



*Environmental and Social
Action Plan*
**WHSD Central Section
Construction and Operation**

Final version

October 2011

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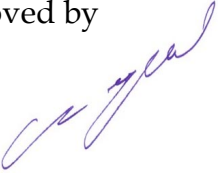
Environmental and Social Action Plan

WHSD Central Section Construction and Operation

Final version

12 October 2011

Project Manager, Technical Director, ERM Eurasia, Moscow Office		Mikhail Popov
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<p>Approved by</p>  <p>Sergey Bourtsev</p> <p>Managing Partner ERM Eurasia, Moscow Office</p> <p>12 October 2011</p>
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ERM Eurasia confirms that this Report has been prepared with all reasonable skill, care and diligence and in conformity with the professional standards as may be expected from a competent and qualified consultant acting as Environmental Consultant having experience in providing services for projects with similar scope of work, complexity, issues and scales.

This Report has been prepared in accordance with the terms of the contract concluded with the Client and the generally accepted environmental consulting practices and for intended purposes stated in the Contract. The conclusions and recommendations made in this Report are based upon information obtained directly by *ERM Eurasia*, as well as information provided by third parties, which we believe to be accurate.

This Report has been prepared for the *EBRD* and we accept no responsibility for third parties whatsoever who may use all or portions of the information contained in this Report.

LIST OF ABBREVIATIONS

Abbreviation	Full name
GUION	City's Administration Office of Inventory and Property Valuation (St. Petersburg)
BAT	Best Available Technologies
CJSC	Closed Joint Stock Company
EBRD	The European Bank for Reconstruction and Development
EHS	Environmental Protection, Health and Safety
ERP	Emergency Response Plan
ESAP	Environmental and Social Action Plan
ESIA	Environmental and Social Impact Assessment
JSC	Joint Stock Company
JSC "WHSD"	Joint-stock Company "Western High-Speed Diameter"
MPC	Maximum permissible level
OHS	Occupational Health and Safety
PAP	Project-Affected People
PCR	Public Compensation Reception
PR	Performance Requirements (EBRD)
RAP	Resettlement Action Plan
RCF	Resettlement and Compensation Framework
SEP	Stakeholder Engagement Plan

BACKGROUND

The following Environmental and Social Action Plan (ESAP) for the construction of the WHSD Central Section and the subsequent operation of the entire WHSD motorway has been prepared by ERM Eurasia. The Plan is intended in the first line for the Partner Company, which will be responsible for the WHSD Central Section and later for the WHSD operation.

This ESAP will facilitate efficient management of environmental and social impacts, risks and issues identified both in the process of the Environmental and Social Impact Assessment (ESIA) of the WHSD construction and operation, as well as earlier during the WHSD Project design development.

All identified impacts, risks and issues, as well as measures aimed at minimizing/eliminating their possible adverse consequences have been classified separately for the preparation, construction and operations phases, in accordance with EBRD requirements.

Organizations responsible for each planned action and the timeframe for their implementation are proposed in the ESAP.

It is assumed that when the elaboration of the final Project design documentation for the construction of the WHSD Central Section starts, the cost of ESAP activities will be estimated and an additional column with cost estimates may be added to the ESAP.

The ESAP should be implemented by the Partner Company in close coordination with the Stakeholder Engagement Plan (SEP) and the Environmental and Social Monitoring Plan.

Some aspects of this Action Plan may be adjusted/amended when the final design documentation is available.

WHSD CENTRAL SECTION - ENVIRONMENTAL AND SOCIAL ACTION PLAN (ESAP)

Ser. Nos.	Actions	Risks / Benefits of implementation	Legislative requirements/ EBRD / BAT	Responsible for implementation	Timeframe	Targeted indicators, criteria of successful implementation
<i>Preparation stage (PS)</i>						
PS-1. Project Management						
PS 1.1	Adopt and publicly disclose overarching Environmental, Social, Health and Safety Policy (ESHS Policy)	Demonstration for the general public of the Company's objectives and basic activities aimed at compliance with the ESHS requirements during the construction of the WHSD Central Section and the full-scale WHSD operation	EBRD PR1	Partner	Q1, 2012	Availability of the Policy
PS 1.2	Set up Environmental, Social, Health and Safety unit in charge of coordination of and supervision over ESHS issues	Efficient EHS management during construction operations	EBRD PR1, Russian OHS Legislation	Partner	Q1, 2012	Availability of trained personnel capable to manage the Project with regard to the ESHS aspects and issues
PS 1.3	Obtain approvals of the Project Design documentation for the construction of WHSD Central Section by the Fishery Protection Agency	Unless an approval has been obtained, a Permit cannot be obtained entitling the Company to use the water area for the construction of provisional flyovers and islands	Russian legislation relating to protection of fish resources	Partner	Q1, 2012	Possibility to commence hydro-engineering work in the Neva Bay water area
PS 1.4	Obtain additional approvals from GlavGosExpertiza for updated design solutions having an effect on safety of facilities (e.g. modification of the design of the bridge across the Marine Canal) and any other design changes that	Without approval from GlavGosExpertiza for the updated design solution, it will not be possible to start the construction of these	RF Urban Development Code	Partner	Q2, 2012	Approval by GlavGosExpertiza for the updated sections of the Project Design

Ser. Nos.	Actions	Risks / Benefits of implementation	Legislative requirements/ EBRD / BAT	Responsible for implementation	Timeframe	Targeted indicators, criteria of successful implementation
	may warrant such approval	facilities				
PS 1.5	<p>Obtain for the construction phase:</p> <ul style="list-style-type: none"> - Required Permits, Licenses for air emissions, wastewater discharge to water bodies, waste management, hazardous types of work and operation of hazardous machinery and equipment - Resolutions entitling the company to use water bodies for the construction of provisional flyovers and temporary island, as well as discharge water to the Neva Bay - License for waste management and/or make sure that the construction contractors have a complete set of required permitting OHS documents; - Approval from the RosPrirodNadzor and the RosPotrebNadzor Agencies for the operational monitoring program for the construction phase 	Compliance with the requirements of the Russian legislation and EBRD Performance Requirements	<p>Federal Law No.7-FZ of 10.01.2002 "On Environment Protection",</p> <p>Federal Law No.116-FZ of 21.07.1997 "On Operational Safety of Potentially Hazardous Industrial Facilities",</p> <p>EBRD PR1</p>	Partner	Q2, 2012	Available of a complete set of permitting documents by the time of the construction commencement as required by the Russian legislation and submission to EBRD
PS 1.6	Find out what is the status of the Project for the construction of an artificial site to the west of the Bely Island, where some WHSD infrastructure facilities are to be constructed (two transformer substations and onsite wastewater treatment facilities) and coordinate the time schedule for the implementation and permitting of that component with the WHSD construction. If required, modify the Project design documentation with regard to the site selection for the wastewater treatment facilities and transformer substations	Timely and complete implementation of the Project	RF Urban Development Code	Partner	Q2, 2012	Finalisation of technical project, associated permitting and commencement of piling at artificial site by the time of construction commencement in the vicinity of Bely Island
PS-2. Mitigation Measures						
PS 2.1 Soils and Land Resources Conservation						
PS 2.1.1	<ul style="list-style-type: none"> • Strip topsoil and store it separately on designated areas agreed with relevant stakeholders 	Conservation and rational use of topsoil	Order "On Approval of Basic Provisions Relating to Land	Construction contractor under the control of the	Q2, 2012	Preservation of the topsoil properties and topsoil use for land reclamation

Ser. Nos.	Actions	Risks / Benefits of implementation	Legislative requirements/ EBRD / BAT	Responsible for implementation	Timeframe	Targeted indicators, criteria of successful implementation
			Reclamation and Fertile Topsoil Stripping, Conservation and Consistent Use" issued by RF Ministry of Environment and Natural Resources Protection (No. 525/67 of 22.12.1995) EBRD PR3	Partner		
PS 2.1.2	Take measures aimed at remediation of the zones of historic soil contamination within the land allocated for the WHSD Central Section construction: <ul style="list-style-type: none"> Carry out soil contamination surveys along the route to identify the exact outlines/depth of the zones of moderately hazardous and hazardous soil contamination; Determine the hazard class of contaminated soils to identify the categories of waste it belongs to and define appropriate ways for their further removal and disposal/ treatment accordingly 	Prevention of adverse environmental impact in the process of execution of work in the areas with moderately hazardous and hazardous soil contamination	Federal Law No.89-FZ of 24.06.1998 "On Industrial and Consumption Wastes" SanPiN 2.1.7.1287-03 "Sanitary and Epidemiological Requirements to Soil Quality" EBRD PR3	Construction contractor under the control of the Partner	Q2, 2012	Identification of areas with potential soil contamination done Categorisation of waste done Measures for protection of staff
PS 2.1.3	Investigate the Shkiperskaya waste dump site (at the south-western end of Vasilievsky Island) and revisit the project to build a construction yard at that site if necessary, and revise Project design accordingly if necessary	Prevention of adverse environmental impact in the process of work execution in the contaminated areas	Federal Law No.89-FZ of 24.06.1998 "On Industrial and Consumption Wastes" Federal Law No.52-FZ of 30.03.1999 "On Sanitary and Epidemiological Safety of the Population"	Partner with specialized consultants	Q1, 2012	Risk elimination of environmental pollution as a result of earthmoving operations within the dump site area; reduction of risks for the health of personnel performing the work in the contaminated areas
PS 2.1.4	Implement measures aimed at conservation and restoration of land resources: <ul style="list-style-type: none"> Pavement of the entire surface area of 	Prevention of soil and land contamination in the process of the construction work	RF Water Code, No.74-FZ of 03.06.2006 RF Land Code, No.136-	Construction contractor under the control of the	Q2, 2012 and throughout construction	Land contamination is avoided also during the construction of the WHSD

Ser. Nos.	Actions	Risks / Benefits of implementation	Legislative requirements/ EBRD / BAT	Responsible for implementation	Timeframe	Targeted indicators, criteria of successful implementation
	<p>temporary construction yards and access roads with concrete slabs or other means to minimize infiltration of pollutants into the ground</p> <ul style="list-style-type: none"> Equip parking areas for vehicles and fuel stations in an appropriate manner to prevent penetration of petroleum products to the ground 		<p>FZ of 25.10.2001</p> <p>EBRD PR3</p>	Partner		<p>Central Section</p> <p>Reclamation of land disturbed in the process of the construction work</p>
PS 2.2 Noise pollution						
PS 2.2.1	<p>Where necessary, elaborate additional measures in the Project Design documentation in order to ensure more efficient protection against the exposure to noise impact:</p> <ul style="list-style-type: none"> On Kanonersky Island – consider providing sound-proof glazing in the more exposed residential buildings not included in the resettlement program, in the No.379 school building and in the Customs Office building On Kanonersky Island – consider the extension of the planned soundproof screen to be installed along each level of the WHSD motorway for additional 300 m in the direction toward the Neva Bay In all areas where the construction work is to be carried out at distances less than 150m from residential zones, construction work should be prohibited at night 	Prevention of non-compliance with the equivalent and maximum permissible noise levels in the areas directly adjacent to the construction sites	<p>Sanitary Norm SN 2.2.4/2.1.8.562-96 "Noise exposure at workplaces, in residential and public buildings and in residential areas" No.36 of 31.10.1996</p> <p>EBRD PR3</p>	Partner/ Construction Contractor and City authorities / JSC WHSD	Q2, 2012 and throughout construction	<p>The noise impact level caused by the motorway construction and operation will not exceed the regulatory maximum permissible level established for the residential areas</p> <p>Amended design of noise protection to be communicated to EBRD</p>
PS 2.3 Use of Water Resources						
PS 2.3.1	<p>Take measures to ensure uninterrupted water supply to all residential areas neighbouring construction sites, and temporary construction camps:</p> <ul style="list-style-type: none"> Warn of any temporary disruption, which should never exceed 8 hours; Obtain from VodoKanal a document specifying 	Sustainable water supply meeting the applicable regulatory requirements	EBRD PR3	Construction contractors / Partner	Q2, 2012 and throughout construction	Uninterrupted water supply to residential areas and temporary construction camps during the construction phase

Ser. Nos.	Actions	Risks / Benefits of implementation	Legislative requirements/ EBRD / BAT	Responsible for implementation	Timeframe	Targeted indicators, criteria of successful implementation
	the Limits for water supply for the construction phase					
PS 2.3.2	Make sure that the Project Design documentation provides solutions ensuring adequate quality of water pumped out from the foundation pits on temporary islands prior to its discharge to the Neva Bay;	Compliance with the regulatory requirements relating to environmental impact on the Neva Bay	Order No.20 of 18.01.2010 issued by RF Federal Fishery Agency (<i>RosRybolovstvo</i>) "On approval of the quality norms for water bodies of fishery significance, including maximum permissible concentrations (MPC) of harmful pollutants in water bodies of fishery significance" EBRD PR3	General Project design developer/ Partner	Q1, 2012	Compliance of discharge of any water from all construction sites with the requirements specified for discharge to water bodies of top fishery category
PS 2.3.3	Consider modifying the technology of construction of temporary islands for the motorway piers to minimize discharge of suspended matter into the Neva Bay;	Minimization of the zones with increased water turbidity levels in the Neva Bay and sliming of bottom sediments	EBRD PR3	General Project design developer/ Partner	Q2, 2012	Modifications made in the Project design documentation and Project of work execution. Provide evidence of amendments to EBRD
PS 2.4 Biodiversity Conservation						
PS 2.4.1	Update estimates of compensation payments for the damage to fish resources taking into account the modified technology for the construction of temporary islands and pay such compensation in accordance with applicable legal provisions;	Compensation for the damage inflicted to aquatic biological resources	Federal Law "On Fishing and Conservation of Aquatic Biological Resources", No.166-FZ of 20.12.2004 (Revision of 28.12.2010) EBRD PR6	JSC "WHSD"	Q2, 2012	Evidence of payment for the fish farming compensation
PS 2.5 Socioeconomic Effects						
PS 2.5.1	Develop and implement a Resettlement Action Plan (RAP) based on the Resettlement and	Maintain good relationship with affected communities	EBRD PR5	Partner with JSC "WHSD" and	RAP to be submitted by	Satisfactory RAP submitted to EBRD. Satisfactory

Ser. Nos.	Actions	Risks / Benefits of implementation	Legislative requirements/ EBRD / BAT	Responsible for implementation	Timeframe	Targeted indicators, criteria of successful implementation
	<p>Compensation Framework (RCF), including a census of PAPs, entitlement matrix, grievance mechanism, time schedule of consultations and other measures to resettlement and/or compensation of affected households in compliance with RF legislation and EBRD requirements, as well as a system for monitoring the RAP implementation</p> <p>The RAP should address:</p> <ul style="list-style-type: none"> - Apartments in affected blocks on Kanonersky Island - Cafes in the area of Marine Embankment provided their legal status is clarified - All affected garages, for which the evaluation methodology will be updated to reflect replacement value at the time of compensation 	and local governments, avoid or mitigate negative social impacts		Government of the City of St. Petersburg	Q2, 2012 and implemented by start of construction	implementation of RAP
PS 2.5.2	Bring the issue of external bridge and flyover illumination for public discussion and, if required, minimize such illumination while not compromising traffic safety	Abatement of impact of illumination on the communities in the direct vicinity of the motorway	EBRD PR1	Partner	Q1, 2012	Night-time illumination of bridges and flyovers does not pose any disturbing impact on the residents living in the direct vicinity of the motorway route
PS 2.5.3	<p>Incorporate the following measures relating to recreational zones in the Project Design documentation:</p> <ul style="list-style-type: none"> • Planning of pedestrian footways, passageways and bridges in the area of the Marine Embankment with due consideration to the requirements of disabled persons; • 	Mitigation of adverse impact upon the existing recreational zones in the direct vicinity of the WHSD motorway	EBRD PR1	Partner with JSC "WHSD" and relevant City authorities	Q2, 2012	The design solutions provide for site improvement after the construction completion; pedestrian footways, passageways and bridges etc. provided, among other things to ensure access to the recreational zones adjacent to the western motorway side on the Marine Facade site

Ser. Nos.	Actions	Risks / Benefits of implementation	Legislative requirements/ EBRD / BAT	Responsible for implementation	Timeframe	Targeted indicators, criteria of successful implementation
PS 2.5.4	Implement and, if required, adjust the SEP, including public reception offices, grievance mechanism and telephone hot lines	Awareness of the stakeholders with regard to phases and aspects of the Project implementation Minimization of social tensions associated with the Project implementation	EBRD PR10	Partner	According to the timeframe specified in SEP	Information about any environmental and social aspects of the Project implementation relevant for the general public has been updated and is accessible. Required consultations for affected parties provided. No complaints about insufficient information disclosure for stakeholders with regard to the Project implementation
PS 2.5.5	Implement measures foreseen in the Project Design and consider additional measures recommended by ERM at the stage of detailed design documentation to reduce the impacts on the communities in the vicinity of the motorway route, including the following: <ul style="list-style-type: none"> • Install sound-proof window frames in the rooms facing the motorway before the construction commencement in conformance with action item PS 2.2.2; • Coordinate with the social facilities (School No.379, "Priboi" Swimming Pool) on Kanonersky Island the time schedule of construction work associated with noise impact 	Minimization of adverse impact on public health during the WHSD construction and operation	Sanitary Norm SN 2.2.4/2.1.8.562-96 "Noise exposure at workplaces, in residential and public buildings and in residential areas" No.36 of 31.10.1996 EBRD PR1 EBRD PR4	Partner / JSC WHSD / City authorities	Quarter 1 of 2012	Impact on public health in relation to people living/working in the vicinity of the motorway route during the construction phase has been minimized
PS 2.6 Occupational Health and Safety (OHS) Issues						
PS 2.6.1	Carry out the planned measures aimed at accident prevention and response: <ul style="list-style-type: none"> • Develop prior to the construction commencement an Emergency Response Plan (ERP) • Development Oil Spill Prevention and Response 	Compliance with the industrial safety requirements	Federal Law No.116-FZ of 21.07.1997 "On Operational Safety of Potentially Hazardous Industrial Facilities"	Partner	Q1, 2012	Risks minimization for the health of construction personnel and of any accidental situations; reduction in the possible scale of consequences of hypothetically possible

Ser. Nos.	Actions	Risks / Benefits of implementation	Legislative requirements/ EBRD / BAT	Responsible for implementation	Timeframe	Targeted indicators, criteria of successful implementation
	Plans for facilities handling large volumes of petroleum products;		EBRD PR2			accidents
PS 2.6.2	Ensure a practical assessment of risks and define measures aimed at mitigating adverse impacts on the temporary islands, as well as machinery and personnel located on them, as a result of negative ice phenomena in the mouths of the Srednaya and Bolshaya Nevka Rivers	Prevention of ice dam formation on the Bolshaya and Srednaya Nevka Rivers and management of the associated risks of ice rafting/flooding of temporary islands	EBRD PR4	General Project design developer/ Partner	Q2, 2012	Measures to prevent ice dam formation in the mouths of the Srednaya and Bolshaya Nevka Rivers developed and successfully implemented
PS 2.6.3	Elaborate and introduce a grievance mechanism for the Company's employees;	Adequate labor relations and working conditions	EBRD PR2	Partner	Operational phase	A grievance mechanism for the Company's employees set up and functioning; the employees are aware of its existence
CONSTRUCTION PHASE (C)						
C-1. Project Management						
C 1.1	Develop and implement an EHS management system in accordance with international standards ISO 14001 and OHSAS 18001;	Systematic approach to management of environmental and social issues and consequences	EBRD PR1	Partner	2012-2014	Availability of a functioning EHS management system complying with the international standards ISO 14001 и OHSAS 18001
C-2. Mitigation Measures						
C 2.1 Soils and Land Resources Conservation						
C 2.1.1	Implement measures aimed at conservation and restoration of land resources: Develop, have approved by the respective district administrations and implement Land Reclamation Plans (delivery and filling of certified clean soil and grass sowing/planting);	Prevention of soil and land contamination in the process of the construction work	RF Land Code, No.136-FZ of 25.10.2001 EBRD PR3	Construction contractors / Partner	Not later than one year before the construction completion	Land contamination eliminated also during the construction of the WHSD Central Section Reclamation of land

Ser. Nos.	Actions	Risks / Benefits of implementation	Legislative requirements/ EBRD / BAT	Responsible for implementation	Timeframe	Targeted indicators, criteria of successful implementation
						disturbed by the construction operations has been carried out
C 2.2 Use of Water Resources						
C 2.2.1	<p>Implementation measures aimed at uninterrupted water supply:</p> <ul style="list-style-type: none"> • Periodic checking of compliance with the applicable sanitary rules in the process of drinking water storage in storage tanks in summer at the construction sites; • Specify more accurately the water requirement for the WHSD operational phase; 	Sustainable water supply meeting the applicable regulatory requirements	EBRD PR3	Construction contractors / Partner	<p>On an on-going basis during the construction phase</p> <p>Not later than one year before the construction completion</p>	Uninterrupted water supply during the construction and operational phases
C 2.3 Biodiversity Conservation						
C 2.3.1	<p>Develop designs and implement compensation measures to ensure greenery planting and conservation:</p> <ul style="list-style-type: none"> • Ensure compensation planting of plant species resistant to gas and dust content of ambient air and to soil contamination; • Include an item in the WHSD operational regulation to ensure seasonal watering of trees planted in the roadside area, and water spraying over their crowns if necessary; • Carry out in due time restoration of lawns, trees, shrubs and other types of greenery; 	Greenery planting and improvement of areas directly adjacent to the motorway route and interchanges	St. Petersburg's Law No.254-38 of 12.05.2004 "On Protection of Urban Greeneries" EBRD PR6	Partner / JSC WHSD / City authorities	Before the commissioning of the WHSD Central Section	Compensation plantings performed and maintenance carried out on an on-going basis
C 2.3.2	<p>Implement measures to mitigate negative impacts on aquatic fauna, including the following:</p> <ul style="list-style-type: none"> • Prohibit to carry out any work with potential to affect water quality and/or within water bodies during the periods of spawning migrations and spawning (i.e. from 15 April to 20 June); 	Mitigation of adverse impact on aquatic biological resources	Federal Law "On Fishing and Conservation of Aquatic Biological Resources", No.166-FZ of 20.12.2004 (Revision of 28.12.2010)	Construction contractors / Partner	During construction phase	Planned measures fulfilled

Ser. Nos.	Actions	Risks / Benefits of implementation	Legislative requirements/ EBRD / BAT	Responsible for implementation	Timeframe	Targeted indicators, criteria of successful implementation
	<ul style="list-style-type: none"> Develop measures to reduce the noise level generated by the construction machinery and devices operating on the shore/temporary islands; Use technologies preventing discharge of suspended matter to water in the process of the construction of temporary islands; Adopt technological solutions ensuring execution of hydro-engineering work in water bodies within as short periods of time as possible; Carry out monitoring of water quality waters that may be affected by Project discharges; 		<p>RF Government's Decree No.569 of 28.07.2008 "On approval of the Rules for approval of site selection for industrial and other facilities, as well as introduction of new technological processes affecting the condition of aquatic biological resources and their habitats"</p> <p>EBRD PR6</p>			
C 2.3.3	Develop, have approved by the Yuntolovo reserve management and carry out compensation measures, such as installation of man-made bird boxes and floating platforms for nesting waterfowl and wading birds within the outlines of the reserve;	Compensation of adverse impact of the Project on wildlife populations	<p>Federal Law No.7-FZ of 10.01.2002 "On Environment Protection" (Revision of 29.12.2010);</p> <p>EBRD PR6</p>	Specialist contractor organization / JSC "WHSD"	Starting from 2012	Compensation measures implemented
C 2.4 Visual Quality of Landscapes						
C 2.4.1	<p>Implement measures aimed at improving the visual appearance of the WHSD segments after the completion of the construction:</p> <ul style="list-style-type: none"> Additional planting of trees and shrubs in the areas adjacent to the new motorway within the framework of the site improvement and revegetation program; Timely land reclamation of areas temporarily disturbed during the construction phase; Continuous management of site improvement and vegetation at the wayside within the 	Minimization of adverse visual impact on landscapes	<p>St. Petersburg's Law No.728-99 of 22.12.2005 "On Urban Development Master Plan of St. Petersburg" (Revision of 30.06.2010, No.412-93)</p> <p>St. Petersburg's Law No.820-7 of 19.01.2009 "On Boundaries of Protection Zones of Objects of Historic</p>	Partner / JSC WHSD / City authorities	During the last year of the construction of particular motorway segments with subsequent maintenance of plantings during the operational phase	Site improvement measures implemented

Ser. Nos.	Actions	Risks / Benefits of implementation	Legislative requirements/ EBRD / BAT	Responsible for implementation	Timeframe	Targeted indicators, criteria of successful implementation
	sanitary distance range during the WHSD operational phase in accordance with the landscape architectural master plan;		Heritage within the Territory of St. Petersburg and Regulation of Land Use within the Boundaries of the Above Zones"			
C 2.5 Socioeconomic Effects						
C 2.5.1	<p>Implement measures to avoid any significant disruption to traffic on the existing road network:</p> <ul style="list-style-type: none"> • Prepare construction traffic management plan • Optimize the traffic routes (including organization of access roads) and timeframe for deliveries of materials on Kanonersky Island and especially via the tunnel under the Marine Canal with the objective to minimize Project traffic during rush hours; • Avoid blocking of the traffic above the ground along the entire WHSD segment across Kanonersky Island; • Timely and comprehensive warning of local motorists and communities about any planned limitations/ temporary blocking of traffic 	Reduction in traffic intensity in the tunnel under the Marine Canal and the road network on Kanonersky Island	EBRD PR1 EBRD PR10	Construction contractors / Partner	During the entire period of the construction work	Impacts on traffic situation during the construction phase minimized. No complaints from local communities received
C 2.5.2	<p>Implement measures foreseen in the Project Design and consider those additionally recommended by ERM to mitigate impacts upon the local communities living in the vicinity of the motorway route:</p> <ul style="list-style-type: none"> • Install acoustic screens at different levels along the motorway route on Kanonersky Island and along some motorway segments on Vasilievsky Island; • Prohibit to perform any construction work in the vicinity of residential zones during a period from 11:00 PM until 07:00 AM • Provide uninterrupted access for the residents 	Minimization of negative impact on public health in the course of the construction and operation of the WHSD Central Section	Sanitary Norm SN 2.2.4/2.1.8.562-96 "Noise exposure at workplaces, in residential and public buildings and in residential areas" No.36 of 31.10.1996 EBRD PR1 EBRD PR4 EBRD PR10	Partner / JSC WHSD / St Petersburg authorities	During the construction phase	Impact on public health in relation to people living / working in the vicinity of the motorway route during the construction phase has been minimized

Ser. Nos.	Actions	Risks / Benefits of implementation	Legislative requirements/ EBRD / BAT	Responsible for implementation	Timeframe	Targeted indicators, criteria of successful implementation
	of Kanonersky Island to social facilities (No379 school, "Priboi" swimming pool, foodstuff store, etc.)					
C 2.5.3	<ul style="list-style-type: none"> Implement the agreed Resettlement Action Plan 	Minimization of impacts in case of physical displacement and/or disturbance of stable economic condition of communities and organizations; livelihood restoration	EBRD PR5	St. Petersburg's pertinent Committees	<p>In accordance with timeframe specified in RAP.</p> <p>Monitoring in conformity with the timeframe and key performance indicators specified in RAP</p>	Successful implementation of RAP as assessed by affected people and local governments and certified by an independent auditor
C 2.5.4	Update the SEP taking consideration of specificities of the construction phase.	<p>Awareness of the stakeholders with regard to phases and aspects of the Project implementation</p> <p>Minimization of social tensions associated with the Project implementation</p>	EBRD PR10	Partner	At least three months before start of construction	Satisfactory SEP submitted to EBRD
C 2.5.5	Implement the updated SEP, including functioning of the Public Reception Offices, the grievance mechanism and "hot line" telephones;	<p>Awareness of the stakeholders with regard to phases and aspects of the Project implementation</p> <p>Minimization of social tensions associated with the Project implementation</p>	EBRD PR10	Partner	In conformity with the timeframe specified in SEP	Information about any environmental and social aspects of the Project implementation relevant for the general public has been updated and is accessible. Required consultations for affected parties provided. No complaints about

Ser. Nos.	Actions	Risks / Benefits of implementation	Legislative requirements/ EBRD / BAT	Responsible for implementation	Timeframe	Targeted indicators, criteria of successful implementation
						insufficient information disclosure for stakeholders with regard to the Project implementation
C 2.5.6	<p>Implement measures related to recreational zones, including the following:</p> <ul style="list-style-type: none"> • Provide access to the residential zones at the Marine Facade site to the west of the WHSD motorway; • Provide access for local residents to the urban forest park zone in the vicinity of the Yuntolovo nature reserve during the WHSD construction and operational phases and consider constructing the motorway on a flyover, rather than on an embankment; 	Mitigation of adverse impact upon the existing recreational zones in the direct vicinity of the WHSD motorway	EBRD PR1	Partner / JSC WHSD / City JSC WHSD	On an on-going basis	Free access to the urban forest park in the vicinity of the Yuntolovo forestry department ensured; access provided to the new recreational zones on the Marine Facade site
C 2.6 Occupational Health and Safety (OHS) Issues						
C 2.6.1	<p>Take measures to ensure safe working conditions:</p> <ul style="list-style-type: none"> • Carry out monitoring of methane emissions in the soil during the drilling operations and excavation of foundation pits; • Carry out radiological monitoring of soils in the process of excavation in the vicinity of the No.6 military camp on Vasilievsky Island; 	Compliance with the regulatory OHS requirements	Federal Law No.116-FZ of 21.07.1997 "On Operational Safety of Potentially Hazardous Industrial Facilities" EBRD PR2	Contractor companies / Partner	On an on-going basis during the execution of particular types of work	Risk minimization for the health of construction personnel and of any accidental situations; reduction in the possible scale of consequences of hypothetically possible accidents
C 2.6.2	Take appropriate measures to mitigate adverse impacts on the temporary islands, as well as machinery and personnel located on them, as a result of negative ice phenomena in the mouths of the Srednaya and Bolshaya Nevka Rivers, which could become more active because over 70% of the riverbed cross-sections of those rivers will be blocked by the temporary islands and dams in the process of the WHSD construction;	Prevention of ice dam formation on the Bolshaya and Srednaya Nevka Rivers and associated risks of ice rafting/ flooding of temporary islands	EBRD PR4	General Project design developer/ Partner	During ice movement in the Neva River branches	Measures to prevent ice dam formation in the mouths of the Srednaya and Bolshaya Nevka Rivers developed and successfully implemented

Ser. Nos.	Actions	Risks / Benefits of implementation	Legislative requirements/ EBRD / BAT	Responsible for implementation	Timeframe	Targeted indicators, criteria of successful implementation
OPERATIONAL PHASE (O)						
O-1. Mitigation Measures						
O 1.1 Air Pollution Abatement						
O 1.1.1	Develop and implement an automated system for monitoring the nitrogen dioxide concentration in ambient air for the motorway segment along the Marine Embankment on Vasilievsky Island;	Prevention of possible non-compliance during the certain periods with the sanitary norms for nitrogen dioxide concentrations in ambient air in residential areas	EBRD PR3 SanPiN Norm 2.1.6.10-32-01 "Hygienic Requirements to Atmospheric Air Quality in Residential Areas", No.14 of 17.05.2004	Partner	Start of operations	Compliance of the atmospheric air quality with the applicable sanitary norms in the residential areas at the Marine Embankment
O 1.1.2	Develop and ensure implementation of measures aimed at reducing the traffic stream of vehicles / temporary limiting speed/ prohibit on a temporary basis entry to the WHSD motorway within Vasilievsky Island for vehicles with engines of lower environmental classes during periods of adverse weather conditions, under which increased air pollution levels can take place at the Marine Embankment;					
O 1.1.3	Take measures aimed at conservation of land resources during the WHSD operational period: <ul style="list-style-type: none"> • Monitor erosion and reinforce the side slopes of the road bed (along short segments of the motorway constructed on embankments) if proved necessary; • Install a stormwater runoff drainage network and stormwater treatment facilities able to handle volumes of hypothetically possible spills of chemicals; • Apply mechanical anti-icing methods (use sand and gravel mixtures), which do not pose any negative impact on soils and keep the road pavement free of ice; 	Prevention of deterioration and contamination of land associated with the WHSD motorway operation	RF Water Code, No.74-FZ of 03.06.2006 RF Land Code, No.136-FZ of 25.10.2001 EBRD PR3	Construction contractors / Partner	On an on-going basis	Soil contamination avoided in the areas, which are potential sources of contamination
O 1.2 Use of Water Resources						
O 1.2.1	Install additional final treatment units for	Compliance with the	Order No.20 of	General Project	Prior to start	Compliance of treated

Ser. Nos.	Actions	Risks / Benefits of implementation	Legislative requirements/ EBRD / BAT	Responsible for implementation	Timeframe	Targeted indicators, criteria of successful implementation
	recovery of petroleum products at the stormwater treatment facilities, from which treated stormwater will be released directly to the Neva Bay, to ensure residual concentrations of petroleum hydrocarbons of less than 0.05 mg/l;	regulatory norms for anthropogenic pressure on the Neva Bay	18.01.2010 issued by RF Federal Fishery Agency (<i>RosRybolovstvo</i>) "On approval of the quality norms for water bodies of fishery significance, including maximum permissible concentrations of harmful pollutants in water bodies of fishery significance" EBRD PR3	design developer/ Partner	of operations and throughout operations	wastewater with the requirements specified for discharge to water bodies of top fishery category
O 1.3 Vibration Impact						
O 1.3.1	Carry out periodic vibration level monitoring (especially at the Customs Office building on Kanonersky Island) before the WHSD motorway will reach its design capacity with regard to traffic intensity	Prevention of non-compliance with the regulatory norms for vibration impact	SanPiN 2.1.2.2645-10 "Sanitary and epidemiological requirements to living conditions for residential buildings and premises"	Partner	2016-2018	Compliance with the sanitary norms relating to vibration impact levels in the buildings located in areas directly adjacent to the WHSD Central Section
O 1.4 Visual Quality of Landscapes						
O 1.4.1	Carry out the following measures for site improvement: <ul style="list-style-type: none"> Additional planting of trees and shrubs in the areas adjacent to the new motorway within the framework of the site improvement and revegetation program; Continuous management of site improvement and vegetation at the wayside within the sanitary distance range during the WHSD operational phase in accordance with the 	Minimization of visual impacts on landscapes	St. Petersburg's Law No.728-99 of 22.12.2005 "On Urban Development Master Plan of St. Petersburg" (Revision of 30.06.2010, No.412-93) St. Petersburg's Law No.820-7 of 19.01.2009 "On Boundaries of Protection Zones of	Specialist contractor organizations / Partner	On an on-going basis	Site improvement measures implemented

Ser. Nos.	Actions	Risks / Benefits of implementation	Legislative requirements/ EBRD / BAT	Responsible for implementation	Timeframe	Targeted indicators, criteria of successful implementation
	landscape architectural master plan;		Objects of Historic Heritage within the Territory of St. Petersburg and Regulation of Land Use within the Boundaries of the Above Zones"			
O 1.5 Socioeconomic Effects						
O 1.5.1	Implement and adjust (as required) the SEP for the Operations period, including the functioning of the grievance mechanism and "hot line" telephones, as well as publication of environmental monitoring reports;	Awareness of the stakeholders with regard to phases and aspects of the Project implementation Minimization of social tensions associated with the Project implementation	EBRD PR10	Partner	In conformity with the timeframe specified in SEP	Information about any environmental and social aspects of the Project implementation relevant for the general public has been updated and is accessible. Required consultations for affected parties provided. No complaints about insufficient information disclosure for stakeholders with regard to the Project implementation

ERM's Moscow Office

Office 1
11/13 Tryokhprudny Per.
Moscow 123001, Russia
T: + 7 495 234 31 77
F: + 7 495 234 31 78

www.erm.com

