**

St.Petersburg generates approximately 40 000 tonnes of toxic industrial waste per annum. the main disposal site for the region’s toxic waste is an enterprise «Krasny Bor», situated in the Leningrad region. More than 80% of the landfill’s area has been used up and consists of pits filled with waste and covered with an upper layer without any remediation done. part of the liquid toxic wastes is kept in open pits. The project of reconstruction of the site is being designed.

**Sewage sludge**

Virtually all sludge collected at sewage works and aeration stations in St.petersburg is burnt in special facility. In the Leningrad region it is lagooned in drying beds.

**Medical waste**

Most of this type of waste is chemically disinfected and then disposed of in landfills together with solid household waste.

Approximately 6 thousand tonnes of medical waste is produced in St.Petersburg annually, of which almost 15% is incinerated.
Construction waste

A large volume of waste is produced in construction sites (demolishing, renovation and new construction of building and infrastructural objects, communications, as well as excavated ground). Production of such waste in St.Petersburg amounts to 14,5 mln. m³.

Part of not dangerous construction waste is recycled into new materials (no more than 20-30%). Remaining volumes of waste and ground is disposed to the landfills, used for recultivation, or is moved to illegal dumping sites.

Illegal dumping sites

Illegal dumping sites present a serious regional environmental problem. Those are unsanctioned landfills that are not equipped accordingly. In St.Petersburg they contain mostly construction waste, while in the Leningrad region - solid household waste. In spite of seriously raised fines and measures to eliminate illegal dumping sites, their number does not decrease. By now more than 40 illegal landfills with a total area of 500 000 m² and and a total volume of 100 000 have been identified in St.Petersburg, and a few thousand - in the Leningrad region.

The problems of sanitation and disposal of household waste become particularly acute during the summer season in areas with a large number of allotment sites of St.Petersburg’s inhabitants (Vyborg, Vsevolozhsk, Luga, Gatchina, and Kirov districts). Existing landfills and waste collecting transport do not provide a timely collection of waste, which causes emergence of illegal sites.

Landfills

At present, 14 landfills are listed in the state inventory:

- The landfill disposal of municipal solid waste, landfill disposal of industrial waste. Branch of St. Petersburg State Unitary Enterprise "Plant MPBO-II» 188689, Leningrad region, Vsevolozhsk district, d. Yannino

- Municipal solid waste company "Lel-ECO" 187110, Leningrad Region, Kirishi district, Kirishi Boulevard Youth, 2.


- The landfill of municipal waste landfill buried industrial waste. Ltd. "Novy svet ECO". 188361, Leningrad Region, Gatchina district, Novy svet uch. №2.
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- Landfill. LLC "Landfill" 188669, Leningrad region, Vsevolozhsk district, d. Lepsari.
- Landfill. LLC "Blagousteistvo", 187660, Leningrad Region, Pikalevo, Leningrad highway, 78.


Protected areas

St.Petersburg and Leningrad region created and develop a system of protected areas. Those are territories with ecosystems or objects that have a special ecological, scientific, cultural, aesthetic, recreational or health-improving value. Protected areas’ legal status removes them completely or partially from practical use.

There are 14 regional protected areas on the territory of St.Petersburg, classified as wildlife preserves and natural monuments. Their total area covers 6 004,4 ha, or 4,2 % of the territory of St.Petersburg. Most of the protected areas are situated on the coast of the Gulf of Finland and around other bodies of water, that have the highest value in terms of recreation or as habitats of valuable animal and plant species, or as bird nesting and migration stopover sites.

The Leningrad region has 46 protected areas with a total area of 586,7 thousand hectares or 6,8% of the region’s territory. Two of those are federal nature reserves: «Nizhnesvirsky» and «Mshinskoye wetland», 40 are regional reserves - «Vepsky forest» national park, 24 state wildlife reserves, 15 natural monuments, and 4 local reserves.

The Leningrad region also maintains five wetlands of international importance, nominated in frames of Convention on Wetlands. They are primarily important as habitats of waterfowl (Ramsar Convention). Four regional reserves («Berezovy Islands», «Vyborgsky», «Kurgalsky», «Lebyazhsky» ) are nominated into the Baltic Sea List of protected areas in frames of Helsinki Convention on Protection of the Baltic Sea Environment.
The regional reserve «Lindulovskaya Woods» is included in the list of UNESCO World Heritage site as «Historical Center of St.Petersburg and related monuments».

The protected areas play a major role in preserving rare and threatened species of plants, animals, and other organisms (the total number in the Leningrad region - 1086, including 558 animal species (120 vertebrates and 438 invertebrates) и 528 plant species.
2.3. Identification of nature protection authorities in the programme area in the Russian Federation

It has been identified by the Programme that the National Authorities shall support the Managing Authority in the management the programme in accordance with the principle of sound financial management.

The National Authorities shall bear responsibility for identification and effective functioning of management systems at the national level, as well as ensuring the overall coordination of the institutions involved at national level in the programme implementation, including, inter alia, the institutions acting as control contact points and as member of the group of auditors.

The National Authority shall also represent the country in the Joint Monitoring Committee. Russia appointed the Ministry of the Regional Development as an authority representing the country in the Programme.

Th governments of St.Petersburg and the Leningrad region have corresponding regional committees in their structure. However, the issues of environmental protection fall within responsibility of the following authorities with which appropriate cooperation shall be developed. In Russia (St.Petersburg and the Leningrad region) supervision and other functions in the area of environmental protection is provided by federal and regional authorities.

**Federal Authorities**

1. **Rosprirodnadzor Department for The North-Western Federal District** – provision of state environmental audit, issuing of licenses on waste processing; issuing of waste disposal limits; determination of norms of emissions into the atmosphere or bodies of water; approval of toxic waste profiles; administration of payments for environmental damage; collection of statistical reports. State environmental supervision (control) over the activities that cause harm to the environment or those that shall be supervised at federal level.

2. **St.Petersburg and Leningrad region offices of The Federal Service for Supervision of Consumer Rights Protection and Human Welfare** (Rospotrebnadzor St.Petersburg; Rospotrebnadzor Leningrad region) – supervision and control in the area of responsibility; sanitary and epidemiological audits of land use projects, projects of emissions limit norms, construction and development projects, waste disposal projects.

3. **North-West office of The Federal Service for Ecological, Technological and Nuclear Supervision** (Rostekhnadzor) - state control and supervision in the field of industrial safety, safety of hydrotechnical objects, supervision of construction, issuing licenses for operation of explosive objects, operation of facilities of harmful chemical industry, storage and use of explosive industrial materials, auditing of industrial safety.

4. **State Federal Enterprise Glavcomexpertiza of Russia** - audit of project documentation of facilities, construction projects, renovation, capital repair that is completed on the territory:

   - of two or more subjects of The Russian Federation;
- of Russia’s diplomatic missions abroad;
- of the exclusive economic zones of The Russian Federation;
- on the continental shelf of The Russian Federation;
- of the inner marine zones, civil safety and military facilities, other facilities that are subject of the state secret; federal highways; preservation capital repairs of federal cultural heritage sites (historical and cultural monuments); dangerous, technically challenging, or unique facilities.

Regional Authorities

St. Petersburg

1. **Committee of environmental protection, nature use, and ecological safety of St. Petersburg** – governmental environmental audit, issuing atmospheric emission permits, approval of terms of reference for waste disposal, signing contracts for water use. State environmental supervision (control) of facilities that have a negative impact of the environment but are not regulated federally.

2. **Committee on urban improvement of St. Petersburg. Waste management** - collection, removal, disposal, recycling, development of special programmes.

3. **State construction supervision and audit service of St. Petersburg** – auditing of project documentation and engineering surveys; issuing permits for construction, reconstruction, renovation of buildings (apart from private residential buildings), state supervision of construction, issuing building exploitation permits.

The Leningrad region

1. **Committee for natural resources** – state environmental audit, issuing atmospheric emission permits, approval of terms of reference for waste disposal, signing contracts for water use. State environmental supervision (control) of facilities that have a negative impact of the environment but are not regulated federally.

2. **Committee for state control for nature use and ecological safety** – State environmental supervision (control) of facilities that have a negative impact of the environment but are not regulated federally.

3. **Committee for construction supervision and audit service of the Leningrad region** – auditing of project documentation and engineering surveys; issuing permits for construction, reconstruction, renovation of buildings (apart from private residential buildings), state supervision of construction, issuing building exploitation permits.
2.4. Environmental risks in the programme area

Environmental risks, as a direct threat of to sustainability of ecosystems that can arise from implementation of projects, must be evaluated at the project design stage.

It is important to note a range of environmental risks related to human activity or natural catastrophes that exist in the Russian programme area.

In St.Petersburg territory, in the South gate of the Neva Bay (multifunctional marine overload complex «Bronka»), in the Vyborg and Luga bays there is construction and upgrading of ports. Those works require significant amounts of marine construction, construction of supply channels and land reclamation.

The aquatic environment is threatened by the projects of underwater sand extraction, such as the «Sestroretskskoye» sand deposit, situated in the north-eastern part of the Gulf of Finland.

A significant part of Russia’s oil transit passes the North-Western region. Most of the oil is transported by tankers via St.Petersburg through Neva (in 2013 9 000 ships passed Neva, of which 2 732 tankers with a total load of 5,2 mln of oil and petrochemicals). There is a risk of large oil spills, that can be caused by tanker traffic passing the drawn bridges or maneuvering in the busy areas.

The new Leningrad Nuclear Power plant (LAES-2) is being built in Sosnovy Bor. Its hydrotechnical construction extends to Koporye Bay (50 km from residential buildings of St.Petersburg, 100 km from Finland, 70 km from Estonia). The project includes implementation of a reverse cooling system with construction cooling towers. Their emissions will contain high volumes of steam (approximately 200 thousand m³ per day) and will disseminate to significant distances. Construction of a new nuclear waste storage facility in the proximity also raises concerns.

Extraction of large volumes of ground during dredging of rivers and channels of St.Petersburg, as well as of sea lanes of the Gulf of Finland, causes secondary pollution of the bodies of water due to the high concentration of toxins in the sediments and the absence of sediment treatment system.

There is a large number of hydrotechnical facilities in the area of the Gulf of Finland, along the banks of rivers and lakes, on the territory of residential and industrial construction. Some of them are potentially dangerous due to the improper maintenance or the absence of owner. There is a risk of emergency situations, since the population and construction density in the areas of potential flooding or facility failure is very high.

There are environmental problems related to the poor state of coastal protection facilities both within the rivers within city limits and in the Gulf of Finland.

The toxic waste landfill «Krasny Bor» also poses an environmental threat. Part of the liquid toxic wastes is kept in open pits, which fill with atmospheric precipitation. That causes a constant risk of their overfill which will result in groundwater and surface water pollution in the drainage basin of the Gulf of Finland. In case of climatic abnormalities or technogenic catastrophes large amounts of toxic
substances can spill into the channels, drainage systems that are connected with Bolshaya Izhora river, and, consequently, with Neva.

In the field of waste management, environmental risks are posed by:

- lack of efficient control over transportation of industrial and medical wastes, and also lack of a system of processing of those wastes,
- composting sites for agricultural wastes are built on uninsulated ground, so are pits for sludge disposal. They are not equipped with treatment facilities for run off and consequently cause pollution of surface and ground water,
- the use of construction waste of various toxicity levels for remediation of disturbed land,
- presence of a large number of illegal dumping sites.
3. Environmental evaluation

3.1. Social consequences of the programme elements

Implementation of the Programme will not have significant social consequences on the transboundary area, but can positively impact various aspects of the social sphere (education, healthcare, culture, employment etc).

The elements of the Programme and its strategic goals are aimed at developing cooperation between our nations, including strengthening cultural connections. This cooperation will be facilitated by forming joint cultural space in the area including South Finland, St.Petersburg and Leningrad oblast, continuous widening of the range of involved people, organizations, and cultural enterprises; establishment of cultural centers and running joint cultural events.

Development of all kinds of tourism is a traditional priority action in transboundary areas. A large number of St.Petersburg and Leningrad region citizens regularly visit Finland, which is aided by multiple entry visas.

Cooperation in the field of restoration of unique monuments of culture of history, joint production and demonstration of cultural values, exchange of experience in the field of maintenance of protected areas will strengthen opportunities to make our territories more attractive for tourist business.

It is important that in the time of crisis small and medium enterprises will continue to develop in the transboundary territories, new business links and directions will emerge, and so will new jobs. Cooperation between educational institutions of different levels and research institutions will give an opportunity to implement new programs and teaching methods, organize joint research, and adopt promising technologies, exchange knowledge, students, and teachers.

Facilitation of implementation of new healthcare programs and technologies, food quality evaluation systems, promotion of healthy lifestyle will have a positive impact on quality of life and life span.

Transfer of Finnish technologies will lead to improvements in housing and utility services will help raise the quality of services provided and lower operation costs.

It is expected that the Programme will contribute to development of institutions of civil society, improvements of cooperation between noncommercial and nongovernmental organizations with governmental authorities, improvements in local self-governance and finding new solutions for social problems.

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The Programme will continue strengthening the region in the area of business cooperation, transportation and logistics in the context of EU’s and Russia’s transportation policy and development of transportation corridors, which is very important in the time of crisis.

The Programme will also contribute to lowering transboundary environmental risks at local and regional levels. Apart from that, the Programme will strengthen mutual cultural contacts and transboundary connections between distant settlements.

There is every foundation to believe that the Programme will contribute to development of the transboundary region as an integrated economic zone and will serve as a good example of practical cooperation between the European Union and Russia.
3.2. Environmental impact of the programme elements

It is proposed that environmental projects will be implemented in frames of the third direction (Strategic goal B).

However, all directions of the Programme will all have environmental aspects, relating to environmental issues and healthcare in the region.

Cooperation between two countries in the transboundary area in frames of the Programme will help utilize scientific and technological potential existing in both countries, as well as practical experience of enterpreneurial and nature protection activity, generated in South-East Finland and in North-West Russia, including environmental pollution surveys, development of analytical research base, surveying territories to identify sources of pollution.

During development and adoption of the Programme it is advisable to consider its elements in terms of improvement of environmental quality for the following directions which are important for transboundary areas and can be addressed by the Programme.

1. Creation of conditions allowing to adequately account for and continuously lower emissions from industries and transport. Included here are possible road construction projects and border crossing areas or upgrading of those; raising quality of fuel, development of alternative energy sources, implementation of measures foreseen by the International Convention for the Prevention of Pollution From Ships (Marpol 73/78)

2. Continuous improvement of the aquatic environment; prevention of dumping of untreated or partially treated wastewater into rivers and other water bodies; safe sludge disposal; systematic processing of toxic sediments. Reduction of water consumption through upgrading pipelines, lowering losses, and implementation of circulating water supplies systems.


4. Development of environmental safety systems for water transportation. Prevention and liquidation of possible oil spills on transportation, storage, and reload of oil and petrochemicals.

5. Contributing to establishment of protected areas to preserve coastal zone of the Gulf of Finland, which has a huge importance for bird stopovers (including rare waterfowl species) on the entire White Sea - Baltic Sea migration route. Such cooperation can be implemented in support of the EU project Natura 2000, regulated by The Bird Protection Directive (1979) and Habitat Protection Document (1992). Application of European experience in development of the network of protected areas and their sustainable use without causing harm to the ecosystem and protected species can make a positive impact on the indicators of international programmes on migratory birds species and habitat preservation.
7. Introduction of modern river dredging technologies, providing safe removal, treatment and disposal of sediments, that allows to minimize environmental damage.
8. Dissemination of european experience in transiting from the system of ecological norms to promoting best available technologies (BAT), creating lists of BATs, issuing systemic ecological permits.
3.3. Impact of the Programme on public health

There is a stable correlation between environmental pollution and population morbidity. According to The World Health Organization (WHO), up to 30% of all known diseases are directly related to environmental pollution. St.Petersburg and towns of the Leningrad region with their high concentration of industries have the least healthy environmental situation.

The main goal of the Programme is to provide a higher level of environmental protection. Actions in this direction will contribute to lowering atmospheric, water, and soil pollution, increase the area of green spaces and protected areas and therefore leads to improvements in the public health.

The positive impact of the Programme on public health will also manifest itself through projects in the field of environmental awareness raising, raising awareness of negative health impacts of smoking and alcohol, metabolic effects of poor diets, hypodynamia, and through promoting Finnish experience of healthy living.

The Programme will create conditions for development of natural potential of transboundary territories in the areas of recreation, sanatorium and spa services, and eco-tourism, which will significantly improve situation in preventive and rehabilitational medicine. The impact will be particularly noticeable in aged people, who represent a large share of populations of St.Petersburg and the Leningrad region.
3.4. Evaluation of significant impacts of thematic tasks selected for the ENI CBC Programme 2014-2020

The Programme Document 2014-2020 identifies strategic goals, that shall be achieved through transboundary cooperation, as well as thematic areas of the cooperation.

Four themes have been chosen:

1. Business and SME development (Strategic objective A)
2. Support to education, research, technological development and innovation (Strategic objective A)
3. Environmental protection, and climate change mitigation and adaptation (Strategic objective B)
4. Promotion of border management and border security (Strategic objective C)

The themes have been translated into the Programme priorities:

Lively, active and competitive economy (Priority 1).

Objective of promoting sustainable economic development in the programme area includes:

- supporting the most potential business cooperation activities in order to yield concrete and sustainable results from the cooperation, e.g. subcontracting, production cooperation, joining forces in the marketing of products and services, transfer of technologies and innovations, etc.;
- supporting the foundation of science parks (industrial / business / technological) and innovation centers through the creation of preconditions for further large-scale investments in production and, where appropriate, through small-scale infrastructure projects;
- creating mechanisms for simplification of international trade, e.g. developing environmentally sound transportation and logistic services and networks, cargo terminals, logistic centres; increasing the speed and transparency of the goods flow; actions in real-time mode; and improving maritime transportation system where appropriate through small scale infrastructure projects;
- promoting energy cooperation, e.g. encouraging R&D, use of new solutions and training in renewable energy sources and energy efficiency, use of bio-fuels, and transfer of (energy saving, environmentally sound, and best available) technologies and know-how, and sustainable management practices;
- developing mutual integration between Russian and Finnish industrial enterprises and the integration of Russian companies into European business community with jointly chosen prior branches;
- promoting mutual brand of the region on the internal and external markets to promote the attractiveness of the region in terms of investment;
- creating automatic computer-based system for processing data concerning goods flows (transporting companies and terminals);
- promoting R&D, education, and training in business areas of mutual interest;
- supporting the use of new ICT by businesses and innovation activities at high schools, R&D institutions, industrial enterprises, and similar;
- developing intensive and environmentally sound tourist industry and increasing tourist attractiveness of the region by improving the quality of services and cooperation of tourist infrastructure companies, developing new products, promoting eco-tourism etc.;
- promoting entrepreneurship and business start-up in jointly chosen prior branches, e.g. in knowledge based and innovation driven sectors, and the exchange on regional business support structures that aim to assist SMEs.

**Innovative, skilled and well-educated area (Priority 2)**

At present actions within this priority and its goals are not presented in the project of the Programme.

**Attractive, well-being environment and region (Priority 3)**

At present actions within this priority and its goals are not presented in the project of the Programme.

Objective of promoting environmental awareness in the programme area includes:

- promoting rational use and research in the field of natural resources and the implementation of sustainable systems of waste and water management (prevention, re-cycling, and recovery of waste), reduction of emissions, and pollution;
- promoting nature protection and conservation of the marine environment, and preserving biodiversity, including the establishment of special ecological zones;
- promoting research, planning, and education in the fields of the environment, resource efficiency, eco-efficiency, environmental audit schemes, and sustainable development;
- supporting public awareness of environmental safety, energy and eco-efficiency, and sustainable development;
- improving municipal systems of waste management, incl. the development of a network of companies specialising in waste management and processing;
- developing cooperation between industrial enterprises, SMEs, and R&D institutions in using environmentally safe and eco-efficient technologies;
- promoting the use of renewable energy sources (bio-fuel, landfill gas, hydro energy, etc.) and the substitution of non-renewable resources with renewable ones;
- promoting cross-border cooperation aiming at reducing the environmental load and risks related to increasing traffic, eutrophication, hazardous substances, and oil spills.

**Well-connected region (Priority 4)**

At present actions within this priority and its goals are not presented in the project of the Programme.

Objective of promoting mobility in the programme area include:
- improving small-scale infrastructure projects at border crossing points and their vicinity where appropriate;
- improving equipment at border crossing points as necessary;
- promoting training and networking between border authorities;
- promoting cooperation of customs and control authorities assuring efficient and secure controls and smooth border crossings;
- launching joint rescue actions such as accident risk management and emergency preparedness and training of rescue personnel, exchange of know-how and information, and improving the maritime search equipment as necessary.

The choice of theme “business and SME development” aims to develop and promote the knowledge based innovative economy, to support the creation of new companies and to enable small and medium-sized enterprises’ (SMEs) entrance to the international markets.

Environmental aspects of cooperation are addressed directly in the Strategic objective B. In spite of that, goals and actions identified in other directions of the programme will create for both sided additional opportunities for lowering emissions into the atmosphere from stationary and mobile sources, reduction in volumes of untreated or insufficiently treated wastewater discharged into ecosystems, systematic removal of toxic sediments and their processing; safe sludge treatment; support of measures aimed at the regions’s capacity building in safe management of household and industrial waste, as well as creation and support of low-waste and resource saving enterprises.

Apart from that, cooperation between border regions of the two countries in frames of the Programme will allow a wider use of existing scientific and technological potential and draw from experience of both South-East Finland and North-West Russia.

As a whole the Programme meets well the requirements of European neighborhood policy and strategic partnership EU-Russia within the four spaces described above.
3.5. Strategic Environmental Assessment (SEA)

The Strategic Environmental Assessment (SEA) includes, according to Directive of the European Parliament and Council 2001/142/EC of 27 June 2001 on evaluation of effectiveness of environmental plans and programmes, timely assessment, i.e. parallel to the development of the Programme project it must be evaluated by the expert of the Regional Council of Kymenlaakso in cooperation with Regional environmental center of South-East Finland according to the Finnish Resolution on environmental impact assessment of projects and programs implemented by governmental structures (SOVA).

In spite of the fact that, as mentioned above, the Russian legislation does not require this procedure to evaluate any programmes, including international ones, the Russian experts evaluated the Programme Draft in terms of its environmental impact and prepared this environmental report.

According to the Directive on SEA and Resolution SOVA the draft report has been prepared by experts and submitted for discussion to the environmental authorities.

The most important issues have been discussed beforehand with governmental representatives - federal environmental service and corresponding regional committees.

Information to the public about initiation of the public discussion of the Programme Draft The Environmental Report as well as about the public hearings was provided through: Mass media (official newspaper of The Russian Government «Rossiyskaya gazeta» 21.10.2014), official web-site of the City Administration – «Environmental portal of St.Petersburg» (www.infoeco.ru), Internet portal of the Centre of Environmental Information for businesses - www.ecoprophi.info, created in frames of a project funded by ENPI CBC 2007-2013 Programme (Project “Envi Info-Centre for Enterprises”).

The Programme Draft and The Environmental Report was presented in the region for public consultation during a 30-day period.

Governmental environmental authorities (Federal environmental service) and concerned Committees have been informed ahead of time regarding the Programme Draft and the Environmental Report.

In the timeframe allocated for the public consultation, the Environmental report has been discussed at the session of the Committee for nature use and ecology of St.Petersburg Chamber of Commerce and with the experts of Environmental Partnership Association (AsEP).

Questionnaires and invitations have been circulated to some institutions as well as to participants of the Programme ENPI CBC 2007-2013.

The Russian environmental legislation does not require a similar procedure from the Russian side. However, there have been public hearings held at St.Petersburg Chamber of Commerce on 21.11.2014.

Representativse of the Programme and governmental bodies took part in the public hearings:
The meeting of participants of the public hearings on 21.11.2014 made the following resolution:

- approve The Environmental Report and directions for action, as stated in the Programme Draft ENI CBC 2014 – 2020,
- recommend to the Application Committee of the Programme Draft to follow up on the suggestions made by the meeting.

Suggestions collected from the participants of the consultation process are provided in the Attachment 1

Conclusions of the environmental report, as well as opinions regarding the Programme strategy and The Environmental report expressed during consultations with environmental authorities and the public can be used to clarify the programme priorities, suggested actions and project selection criteria.
3.6. Environmental impact monitoring and efficiency

The Draft Programme identifies that it shall be evaluated with the general indicators applied to all programmes (Article 30 of Commission implementing regulation (EU) No 897/2014).

If required, additional indicators, specific for a particular programme evaluation, can be developed.

All indicators shall be developed with perspective that any programme actions shall have a transboundary effect and generate additional results, even if it is not explicitly stated in one or another indicator.

In future the indicators used for the previous programme 2007-2013 can also be considered.

It is important to ensure that the monitoring and evaluation of the programme’s results at all levels (impact, results, expenses and outputs) can be measured to provide foundation for reporting and decision making.

The following data must be provided for each indicator: definition, targets, data collection methods, frequency of data collection etc. Monitoring of environmental impact and efficiency must be implemented and evaluated, first of all, as part of individual projects that may have an impact on the environment to any degree.

It is important to ensure inventory of the existing indicators and develop a data collection system to measure the impact of the project outputs and programme indicators.

To monitor and assess the impact of the Programme it is important to use a system to collect reliable information. Such system will use a data base that contains information on the project results. The necessary information will be regularly presented in progress and final reports, provided by each project’s leading partners. Additional information can be provided by interested parties based on surveys and questionnaires.

Electronic data management systems shall be used.

Electronic system to manage the programme overall and individual projects was employed in the previous Transboundary Cooperation Programme. The system was used at the project level for both operational and financial monitoring. Information from both systems was regularly checked for alignment.

The current Draft Programme 2014-2020 does not present a monitoring and evaluation plan nor the indicators. They shall be provided later, possibly based on the experience drawn from the previous programme, as mentioned above. Provided below is some data from the 2007-2013 Programme.

**Objectively verifiable indicators, related target values and expected results, used in the Programme ENPI 2007-2013**
Amongst the financial indicators: investments from the project implementation, expected investments from the project implementation, payments to the budget from the implemented project (Unified Social Tax from payments to Russian employees of projects).

Evaluation was also based on the following indicators:

1. New companies created by the projects
2. Jobs created
3. Researched completed
4. Joint training courses and programmes developed
5. Number of people trained
6. New equipment developed and introduced into production
7. New equipment prototypes has been developed
8. Published research articles and books
9. Number of PhDs based on the projects
10. Trained volunteers in various fields
3.7. Environmental importance of the Programme

Analysis of the current environmental situation in the Russian part of the programme area shows a rather high level of pollution, especially in St.Petersburg and in towns of the Leningrad region. At the same time the overall environmental situation in the Finnish territory is significantly better, including due to systemic approach to environmental protection.

Therefore it is important that the Strategic Objectives for the Programme provide vast opportunities for exchanging environmental technologies, expertise, and experience in solving environmental problems in Russia and Finland.

The goals identified by the Programme, including those in the field of sustainable resource use, implementation of sustainable waste and water management systems, reduction of pollution and emissions, are aimed at improvement of environmental situation in the regions of the Programme. Support of the transboundary cooperation is aimed at reduction of environmental impact and risks related to increasing traffic, eutrophication, hazardous substances and oil spills.

Environmental impact of the Programme will be determined, first of all, by efficiency of joint actions of Russian and Finnish institutions, aimed at improving various aspects of the environment and raising social responsibility of business in the interests of sustainable development.

Active participation in the Programme of environmental organisations, supporting the projects in the field of environmental education and information provision will help raise the level public awareness and involve the public into environmental actions (especially in the field of waste management), and implement events popularizing healthy life style.

The Programme gives an opportunity to continue traditions of regional cooperation in the field of environmental protection of St.Petersburg and the Leningrad region, which began after the signing of Intergovernmental Agreement between Russia and Finland in 1992.

The Programme will continue strengthening positions of the participating regions in business cooperation, as well in transportation and logistics in the context of Russian and EU policies on transport and transportation corridors, which is highly important in the current period of crisis.

The Programme will also help lower transboundary environmental risks at local and regional levels. Besides, the Programme will enhance mutual cultural contacts and transboundary connections between distant settlements.
4. Conclusion

The report considered the Draft Programme «South-East Finland - Russia ENI CBC 2014-2020», which is to be implemented in frames of the EU’s programme «European Neighborhood and Partnership Instrument».

The Programme is aimed at adoption of joint measures for development of transboundary region on both sides of southern part of the border between Finland and Russia. The programme area on the Russian side includes the Leningrad oblast and St. Petersburg.

The Draft objectively evaluates the regional infrastructure, draws from past experience and continues traditions that started during the previous programmes between Russia and Finland in 2004 – 2006 and 2007 – 2013. Priorities and Objectives identifies in the new Programme fully reflect the development of cooperation in the transboundary region, which is based in co-funding from the European Commission and from the Programme partners - Finland and Russia.

At the current stage of development of the Programme, when both the kinds of projects to participated in the Programme, and the criteria of their selection are unknown, it is impossible to quantitatively evaluate the level of the impact of the Programme on the environment (implement sufficient measures to complete strategic evaluation of the environmental impact). This shall be taken into account in developing project guidelines, application guidelines, and evaluation criteria.

The limited funding and funding guidelines of the Programme do not allow large scale industrial construction, therefore its implementation cannot have a substantial negative impact on the environment. At the same time some project actions in frames of the Programme can approve of large infrastructural projects such as construction of new highways and railways, including around protected areas; development of new port complexes, allocation of tourist infrastructure objects etc.

In such cases it is necessary to implement environmental impact assessment (IEA) and ensure complying with Russian legislation requiring mandatory state audit of project documentation. All large projects of the Programme shall implement special environmental measures which will ensure that the anthropogenic impact of the project stays within acceptable limits.

Unconditionally positive environmental impact of the Programme will be provided by projects aimed at environmental protection, development of environmental businesses, promotion of the best available technologies, promotion and use of alternative energy, encouraging energy and water saving etc, as well as public awareness raising in the above mentioned fields.

Analysis of the previous Programme «South-East Finland - Russia ENPI CBC» 2007-2013 showed that many successfully implemented projects were aimed largely on solving environmental problems, or cooperation between social and healthcare sectors.
This must be considered in identifying project selection guidelines and action criteria. Here it is also important to take into account possible environmental risks that exists today on the in the Russian programme area. These risks have been reflected in the report.

Non-adoption of the Programme will cause lost opportunities for continuation of fruitful partnership between Russia and Finland in such areas as environmental protection, promotion of modern technologies and services, supporting environmental entrepreneurship and environmental development projects in the Russian programme area. Apart from that, it might cause disruption in business and cultural contacts developed over the long-term partnership, weakening of transboundary connections between distant settlements. An objective weakening of environmental activity on both sides of the border caused by economic crisis should also be taken into account.

Expert evaluation of the Programme Draft also showed that its implementation will create large opportunities for lowering environmental impact in the transboundary areas of Russia and Finland. It would support the efforts of businesses and institutions aimed at implementation of new ideas and initiatives in various areas of environmental protection.

The priorities identified in the Programme meet the Strategy of socio-economic development if the North-West Federal District of Russia. The Programme will aid the local authorities to put forward sustainable environmental policy in St.Petersburg and the Leningrad region, implement plans and programmes, support the measures aimed at solving environmental problems, protection and sustainable development of natural resources.

The Programme shall facilitate public participation in environmental actions, create comfortable conditions for NGO participation in environmental projects, which will strengthen the role of civil society in regional environmental decision making. Analysis of the Programme Draft showed its coherence with its declared goals - provision of a higher level of environmental protection and facilitation of integration of environmental issues into development plans.

The Programme Draft meets the requirements of the European neighborhood policy and strategisc partnership EU-Russia in the four directions stated in the Programme. Conclusions of this report, as well as opinions, shared during the consultation process with environmental authorities and the public on the given report and the Programme Draft, can be used to clarify the programme priorities, appropriate measures and project selection criteria.

The report is based on the following sources of information: official documents of Administrations of St.Petersburg and The Leningrad region, federal authorities of The Russian Federation; official statistical and analytical data, reports and regional development programmes. Environmental goals stated by the national legislation have been reflected in this report.
Informal cross-border consultation on the environmental report with the Finnish partners has been organized by JMA of SEF-Russia ENPI Programme 2007-2013 on 28.11.2014 in Lappeenranta in the office the Regional Council of South Karelia. Measures to monitor environmental impact shall be ensured during development and implementation of large infrastructural projects.
5. Attachments

5.1. Attachment 1

Attachment 1 to the Expert Evaluation of Environmental aspects the Programme Draft ENI CBC 2014 – 2020 South-East Finland - Russia

INFORMATION BRIEF

On public consultation of the Programme Draft ENI CBC 2014 – 2020 and The Environmental Report

According to Russian legislation, information of the public regarding initiation of consultations of the Programme Draft ENI CBC 2014 – 2020 and The Environmental Report, as well about organization of public hearings, was distributed 30 days prior to the date of the hearings.

Information to the public about initiation of the public discussion of the Programme Draft The Environmental Report as well as about the public hearings was provided through:

- Mass media (official newspaper of The Russian Government «Rossiyskaya gazeta» 21.10.2014),
- Official web-site of the City Administration – «Environmental portal of St.Petersburg» (www.infoeco.ru),
- Internet portal of the Centre of Environmental Information for businesses - www.ecoprofi.info, created in frames of a project funded by ENPI CBC 2007-2013 Programme (Project “Envi Info-Centre for Enterprises”).

Governmental environmental authorities (Federal environmental service) and concerned Committees have been informed ahead of time regarding the Programme Draft and the Environmental Report.

In the timeframe allocated for the public consultation, the Environmental report has been discussed at the session of the Committee for nature use and ecology of St.Petersburg Chamber of Commerce and with the experts of Environmental Partnership Association (AsEP).

Questionnaires and invitations have been circulated to some institutions as well as to participants of the Programme ENPI CBC 2007-2013.

The public hearings held at St.Petersbrug Chamber of Commerce on 21.11.2014.

Representative of the Programme developer Georgy Psarev and governmental bodies took part in the public hearings:

- North-West office of Rosprirodnadzor,
- Neva and Ladoga basin territorial department,
Committee on Environmental Protection, Nature Use, and Ecological Safety of the Administration of St. Petersburg
- Committee of external affairs of the Administration of St. Petersburg
- North-West office of the Russian Federal Border Development Service, and representatives of
- St. Petersburg Chamber of Commerce and Leningrad region Chamber of Commerce, NGOs, universities, businesses of the city and the region.

Total participation - 36 people. 21.11.2014. - St. Petersburg Chamber of Commerce.

The Programme developer representative, Georgy Psarev, presented the Programme Draft.

The Environmental Report has been presented by representatives of The Environmental Information Center for businesses - www.ecoprofi.info:

   Evgenia Koroleva – director of Ecological bureau "KOSMOS" - EIA и SEA

   Boris Krilov - director NP «AsEP» - Environmental Assessment of the Programme

All participants took part in the discussion.

Based on presentations and analysis or questionnaires the following suggestions have been formulated:

Malishev V.N. (SETU) – it is advisable to consider R&D cooperation in the field of advanced ICT as one of the constituents of regional economic development and building of information society.

Kuznetsova E.M. (NGP “Ecological Union”) – include in the Programme Draft such aspects as development of environmentally friendly procurement both in private and governmental sector (based on Finnish experience); development of criteria and procedures for sustainable procurement of goods and services; harmonization of environmental certification standards; awareness raising on eco-labeling.

Nepomnyashy A.M. (JSC "Plant Kozitsky") – simplify the project application form and logframe, remove redundant elements in application materials.

Kuznesva E.N. (NP "Northwest Service Center in attracting investments") – pay a more serious attention to application guidelines and developing logframes.

Senova O.N. (NGO “Friends of the Baltic Sea”) – to reduce required project co-funding from NGOs to 10% (as in ESTLATRIS Programme).

Korneev O.U. (JSC « Sevmorgeo ») – include in the potential project list programmes of The State Institute of Freshwater Fishery, The Zoological Institute of the RAS? JSC « Sevmorgeo ».
Litvinenko V. I. (SGE “Miniral”) – organize a project application training workshop for potential Russian applicants in a timely manner.

The meeting of participants of the public hearings on 21.11.2014 made the following resolution:

- approve The Environmental Report and directions for action, as stated in the Programme Draft ENI CBC 2014 – 2020,
- recommend to the Application Committee of the Programme Draft to follow up on the suggestions made by the meeting.

Conclusions of the environmental report, as well as opinions regarding the Programme strategy and The Environmental report expressed during consultations with environmental authorities and the public can be used to clarify the programme priorities, suggested actions and project selection criteria.