



Freeport of Riga Development Programme Environmental Report Appendices



2009 - 2018

*Client: Freeport of Riga Authority
BMT Transport Solutions GmbH
SIA "NK konsultāciju birojs"*

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A. List of International Conventions

Latvia has signed and ratified various international conventions that relate to environmental protection and public participation in the strategic decision making process. A list of relevant international conventions ratified by Latvia is below:

“Convention on Long-range Transboundary Air Pollution“, Geneve, 1979 - ratified by Saeima of Republic of Latvia in 1994.

1992, 9th of May United Nations Framework “Convention on Climate Change” 1979 - ratified by Saeima of Republic of Latvia in 1995.

“Convention for the Protection of the Ozone Layer“, Vienna, 1985 - ratified by Saeima of Republic of Latvia in 1995.

“Convention on the Protection of the Marine Environment of the Baltic Sea Area“, Helsinki, 1992 - ratified by Saeima of Republic of Latvia in 1994.

“Convention on the Protection and Use of Transboundary Watercourses and International Lakes“, Helsinki - ratified by Saeima of Republic of Latvia in 2003.

“Convention for the Prevention of Pollution from Ships“, London, 1973 - ratified by Saeima of Republic of Latvia in 1993.

“Convention on the Transboundary Effects of Industrial Accidents“, Helsinki, 1992 - ratified by Saeima of Republic of Latvia in 2004.

“Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal“, Basel, 1989 - ratified by Saeima of Republic of Latvia in 1992.

“Convention on. Environmental Impact Assessment in a Transboundary Context“, Espoo, 1991 - ratified by Saeima of Republic of Latvia in 1991.

“Convention on Access to Information, Public Participation in Decision-making. and Access to Justice in Environmental Matters“, Aarhus, 1998 - ratified by Saeima of Republic of Latvia in 1998.

Treaty of European Community and Republic of Latvia "Treaty on Participation of the Republic of Latvia in European Environmental Agency and European Environmental Information and Monitoring Network and the Final Protocol of Negotiations" - ratified by Saeima of Republic of Latvia in 2001.

“Convention on Persistent Organic Pollutants“, Stockholm, 2001 - ratified by Saeima of Republic of Latvia in 2004.

“Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade“, Rotterdam (10.09.1998.) - ratified by Saeima of Republic of Latvia in 2003.

“Ramsar convention on Wetlands” (1971) On international importance wetlands, especially the life environment to waterbirds - ratified by Saeima of Republic of Latvia in 1995.

UNESCO convention (1972) About the World's heritage - ratified by Saeima of Republic of Latvia in 1997.

CITES (Washington) convention (1973) - About international trade on rare wild animals and plant species - ratified by Saeima of Republic of Latvia in 1996.

Bern convention (1979) is to ensure the conservation of European wildlife and natural habitats by means of cooperation between States - ratified by Saeima of Republic of Latvia in 2001.

Bonn convention (1979) on the Conservation of Migratory Species of Wild Animals - ratified by Saeima of Republic of Latvia in 1999.

Agreement on the Conservation of Bats in Europe (1991) - ratified by Saeima of Republic of Latvia in 2003.

Agreement on the Conservation of African - Eurasian Migratory Waterbirds (1995) - ratified by Saeima of Republic of Latvia in 2005.

Riodejaneiro convention (1992) about the biological diversity - ratified by Saeima of Republic of Latvia in 1995.

Helsinki convention (1974, 1992) on Baltic sea region sea environment conservation - ratified by Saeima of Republic of Latvia in 1994.

B. Laws and Regulations related to environmental management of port operations.

Environmental protection is a national priority embedded in the national Constitution (*Satversme*), which declares that:

“the state protects everyone’s rights to live in a favourable environment through providing access to environmental information and ensuring the protection and improvement of the environment”.

Commitment to this notion is demonstrated through its inclusion in a number of national laws and regulations. Since independence, Latvia has become a signatory to various international conventions for environmental protection and a list of the relevant conventions which Latvia has ratified is provided in Appendix B. International convention requirements have been transposed into national legislation and the accession to the EU in 2004 was preceded by the transposition of EU Directives into Latvian laws and regulations.

B.1 Impacts Assessment and Public Participation

CM Regulation No. 157 (23.03.2004) on SEIA procedures outlines the process to be followed during the preparation of specific types of planning documents. The Regulation outlines *inter alia* general procedures, types of planning documents requiring an SEIA, consultation and disclosure requirements and information to be included into a SEIA Report. In addition, it requires the public to be informed after the adoption of the planning document and requires identified impacts to be monitored during the implementation phase.

B.2 Environmental Protection

The following section provides a summary description of most pertinent laws and regulations. Where relevant, a brief summary in *italics* is given to indicate the implication of this law and how it applies to the *Development Programme*.

General environmental protection principles are stipulated in the **Law on Environmental Protection** (02.11.2006; last amended 2008). Importantly, the law establishes the ‘polluter pays’ principle which is applied broadly within the EU. The main objective of the law is to ensure the preservation and recovery of the quality of the environment along with the sustainable utilisation of natural resources. The law stipulates general requirements for environmental protection, access to environmental information, necessity of EIAs and SEIAs, responsibilities and rights of stakeholders including the Cabinet of Ministers, Ministry of Environment, municipalities and members of the public.

Law on Water Management (10.16.2002; last amended 2007) transposes **EC Directive 2000/60/EC** which establishes a European framework in the field of water policy (known as the Water Framework Directive;). The Law applies to the protection of surface, transition, coastal waters and groundwater through pollution prevention, the sustainable use of water resources, protection of the aquatic environment, improvement of ecosystems and minimisation of impacts from flooding and drought. **CM Regulation No. 858** (19.10.2004) relates to the management of surface water bodies including their classification, water quality criteria and the procedure for permitting discharges. This regulation provides a basis for the preparation of river basin management plans and defines the types of water bodies and procedures for permitting discharges, alongside the criteria of excellent, good and average water quality.

Implication: The Development Programme will need to take into consideration the content of the Daugava River Basin Management plan to avoid any conflicts.

CM Regulation No. 588 on air quality (21.10.2003; last amended 2006) transposes **EC Directive 96/62/EC** and other EC directives dealing with specific types of air pollutants. The regulation sets permissible limits for a variety of pollutants including CO, NO_x, benzene, PM₁₀, and heavy metals.

Various EU legal norms are integrated into the **Law on Pollution** (15.03.2001; last amended 2007), which aims to prevent or reduce damage to human health, property and the environment caused by pollution. The law stipulates actions to reduce emissions into soil, water and air; to reduce impacts of noise to human health, and to reduce greenhouse gas emissions.

Implication: The Development Programme will need to take into consideration the permissible air quality limits in addition to evaluating future emissions to both soil and water.

CM Regulation No. 118 (12.03.2002; last amended 2008) relates to the quality of surface and ground water, including priority fish habitats, and places a limit on the acceptable concentrations of substances such as metals and hydrocarbon-based compounds. **CM Regulation No. 34** (22.01.2002; last amended 2007) relates to the discharge of wastewater into surface water bodies and sets out permissible limits for specific parameters. This regulation applies to all types of waters, including surface and ground waters.

Implication: All discharges from arising from industrial operations outlined in the Development Programme should meet water quality discharge requirements.

CM Regulation No. 626 (27.07.2004) relates to the methodology used to determine the impacts to human health from odour linked to industrial activities.

Implication: The proximity of industrial operations (including railway movements) and the potential impacts to human health should be taken into consideration during design of the Development Programme.

CM Regulation No.597 (13.07.2004; last amended 2006) transposes **EC Directive 2002/49/EC** and relates to the method used to assess and manage noise including the avoidance, prevention of harmful effects (mitigation) and acceptable exposure limits. Specific sources of noise are included in the Directive such as sources from road, rail, aircraft and industrial equipment. The Regulation includes acceptable exposure levels for noise.

Implication: The permissible limits of noise exposure should be taken into consideration during design of the Development Programme.

The **Law on Waste Management** (14.12.2000; last amended 2008) transposes two key EC Directives on waste management. It classifies waste types and assigns a role and responsibility for waste management. SA series of CM regulations prescribe actions related to waste management. **CM Regulation No. 455** (08.10.2002) relates to the waste volumes produced by ships including discharges to water and outlines the management plans required for vessels to effectively manage their waste (a ship generated waste management plan).

Implication: The Development Programme should consider the impacts associated with increasing waste volumes being produced as a result of increases in the frequency of shipping.

CM Regulation No. 985 (30.11.2004) on waste classification and characteristics that make waste hazardous and **CM Regulation No. 529** (18.12.2001) on management of certain types of hazardous waste prescribes procedures for management of waste containing polychlorinated biphenyls and polychlorinated terphenyls, waste petroleum products, plus others. For instance, the regulation

prohibits burning of polychlorinated biphenyls and polychlorinated terphenyls on ships and also prohibits discharges of any petroleum products into water bodies.

Implication: The Development Programme should consider the future impacts associated with the management of waste volumes arising from the Development Programme, including hazardous materials.

CM Regulation No. 199 (14.03.2006) relates to the movement and control of hazardous and polluting cargos in ports and outlines the requirements for cargo handling. The Maritime Administration of Latvia carries out general supervision on abidance of these Regulations in ports with the FRA undertaking general supervision within their territory.

The **Maritime Board and Marine Safety Law** (31.10.2002; last amended 2007) includes the requirements set out in the **EC Directive 2005/35/EC** relating to ship-source pollution and the use of penalties for infringements. It incorporates standards for ship-source pollution and ensures that persons responsible for discharges are subject to adequate penalties and outlines provisions for emergency response arrangements relating to maritime transport.

The **Law on Ports** (22.06.1994; last amended 2005) identifies FRA as the institution that has the responsibility to ensure adequate protection of the port's territory against pollution including the implementation of remedial measures for both land and sea territory and ship-derived waste. FRA also has the responsibility for monitoring compliance with national and local regulatory requirements; including those derived from FRA own policies.

B.3 Protected Areas and Biodiversity

There are a number of laws pertaining to protected areas and biodiversity. An important law is The **Law on Specially Protected Nature Territories** (02.03.1993; last amended 2007), which specifies the procedure for establishing, maintaining and managing such areas. The **Law on Conservation of Species and Habitats** (16.03.2000; last amended 2006) ensures the protection for species and habitats through prescribing conservation and management measures and balancing economic and nature conservation interests.

A number of CM regulations contain lists of protected species and habitats including: **CM Regulation No. 396** (14.11.2000, last amended 2004), **CM Regulation No. 421** (05.12.2000; last amended 2009) which focuses upon specially protected habitats and **CM Regulation No. 153** (21.02.2006) on the list of EU priority species and habitats found in Latvia. **CM Regulation No. 45** (02.02.2001; last amended 2005) relates to the establishment, protection and management of micro-reserves. **CM Regulation No. 415** (22.07.2004; last amended 2007) relates to the protection of SPNTs and defines activities that are prohibited within such areas.

The **Law on Specially Protected Nature Territories** is a particularly relevant as it transposes the following key EC Directives which relate to *Natura 2000* sites:

- **Council Directive 92/43/EEC** on the Conservation of Natural Habitats and of Wild Fauna and Flora (known as the Habitats Directive); and
- **Council Directive 79/409/EEC** on the Conservation of Wild Birds (known as the Birds Directive).

The principal aim of the Habitats Directive (92/43/EEC) is to sustain biodiversity through the conservation of natural habitats and wild fauna and flora in the territory of Member States. The Birds Directive (79/409/EEC) relates to the conservation of all wild bird species in the European territories of the Member States and encompasses protection, management and control of these species. In

particular, birds listed in Annex 1 to the Directive in addition to regularly occurring migratory species, are the subject of special conservation measures concerning their habitats.

The aims of these Directives are principally being met through the establishment of SPNTs according to the legislation of individual Member States, but within the framework set by the Directives, which together form a network of sites known as the *Natura 2000* network. The Birds Directive requires Member States to take appropriate steps to avoid deterioration of the habitats in those areas protected under the Directive, as well as avoiding disturbance to the bird species for which the areas have been designated.

The **Law on Specially Protected Nature Territories** requires that any activities, plans, or projects whether inside or outside a *Natura 2000* site, that are likely to have a significant effect on the conservation status of the site's features can only be permitted once it has been demonstrated that there will be no adverse effects on the integrity of the site. A proposed activity, plan or project to be located in/outside a *Natura 2000* site shall be subject to an Appropriate Assessment if alone, or in combination with other plans or projects, it would be likely to have a significant effect on a 'European Site'. A European Site is any protected area which is agreed between the European Commission (EC) and the Government of Latvia to be a Site of Community Importance.

An Appropriate Assessment is required, as a matter of Government policy, for SPNTs for the purpose of considering development proposals affecting them. It is the responsibility of the Competent Authority (State Environmental Bureau), with advice from the statutory conservation agencies, to determine whether a proposed activity, plan or project is likely to have a significant effect on a *Natura 2000* site. If an Appropriate Assessment is required then it must be undertaken by the Competent Authority and the developer or proposer of the plan or project is required to provide relevant information. The Appropriate Assessment must focus explicitly on the implications of the proposed activity, plan or project with respect to achieving the conservation objectives of the *Natura 2000* site, which may be affected.

An Appropriate Assessment should be confined to the effects on the internationally important habitats or species or which the site is or will be internationally designated or classified, including any indirect effects on these habitats or species, for example, via their supporting ecosystems and natural processes.

In a situation where an EIA or SEIA is being implemented for an activity, plan or project then the EIA/SEIA Report is required to address all significant environmental effects. Such an Environmental Report should clearly identify, under a specific subject heading, the likely significant effects on the internationally important habitats and/or species.

Generally, a proposed activity, plan or project may only proceed once it has been ascertained that it will not significantly adversely affect the integrity of 'European Site'. In the event that the activity, plan or project might result in an adverse impact, the proposed activity, plan or project would only be granted consent if the competent authority is satisfied that there are:

- appropriate grounds of imperative overriding public interest; and
- no alternative solutions available.

In such cases compensation measures will be necessary to ensure the overall integrity of the network of the sites.

Implication: The Development Programme should consider the future impacts to SPNTs, especially those designated as Natura 2000 sites, areas where protected species and habitats are present and land designated as micro-reserves.

B.4 Cultural Heritage

Cultural heritage conservation provisions are included in the **Law on Protection of Cultural Monuments** (12.02.1992; last amended 2008), which defines cultural monuments and ensures their utilisation, protection and management. **CM Regulation No. 474** (26.08.2003) on the registration, protection, utilisation and restoration of cultural monuments (plus others) outlines the requirements and restrictions for economic activities, land transformation measures around and alterations to cultural monuments, and activities within their protective zones.

Of importance is the **UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage** (1972) which sets out a set of general principles to guide national cultural heritage policies and a framework for establishing a list of 'world heritage sites'.

C. Port's Access Infrastructure and Terminal projects

C.1 Development of the Port's Access Infrastructure

Action AI1: Construction of New Rail Bridge and Reconstruction of Rail and Road Access Infrastructure in Kundzinsala

In order to improve the current level of railway access to Kundzinsala, and in parallel with the construction of the new container terminal described in Project PT3 (Section 7.4), a modern railway line will be constructed from the Sarkandaugava channel up to railway track Nr. 401 in Kundzinsala. Additional developments include the installation of a rail bridge and track with the complete package providing adequate railway infrastructure to meet the forecasted increase in container volumes. The anticipated additional capacity created by the railway upgrades represents up to 5 million tonnes per year.

Concurrently there will be reconstruction works for the rail tracks and the access roads to improve their conditions and capacity. Road access also has to be created to the new planned terminal (Project PT3, see Section 7.4). Details of these subprojects will be subject to further planning and design studies, as needed.

The project realization is planned from 2009 until 2013. Total estimated costs: 7,000,000 LVL (10,000,000 EUR)

Action AI2: Reconstruction of Access Channel for Ships Entrance into the Port

The project "Reconstruction of access channel for ships entrance into the Riga port" is needed to provide safe entering and operation possibility of heavy tonnage ships (till 130,000 dwt Aframax and 175,000 dwt cape size) in Riga port (see also Section 7.5).

The deepening of Riga port fairway is planned in several stages, which will be done gradually, based on demand and economic feasibility. Currently, a technical study and designs are in progress for this project.

In consequence of dredging reconstruction and reinforcement of some berths as well as reinforcement of the waterfront will need to be carried out. Details will be elaborated after completion of the detailed design of the dredging works.

Action AI3: Reconstruction of East and West Breakwaters

A series of investigations has been conducted (engineering, geological, topographical) and the technical design has been developed for the reconstruction of the East and West breakwaters of the Freeport of Riga.

The reconstruction works of breakwaters are planned to take place in time period from 2012 until 2015 and reconstruction costs are estimated to be 28,000,000 LVL (40,000,000 EUR).

Action AI4: Various Optional Infrastructure Reconstruction and Improvement Measures

There are options for a variety of other projects to take place in order to achieve SO3, which at this stage cannot be defined in sufficient detail they are in an only preliminary planning

stage. This may include (but should not be limited to) the following projects some of which other stakeholders than FRA would sign responsible for:

- Feasibility study for land reclamation in the sea territory close to Western Breakwaters (research territory) in accordance with objectives set in the Freeport of Riga Development Programme 1996 – 2010
- Land reclamation by infilling smaller basins when there is a need and justification. The potential areas for infilling are identified in Riga Territory Plan for 2006 – 2018 (see Section 9). Realisation - subject to need - could occur in the period 2012 to 2018
- Development of a conceptional layout for the berths along both sides of the river, in preparation of future berth construction/reconstruction works. The layout shall be developed until 2012; the estimated costs are 250,000 LVL (355,000 EUR)
- Development of rail and road access to Krievu Sala (see also Project PT1, Section 7.4)
- Access road and rail link projects implemented by terminals or other companies residing in the Freeport
- Access road and rail link projects implemented by FRA on an as need basis
- Reconstruction/construction of berths by FRA and terminals residing in the Freeport on an as need basis

C.2 Development of the Port Terminals

Action PT1: Development of Infrastructure on Krievu Sala for the Transfer of Port Activities from the City Centre

According to currently ongoing feasibility study¹ it is planned to develop new territories for dry bulk and general cargo terminals on Krievu Sala providing larger handling facilities of both, dry bulk and general cargo traffic.

The entire development covers an area of 65 ha and will be equipped with total quay length of 1,780m divided into 7 berths:

- 4 berths (1,180m) for dry bulk handling (coal, iron ore, etc.) and an initial depth of 15m;
- 3 berths (580m) for general cargo, dredged at a depth of 12m.

The project is to be completed until 2012.

Estimated costs: 111,692,000 LVL (159,560,000 EUR)

Action PT2: Development of New RoPax and Cruise Terminal

FRA undertakes a feasibility study and prepares construction designs for a new RoPax and cruise terminal to be placed on Eksportosta.

Timeline: until 2017.

Estimated costs: 35,000,000 LVL (50,000,000 EUR)

¹ Vides Projekti, State Ltd: Development of Infrastructure of Krievu Sala for the Transfer of Port Activities from the City Centre – Feasibility Study, February 2009

Action PT3: NKT Container Terminal

The project relates to the construction of a container terminal on Kundzinsala following the completion of ongoing land reclamation activities (done by FRA). Upon completion, the container terminal will feature a total capacity of 850,000 TEU and 500,000 vehicle units.

The construction phase will continue from 2009 to 2021 and comprise the following activities:

- installation of berthing capacity
- shore strengthening works
- paving of ground surfaces
- construction of outbuildings for office and warehouse use
- installation of services to provide electrical power, water and sewerage
- enhanced railway track and road infrastructure
- installation of container lifting equipment

Action PT4: Baltic Oil Terminal

This project relates to the construction of a new oil terminal by SIA "Baltic Oil Terminal" at the western bank at mouth of river Daugava and includes increased railway access both to, and within, the site. The terminal is located in a predominately industrial part of the port and lies adjacent to the Bolderaja shipyard.

A conceptual outline of the terminal has been prepared by SIA "Baltic Oil Terminal" and an EIA process is underway. The estimated construction is expected to start in 2010 and completion shall be after three years. Expected tank capacity is approximately 370,000m³ with the total area of the site occupying 27 hectares. According to SIA "Baltic Oil Terminal" approximately 37 individual storage tanks are expected to be constructed.

Action PT5: LNG Terminal

An LNG terminal is planned with a footprint of 34 ha on the north-east bank of the River Daugava, near to the mouth. The capacity of the terminal shall be 1,500,000 tonnes LNG/year.

The LNG terminal will comprise of the following elements:

- a tanker berth with unloading equipment,
- LNG storage facility,
- re-gasification process plant and
- infrastructure connecting terminal to the pipeline transmission network.

Action PT6: Biofuel Plant "JP Terminals"

The project involves the construction of a bio-ethanol production and blending plant. Footprint of the terminal may comprise 18.1 ha and be situated near Krēmeri - Voleri.

The main feedstock will comprise grain and oil, imported by sea or rail. Planned production capacity is 1.5 million tonnes of biofuel per year. A pipeline is proposed from the terminal to a berth for export via sea.

Action PT7: Various other projects

There are several other terminal projects which are considered or planned by private terminals or developers, which include:

- **A1** – Cruise ship berths on both banks of Daugava – on the left bank, in Kipsala; on the right bank on the territory of current passenger terminal and in Andrejosta
- **A2** – logistics centre in Gubernciems
- “MT Termināls” Ltd. – Container terminal
- “Systems terminal” Ltd. – General cargo terminal
- “Senpasaule” Ltd. – new grain terminal

D. "Vecdaugava" Nature Reserve

Figure D-1: Location of Vecdaugava Nature Reserve



