



**Strategic Environmental Assessment of the Estonia - Latvia - Russia
Cross-Border Cooperation Programme
Within European Neighbourhood and Partnership Instrument**

2007 - 2013

ENVIRONMENT REPORT

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Introduction

The Strategic Environmental Assessment (*further in the text* – SEA) of the Cross-Border Cooperation (*further in the text* – CBC) Programme between Estonia – Latvia - Russia is carried out based on the contract signed between the Ministry of the Regional Development and Local Government of the Republic of Latvia (acting as the Joint Managing Authority) and the association “Baltic Environmental Forum-Latvia” on 6 July, 2007. The Environment Report has been prepared in English.

The Estonia-Latvia-Russia CBC Programme will be implemented as a part of the European Neighbourhood and Partnership Instrument (*further in the text* – ENPI) supporting implementation of the EU Neighbourhood Policy for 2007-2013.

The goal of SEA is to provide a basis for a high level of protection of the environment and to contribute to the integration of environmental considerations into preparation and adoption of plans and programmes with the goal to promote sustainable development. The legal requirements for SEA are laid down in the EC Directive 2001/42/EC on the evaluation of the effects of certain plans and programmes on the environment.

According to the Directive 2001/42/EC Annex 1 the requested and relevant information and outcomes of the SEA are presented in this Environment Report. The Report has been prepared based on available policy documents, statistics, information, and available knowledge and methods of the environment assessment.

The Environment Report is also seen as a tool for making plans and programmes more environmentally friendly through close cooperation between environmental experts and programme developers. Therefore communication and consultations between involved parties, various stakeholders and public are essential in the development of this Report. The SEA expert team would like to thank for the support with information and data the members of the Joint Task Force and environmental institutions who commented during the assessment procedure.

During November and December, 2007 the competent authorities organised the public consultation and hearing. The draft Estonia - Latvia - Russia CBC Programme 2007-2013 and the draft Environment Report were published on the relevant websites, various stakeholder meetings held. The results of the public consultation process were reviewed at the Joint Task Force meeting held in Riga on 19 December, 2007.

This version of the Environment Report is prepared for the Estonia- Latvia - Russia CBC Programme 2007-2013 CBC draft version of January, 2008 which has integrated the results of the public hearing. The Environment Report has also integrated relevant comments received during the consultation process.

I. Description of the CBC Programme Estonia - Latvia - Russia

1.1. Development of the Programme and its main contents

The Estonia - Latvia - Russia CBC Programme 2007-2013 has been prepared in the frame of the ENPI adopted by the Regulation No 1638/2006 of the European Parliament and of the Council laying down general provisions establishing European Neighbourhood and Partnership Instrument. Amongst others, it states that the ENPI shall promote enhanced cooperation and progressive economic integration between the European Union and the partner countries. The Regulation lists those cooperation areas for which the support shall be used.

The Estonia - Latvia - Russia CBC Programme 2007-2013 has been elaborated jointly by Latvian, Estonian and Russian national and regional governmental authorities, based on mutual understanding, respect and co-operation. The programme development started in August 2006.

A Joint Task Force was set-up composed of representatives from the relevant planning ministries as well as from regional and local authorities of the three countries based on the partnership principle. The process was also supported by the established National Sub-Committee in Latvia and the Working Group in Estonia and Russia which consulted on the priorities, measures and positions to be covered by the CBC programme.

1.2. Eligible CBC programme area

The Estonia – Latvia – Russia CBC Programme 2007-2013 focuses its actions on certain regions located near the North East boarder of the European Union:

Estonia: Kirde-Eesti, Lõuna-Eesti, Kesk-Eesti; adjoining territory: Põhja-Eesti

Latvia: Latgale, Vidzeme; adjoining territories: Riga City and Pieriga

Russia: Leningrad oblast, Pskov oblast, St.-Petersburg City.

The Programme area covers the territory of 213,828 km². 32,964 km² of the area belongs to Estonia (or 72.89% of total territory of the state), 40,246 km² – to Latvia (or 62.31% of total territory of the state), and 140,600 km² – to Russia. 34.25 % of the Programme area lies within the EU, and 65.75% - outside the EU.

The total population of the Programme area has been estimated as 9,831,524 inhabitants (2005), almost 50% (4.6 million) of them living in St. Petersburg. Altogether 29.4 % of the population of the Programme area lives in the EU territory, and 70.6 % outside the EU.

Map 1. Eligible territories of the Programme



1.3. Objectives and Priorities of the Programme

The **strategic objective** of the Programme is to promote joint development activities for the improvement of the region’s competitiveness by utilising its potential and beneficial location in the cross roads between the EU and Russian Federation. The **specific objective** is to make the wider border area an attractive place for both its inhabitants and businesses through activities aimed at improving the living standards and investment climate.

The programme is divided into the following three major priorities.

Priority I. Socio-economic development

The priority is dedicated to strategic development of border region’s competitiveness through support to business and labour market development, improvements in communication networks and exploring region’s potential for tourism as well as maintaining efficient and safe borders.

Measure 1.1. Fostering of socio-economic development and encouraging business and entrepreneurship

Directions of support:

- Support to SME development, improvement of business related infrastructure, promotion and diversification of local economic and business environment
- Development of know-how and promotion of innovations, research and technology development
- Development of labour market potential (improvement of employment conditions, support to economically inactive population, cooperation between research institutions, educational establishments and businesses in order to raise the quality of workforce and human resource development)
- Development of entrepreneurs' contacts and networks

Both small-scale investments and soft projects are eligible.

Measure 1.2. Transport, logistics and communication solutions

Directions of support:

- Development of transport corridors and small-scale infrastructure (improvement of road, rail, water and air networks and services)
- Planning and development of border-related infrastructure (parking areas, facilities for various services of interest for travellers both tourists and truck drivers, recreation areas etc)
- Development of new cross-border public transportation routes and services
- Development of information infrastructure and services, creation of joint information facilities.

Both investments and soft projects are eligible.

Measure 1.3. Tourism development

Directions of support:

- Development of tourism infrastructure, joint tourism products and services and their accessibility (accessibility of roads connected with tourism routes, placing of guide-boards, etc.)
- Coordinated tourism strategies and marketing measures (joint events aiming at extending attractiveness of the programme area, information services, etc)
- Development of networks between tourism organisations and creation of new contacts in tourism sector.

Both investments and soft projects are eligible.

Priority II: Common challenges

The priority aims at addressing common problems and initiating and continuing joint actions in the areas of common interest on both sides of the border.

Measure 2.1. Joint actions aimed at protection of environment and natural resources

Directions of support:

- Environmental studies and management (researches addressing environmental pollution, monitoring, management, etc.)
- Environmental awareness raising (incl. establishment of information centres and introduction of systemic environmental education, etc.)
- Environmental risk management and cooperation of environmental services
- Planning and improvement of small scale environmental infrastructure

Both investment and soft projects are eligible.

Measure 2.2. Preservation and promotion of cultural and historical heritage and support of local traditional skills

Directions of support:

- Preservation and restoration of cultural and historical heritage
- Application of local crafts, know-how and traditional skills in business development

Both small – scale investments and soft projects are eligible.

Measure 2.3. Improvement of energy efficiency

Directions of support:

- Effective and sustainable use of energy resources, energy savings
- Development of alternative and renewable energy sources

Soft projects are eligible.

Priority III: Promotion of people to people co-operation

The third priority is focussing on small scale activities for improved cohesion of the border region supporting wide range of activities to be performed by regional and local municipalities and various actors of the society, which have been identified as being of crucial importance to a more integrated region.

Measure 3.1 Development of local initiative, increasing administrative capacities of local and regional authorities

Directions of support:

- Promotion of co-operation and networking between local and regional authorities and NGOs. Promote the participation of civil society in local initiatives and promote common dialog between local authorities and society.
- Increasing the administrative capacity of local and regional authorities (including cooperation in providing public services and e-services etc.)

Soft projects are eligible.

Measure 3.2 Co-operation in spheres of culture, education, sport, social and healthcare

- Development of people – to - people cooperation (in culture, sport, education, social sphere and public health etc.)
- Exchange of initiatives in education, culture, health and social care
- Establishment and development of common information space and partnership networks

Soft projects are eligible.

1.4. Beneficiaries of the Programme

The following bodies can be beneficiaries and project partners:

1. National, regional and local public authorities;
2. Associations formed by one or several national, regional or local authorities;
3. Public equivalent bodies (any legal body governed by public or private law):
 - a. Established for the specific purpose of meeting needs in the general interest, not having an industrial or commercial character,
 - b. Having legal personality,

- c. financed, for the most part, by the State, regional or local authorities; or other bodies governed by public law, or subject to management supervision by those bodies, or having an administrative, managerial or supervisory board, more than half of whose members are appointed by the state, regional or local authorities or by other bodies governed by public law (for example, municipal and state enterprises, trade unions, medical institutions, museums, etc.).
4. Associations formed by one or several bodies governed by public law as defined under paragraph 3,
5. NGOs and other non-profit making bodies.
6. Educational organisations (schools, preschool institutions, colleges, institutes, universities)
7. Private companies (only within priority 1).

The specific requirements for the eligibility of the beneficiaries and partners, please see the Programme Document.

2. Determination of the environmental issues, objectives and indicators relevant to CBC Estonia- Latvia-Russia programme

Environment is a rather complex issue, therefore, this Report reviews the aim, objectives and priorities of the CBC programme in relation to the environmental issues aiming at identifying those issues which have a potential impact – either positive or negative.

The **national** and **regional** Environmental Policy Documents have been used for defining **the relevant environmental issues** with regard to the Estonia - Latvia - Russia CBC Programme 2007-2013. In Estonia and Latvia, national environmental and sustainable development policy documents already integrate international commitments as well as the EU policy goals and tasks. Estonian and Latvian national environmental policy goals shall be considered in regional and local planning documents.

Latvian National Environmental Policy Plan has been developed in 2003 and sets out the tasks for the period of 2004-2008. It points out the priority problems, goals and measures how to deal with the identified problems. Latvian National Sustainable Development Strategy was adopted in August, 2002 and sets out the long-term goals for the country.

Estonian Environmental Action Programme has been developed in 2006 and sets out the tasks for the period of 2007-2013 (approved by the Estonian Government in February 2007). The strategic environmental goals have been set out by the Estonian Environmental Strategy, which is valid for the period up to 2030 (approved by the Parliament in February 2007). In addition, the Estonian Sustainable Development Strategy adopted by the Parliament in September 2005 is also applicable. The Estonian Environmental Strategy up to 2030 is precondition for implementing the goals in the Sustainable Development Strategy in the field of environment.

In Russia, the Ecological Doctrine of Russian Federation (ECRF) adopted by the decision of the Government in 2002 states the necessity for the development and the implementation of the national environmental policy aiming at environmental protection and efficient use of the natural resources. ECRF defines the goals, objectives, tasks and principles of the long-term national environmental policy. ECRF names the main environmental issues and the objectives. The document is term less.

Under the ECRF, the Federal Ministry of Natural Resources has developed a special Action Plan for Implementation of the Ecological Doctrine for 2003-2005; this Plan demands preparation of the regional documents (action plans) in line with the federal one. However, these activities were not followed up in recent years.

Referring to the North-West Russia, the eligible regions of the Programme (Leningrad and Pskov regions and City of St.Petersburg) are allowed to have own environmental policies. In St.Petersburg such policy exists in the form of “Main directions of St.Petersburg policies in the field of environmental protection and ensuring environmental security for 2003-2007” and for coming years the draft document is given for commenting at the official web-site of City Government. In Pskov region there is a “Programme of economic and social development of

Pskov region for 2006-2010”, partially addressing environmental issues. Leningrad region has several relevant documents for the environmental field: regional targeted programme “Environmental Protection in Leningrad region for 2004-2006”, regional targeted programme “Development and Use of Mineral Resources of Leningrad region in 2006-2010” and regional targeted programme “Support and Development of the Specially Protected Areas in Leningrad region until 2010”.

Some of the environmental issues have also link to the Human Health Protection Policies. For example, status of the water body has a relation to the bathing water quality. Further on, air quality defines also pollution limit values with regard to human health.

Environmental Issues as defined by the Environmental Policy documents.

	Estonia ¹	Latvia ²	Russia ³	St. Petersburg ⁴	Pskov reg. ⁵	Leningrad reg. ⁶
Air (pollution, quality)	+	+	+	+	+	+
Climate change (efficient use of energy resources)	+	+	+		+	
Radioactivity of atmosphere (transboundary)	+	+				
Water resources (use/pollution/quality)	+	+	+	+	+	+
Waste management (generation, recovery, disposal)	+	+	+	+	+	+
Maintenance of the biological diversity and landscape	+	+	+	+		+
Forest management	+		+		+	
Fish resource management	+		+			
Game resource management	+					
Use of mineral resources	+	+	+			+
Contaminated sites (research and clean-up)	+	+	+	+		+
Noise	+	+				

1 – Estonian Environmental Action Programme – 2007-2013

2 – Latvian Environmental Action Programme – 2004-2008

3 - Ecological Doctrine of Russian Federation

4 - “Main directions of St.Petersburg policies in the field of environmental protection and ensuring environmental security for 2003-2007” and “Environmental Policy of St.Petersburg for 20008-2012 years”.

5 - “Programme of economic and social development of Pskov region for 2006-2010”.

6 - Regional targeted programmes “Environmental Protection in Leningrad region for 2004-2006”, “Development and Use of Mineral Resources of Leningrad region in 2006-2010” and “Support and Development of the Specially Protected Areas in Leningrad region until 2010”.

The **strategic objective of the CBC Programme** is to promote joint development activities for the improvement of the region’s competitiveness by utilising its potential and beneficial location in the cross roads between the EU and Russian Federation. The specific objective is to make the wider border area an attractive place for both its inhabitants and businesses through activities aimed at improving the living standards and investment climate.

Although the CBC Programme **does highlight neither sustainable development nor environmental protection in its objectives**, the several relevant statements with regard to environment and the vision of the Programme have been included. It declares that business related infrastructure is developed in compliance with European environmental requirements

and best practices thus ensuring that **environmental resources are not further degraded** and the current values preserved. Further on, it states that the main task of the Programme thus is to address the common challenges in the way that would be mutually benefiting for the whole region and contribute to sustainable development of the Programme area.

The table below indicates links between the priorities and directions supported by the Programme and the Key Environmental/Health Issues to which the Programme items refer:

TABLE 1. Links between the priorities and direction of support

CBC Programme Priorities	Key Environmental/Health Issues	Relevant for the further assessment
Priority I Socio-economic development		
<i>Measure 1.1. Fostering of socio-economic development and encouraging business and entrepreneurship</i>		
<ul style="list-style-type: none"> • Support to SME development, improvement of business related infrastructure, promotion and diversification of local economic and business environment • Development of know-how and promotion of innovations, research and technology development • Development of labour market potential (improvement of employment conditions, support to economically inactive population, cooperation between research institutions, educational establishments and businesses in order to raise the quality of workforce and human resource development) • Development of entrepreneurs' contacts and networks <p>Both small-scale investments and soft projects are eligible.</p>	<p>Environmental issues related to pollution (climate change/water pollution, waste management) and use of local resources (maintenance of biodiversity, forest resources, fish resources, mineral resources, e.t.c)</p>	<p>Yes – positive and negative</p> <p>if a new activity is started based on local resources/generating pollution load, performed construction works it can lead to additional pressure to environment;</p> <p>on the other hand, by improvement of business related infrastructure, innovations, research and technologies, the resources are used more efficiently.</p>
<i>Measure 1.2. Transport, logistics and communication solutions</i>		
<ul style="list-style-type: none"> • Development of transport corridors and small-scale infrastructure (improvement of road, rail, water and air networks and services) • Planning and development of border-related infrastructure (parking areas, facilities for various services of interest for travellers both tourists and truck drivers, recreation areas etc) • Development of new cross-border public transportation routes and services • Development of information infrastructure and services, creation of joint information facilities. <p>Both investments and soft projects are eligible</p>	<p>Air quality</p> <p>Maintenance of Biodiversity</p> <p>Water resources (pollution)</p> <p>Noise</p> <p>Waste management</p>	<p>Yes (negative - the increased transportation causes various environmental problems during the construction period and afterwards; e.g. potential for transport accidents which could cause serious environmental damage).</p> <p>Positive – supports public transport, IT measures, reduction of littering with waste if the infrastructure at the parking places are provided</p>

Measure 1.3. Tourism development		
<ul style="list-style-type: none"> • Development of tourism infrastructure, joint tourism products and services and their accessibility (accessibility of roads connected with tourism routs, placing of guide-boards, etc.) • Coordinated tourism strategies and marketing measures (joint events aiming at extending attractiveness of the programme area, information services, etc) • Development of networks between tourism organisations and creation of new contacts in tourism sector. <p>Both investments and soft projects are eligible.</p>	<p>Maintenance of Biodiversity and Landscape</p> <p>Water Resources</p> <p>Waste Management</p>	<p>Yes – increased tourism has an impact on various aspects of the environment – biodiversity, waste generation, water pollution. Further on, constructing new infrastructure can cause environmental damage. On the other hand the certain infrastructure elements can support tourism flow management – to guide tourists away from vulnerable areas.</p>
Priority II: Common challenges		
Measure 2.1. Joint actions aimed at protection of environment and natural resources		
<ul style="list-style-type: none"> • Environmental studies and management (researches addressing environmental pollution, monitoring, management, etc.) • Environmental awareness raising (incl. establishment of information centres and introduction of systemic environmental education, etc.) • Environmental risk management and cooperation of environmental services • Planning and improvement of small scale environmental infrastructure <p>Both investment and soft projects are eligible.</p>	<p>All environmental issues related to nature management (maintenance of the biodiversity) and pollution (climate change/water pollution, waste management)</p>	<p>Yes, positive</p>
Measure 2.2. Preservation and promotion of cultural and historical heritage and support of local traditional skills		
<ul style="list-style-type: none"> • Preservation and restoration of cultural and historical heritage • Application of local crafts, know-how and traditional skills in business development <p>Both small – scale investments and soft projects are eligible.</p>	<p>Landscape Maintenance</p> <p>Cultural heritage</p>	<p>Yes, positive</p>
Measure 2.3. Improvement of energy efficiency		
<ul style="list-style-type: none"> • Effective and sustainable use of energy resources, energy savings • Development of alternative energy sources, including renewable energy <p>Joint research, planning and exchange of experiences in the form of soft projects</p>	<p>Climate change</p> <p>Air quality</p> <p>Forest resources</p> <p>Water resources</p>	<p>Yes, positive with regard to increase efficiency.</p>
Priority III: Promotion of people to people co-operation		
Measure 3.1 Development of local initiative, increasing administrative capacities of local and regional authorities		
<ul style="list-style-type: none"> • Promotion of co-operation and networking between local and regional authorities and NGOs. Promote the participation of civil society in local initiatives and promote common dialog between local authorities and society • Increasing the administrative capacity of local and regional authorities (including cooperation in providing public services and e-services etc.) <p>Soft projects are eligible.</p>	<p>-</p>	<p>No, cooperation and networking itself does not have any impact on the environment</p>

Measure 3.2 Co-operation in spheres of culture, sport, social and healthcare		
<ul style="list-style-type: none"> • Development of people – to - people cooperation (in culture, sport, education, social sphere and public health etc.) • Exchange of initiatives in education, culture, health and social care • Establishment and development of common information space and partnership networks 	-	No, cooperation and networking itself does not have any impact on the environment
Soft projects are eligible.		

The following table points out the **relevant environmental protection objectives** according to the **identified environmental issues**. In a view of the priorities of the CBC programme, the Latvian National Policy Plan, Estonian National Strategy and the Ecological Doctrine of Russian Federation defined the following **environmental objectives**:

Table 2. Relevant environmental objectives

	Environmental Issues	Environmental Protection Objective	Country
1	Air quality	<ul style="list-style-type: none"> – To ensure compliance with air quality standards, especially in bigger towns and companies; 	Latvia
		<ul style="list-style-type: none"> – To develop effective, environmentally friendly and comfortable public transport system, safe light transport (make the alternatives for cars more comfortable) and to develop the infrastructure that decreases the compulsory pendulum traffic and road transport. – To remove step by step from the industry as well from the households the substances depleting the ozone layer. – To develop the system for monitoring the ambient environmental factors that influence human health and relevant information system as well the publication of this data. 	Estonia
		<ul style="list-style-type: none"> – To ensure ...air quality according to the legal requirements; – To develop the guiding principles for the use of atmospheric air (air resources) aiming at environmental protection 	Russia
2	Climate Change/Energy	<ul style="list-style-type: none"> – To reduce the harmful effects of global climate change by implementing requirements laid down by the UN Framework Convention on Climate Change, the Kyoto Protocol and regulations of the European Union. – To take measures with a view of jointly reducing the emissions of greenhouse gases and increasing the attraction of CO2. 	Latvia
		<ul style="list-style-type: none"> – to produce electricity in amounts that are sufficient for Estonian consumption needs and to develop the diverse, based on different energy sources with less environmental effect sustainable production technologies, that also allow to produce electricity for export. – To slow down and stabilise the energy consumption growth 	Estonia
		<ul style="list-style-type: none"> – To support environmentally effective energy protection, including use of renewable resources and secondary raw materials; – To decrease energy and resources loses at transportation, including environmentally sound decentralization of energy production, optimization of energy supply for smaller energy users. – 	Russia

3	Maintenance of Biodiversity	<ul style="list-style-type: none"> – To preserve and restore the diversity of ecosystems and their natural structures. – To preserve and promote the diversity of local wild species. 	Latvia
		<ul style="list-style-type: none"> – To guarantee the necessary habitats and communities for maintainance of viable populations 	Estonia
		<ul style="list-style-type: none"> – To protect biodiversity of used biological resources, their internal structure and ability to self-regulation and self-reproduction; – To protect and restore the optimal complex of terrestrial, firewater and marine eco-systems for sustainable development of the country of its separate regions; – To protect and restore rare and endangered species in their natural habitat and in the bondage and genetic banks; – To create and develop specially protected areas on different levels and regimes, to form on their basis (and also on the base of other territories with prevailing natural processes) a nature protection fund of Russia as an integral component of regional and country development, to save unique nature complexes; – To save and restore the unity of natural systems, including prevention of their fragmentation during the economic activities while constructing hydro-technical installations, automobile and rail roads, pipelines, electric networks and other linear constructions; – To save and restore natural biological diversity and landscapes on the economically used and urbanized areas. 	Russia
4	Water/Pollution	<ul style="list-style-type: none"> – To improve the quality of underground and surface waters, to prevent further pollution thereof and to gradually reduce the current level of pollution. – To improve international co-operation with respect to transboundary river basins in order to ensure joint use of water resources and to reduce the pollution arriving in Latvia. – To deal with the issue of reducing chemical pollution in the Baltic Sea and to provide for fulfilment of international obligations undertaken by Latvia. – To promote a sustainable and rational use of water with particular attention paid to the preservation of underground water resources and lakes and water bodies threatened by eutrophication. – To protect water ecosystems and water-dependent terrestrial ecosystems and wetlands. – To provide for protection against floods and drought. – To provide for the compliance of potable water to the quality standards. 	Latvia
		<ul style="list-style-type: none"> – To acheive the good status of the surface water (including coastal waters) and to maintain the water bodies that have already the good or very good status. – Drinking and bathing water is safe for human health. 	Estonia
		<ul style="list-style-type: none"> – To ensure ...water... quality according to the legal requirements; – To decrease water consumption per capita in production and in communal sector. 	Russia
5	Waste Management	<ul style="list-style-type: none"> – To limit waste production and to reduce quantities of disposed waste by promoting to processing or reuse thereof. – To implement a regional municipal waste management system. – To ensure that as much waste is reintroduced in the economic system as possible. 	Latvia

		<ul style="list-style-type: none"> – To provide for the disposal of waste in a way that is safe for human health and the environment. – To facilitate waste processing as close to its place of origin as possible. – To facilitate the introduction of sorted waste collection system in municipalities. – To provide residents and entrepreneurs with information and to raise their awareness about waste management issues. 	
		<ul style="list-style-type: none"> – In year 2030 the disposal of generated waste has decreased by 30% and hazardousness of generated waste has decreased remarkably. 	Estonia
		<ul style="list-style-type: none"> – To ensure maximum use of extracted ...biological resources, and minimization of waste at their mining and processing; – To introduce resource-saving and zero-emissions technologies in the spheres of economic activities; – To develop schemes for re-use of natural resources, including waste recycling. 	Russia
6	Landscape/Cultural heritage/ land use	<ul style="list-style-type: none"> – No specific goal set by the Environmental Policy 	Latvia
		<ul style="list-style-type: none"> – To maintain the multipurpose and coherent landscape – Sustainable use of natural and cultural landscapes – Environmentally friendly soil usage 	Estonia
		<ul style="list-style-type: none"> – To introduce the system optimization of agricultural lands and activities, which are adopted to the natural landscapes; to develop environmentally-sound agricultural technologies, to protect and restore natural soils fertility on the agricultural lands; – To support traditional environmental and sustainable economic activities. 	Russia
7	Forest resources	<ul style="list-style-type: none"> – To satisfy the balanced needs of ecological, social and economical forest use in very long perspective (longer than the strategy – 25 years) 	Estonia
8	Fish resources	<ul style="list-style-type: none"> – To guarantee the good status of fish populations and diversity of fish species, as well to avoid the indirect negative effect to the ecosystem of the fishery 	Estonia
9	Mineral resources	<ul style="list-style-type: none"> – Environmentally friendly mining of mineral resources, that spares the water, landscape and air and the effective use of the earth resources with minimum wastes and losses. 	Estonia
		<ul style="list-style-type: none"> – To ensure maximum use of extracted ...mineral resources, and minimization of waste at their mining and processing; – To minimize a negative impact on the environment during the prospecting and extraction of mineral resources, to restore the lands damaged at the mining activities 	Russia
10	Chemicals/radiation	<ul style="list-style-type: none"> – To provide a radiation and chemical safety and decrease the risks of negative effects on the human health at the design, building, exploitation and deconstruction of industrial and energy objects (inducing nuclear stations, chemical and mining enterprises etc.); – To ensure environmental safety during disarming, including rackets and their fuel dismantling, chemical weapons and their storages liquidation, and also solving the problem of old chemical weapons; – To decrease production and use of toxic and other hazardous substances, to provide their safe handling and storage, as well as liquidation of toxic storage places; – To rehabilitate the territories and water surfaces, which were a 	Russia

		subject to the negative impacts from the economic activities including radiation and chemical treatment.	
11	Contaminated sites	– for year 2030 all today known past contaminated sites are eliminated;	Estonia
		– To eliminate or reduce pollution caused by previous military or economic activities and the adverse impact thereof on human health, property, environment and biological diversity. – To achieve improvement in soil, ground, underground and surface water quality in polluted sites. – To preclude the penetration of hazardous substances from polluted sites into surface and underground waters. – To renovate and improve environmental quality in polluted sites.	Latvia

In order to evaluate the current state of the environment against the relevant key environmental objectives the following **core-set of the indicators is proposed**:

Table 3. Core environmental indicators

	Environmental/Health Issues	Environmental Indicators
1	Air quality	– Passenger turnover in million passenger kilometers – Number of days when the air quality standards are not met
2	Climate Change	– Share of renewable resources in energy supply – Energy efficiency
3	Maintenance of Biodiversity	– Protected nature areas – Area of built-up
4	Landscape/Cultural heritage	– Number of cultural heritage and their status
5	Water Resources	– Share of waste waters at a level meeting treatment standards; – Water quality status (high, good, bad)
6	Waste Management	– Share of municipal waste deposited in landfills – Share of separate waste collection in the eligible areas
7	Contaminated sites	– Number of contaminated sites

Selection of the indicators is partly driven by the availability of respective data.

3. Relevant aspects of the current situation and the likely evolution without implementation of the CBC programme

The Annex 1 (b) of the SEA Directive requires that the **relevant aspects of the current state of the environment** and the likely evolution thereof without implementation of the plan or programme (the “zero” alternative) are addressed.

To focus the assessment, this Environmental Report covers only those environmental issues which have been identified as relevant in the chapter No. 2.

The CBC programme covers a significant part of Estonia and Latvia. Therefore, the evaluation of the current situation and trends are mainly based on data at national level. Nevertheless, when regional specific information is available the evaluation is undertaken on that level.

With regard to Russia, the priority has been given to regional data (North-West and subjects of the Russian Federation, engaged into the Programme), although in some issue the national data has been used to show a trend.

The data sources mainly are environmental statistics published by Eurostat, national statistical offices, regional authorities. A note below the graphs or texts has been used to give a reference to the original data source.

Trends are evaluated by the “potential of changes” or “no change” in the pressure to environment or in the state of the environment due to implementation of the CBC programme.

3.1. Air quality

Air quality is actual urban environmental and health issue in many European countries. Different policy measures and targets have been set to reduce pollution load, thus to achieve environmental and health protection limit values. The transport is one of the economy sectors causing the pollution problems in terms of elevated concentrations of nitrogen oxides, ozone, solid particles and other dangerous substances in ambient air. Nowadays, it is estimated that the road transport contributes about 80% of total emissions of the main pollutants in St. Petersburg¹. In Estonia and Latvia, the transport contributed about 50-60% of total NO_x from the total emissions in 2004².

3.1.2 Number of days when the air quality standards are not met

Several cities and bigger towns are located in the Programme area– Tallinn, Tartu, Riga, Daugavpils, St.Petersburg and Pskov. Automatic air quality monitoring is performed in Riga and Rēzekne (Latvia), Tallinn and Kohtla-Järve (Estonia) and St.Peterburg (Russia).

¹ http://www.gov.spb.ru/gov/admin/otrasl/ecology/maps/karta_vozduh

² Eurostat data base

Concentrations of the nitrogen dioxide (NO₂) and particulate matter (PM₁₀) in the air indicate the pressure of transport sector on environment. Therefore, to reduce these emissions measures shall be related to the transport sector. In 2004-2005, the mean annual hourly limit value of 100 NO₂ µ/m³ (lower assessment level for human health protection) has been exceeded in Riga in several stations as well as in Rezekne³.

According to the data of the European Environment Agency, PM₁₀, the mean annual daily limit value of 20 µ/m³ (lower assessment level for human health protection) has been exceeded in Tallinn and Riga in 2005. Additionally, the EU legislation requests that if the concentration daily concentration exceeds 50 µ/m³ then the inhabitants shall be informed. In 2005 such days were recorded in Tallinn.

Table 3.1. Concentrations of air pollutants

	Riga,	Rēzekne 2002	Tallinn* 2005	Kohtla-Järve	St.Petersburg	Pskov
NO ₂ (mean annual hourly concentration)		22	27/12	8	n.a.	n.a.
PM ₁₀ (mean annual daily concentration)	48	n.a.	28/20	17	n.a.	n.a.
PM 10 (days with concentr. >50 µ/m ³)	124	n.a.	14/9	2	n.a.	n.a.

Data source: European Environment Agency, Airview data base, 2005

*Liivalaia station, Tallinn (to measure traffic pollution)/Õismäe station (background station)

In St. Petersburg, 17 automatic stations have been set up for the air quality monitoring network. The results of 2002 and 2003 that mean annual NO₂ concentrations have exceeded the allowed air quality standards by 1.1 and 1.3 times, respectively (<http://gov.spb.ru/>).

In Pskov region, the measurements are not taken automatically. However, the results show that in the urban settlements near to the transport routes, the air concentrations have exceeded the Russian air quality standard. In Pskov, PDK (maximum admissible concentration - 0,5 mg/ m³) for PM was exceeded for 3,6 times in 2004. With regard to NO₂, the PDK has been increased by 2.1 times in 2004.⁴

3.1.2. Passenger turnover in million passenger kilometres

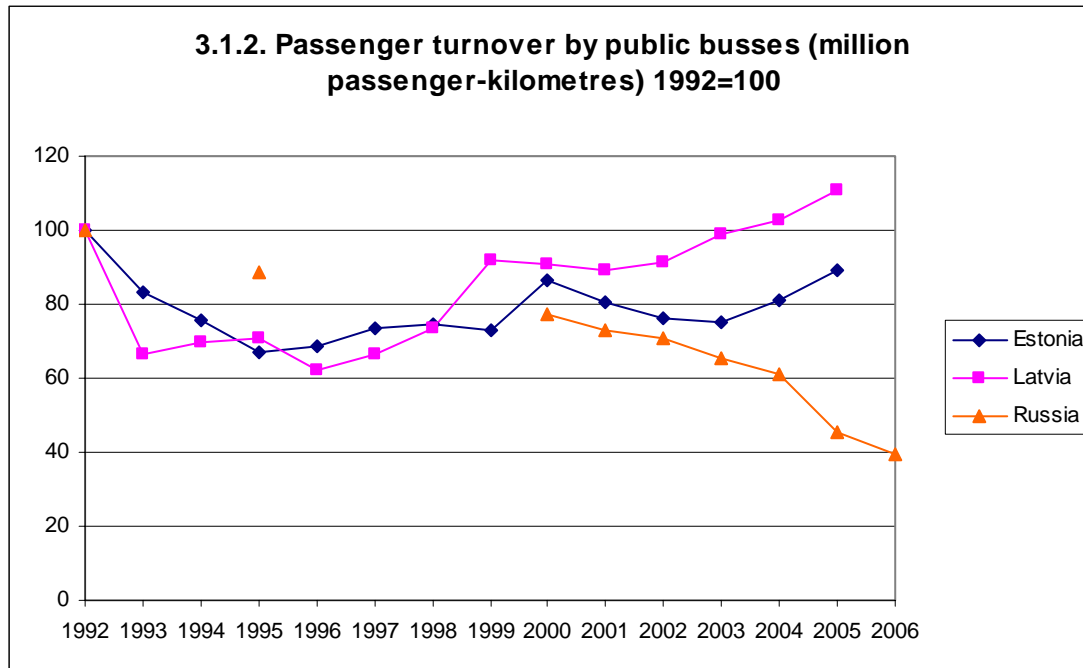
Passenger turnover in million passenger kilometres is the indicator showing development in public transport sector. It usually strongly correlates with the trend of the use of individual cars. If the public transport is decreasing this means that there is pressure to use more individual cars and thus the emission level from transport sector is increasing. The turnover by public busses indicates the amount of kilometres driven by public busses.

In all three countries the public transport has been reducing its turnover since 1990, thus giving more need to drive a car in order to reach the needed destination in a given time. The trend has lead to a negative effect on the air quality especially in big cities. The positive trend

³ Latvian Environment Agency, Air Quality Annual Assessment, 2004 and 2005

⁴ http://www.pskov.ru/ru/about_region/natural_resources/ecology/air

can be observed for last years in Estonia and Latvia, when passenger turnover by public bus has increased in both countries.



Data source: Estonian Statistical Office, Latvian Central Statistical Bureau, Federal State Statistics Service of Russia

Likely evolution if the CBC programme is not implemented (=zero alternative)

Although the air quality problems in the region is rather local ones the CBC Programme could also support solving air quality problems caused by transport sector in the towns of the cross border areas.. It envisages to support application of new transport and logistics solutions in the cooperation area, as well as to promote innovative ICT services. Thus, the Programme has a **potential of change** towards reduced pressure on the environment.

There are national programmes which shall address the issue of the air quality. However, regional solutions could primarily contribute to deal with this problem. Thus, if the Programme is not implemented one of the chances to support solving this air quality issue is gone.

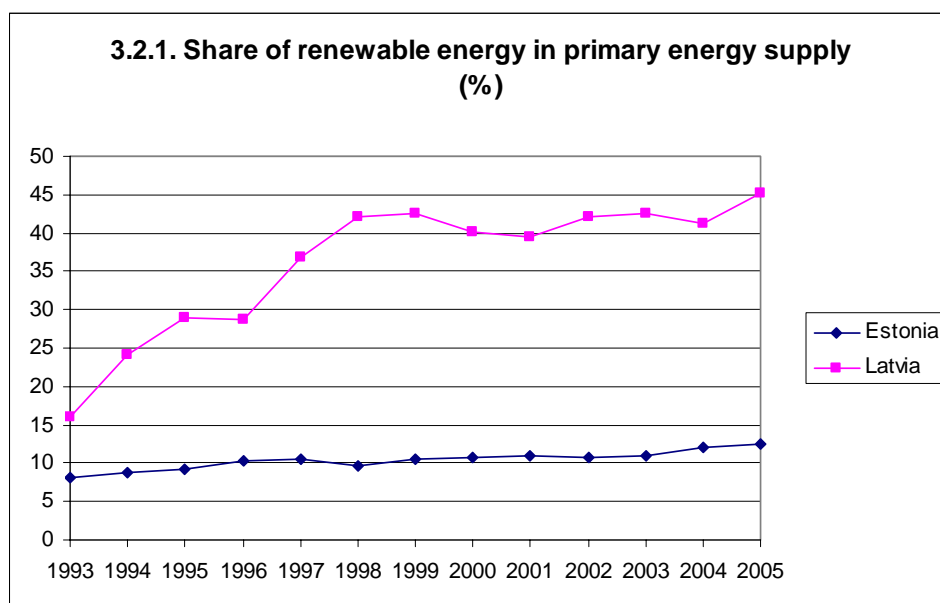
3.2. Climate change

Although climate change is considered as a global environmental issue, many measures to reduce the problems shall be taken on a local level. Energy and transport are the key economy sectors driving the trend in emissions of greenhouse gasses. Burning of fossil fuel like oils, gas and coal are the source of emissions of greenhouse gasses. When increasing the percentage of renewable energy sources (wood, hydro-power, solar energy, etc.) in the consumption of primary energy, the use of fossil fuels decreases and thus, also the emissions of greenhouse gasses which, in the end, contribute to the impact of the climate change.

3.2.1. Share of the renewable energy in the energy supply

There is an increasing trend to use renewable, domestic resources (wood, wood residues and hydro energy) in many countries, especially, where oil products shall be imported. In Latvian and Estonian smaller municipalities and settlements it has been feasible to switch the heating supply from coal to wood. The use of wind, biogas, geo-thermal and solar energy is, however, still far negligible. The comparatively lower share of the renewable energy in Estonia is due to the fact that the energy supply is based on the domestic fossil fuel – oil-shale.

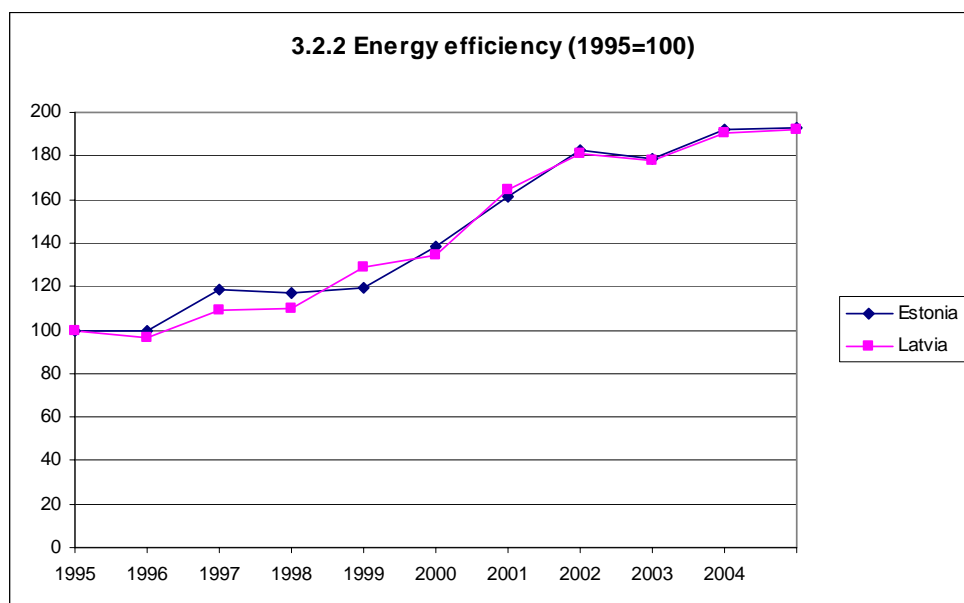
Russia is rich in fossil fuel and thus the use of renewable energy resources has not been very actual so far. According to the Statistics of the International Energy Agency, share of the renewable energy resources in total primary energy supply was 3.5% in 2004.



Data source: Eurostat

3.2.2. Energy efficiency

Energy efficiency is an indicator to illustrate how much any country uses energy resources to generate a unit of Gross Domestic Product (GDP). When less energy is needed to generate the same amount of products and services, that country also produces less greenhouse gasses. Thus, many efforts are allocated to increase energy efficiency.



Data source: Total Energy Supply - Eurostat, GDP – Estonian Statistical Office, Latvian Central Statistical Bureau.

There is a positive trend towards energy efficiency in Estonia and Latvia. However, the indicator is below the average in EU. According to the data of International Energy Agency, in Latvia the energy efficiency indicator in 2004 was 0.45 (total primary energy supply per GDP of 2000US\$); 0.72 in Estonia and 1.95 in Russia. Average value in European Union is 0.20.

Likely evolution if the CBC programme is not implemented (=zero alternative)

A lot of attention in national planning documents has been paid on climate change and related measures to mitigate the process. Increase of energy efficiency and use of renewable energy sources are amongst priority ones. Therefore any action in this field is contributing positively to deal with this environmental issue. The measure 2.3 of the CBC programme will specially support increase of energy efficiency of the region and thus ***potential of change*** towards reduced pressure on the environment.

3.3. Maintenance of biodiversity

Protection of the biodiversity is among one of the priority issues and have been dealt over the century in the regions. The region is considered as one of the riches from the view point of the abundance of the rare and threatened species and habitats. To maintain these rare and threatened nature values the protected nature areas have been established either at local, national or European level.

3.3.1. Protected nature areas

Protected nature areas can be different type, e.g., strict nature reserves, nature parks, nature reserves, national parks, biosphere reserves, natural monuments, areas of protected landscapes.

The Programme area has got many protected nature areas. In Latvia a huge share of the area lies in the North Vidzeme Biosphere reserve, Gauja National Park, Teiču un Krustkalnu nature reserves as well as many micro-reserves and nature parks. In Estonia the Programme area lies in Lahemaa, Karula and Soomaa national parks. It shall be pointed out that some of the protected areas have direct borders, thus acknowledging the protection of the species in both countries. However, the management of the species is organised individually and might lack some coordination.

For many of the nature areas of Estonia and Latvia, nature management plans have been developed, thus setting the specific rules for protection, nature management and potential for development, e.g. tourism related activities.

To have efficient nature conservation at the EU level, a network of the nature areas called as Natura 2000 is established. The process of the site selection for Natura 2000 in Estonia and Latvia was held in 2003-2004 when many Sites of Community Importance for habitats and species protection (SCI) and Special Protection Areas for Birds (SPAs) were selected. The indicator would show that as more area is covered by Natura 2000 sites as more rare species/habitats are occur in the area.

Currently, 331 site of SCI are designated in Latvia and 497 in Estonia. They cover 11% of the terrestrial territory of Latvia and 16.5% of that in Estonia (European Commission, Natura 2000 Barometer, December 2007). The sites ensure that more than 50 different habitat types (and more than 600 species) are protected in this part of Europe.

With regard to SPAs, 67 sites have been designated in Estonia and 98 in Latvia. They cover 13.1% of the terrestrial territory of Estonia and 9.7% of Latvia. Some of the SCI and SPA areas are overlapping since being important for protection of birds and habitats and their species. (European Commission, Natura 2000 Barometer, December 2007)

The net of Natura 2000 includes 336 territories – 4 nature reserves, 3 national parks, 250 restricted areas, 38 nature parks, 9 protected landscape areas, 9 nature monuments and 23 microreserves. They cover 11,9% of the whole area of the country. The protection and management regimes are various – from minor restrictions in landscape areas to absolute prohibition of any management in nature reserves.⁵

In Russia there were 100 nature parks and state reserves of national importance in 2006. 2 of them are located in Leningrad region («Нижнесвирский» national park and “Мшинское болото” micro-reserve) and 2 in Pskov region (national park “Себежский” and nature reserve “Полистовский”). Additionally, there are nature parks and micro-reserves and other nature protected areas of regional/local importance. (37 in Leningrad region, 128 – in Pskov region, and 6 – in St.Petersburg) with different names and status - such as hunting/zoological reserves (for example, Remdovsky state hunting reserve in Pskov region, which is also a Ramsar site), local nature monuments and other nature protected areas of local importance. PAs are managed on the different levels and by different authorities.

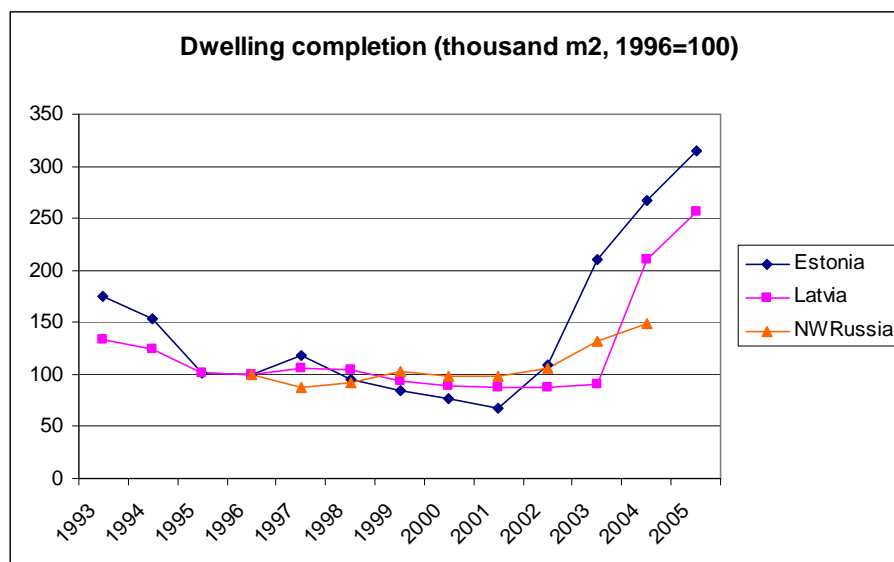
⁵ December, 2007, www.dap.gov.lv

Despite of the urban environment, St.Petersburg has six specially protected areas: Юнтоловский and Гладышевский state micro-reserves, Комаровский coasts, Стрельнинский coasts, Сергиевка park, and Дудергофские высоты.

In total protected areas cover 6% of Leningrad region, 2% of Pskov and 1.4% of St.Petersburg.

3.3.2. Area of built-up

Any new built-up area means that a natural area has been impacted or even lost. Currently, a gradual growth occurs mainly in the vicinities of bigger towns where the new settlement areas are being erected. In the countryside there are regional differences; the coast and western islands are the major building areas. New housing areas are connected with building of summerhouses and cottages, sometimes with creating of new industries and infrastructure. This trend is confirmed by the statistics on the built dwellings.



Data source: Estonian Statistical Office, Latvian Central Statistical Bureau, Federal State Statistics Service of Russia

Another issue related to the built-up areas is related to the expansion of the road. Although the main focus of the transport development is to reconstruct the existing network, the widening roads, building bypasses as well as related parking places is planned due to new flow direction of the goods/people.

Likely evolution if the CBC programme is not implemented (=zero alternative)

Natura 2000 sites is a strong legal instrument to protection of the habitats and species and thus to maintain the biodiversity in Estonia and Latvia. The protection area network in Russia shall also ensure the similar objectives. However, the habitats/species might be endangered outside the network by increasing local economic interest (forestry, road construction, tourism, urban spatial planning, etc.). This aspect shall be considered by supporting the activities.

3.4. Maintenance of landscape and cultural heritage

Maintenance of the landscapes and cultural heritage is one of the essential prerequisite for the tourism development. Due to lack of funding and former cultural policy many cultural and historical buildings were left without management or even misused (e.g., churches as fertilisers storages) in Soviet time. Therefore there is a need to have support for the preservation and restoration of the heritage left.

3.4.1. Status of cultural heritage/monuments

According to the information of the State Inspection of the Heritage Protection, there are 8517 State protected cultural monuments in Latvia. Exploration of cultural monuments has revealed emergency conditions in at least 520 objects. Some monuments of urban development encounter even 30% of buildings in poor condition. Owners of cultural monuments have limited finances and tax incentives are mismatching burden placed on them by the state. Generation gap hinders normal work of cultural heritage experts.

There are 25173 listed monuments in Estonia and similarly as in Latvia the part of them are in poor conditions.

Leningrad region is rich in historical and cultural monuments. There are more than 3,900 of them in the area. Half of those are architectural monuments.

Pskov region is home to 372 monuments of federal significance, 3588 monuments of local significance and 475 newly discovered legacy objects. The number of monuments, primarily architectural and archeological, puts Pskov into one of the leading positions in Europe. The city is the richest treasury of Russian culture.

St. Petersburg has 7783 cultural monuments which are protected by the state. They represent the heritage of the architecture and culture up to the middle of 20th century. Due to anthropogenic and ecological pressure many monuments are threatened. In those way 9 monuments has been already lost in last five years, while 1317 are in conditions to be lost due to degree of degradation.

Likely evolution if the CBC programme is not implemented (=zero alternative)

Preservation of the cultural heritage is lead by the Ministries of the Culture and relevant national programmes have been elaborated. However, the resources for the realisation is limited therefore if the measures targeted to the preservation and restoration of cultural and historical heritage are not implemented then the certain objects would lack support in near future.

3.5. Water resources

There are different aspects related to water resources: water pollution load from point and diffuse sources, water quality status as well as health aspects of the water resources (drinking water and bathing waters).

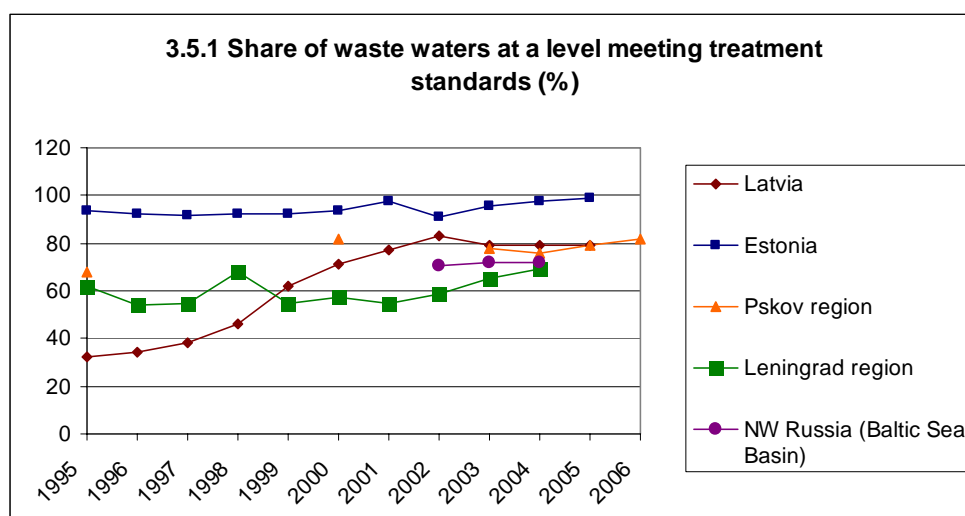
Since the beginning of development and implementation of the environmental policy in Latvia and Estonia, water has been one of the priority sectors where investments have been allocated. The key problem was to reduce pollution load mainly of nutrients (nitrogen and phosphorus) which causes the overgrowth of lakes, rivers, coastal waters, the process called as eutrophication. The key measure has been to improve waste water treatment by reconstructing or building new waste water treatment plants.

In Russia this kind of activities was also dominating last years due to poor status of old treatment facilities and increasing state funds for environmental protection, comparing to the 90-ties. Currently, the focus is changing from conventional reconstruction and building into research/investigations and strategy development issues. However, water resources are still considered from economy perspective and therefore water protection in eco-systems is not always recognised as a priority (i.e. still dominating “end-of-pipe” solutions).

The eligible area of CBC programme belongs to different river basins. Regions of Latvia are a part of all four assigned river basin districts: Gauja/Koiva, Daugava, Lielupe and Venta. Regions of Estonia are also part of all three assigned basin districts: Lääne-Eesti, Ida-Eesti and Koiva/Gauja. Russian territory falls into 2 major transboundary water basins of Daugava and Narva rivers (plus Finnish-Russian waters on the north of Leningrad region) being shared with Estonia and Latvia.

3.5.1. Share of waste waters at a level meeting treatment standards

This indicator illustrates the general pressure on the water resources by discharging waste waters into surface bodies. Due to heavy investments allocated to this priority environmental sector, the positive trend can be observed; particularly the progress is seen in Latvia where more and more properly treated waste water is discharged into environment.



Data source: National Statistical Offices for Latvia and Estonia; Regional statistics for Russia.

3.5.2 Water quality

The water quality is evaluated based on a set of chemical, ecological and hydro-morphological parameters. In Latvia and Estonia the results are expressed in the following quality classes: high, good, moderate, bad and poor.

In 2004 the overall assessment was carried out in the frame of implementation of the Water Framework Directive by the competent authorities of Estonia (Ministry of the Environment) and Latvia (Latvian, Environment, Geology and Meteorology Agency). The assessment report pointed out how big is the risk not to achieve “good ecological status” of waters by the target date of 2015. It concluded that 49 out of 207 water bodies (about 24%) of Latvia will achieve the “good ecological status” while the almost same amount of water bodies are at risk not meeting the set objectives since they are evaluated either as of moderate, bad or poor quality. In Estonia, the situation also indicates that a number of rivers and lakes are at risk to achieve “good ecological status” of waters by 2015. Therefore, when supporting activities it is important to consider whether these will deteriorate or improve the water quality of that particular lake or river.

In Russia, seven water quality classes are used. However, water quality classes and assessment criteria are not fully corresponding with the EU ones that often create confusion when trying to compare the results. The major points for discussions are PDK (maximum allowable concentrations) system (than the discharge norms are based not on the technological demands but on rather strict concentration limits in the recipient bodies) and IZV (index of water pollution) assessment than water quality is presented in index figures (comprised from different parameters) that can not answer the question on the absolute concentrations and major pollutants.

In St.Petersburg, the results of chemical monitoring analyses shows that waters are assessed as moderate polluted or polluted. There is no sampling site where the quality would be good. In Leningrad region water quality is very diverse – starting from good water quality in less polluted water bodies, ending at highly polluted waters. In border areas water quality is moderate to polluted (rivers Luga, Narva, Vuoksa). In Pskov region most of the water bodies are characterised as having moderate water quality.

Likely evolution if the CBC programme is not implemented (=zero alternative)

The improvement of the water resources management is the key focus on the river basin management plans in Estonia and Latvia and the complex management schemes in Russia. These plans are setting the objectives and implementation measures for the water resources. However, since the resources are limited, the measures of the CBC programme could support the implementations of these programmes, particularly with regard to transboundary pollution.

3.6. Waste management

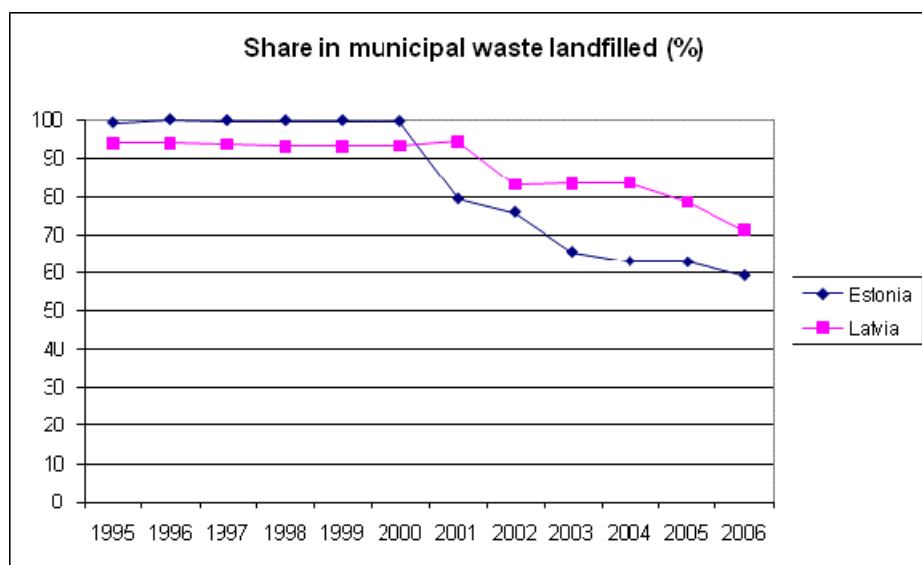
The waste management sector in Latvia and Estonia has also got a particular attention, specifically due to accession of the countries to the European Union. The EU waste policy sets out ambitious tasks for waste management sector aiming at waste prevention, recycling and reducing waste to be disposed at landfills. Estonia and Latvia shall ensure that the established EU targets and requirements are met in the given time frame.

Similarly to EU, Russian environmental policy also points out the need for recycling, efficient use of resources in the business. There are no specific deadlines set for the implementation of these goals.

3.6.1. Share of municipal waste deposited in landfills

National and regional waste management policies of Estonia and Latvia aim to increase the recovery and recycling of the waste. Consequently, fewer amounts shall be deposited in the landfills. The data on the deposited waste amounts into the landfills are recorded for several years. They are showing a positive trend: from almost 100% waste brought to landfill in the middle of nineties to 60-80% in 2005.

In St.Petersburg c.a. 71% of the total municipal solid waste was disposed at landfills in 2003. However, it is highly possible that not all generated waste volumes are reported due to the existence of numerous illegal dump site (e.g., 2004/05, 279 sites were identified in Leningrad region).



Data source: Eurostat

To reduce the amount deposited the prerequisite is sorting and recycling of the waste. Currently, the separate waste collection systems are under development and the availability to this public service varies from a region to region. Further on, there is a lack of recycling capacities in the region, thus many waste is delivered to landfills.

Likely evolution if the CBC programme is not implemented (=zero alternative)

National Waste Management Plans of Estonia and Latvia as well as regional programmes primarily deal with achieving the targets of the waste policy. Their task is also to plan setting up needed infrastructure for waste management system in the country including waste sorting sites and building of new regional landfills. In St. Petersburg the city waste management plan has also been developed. Similarly to the water resources, there are limited funding resources available, therefore different initiatives are welcome to support the better waste management in the region.

3.7. Contaminated sites

In European Union and Russia, the contaminated sites are viewed in context of soil and ground water pollution. Where past or present land use activities involve, or have involved, the storage, handling or disposal of chemicals, there is an increased risk of contamination. Examples of potentially contaminating activities include service stations, landfills, former industrial facilities, military sites. Contamination is usually caused by spills or leaks, such as from fuel or chemical storage tanks, or poor management practices at industrial sites.

European Environment Agency carries out the assessment of management of contaminated sites. The sites are grouped as follows:

- Potentially contaminated sites: Sites, possibly posing significant risk for human health or for the environment.
- Contaminated sites: Sites, posing significant risk for human health or for the environment.

Latvian legislation (Law on Pollution) also provides slightly different definition of the polluted and potentially polluted sites. To have comparative information on the region (at least for Estonia and Latvia) the definition of the European Environment Agency has been applied in this report.

3.7.1 Number of contaminated sites

The objectives of environmental policy highlight the necessity to prevent or to reduce pollution as well as to renovate and improve the environmental quality in contaminated areas. (see the objectives in Table 2).

Firstly, the inventory or preliminary survey of the sites has been performed to identify and to assess the polluted area. According to the data of European Environment Agency (EEA), there are 354 contaminated sites identified in Estonia. The number is a result of the research studies performed in Estonia in 2002-2004. The assessment report of the EEA indicates that in Latvia 242 contaminated sites have been identified in 2006. However, it has been estimated that potentially contaminated could be more than 2600 such sites in Latvia.⁶

To improve the environmental quality, there is a need to carry out feasibility studies for the certain areas to have detailed investigations and assessment.

⁶ European Environment Agency, Progress in the management of contaminated sites

In Russia soils contamination is also the issue to the industrial pollution, accidents and illegal landfills. In Leningrad region the major pollution was characterised as nuclear (1500 sq. km as industrial plus 5711 sq. km due to Chernobyl nuclear pollution) and chemical (13569 sq.km), located mainly around major settlements and industrial objects. St.Petersburg also have a lot of contaminated sites (34 nuclear spots are identified in 2006) with both nuclear and chemical pollution. So, special actions programmes are designed in order to decontaminate such sites and prevent further on illegal dumping.

Likely evolution if the CBC programme is not implemented (=zero alternative)

Support for cleaning up the contaminated is provided by various programmes, however the volume of the required resources is large. Thus, the CBC Programme has a **potential of change** towards reduced pressure on the environment by investigating and performing environmental measures in the identified contaminated sites.

4. Assessment of the environmental effects of the priorities and directions of support

This chapter aims at presenting assessment of the positive and negative effects of the priorities and directions of support of the CBC Programme on the relevant environmental issues and thus on the environmental objectives. When a negative effect or uncertainty with regard to measures financed under the given priorities is identified, the Environment Report proposes measures which could be envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment.

Table 4. Assessment of the environmental effects

Relevant Environmental indicators	Likely significant effects from the priority ☹ - negative effect ☺ - positive effect ☹ - no significant effect ? - uncertainty	Recommended measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment
CBC Programme Priorities		
<i>Priority I Socio-economic development</i>		
Number of days when the air quality standards are not met	☹ - no significant effect The measure will support the small business related infrastructure which can not have significant environmental effect. Other directions of support of the CBC Programme will also have no significant effects on the environment.	
Energy efficiency	☹ - no significant effect Although this measure will support the business, the CBS programme has declared the improvement in energy efficiency as the priority. Therefore there can not be significant effect from this measure.	Promote and require that supported business activities/ infrastructure use the best practice in energy efficiency.
Protected nature areas	? – uncertainty Impacts cannot be determined at this point. It depends where and what kind of business will be supported.	Nature conservation expert or relevant authority shall be consulted before granting support in the areas of protected habitats. When performing the environmental impact assessment on protected nature areas, one shall take into account that certain activities are prohibited in these areas.

Area of built-up	? – uncertainty Impacts cannot be determined at this point. It depends where and what kind of business will be supported.	Nature conservation expert or relevant authority shall be consulted before granting support in the areas of protected habitats and species.
Water quality status	☹ - no significant effect The measure will support the small business related infrastructure which can not have significant environmental effect Other direction of supports will also have no significant effects on the environment.	Promote and require that supported business activities/ infrastructure use the best practice in water management. If the business would have discharges containing hazardous substances, pre-treatment shall be installed.
Share of municipal waste deposited in landfills	☹ - no significant effect The measure will support the small business related infrastructure which can not have significant environmental effect Other direction of supports will also have no significant effects on the environment.	Promote and require that supported business activities/ infrastructure use the best practice in waste management.
<i>Measure 1.2. Transport, logistics and communication solutions</i>		
Passenger turnover in million passenger kilometers	☺ - positive effect on air quality if the measures will focus on public transportation issues and promote IT solutions instead of the use of single cars.	
Number of days when the air quality standards are not met	☹ - no significant effect The measures are primarily focussed on the cross border areas which are mainly rural ones where air quality is not a problem. However, if the measures are taken in the cities of the region then there might be a certain impact.	Preventive measure is recommended if a measure is taken in urban environment of the region: to carry out the assessment of the impact from the transport development on air quality.
Protected nature areas	☹ - negative effect The development of transport routes and the related services and infrastructure might cause damage to the valuable habitats. It also increases fragmentation effect of the landscapes and nature areas. ☺ - positive effect On the other hand, the maintenance and restoration of roads is also the essential prerequisite for the protection of landscapes and biodiversity which is ensured by the targeted human activities.	There would be a need for individual assessment of the specific measure targeted to restoration of the roads. When performing the environmental impact assessment on protected nature areas, one shall take into account that certain activities are prohibited in these areas.
Area of built-up	☹ - negative effect The development of transport corridors	There would be a need for individual assessment of the

	and the related services and infrastructure might cause damage to the valuable habitats.	specific measure targeted to restoration of the roads.
Water quality status	? - uncertainty Water related transport sector is one of potential polluters of the water environment particularly with hazardous substances. There is uncertainty on the scale of potential risks to have increased pollution levels or accidents since risks largely depend on the individual activities.	If activities supported, attention shall be paid to the pollution and risk prevention measures.
Share of municipal waste deposited in landfills	? – uncertainty Impact cannot be determined at this point. However, wastes along the transport corridors, parking or recreational sites are an increasing problem in the region.	When developing transport related infrastructure, the waste management issues shall be tackled as well. The proper infrastructure shall be set-up to guarantee waste collection (containers at the parking sites, etc.). Established waste collection system shall promote waste sorting and further recycling. It is also important to ensure the supervision and control at tourism sites and camping places.
<i>Measure 1.3. Tourism development</i>		
Protected nature areas	Depending on the supported measures, the priority may have either negative or positive effect. ☹ - negative effect The increasing number of tourists can create a stress to the protected habitats and species if a tourism product is focused on natural resources (forests, waters, bogs, etc) and valuable landscape sites. Certain locations have rather small carrying capacities. ☺ - positive effect Many nature conservation areas are already attractive for the visitors and tourists. To prevent from the caused damage, the proper infrastructure is needed to be set-up. Support to such measures would bring a	The activities envisaged in the nature conservation areas should be in line with already developed nature management plans. When such management plan have not been elaborated yet, a nature conservation expert or relevant authority shall be engaged in developing new tourism products and infrastructure, thus, the carrying capacity of nature would be taken into account. Further on, adequate environmental monitoring system which would support identification and prevention of

	positive effect on biodiversity.	the negative impacts, supervision of visitors flow shall be foreseen. When performing the environmental impact assessment on protected nature areas, one shall take into account that certain activities are prohibited in these areas.
Area of built-up	? – uncertainty The priority envisages supporting developing further existing tourism infrastructure which might include construction works. Depending on the location, a nature area might be threatened by a new construction activity.	It is advisable to locate a tourism related infrastructural buildings (housing) in already built-up areas. Otherwise there would be a need for individual assessment.
Water quality status	? – uncertainty The impact on water quality depends on the type of tourism developed. If the focus is on water tourism and the caring capacity of the particular water body is not considered it can reduce the water chemical and/or ecological quality status. The water related recreation and tourism is often causing littering of the water. On the other hand, other tourists might have no effect on the environment.	A water expert shall be engaged in developing new water related tourism products and infrastructure, thus, the carrying capacity of water body would be taken into account. The development and implementation of the adequate water quality and tourism flow monitoring system would support with information for preventive and mitigation measures.
Share of municipal waste deposited in landfills	? – uncertainty Impact cannot be determined at this point. However, any tourist or recreational and larger sport activities usually generate waste in the site which is visited.	When developing a tourism product, the waste management issues shall be tackled as well. The proper infrastructure shall be set-up to guarantee waste collection (containers at the camping sites and places of recreation, etc.). Established waste collection system shall promote waste sorting and further recycling. It is also important to ensure the supervision and control at tourism sites and camping places.
Priority II: Common challenges		

Measure 2.1. Joint actions aimed at protection of environment and natural resources		
Protected nature areas	☺ - positive effect The measure is targeted to the cross-border nature management.	
Share of waste waters at a level meeting treatment standards	☺ - positive effect Improvements in pollution control activities as well as even small infrastructure can support the reduction of pollution load into water bodies.	
Water quality status	☺ - positive effect Improvements in pollution control activities as well as even small infrastructure can support the improvement of the water quality status.	
Share of municipal waste deposited in landfills	☺ - positive effect Improvements in small infrastructure can support the waste management (particularly, waste sorting options).	
Number of contaminated sites	☺ - positive effect The measure is targeted to the environmental management issues.	It would be recommendable that activities would support the problem from the transboundary perspective.
Measure 2.2. Preservation and promotion of cultural and historical heritage and support of local traditional skills		
Status of cultural heritage/monuments	☺ - positive effect The measure itself already is favourable for the support to cultural heritage	
Measure 2.3. Improvement of energy efficiency		
Share of renewable resources in energy supply	☺ - positive effect The measure itself already is favourable for the environmental improvement	
Energy efficiency	☺ - positive effect The measure itself already is favourable for the environmental improvement	
Priority III: Promotion of people to people co-operation		
Measure 3.1 Development of local initiative, increasing administrative capacities of local and regional authorities		
-	☺ - no significant effect Experience exchange itself does not have any significant impact on the environment	
Measure 3.2 Co-operation in spheres of culture, sport, social and healthcare		
-	☺ - no significant effect Experience exchange itself does not have any significant impact on the environment	

5. Assessment of cumulative effects of the entire programming document

This chapter of the Environment report is aiming to assess the cumulative effects of all proposed measures in the programming document on the relevant environmental and health issues. This analysis uses information generated by the preceding assessments of individual priorities in the CBC programming document carried out in the chapter No. 4.

Considering the **precautionary principle** of the EU environmental policy, the cumulative assessment has been presented in the table below.

Table 5. Cumulative effects.

Environmental issue	Cumulative effect	Note
1. Air quality	☺ - no significant effect The relevant CBC activities (Measures 1.1. and 1.2) are having rather minor effects on air quality in the region.	The CBC Programme can be assessed as neutral towards the air quality since its activities having potential effect on the air quality (e.g., transport development) are focused at the border areas where air quality has not been noted as the environmental problem. However, the positive contribution could be if a support would be granted to improvement of public transportation related activities, especially in the cities.
2. Climate change	☺ - positive effect The relevant CBC activities (Measure 2.3) itself already are favourable for addressing the climate change.	The CBC programme can be assessed as positive towards the Climate Change issue, especially by implementing its <i>Measure 2.3. Improvement of energy efficiency</i> . Despite of the implementation of the Measure 2.3, the energy efficiency shall be also promoted for activities supported with measure <i>1.1. Fostering of socio-economic development and encouraging business and entrepreneurship</i> .
3. Maintenance of Biodiversity	? – uncertainty On the one hand the CBC Programme has stated support for the nature conservation (Measure 2.1), on the other hand other measures might pose	It is rather uncertain about the cumulative effect of the CBC programme on the maintenance of biodiversity: on the one hand, the measure <i>2.1 Joint actions aimed at protection of environment and natural resources</i> aims at cross-border management of natural

	certain threats.	<p>values which will bring positive results to this environmental issue. Further on, the support to the tourism infrastructure (<i>the Measure 1.3. Tourism development</i>) in areas which are already attractive for visitors would be also seen as positive activity.</p> <p>On the other hand, some activities might cause pressure for shorter or longer time or even destroy certain habitats. To prevent this, assessment of the supported measures shall be carried out in those activities where potential negative effect could be (see assessment in the chapter 4). The existing nature management plans for the nature conservation areas as well as other impact assessment studies can be an input for such assessment.</p>
4. Maintenance of landscape and cultural heritage	<p>☺ - positive effect The relevant CBC activities (Measure 2.2) itself already are favourable for solving this issue.</p>	<p>The CBC programme can be assessed as positive towards the Maintenance of landscape and cultural heritage, especially by implementing its <i>Measure 2.2. Preservation and promotion of cultural and historical heritage and support of local traditional skills.</i></p>
5. Water resources	<p>? – uncertainty On the one hand the CBC Programme has stated support for the control of the environmental pollution (Measure 2.1), on the other hand other measures (e.g., business, transport and tourism development) might pose certain effect.</p>	<p>The CBC programme can be assessed as positive towards the water resources, since one of the Measure 2.1 aims at joint pollution control in the region. However, other activities might generate additional pollution load to the water ecosystems, thus it is uncertain of the cumulative effect of the programme.</p>
6. Waste management	<p>? – uncertainty On the one hand the</p>	<p>The CBC programme can be assessed as positive towards the</p>

	<p>CBC Programme has stated support for the control of the environmental pollution (Measure 2.1), on the other hand other measures (e.g., business, transport and tourism development) might pose new pollution load.</p>	<p>waste management, since one of the Measure 2.1 aims at planning and improving the small infrastructure. However, other activities might generate wastes, mainly as littering, thus if the proper management and supervision is not organised thus, the cumulative effects on the environment is uncertain.</p>
7. Contaminated sites	<p>☹ / ☺ no significant or positive effect</p>	<p>If the remediation activities will be supported as an activity of the Measure 2.1., then CBC programme can be assessed as positive towards this issue. Otherwise, the Programme is neutral with regard to this issues.</p>

6. Envisaged measures for monitoring system for the programming document

According to Article 10 of the SEA Directive, significant environmental effects of implementation of plans and programmes shall be monitored to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action. Existing monitoring arrangements may be used, if appropriate, with a view to avoid duplication of monitoring.

The following table contains potential environmental indicators which would support to monitor the impact on environment caused by the measures and/or the programme as whole.

CBC Programme Priorities	Key Environmental/Health Issues	Potential indicator for monitoring (P - applicable on programme level; M - applicable on measure level)
Priority I Socio-economic development		
Measure 1.1. Fostering of socio-economic development and encouraging business and entrepreneurship	Maintenance of Biodiversity	<ul style="list-style-type: none"> – Protected nature areas (P, M) – Area of built-up (P, M)
Measure 1.2. Transport, logistics and communication solutions	Air quality Maintenance of Biodiversity Water resources (pollution) Waste management	<ul style="list-style-type: none"> – Passenger turnover in million passenger kilometres (P, M) – Protected nature areas (P, M) – Area of built-up (P, M) – Water quality status (M) – Waste deposited in landfills (M)
Measure 1.3. Tourism development	Maintenance of Biodiversity Water Pollution Waste Management	<ul style="list-style-type: none"> – Protected nature areas (P, M) – Area of built-up (P, M) – Water quality status (M) – Waste deposited in landfills (M)
Priority II: Common challenges		
Measure 2.1. Joint actions aimed at protection of environment and natural resources	All environmental issues	<ul style="list-style-type: none"> – Protected nature areas (P, M) – Share of waste water at a level meeting treatment standards (P, W) – Water quality status (M)

		<ul style="list-style-type: none"> - Share of waste deposited in landfills (M) - Number and area of contaminated sites where remediation has been implemented (M, P)
Measure 2.2. Preservation and promotion of cultural and historical heritage and support of local traditional skills	Landscape Maintenance Cultural heritage	<ul style="list-style-type: none"> - Number of cultural heritage and their status
Measure 2.3. Improvement of energy efficiency	Climate change	<ul style="list-style-type: none"> - Share of renewable resources in energy supply - Energy efficiency
Priority III: Promotion of people to people co-operation		
Measure 3.1 Development of local initiative, increasing administrative capacities of local and regional authorities	-	-
Measure 3.2 Co-operation in spheres of culture, sport, social and healthcare	-	-

7. Consultations with stakeholders and public

The consultation with stakeholders is an essential element in strategic environmental assessment. One of the successes of the assessment is that the SEA and Programming are being organised in parallel and timely. This approach has been implemented with regard to CBC Programme for Estonia-Latvia-Russia.

The representative of the SEA expert team has attended the Task Force meetings and followed the development of the goals, objectives as well as proposed priorities and direction of supports. In the meetings, SEA expert introduced the interim results of the assessment (priorities against objectives, key environmental issues, and potential indicators for monitoring) and discussed potential of integrations of the environmental concerns in the draft Programme.

As the next, the SEA expert team has contacted and discuss the SEA process and the key issues to be considered with relevant Environmental Authorities which are supervising the SEA process in the countries;

- Latvian Environment State Bureau;
- Estonian Ministry of the Environment.

Although SEA is not legally requested in Russia, the relevant institutions were contacted and issues on environment discussed:

- Pskov, Leningrad Regional administrations
- TACIS office in St. Petersburg.

The public consultation on the draft SEA Report and the draft Programme was held in parallel. It was organised either according to national legislation (Estonia and Latvia) or as the EU requirement for the development of a new programme (Russia). The countries had similar approaches, see table 7.1.

Table 7.1. Overview on the public consultation process

	Estonia	Latvia	Russia
Announcement	<ul style="list-style-type: none"> • Website of the Ministry of the Interior www.siseministee.ruum.ee/interreg 	<ul style="list-style-type: none"> • Latvia's Official newspaper "Latvijas Vestnesis" on 9.11. 2007 • Web page of the MoRDLG (www.rapl.m.gov.lv) • Web page of the Environment State Bureau; http://www.vidm.gov.lv/eng/par_ministriju/padotas_institucijas/ivnvb/default.htm 	<ul style="list-style-type: none"> • Web site of St. Petersburg Administration http://gov.spb.ru/ • Web site of administration of Pskov oblast http://www.pskov.ru/

Time for consultation	26.11-20.12.2007	09.11-19.12.2007	From 8.11.2007- Dec, 2007
Public hearing/ Involved stakeholders	Narva (07.12.2007), Rakvere (11.12.2007) and Tartu (13.12.2007) cities; 27 participants from 16 organisations including local governments, non-governmental organisations, and associations of local governments took part in the seminars.	Information was provided during the regional seminars Documents were sent for comments to Latvian line ministries and regional administrations. Altogether 23 organisations participated in the public consultations, 7 municipalities (City, District and Regional councils), 14 national governmental bodies, 1 Euroregion and European Commission.	St. Petersburg (16.11.2007) 48 representatives of different organisations took part in this event including representatives of sectoral committees of regional and local administrations, universities and NGOs. Upon the completion of the information seminar and based on the agreement with representatives of regional administrations the LSO St. Petersburg acted as a contact point where all interested organisations could send their questions and comments until 10 December 2007.

The results of the public consultation process were reviewed at the Joint Task meeting held in Riga on 19 December, 2007. The comments were integrated in the next Programme draft.

Regarding the comments on the draft Environment Report, they were received only from Latvian stakeholders. A part of them were related to mistranslation of the English version of the draft Environment Report in to Latvian or kind of editorial. The relevant content comments have been integrated or additional information provided. The overview is presented in the table below.

Table 7.2. The comments and proposals received by Latvian stakeholders and the action taken to integrate the Environment Report

Institution:	Comment	Action
Ministry of the Defence	To include the information on the beneficiaries of the Programme in the Environment Report.	The information has been included in the chapter 1.4.
Ministry of the Health	To delete sentence in the conclusions: "Air quality issues and water resources issues has a link with human health policies as well." Reason: Change in any environmental factor can have impact on human health. As both documents (the Programme and Environment Report) do not offer cooperation for human health's	The sentence has been deleted.

	sector, then there is no need to highlight the importance of the single environmental factors as impacting human health.	
Ministry of the Environment	Chapter 2. , Table 1. To reflect on potential negative impact of the construction works (in relation to measures 1.1.;1.2.;1.3.;2.3);	The relevant statements have been added in the table with regard to 1.1; 1.2 and 1.3 measures). For the measure 2.3., it has been specified that the measure will support only soft projects, no construction works.
	Chapter 3.3.1. To include the total number and the area covered by Nature 2000 sites in Latvia	The information has been included (para.7)
	Chapter 3.6.1. , to use more actual data and facts on Latvia	The data on 2006 on waste deposited in landfills has been added for Latvia and Estonia.
	Chapter 3.7., to edit the definition of “contaminated sites” and “potentially contaminated sites” according to the definitions of the Law on Pollution (2001)	To have comparative information on the region (at least for Estonia and Latvia) the definition of the European Environment Agency has been applied and the information provided in this report.
	Chapter 4, Table 4, „Protected nature areas” - When performing the environmental impact assessment on protected nature areas, one shall take into account that certain activities are prohibited in these areas.	The sentence has been added.

Non- technical summary

The Environment Report of the Cross-Border Cooperation Programme between Estonia – Latvia- Russia 2007-2013 is carried out based on the contract signed between the Ministry of the Regional Development and Local Government of the Republic of Latvia (acting as the Joint Managing Authority) and the association “Baltic Environmental Forum-Latvia” on 6 July, 2007.

This version of the Environment Report is prepared for the Estonia- Latvia - Russia CBC Programme 2007-2013 CBC draft version of January, 2008 which has integrated the results of the public hearing. The Environment Report has also integrated relevant comments received during the consultation process. The Environment Report has been prepared in English.

The Estonia-Latvia-Russia CBC Programme will be implemented as a part of the European Neighbourhood and Partnership Instrument supporting implementation of the EU Neighbourhood Policy for 2007-2013.

The overarching strategic objective of the CBC Programme is to promote joint development activities for the improvement of the region’s competitiveness by utilising its potential and beneficial location in the cross roads between the EU and Russian Federation. The specific objective is to make the wider border area an attractive place for both its inhabitants and businesses through activities aimed at improving the living standards and investment climate.

Although the CBC Programme does highlight neither sustainable development nor environmental protection in its objectives, the several relevant statements with regard to vision of the Programme have been included. It declares that business related infrastructure is developed in compliance with European environmental requirements and best practices thus ensuring that environmental resources are not further degraded and the current values preserved. Further on, it states that the main task of the Programme thus is to address the common challenges in the way that would be mutually benefiting for the whole region and contribute to sustainable development of the Programme area.

Based on the assessed trends and tendencies of the area’s socio-economic situation and reviewed strengths, opportunities, weaknesses and threats, the Estonia-Latvia-Russia CBC Programme has defined **three priorities** each of these covering several directions of support: i) Socio-economic development; ii) common challenges and iii) Promotion of people to people co-operation.

According to the priorities the Estonia-Latvia-Russia CBC Programme 2007-2013 has defined the measures to be supported as well as directions of support. The programme specifies whether support will include investments or soft projects. The strategic environmental assessment and this Environment Report assess only the measures and the directions of support as specified by the Programming document.

The Environmental Report reviews potential positive or negative effects of the Estonia-Latvia-Russia CBC Programme 2007-2013 on the following identified relevant environmental issues: **air quality, climate change, maintenance of the biodiversity, maintenance of the**

landscape and cultural heritage, water resources, waste management and contaminated sites.

In general, the measures of the CBC programme can be assessed as **positive** towards the climate change issue and maintenance of landscape and cultural heritage. One of the measures will deal with improvement of energy efficiency and promoting use of renewable energy resources. The preservation of the cultural heritage is another separate priority measure.

The CBC Programme will contribute **positively** to several aspects of the **general environmental management** by supporting environmental monitoring, managing together nature areas and organising joint pollution control. Moreover, the Programme recognises the importance of environmental awareness, research, needs for cooperation among the services of the region.

It is rather **uncertain** about the cumulative effect of the CBC programme on the maintenance of biodiversity, water resources, waste management. To avoid irreversible effects, the environmental assessment of individual measures, particularly related to business support, transport development, or tourism's development in nature areas would be recommendable.

The CBC Programme can be assessed as **neutral** towards the air quality since its activities having potential effect on the air quality (e.g., transport development) are focused at the border areas where air quality has not been recorded as the environmental problem. However, the **positive** contribution could be if a support would be granted to improvement of public transportation related activities, especially in the cities.

During November and December, 2007 the competent authorities organised the public consultation and hearing. The draft Estonia - Latvia - Russia CBC Programme 2007-2013 and the draft Environment Report were published on the relevant websites, various stakeholder meetings held. The results of the public consultation process were reviewed at the Joint Task Force meeting held in Riga on 19 December, 2007.

The CBC programme foresees regular monitoring and reporting. It shall also ensure that the programme monitors the effects of the measures on environment. For that reason, a set of environmental indicators has been proposed.