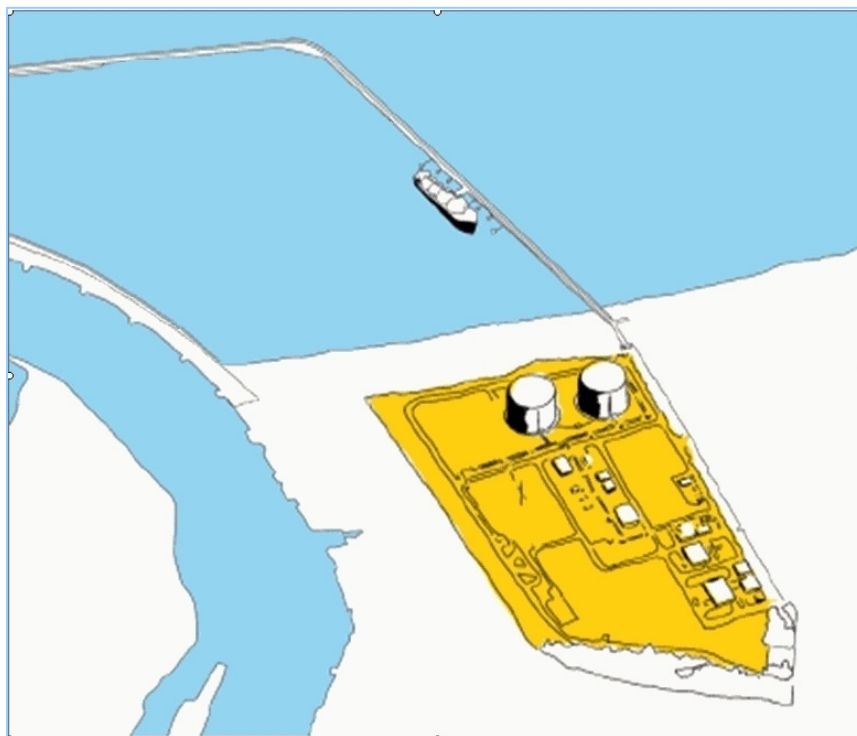


LNG Terminal Świnoujście, Poland



Environmental and Social Action Plan (ESAP)

June , 2012



Action Item Tables

The ESAP Action Items are contained in several tables as shown below. Included within these Action Items are references to the Stakeholder Engagement Plan (SEP) and the Biodiversity Action Plan (BAP), that were both developed for the Project.

The Action item tables are structured as follows:

- Table 1 for the Overall LNG Project (“OP”),
- Table 2 for LNG Terminal (“T”),
- Table 3 for Breakwater and Jetty (“BJ”),
- Table 4 for Pipeline (“P”), and
- Table 5 includes measures that result from the Social Review of the Project (“SR”).

Please note that previous requirements relating to compliance with Decision documents or permits have been largely removed. Compliance with such requirements will need to be reported in routine monitoring reports to the Bank.

Table 1 Overall Project

Item No. Lender 's Standard Reference	Potential Impact/ Issue	Mitigation/ Management	Responsibility / Implementation	Monitoring / Key Performance indicators	Cost / Budget for Activity	Timeline / Milestones
OP1	Lender requirements	Overall commitment to implement the EBRD Performance Requirements (PRs) as detailed in this ESAP and associated documents, EU standards and regulatory requirements.	PLNG, Gaz-System, Maritime Office, Port Authority	Compliance reports	Personnel and office cost	On-going
OP2 PR1	Management Capacity	Gaz-System will take the role as coordinator for Project implementation by setting up a an Overall Operational Coordination Unit (OOCU) for the LNG Project and continue to coordinate between Project Sponsors on EHS / Stakeholder Engagement issues related to the EBRD Performance Requirements. Statutory meetings will include EHS issues in the agenda.	PLNG, Gaz-System, Maritime Office, Port Authority	Minutes of Meetings	Personnel and office cost	On-going
OP3 PR1 + PR10	Stakeholder Engagement	Maintain a Stakeholder Engagement Plan (SEP) for the Project: which shall include an advanced programme of planned stakeholder engagement activities; advertisements of local job and procurement opportunities. The CLO will monitor and track number and origin of local people in the construction workforce (including subcontractors) and track amount of local procurement.	PLNG, Gaz System CLO at Project Coordination Level	Report to EBRD Activities as per SEP carried out and documented in Reports	Personnel and office cost	Ongoing
OP4 PR1&10	Community Liaison	Establishment of a Grievance Mechanism for the overall Project which is made readily available to the public and other stakeholders. Grievances will in general be responded to within 10 working days after receipt Gaz System shall ensure that staff and contractors are informed about the grievance procedure.	Gaz-System in its role of Project Coordinator on behalf of all Project Sponsors - CLO	CLO person / team in place; Reporting on SEP implementation progress; Grievance register and tracker demonstrate follow-up and project response to grievances from receipt to resolution	Personnel and office cost	On -going
OP7 PS6/ PR6	Impact on Biodiversity	Disclose and implement the Biodiversity Action Plan (BAP) As part of the EHS reporting Sponsors will inform EBRD on the implementation of the BAP with monitoring results and any corrective actions taken.	PLNG Gaz System S&SPA MOS	Report on status to EBRD	Consulting fees Personnel and office cost	BAP disclosed reports to EBRD

Item No. Lender 's Standard Reference	Potential Impact/ Issue	Mitigation/ Management	Responsibility / Implementation	Monitoring / Key Performance indicators	Cost / Budget for Activity	Timeline / Milestones
OP8 PS1/ PR1	Reporting - Construction	The Project Sponsors will compile every year EHS monitoring reports (semi-annual EHS monitoring statements) during construction, to be reviewed internally by senior management, and then provided to the EBRD for review. The reports formats and content are to be approved with EBRD . But must include update on compliance status and progress in the implementation of the ESAP actions.	Gaz System will take the coordinating role to ensure that EHS reports will be provided from Projects Sponsors	Annual EHS monitoring reports from Project Sponsors Additionally, during the initial phase, six monthly EHS monitoring statements from Project sponsors	Personnel and office cost	During Construction Phase
OP5 PR1	Reporting - Operations	Annual monitoring reports will be compiled by Project Sponsors, review internally by senior management, and then provide and made available to the relevant authorities and the EBRD, as requested and appropriate. The reports shall cover the status of EHS related aspects such as, status of compliance with obligations arising from licences or permits, exceeding of regulatory environmental standards with root cause analysis and corrective measures.	Gas System will take the coordinating role to ensure that annual reports will be provided from Projects Sponsors	Annual Report on environmental & social performance and ESAP implementation	Personnel and office cost	Annual Report During lifetime of project
OP6 PR1	Public Reporting	A report on the EHS performance of the Project including ESAP implementation shall be issued to the public on an annual basis.	Gaz System/ CLO	Annual Report on EHS	Personnel and office cost	Annual Report During lifetime of project
OP7 PS1/ PR1	Change Management	A change management procedure that assesses EHS risks is in place satisfactory to the EBRD. EBRD to be notified of significant changes with potentially high EHS or reputation risks on a timely basis. Such changes cover for example changes in design or operation and the construction and implementation of the 3 rd Tank. . Significant changes to be publicly disclosed. A summary of all the changes to be reported to the EBRD.	PLNG Gaz System S&SPA MOS	Notification of significant changes in Project to EBRD	Personnel and office cost	Ad hoc notification
OP 14 PS2/ PR2	Staff training operation	All operational personnel will be provided with training on basic safety and environmental issues and procedures specific to the projects components. This training should provide personnel with the necessary skills and knowledge needed to conduct their jobs in a safe manner, provide for health and safety of all persons, and protect the environment. Training records shall be maintained.	PLNG Gaz System	Training Plan and documentation of participation	Personnel and office cost Consulting cost	Prior to operation and annual refresher

Table 2 LNG Terminal

Item No. Lender Standard Reference	Potential Impact / Issue	Mitigation/ Management	Responsibility/ Implementation	Monitoring/ Key Performance indicators	Cost/ Budget for Activity	Timeline / Milestones
T1 PR1	Noise	<p>A noise monitoring programme shall be established during construction and operation which shall include night time measurements in compliance with Polish regulation. Non-compliances will be investigated and corrective actions shall be notified in routine reports to EBRD.</p> <p>Additional noise abatement measures such as acoustic shielding shall be implemented during operations, where it is confirmed that admissible limits are exceeded.</p>	PLNG EPC Contractor	Noise monitoring programme	Cost for noise measurements Personnel and office cost	Six monthly reporting during construction and annual reporting during operation
T2 PR3	Energy efficiency / Green House Gas Emissions Reduction	EBRD policy require that facilities emitting significant amounts of CO2 (<i>i.e.</i> greater than 100,000 tons per year of CO2 equivalent) must establish a yearly reporting programme to the EBRD. The LNG Terminal will be obliged to implement such a programme, which must include information on energy use/CO2 emissions and an evaluation of feasible options for minimizing such emissions.	PLNG	Initial CO2 report and annual updates	Personnel and office cost	Annual Report during operation
T3 PR4	Emergency Preparedness and Response Plan – Seveso Plan	<p>The LNG Terminal is subject to the EU Seveso II Directive (96/82/EC) and the respective Polish regulation (April 9, 2002), the following documents will have to be prepared</p> <ul style="list-style-type: none"> - Major-Accident Prevention Program - Safety Report - Emergency Plan - Information on Safety and Response Measures to be provided to the Community <p>These documents will be based on the detailed design for the project and need to be provided and agreed prior to obtaining the operation permit and provided to EBRD for review and comment. All measures are to be developed in consultation with relevant authorities and with institutional stakeholders.</p>	PLNG	<p>Major-Accident Prevention Program</p> <p>Safety Report</p> <p>Emergency Plan</p> <p>Information on Safety Measures has been provided to the Community</p>	Personnel and office cost Consulting fees	<p>Prior to obtaining the operation permit</p> <p>(recommended 30 days prior obtaining the operation permit)</p>
T12 PS3/ PR3	Technical State of the Art / Best Available Technique	In accordance with the Polish Law, EU IPPC Directive, the design, construction and operation of all equipment installed for use on this project will be compliant with following industry norms: EN 1473, EN 12259 and will be reference BAT.	PLNG	PLNG to provide performance compliance statement of Detailed Design	Personnel and office cost	Prior to Operation

Item No. Lender Standard Reference	Potential Impact / Issue	Mitigation/ Management	Responsibility/ Implementation	Monitoring/ Key Performance indicators	Cost/ Budget for Activity	Timeline / Milestones
				Compliance of technical design of installed equipment to be confirmed by ITC		
T13 PS4/ PR4	Natural hazards	Risk analysis to be completed before start of operation detailing the possible impacts to the project caused by natural hazards. Mitigation measures to be addressed in the emergency response plans.	PLNG	See above Detailed QRA Report	Personnel and office cost	Prior to start the operation
T14 PS1/ PR1	Transportation	The EPC Contractor shall maintain a Transport Management Plan for the construction phase including road safety on and off site aimed at ensuring there are no adverse effects to local communities (alternatively this item should be covered by the Construction Logistics Plan). Information on the plan shall be made publicly available and include advance notification of traffic restrictions to potential affected parties.	PLNG	Transport Management Plan	Personnel and office cost	On-going
T15 PR2	Workforce	<p>Implement a Worker Management Plan (CWMP) to address inter alia:</p> <ul style="list-style-type: none"> • code of conduct related to site work and community relations • prevention measures and awareness training regarding potential diseases introduced/spread by construction workforce • on-site accommodation plan (if applicable) according to Polish legal requirements and in addition considering the IFC/EBRD's worker accommodation guidelines (http://www.ebrd.com/enviro/tools/workers.pdf). • free access to medical service, healthcare and preventative treatment. • provision of transport for workers to/from worksite and for non-work needs so as not to affect local transport systems • Maintain a worker grievance mechanism. <p>For any foreign workers, appropriate training and information will be provided in their primary language and translators available to assist with communication.</p>	PLNG	Detailed Construction Worker Management Plan satisfactory to EBRD	Personnel and office cost	On-going
T16 PR6	Groundwater	Development of a Construction Site Groundwater and Surface water Management Procedures to prevent drainage or other adverse impacts to nearby habitats.	PLNG	Construction Site Groundwater and Surface water Management	Personnel and office cost	On-going

Item No. Lender Standard Reference	Potential Impact / Issue	Mitigation/ Management	Responsibility/ Implementation	Monitoring/ Key Performance indicators	Cost/ Budget for Activity	Timeline / Milestones
				Procedures		

Table 3 Water Side Installations: Breakwater (New External Harbour) & Jetty (LNG Berth)

Item No. Lender s Standards Reference	Potential Impact / Issue	Mitigation / Management	Responsibility / Implementation	Monitoring / Key Performance indicators	Cost / Budget for Activity	Timeline / Milestones
BJ 1 PR4	Navigation Safety and Emergency Preparedness and response to ship accidents	<p>A navigation risk assessment (QRA) was undertaken by the Maritime Academy in Szczecin for the LNG port facilities and the navigation access and the required measures for safe navigation and emergency response were identified. As a result of the QRA, an improved Vessel Tracking System (VTS) will be installed by the Maritime Office, and a fire fighting ship, tug boats and support vessels will be provided by the Port and mariner staff will be trained prior to commencement of harbour operation.</p> <p>Further for the new external harbour a Port Regulation will be established by the Maritime Office Szczecin prior to commencement of harbour operation.</p> <p>Accordingly, the Port will update the present Emergency and Oil Spill Response Plan (OSRP) of the port to cover the new external harbour and LNG vessel traffic, and additional equipment and services will be purchased as needed and staff will be trained by the Port in advance of the start of LNG ship operations, i.e. by mid-2014.</p> <p>The preparation of the new response plan will be consulted with the competent authorities and responsible response organisations and include information relating to potential trans boundary impacts.</p> <p>The Port Authority shall provide the EBRD with a draft copy of the OSRP for review and comment. The OSRP will be completed a minimum of 6 months prior to operation.</p>	MOS S&SPA	VTS installed and functioning - local demonstration Ships/vessels provided and training protocols New Port Regulation is announced Revised OSRP	Costs for VTS, Ships/vessels Personnel and office cost	Draft OSRP six months prior to operation Other items six months prior to operation
BJ 2 PR2/ PR4	Vessel traffic management	Existing VTS to be improved (see above) A vessel exclusion zone will be in place around the construction, dredging and dredge disposal operations. This zone will have a safe radius to be	MOS	Contractor specifications. Safe radius is defined and communicated Notice to Mariners, shipping	Personnel and office cost Costs for VTS and nav aids	Prior to operation

Item No. Lender s Standards Reference	Potential Impact / Issue	Mitigation/ Management	Responsibility / Implementation	Monitoring/ Key Performance indicators	Cost/ Budget for Activity	Timeline / Milestones
		<p>determined by the Competent Authority (CA) prior to construction.</p> <p>Safety of construction vessel traffic is regulated in Navigation Safety Plan, which was approved by the competent authority (MOS).</p> <p>The Project sponsor will inform shipping control networks, shipping companies, fishery organisations, navies, etc. regarding the exclusion zone. A Notice to Mariners will be issued.</p> <p>Navigation charts will be modified during detail engineering, in consultation with local authorities, to signal the presence of the new breakwater. If necessary shipping lanes will be modified.</p> <p>Regulatory marking, illumination and marine navigation aids (navaids) on the breakwater and jetty will conform to the recommendations of the International Association of Lighthouse Authorities. Navaids will be located such that they can be maintained.</p>		<p>networks etc. documented</p> <p>Navigation charts modified</p> <p>Navaids installed</p>	<p>Consulting costs (all items MOS and S&SPA budget)</p>	
<p>BJ 3 PR1</p>	<p>Management Capacity of the Port to handle environmental, safety and security aspects of LNG vessels</p>	<p>Port Authority will carry out</p> <p>(i) an analysis of the adequacy of the management capacity and facilities (port reception facilities, security arrangements) and capabilities (fire fighting, emergency response) vis-à-vis its future use by LNG tankers in accordance with relevant IMO (MARPOL 73/78 and Annexes) and HELCOM requirements, EU directives and international standards, Polish Labour law /ILO regulations. and</p> <p>(ii) take necessary measures (such as training, procurement of equipment, etc.) to ensure compliance with all the requirements by the start of commissioning of the new harbour.</p>	<p>S&SPA</p>	<p>Analysis performed and plan of action in place.</p> <p>Reporting</p> <p>Relevant criteria implemented in detailed design. All requirements built into the design and EMS which will assist in ensuring that the project remains compliant.</p> <p>Training and capacity building programmes</p> <p>Procurement plans for equipment</p> <p>Respective update of the Part regulation the Port regulations that conform to highest environmental standards</p>	<p>Personnel and office cost</p> <p>Auditing time</p>	<p>Gap Analysis by June 2014</p> <p>Implementation before commissioning of the new harbour</p>

Item No. Lender s Standards Reference	Potential Impact / Issue	Mitigation / Management	Responsibility / Implementation	Monitoring / Key Performance indicators	Cost / Budget for Activity	Timeline / Milestones
				IESMC sign off		
BJ 4 PR3 / PR6	Protection of marine environment	<p>The Project will comply with IMO requirements (MARPOL 73/78 and Annexes), HELCOM recommendations and IFC guidelines where relevant.</p> <p>Regulatory Change Management: A number of IMO Conventions and/or HELCOM recommendations and EU Directives will enter into force as the Project progresses and therefore a system will be in place to incorporate any changes in the Project design or its activities.</p> <p>The aforementioned considerations will equally apply to the Project contractors and suppliers. EPC contractors and supplier shall develop and implement similar environmental management procedures relevant to its activities.</p>	MOS and S&SPA during Construction and Operation EPC contractors during marine site construction	Relevant criteria implemented in detailed design. All requirements built into an Environmental Management System (EMS) which will assist in ensuring that the project remains compliant.	Personnel and office cost Auditing time	
BJ 5 PR1	Supply Chain: LNG tanker operation	LNG transport to the Project shall be safeguarded by a Ship Owners Management System that includes the provisions of the Safety of Life at Sea Convention, including in particular Chapter IX pertaining to the International Safety Management (ISM) Code, The International Convention on Oil Pollution Preparedness, Response and Co-operation OPRC), and the International Convention on the Prevention of Pollution from Ships (MARPOL 73/78), among others. Further, it should include guidelines, codes and relevant international conventions to safeguard those additional requirements of the Baltic Sea Special Area such as those established by the Marine Environment Protection Committee (MEPC) and Maritime Safety Committee (MSC) of the International Maritime Organization (port regulation will comply with IMO and HELCOM regulations).	S&SPA responsible to check compliance	Checks and audits by S&SPA of ship owners management system in place and evidence that it includes relevant guidelines, codes and international conventions.	Personnel and office cost Auditing time	Prior to first delivery of LNG to the Project

Table 4: Pipeline

Item No. Lender 's Standard Reference	Potential Impact/ Issue	Mitigation/ Management	Responsibility / Implementation	Monitoring/ Key Performance indicators	Cost/ Budget for Activity	Timeline / Milestones	Frequency of reporting
P 1 PR5	Land Issues	As per LNG Act, the Voivode after the <i>Decision on the Location</i> will retain independent property assessors to determine value of assets and level of compensation. Information of the affected land owners and users about land acquisition process and compensation issues. Preparation of a Brochure and distribution in the project area to be undertaken and included in the SEP programme .	Gaz-System (if needed in cooperation with CLO)	Information Meetings held, Information Brochure prepared and distributed in advance of works	Personnel and office costs	Prior to pipeline construction	SEP updated annually during construction and forwarded for review. Otherwise included in AESR+ESAP Update
P 2 PR4	Emergency Response/ Public Safety	Active participation in preparation of an Emergency Response Plan, which will be consulted with the relevant response organisations that are coordinated by Crisis Management Centres of the Districts (fire brigades, police, other relevant agencies) where the pipeline route passes.(Świnoujście, Międzyzdroje, Wolin, Stepnica, Goleniów). For establishing such plans the local municipalities are responsible (in accordance with Polish regulations, inter alia Crisis Management Act) .	Gaz-System	Emergency Response Plan agreed with relevant public organisations Gaz System to notify EBRD.	Local municipalities	To be agreed with Local municipalities Prior to Operations	Within AESR+ESAP Update every 6 months at construction stage, annually at operational stage
P3 PR6	Biodiversity	Measures as specified in the Biodiversity Action Plan (BAP) shall be implemented.	Implementation by contractor Supervision by Gaz-System's Construction supervisor	Monitoring reports	Personnel and monitoring costs	On-going	Within AESR+ESAP Update every 6 months at construction stage, annually at operational stage

Table 5: Social Review

Item No.	Potential Impact / Issue	Mitigation / Management	Responsibility / Implementation	Monitoring / Key Performance indicators	Cost / Budget for Activity	Timeline / Milestones
SR1 PR5	Impacts on Local Fishermen	During Project Implementation, in order to make fishermen aware of construction times, navigation constraints and the temporary closing of the dredge spoil disposal areas, the MOS will provide appropriate information to the fishery base of Swinoujscie before any such restrictions apply	MOS (possibly in cooperation with the CLO)	Information is distributed and provided to the fishery base	Personnel and office cost	During construction – on-going.
SR2 PR2	Worker Health – construction	As part of the liaising with local medical services, the local clinics must be advised about the specific types of injuries stemming from cryogenic exposure and methane gas exposure and encourage them to be trained and equipped to treat such injuries.	PLNG	Meeting protocols Correspondence from clinics confirming ability to handle such specific medical treatments	Personnel and office cost	On-going
SR3 PR2	Worker health – Operation stage	<p>At least six months prior to the operation a suitable and sufficient First Aid Needs Assessment (FANA) is to be undertaken to assess the first aid provisions necessary for the commissioning and operational phases of the Project. The provisions should take account of the;</p> <ul style="list-style-type: none"> • workplace hazards and risks • the nature of the undertaking and accidents associated with similar facilities • the size of the establishment and distribution of employees • the location of the establishment and the locations to which employees go in their workplace; and • Emergency facilities available in the local area. <p>Following the assessment all first aid provisions which have been identified from assessment, shall be put in place prior to commissioning.</p>	PLNG	Revised FANA	Personnel and office cost First Aid equipment costs	Prior to operation of terminal