



SUSTAINABILITY
FUTURE GROWTH

NON-TECHNICAL SUMMARY

FINAL REPORT OF THE:

INDEPENDENT ENVIRONMENTAL & SOCIAL CONSULTANT

**ENVIRONMENTAL & SOCIAL REVIEW AND AUDIT OF THE
LUKOIL OVERSEAS SHAH DENIZ - STAGE 2 OF THE SHAH DENIZ
PROJECT**

AZERBAIJAN

September 2015



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INTRODUCTION

An environmental and social review and audit of the Shah Deniz Stage 2 (SD2) oil and gas development Project, located in Azerbaijan, has been completed by independent environmental and social consultants engaged by a lender group considering financing of Lukoil Overseas Shah Deniz (LOSD), a 10% shareholder of the BP Caspian operated Shah Deniz Company. This report is a non-technical summary of the Environmental and Social review findings.

The European Bank for Reconstruction and Development (EBRD) is leading the environmental and social review for possible financing of the SD2 Project on behalf of a group of Lenders including the Bank of China and Asian Development Bank. The Lender Group is considering finance to LOSD as a joint venture member, but not the operator, of the Shah Deniz Company.

The Shah Deniz gas field lies approximately 100km south east of Baku, within the Azerbaijani sector of the Caspian Sea. Development of the field is being pursued in stages under the terms of a Production Sharing Agreement (PSA) between the State Oil Company of the Azerbaijan Republic (SOCAR) and a consortium of foreign oil companies, including LOSD.

The SD Stage 1 development, which commenced production in 2006, includes a fixed platform with drilling and processing facilities limited to the separation of gas and liquids and two marine export pipelines to transport gas and condensate to onshore reception, gas-processing and condensate facilities at the Sangachal Terminal located approximately 50km south-west of Baku.

The SD2 represents the second stage of development of the Shah Deniz field.

OBJECTIVES AND SCOPE OF REVIEW AND AUDIT

To comply with the Project Lender environmental and social policies, the SD2 Project requires a comprehensive Environmental and Social Impact Assessment (ESIA) that clearly identifies the environmental and social impacts of the Project, assesses the extent and magnitude of these impacts and describes how the Project will either avoid, reduce or otherwise manage impacts to meet national and internationally accepted standards. Based on this requirement, the Lender Group engaged Sustainability Pty Ltd (Sustainability) as an Independent Environmental and Social Consultant (IESC) to review the existing ESIA documentation and conduct an environmental and social compliance audit of the existing facilities.

The objective of the environmental and social review and audit is to provide an independent assessment of the Project's environmental and social performance, including the ESIA, against the Lender Group environmental and social performance standards, requirements and policies. The review and audit has focused on evaluating social and environmental changes brought about by the Project and on assessing the implementation and effectiveness of proposed mitigation measures. The basis for evaluating the Project in terms of Lender policies is defined as follows:

- Equator Principles III 2013;
- International Finance Corporation (IFC) Sustainability Framework – 2012; including the Environmental and Social Performance Standards
- IFC General Environmental Health and (EHS) Guidelines 2007;
- IFC EHS Guidelines for Onshore Oil and Gas Developments 2007;
- IFC EHS Guidelines for Offshore Oil and Gas Developments 2007;

- EBRD Environmental and Social Policy (2014) and Performance Requirements;
- EBRD Sub-Sectoral Environmental and Social Guidelines: Petroleum and Coal Products;
- ADB Safeguard Policy Statement and other social requirements (ADB Gender and Development Policy, ADB's Policy on Incorporation of Social Dimensions into ADB Operations, and ADB's Public Communications Policy);
- The Project's Environmental and Social Management Plans; Environmental and Social Action Plans; Stakeholder Engagement Plans including internal and external grievance mechanisms; and health and safety provisions and record for the Project;
- Applicable national laws in Azerbaijan;
- Conformance with international environmental agreements and good international practices; and
- Any other environmental or social regulation or standard as the Lender Group may indicate they expect to apply to the Project.

The environmental and social review and audit outcomes are provided in the full IESC report, which is the subject of this non-technical summary.

The scope of the environmental and social review of the SD2 Project consists of:

- A fixed platform complex, denoted SD Bravo, that includes 2 new bridge linked platforms:
 - A Production and Risers platform; and
 - A Quarters and Utilities platform.
- Subsea manifolds, associated well clusters and flowlines. The subsea development incorporates a total of 26 wells, drilled using mobile drilling rigs ;
- New subsea gas and condensate export pipelines to the onshore terminal facilities and a dedicated monoethylene glycol import pipeline from the Terminal to the platform complex; and
- Onshore processing facilities for the SD2 Project within an expansion area at the Sangachal Terminal.

The scope of the SD2 Project includes the design and construction of the gas export compression, metering and associated utilities at the Sangachal Terminal, but does not include the work involved in a separate project to expand the capacity of the existing South Caucasus Pipeline, which transports gas from the Terminal to its customers. Although the gas export pipelines are not directly included in the proposed Project financing, these are subject to the environmental and social review as these facilities are considered to be within the Project's area of influence.

REVIEW METHODOLOGY AND CONTEXT

The independent environmental and social review and audit was undertaken by a team of suitably qualified and experienced environmental and social consultants who completed the assessments based on a review of publicly available environmental and social documentation and information provided by LOSD in response to the reviewer requests. This included review of the ESIA documentation and associated environmental and social reports, plans, policies and strategies. Documentation reviewed to assess the level of environmental and social performance included construction phase management plans, procedures, audit reports, records of inspection, training records, incident investigations and monitoring data. Worker health and safety document reviews included planning phase and construction phase occupational health and safety policies, plans and strategies; safety statistics; audits and inspections, and; risk assessment methodologies and outcomes.

Information was obtained from discussions with relevant Shah Deniz Project personnel and site visits, including:

- Meetings with the Project design personnel at the Project design team offices in Leatherhead, UK on 17 November 2014;
- Meetings and interviews with the Shah Deniz Project team in Baku, Azerbaijan on 20 November 2014;
- A site visit to the Sangachal Terminal construction site on 21 November 2014 which included meetings with construction health, safety and environment personnel and an overview of the current construction site for the terminal expansion.

An initial Draft Environmental and Social Review and Audit Report were submitted subsequent to the site visit on 27 February 2015 for circulation, review and comment by the Lender Group. The draft report identified a number of evidence gaps that prevented demonstration of Project compliance with the Lender Group policies and performance standards/requirements. LOSD facilitated additional environmental and social discussions with the operator and a document request to address the evidence gaps. An additional package of environmental and social information was provided by LOSD to Sustainability on 27 April 2015. Furthermore, additional specific information regarding initial IESC findings was supplemented from meetings with the SD2 operator on 25 June 2015 at the Project design team offices in Leatherhead, UK. This additional information assisted in demonstrating compliance with Lender standards and policies for specific issues that were not fully documented in the disclosed ESIA. The report findings have been updated accordingly in the final report that is summarised in this Non-Technical Summary.

The scope of the environmental and social review of the SD2 Project included a review against Lender Group environmental and social performance standards, requirements and policies that differ from the environmental and social criteria and impact assessment and management methodologies applied to the SD Project through both statutory requirements and Operator (BP) standards. These differences are recognised by the IESC with the review and audit findings discussed within the context of the intent of the Lender Group requirements and policies rather than a systematic assessment of compliance that may otherwise apply in the case of an ESIA being developed with the objective of meeting Lender Group environmental and social criteria.

The environmental and social review and audit findings also recognised that LOSD, as the party seeking finance from the Lender Group, is not the Operator of the Shah Deniz project and has limited ability to influence the environmental and social performance and is also limited in the ability to facilitate the Project's demonstration of environmental and social performance in compliance with Lender Group policies and standards. To that end, the IESC findings recognise that compliance with Lender Group obligations is assessed on the basis of information that may be incomplete and with limited access to the operator or its contractors. Where incomplete or limited information was available to demonstrate compliance with Lender Group standards and policies, the IESC has considered past performance and practices applied at the Shah Deniz project and applied professional judgements based on knowledge of the Operator's practices, policies and management systems applied globally.

KEY PROJECT ENVIRONMENTAL AND SOCIAL ASPECTS AND IMPACTS

The SD2 ESIA has identified and assessed environmental and social aspects and impacts drawing on a wide range of environmental, social and heritage surveys undertaken since 1999. Environmental impacts have been identified and assessed for the following phases of the project: Drilling and Completion; Construction, Installation, Hook-up and Commissioning; and Operations.

The impacts of all aspects of the offshore drilling and completion programme were predicted to be of minor negative significance, with adequate controls, monitoring and mitigation measures that have been applied for Shah Deniz drilling over the life of the Project. The ESIA described the key waste mitigation associated with offshore drilling activities including the selection of drilling methodologies and drill chemicals to ensure that discharges to the sea and sea floor are minimised. Water-based muds used for drilling are separated from drill cuttings as far as practicable and re-used; additives used during offshore drilling activities are low toxicity (UK HOCNS "Gold" and "E" category or equivalent toxicity). No mineral oil based muds are discharged to the sea during drilling. All oil-based muds and associated cuttings used for lower hole drilling are returned to the drill rig and separated for reuse where practicable, and the remainder returned to shore for disposal.

Significant residual negative impacts were identified from the Construction, Installation, and Hook-up and Commissioning phase of the Project, which includes:

- Expansion of Sangachal Terminal to accommodate SD2 facilities (including temporary facilities for construction and construction workers);
- Installation and commissioning of gas and condensate export lines, and a monoethylene glycol import line, between the Shah Deniz Bravo platform complex and the new Sangachal Terminal facilities;
- Installation and commissioning of the subsea flow lines and associated subsea infrastructure;
- Onshore construction and pre-commissioning of the platform topsides and jackets; and
- Offshore installation and hook-up and commissioning of the platform complex.

Atmospheric emissions and noise associated with onshore construction at the Sangachal Terminal, onshore and near shore pipelay and construction at the yards were predominantly predicted to result in impacts of moderate negative significance. Additional measures to reduce noise impacts associated with terminal construction plant and vehicles include completion of a detailed noise assessment immediately prior to works commencing, completion of work plans to include when noisy works are anticipated (to be communicated to the local communities) and noise monitoring prior to and during construction focused on identifying and addressing the reasons for any breach of the relevant noise limit. Discharges to the marine environment associated with pipeline and flowline pre-commissioning were also assessed as having a moderate negative impact. The marine impact of other offshore installation and hook-up and commissioning activities were predominantly assessed as being of minor negative significance.

During operations, noise and emissions associated with onshore terminal activities were assessed as being of moderate negative significance. Impacts associated with offshore activities during operations were predominantly assessed as being of minor negative significance. Impacts associated with odour due to the anticipated non-routine use of ponds for produced water storage were assessed to be of moderate adverse impact, taking into account existing controls and additional mitigation, which includes use of a treatment package to manage any potential breach of air quality thresholds from the produced water stored in the pond and evaluation of odour control techniques to be included in the design, if practicable.

The following socio-economic interactions resulting from Project activities were identified within the Project ESIA based on the anticipated Project activities:

- Employment creation and de-manning;
- Training and skills development;
- Procurement of goods and services (including construction yard operations and their workers);
- Disruption to fishing and commercial shipping operations; and
- Offsite construction vehicle movements and an associated increased risk to community health and safety.

Survey work indicated that those individuals and groups most likely to be affected by project activities include:

- The local communities of Sangachal Town, Umid, Masiv 3 and Azim Kend, which are the four main settlements in the vicinity of the Terminal;
- Recreational, small-scale and artisanal fishermen, commercial fishermen and recreational users of the shoreline;
- Users of regional road infrastructure;
- Local, regional and national businesses and their staff (including the contractors and workers at construction yard operations); and
- Owners and the crew of vessels engaged in commercial shipping operations and local government authorities responsible for regulating such activities.

The assessment predicted predominantly positive impacts in terms of employment, training and skills development and procurement of goods and service with potential negative impacts (e.g. disruption to fishing and shipping) minimised through the use of appropriate plans and mitigation.

ENVIRONMENTAL AND SOCIAL MANAGEMENT

Control measures to mitigate impacts to the marine environment from routine and non-routine discharges associated with the Project and associated reporting requirements are detailed within the SD2 ESIA. These include design and operating principles (e.g. no planned discharge of non-water based mud), facility maintenance regimes, appropriate chemical selection and monitoring to confirm effective operation and/or confirm compliance with standards.

Monitoring and reporting procedures and documentation requirements for the each Project phase are included within BP Azerbaijan's Health, Safety, Security and Environment (HSSE) Policy. Once operational, the Project commits to develop a set of specific monitoring, management and reporting procedures based on, and consistent with, the procedures already in use on existing BP operated Shah Deniz and Azeri-Chirag-Guneshi platforms.

The Project Health Safety and Environment (HSE) Plan has been developed for the construction phase of the Project and describes how occupational health, industrial hygiene, safety, legal and regulatory compliance and environment and social responsibility impacts and risks will be managed in conformance with applicable BP requirements. The HSE Plan provides an overarching framework for the implementation of safety and environmental management programs required for the construction Phase of the Project.

The Project delivery teams are required to use the Environmental and Social Management and Monitoring Plan (ESMMP) as the framework to deliver the environmental and social requirements, as defined by applicable legal, contractual and other requirements, including ESIA commitments. The ESMMP includes specific requirements for various work packages to manage and monitor environmental performance against the Environmental Design Verification Register, and the Environmental and Social Compliance Register that includes ESIA commitments. The ESMMP includes management plans designed to implement the environmental and social requirements during construction and includes:

- **Restoration and Landscape Management Plan** – landscape management; soil management during construction; site restoration; spoil management; training; monitoring and reporting.
- **Waste Management and Minimisation Plan** – waste hierarchy, procurement; classification; waste registers; handling; training; monitoring and reporting.
- **Ecological and Wildlife Management Plan** – baseline surveys; inspections; protection during construction; training; monitoring and reporting.
- **Pollution Prevention Management Plan** - energy efficiency; emissions management; wastewater management; sewage treatment and disposal; chemical management; noise and vibration; contaminated soils; training; monitoring and reporting.
- **Community Engagement and Nuisance Management and Monitoring** – nuisance management and monitoring (noise, light, odour, vermin).
- **Archaeology and Cultural Heritage Management** – protection of known CH resources; chance find procedure; watching brief procedure; training; monitoring and reporting.
- **Spill Prevention, Response, Notification and Close-Out Actions** – spill prevention; training; monitoring and reporting.
- **Traffic and Transportation Management Plan** – driver training, onsite and offsite vehicle movements; risk assessments for transport of heavy loads; monitoring and reporting.

- **Employee Relations Management Plan** – training and skill development; grievance mechanism; de-manning; monitoring and reporting.

FINDINGS AGAINST LENDER GROUP REQUIREMENTS AND POLICIES

The IESC assessment findings are discussed under the headings below, with specific reference to those findings where compliance with the Lender Group environmental and social criteria have not been fully demonstrated. The review and audit findings are presented against the relevant Lender Group requirements that have been aggregated where these requirements are similar.

ENVIRONMENTAL AND SOCIAL MANAGEMENT / STAKEHOLDER ENGAGEMENT

(IFC Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts / EBRD PR 1: Environmental and Social Appraisal and Management / EBRD PR 10: Information Disclosure and Stakeholder Engagement / EBRD Sub-sectoral Guidelines / Equator Principles 2 – 6 / ADB Safeguards Policy Statement)

Scope of ESIA

The environmental and social impacts have been assessed through a systematic process applied for all Project components as identified through the ESIA scoping and through engagement with key Government stakeholders in Azerbaijan. The environmental and social assessment includes the SD2 Project ESIA, which incorporates an assessment of the expansion of offshore wells and production facilities within the Shah Deniz Contract Area production field, expansion of the onshore Sangachal Terminal processing facilities, and the marine export pipelines that connect the offshore facilities with the onshore Terminal. The ESIA also includes the design and construction of the export compression, metering and associated utilities for Southern Caucasus Pipeline Expansion Project at the Terminal. The ESIA covers the construction, commissioning, offshore platform hook-up and commissioning, start-up and operation of all the Project facilities. The ESIA for the Project does not include assessment of works that were subject to previous statutory approvals from national Azerbaijani authorities, including a number of Environmental Technical Notes (ETN) developed for offshore pre-drilling and drilling activities undertaken within the Shah Deniz field. The pre-drilling and drilling ETN documents were completed using a systematic environmental and social assessment process that is consistent with the SD2 ESIA. However, the level of detail and extent of the ETN documents is somewhat limited and abbreviated to key issues only, e.g. the ETNs do not include broad stakeholder engagement or public disclosure.

A separate ESIA was conducted and approved by the MENR for early site works for the Terminal expansion - the SD2 Infrastructure ESIA (9 December 2011), which includes site access, construction facilities, earthworks and drainage works.

ESIA assessment methodology

The review and audit findings identified a comprehensive environmental and social impact assessment process has been undertaken for the SD2 Project, which is the latest assessment for the SD Project that was initially subject to ESIA for Stage 1 in 2002. The 2014 ESIA for SD2 has been developed from a body of knowledge gained from operation of the Stage 1 Project since 2006 and the associated environmental and social monitoring and management programmes that have continued since the initial ESIA studies. The operational knowledge gained from the SD Project, together with the understanding gained on the environmental and social aspects of the Project, have informed the identification, scoping and assessment of impacts for the 2014 SD2 ESIA.

In general, the ESIA provides a systematic and detailed assessment of the significant environmental and social aspects of the SD2 Project. Baseline environmental and social data are comprehensive, being developed from monitoring programmes refined over a 10-year period. The impact assessment methodology is sound and consistent with Good International Industry Practice (GIIP). The impact assessment scoping process used for

the SD2 ESIA has applied past Project experience to identify those environmental and social aspects that are likely to be significant for SD2. This process allows the SD Project Operator to design the SD2 Project such that significant impacts are avoided where possible or substantially mitigate those impacts using proven methods and technology.

Environmental objectives

The overarching environmental performance objectives for the Shah Deniz project are included in the Project specific Environmental Protection Standards (EPS) developed by a working group consisting of Azerbaijani Government departments, regulators and academic institutions. However, the EPS are yet to be endorsed by the MENR and therefore these standards do not yet have legal force. Until such time as the EPS are fully authorised, the Project must comply with the more generic environmental standards included in the Product Sharing Agreement and which describe the standards and practices common for international petroleum industry that were in existence at the time the PSA was signed - 1996. The ESIA (Chapter 2/5) states that the SD2 Project will comply with the intent of current national legislation where those requirements are consistent with the provisions of the PSA, and no not contradict, or are otherwise incompatible with, international petroleum industry standards and practice.

Area of influence

The IESC found that the Project area of influence is not fully described for all Project activities and phases resulting in limited demonstration that the environmental and social management programmes are sufficient to mitigate impacts. The area of influence is identified for the Sangachal Terminal expansion based on social baseline and modelled impacts from the construction and operational phase of the Project. However, similar assessments are not provided for other Project activities described in the ESIA, specifically construction yard sites.

The reported specific socio-economic baseline conditions do not appear to have been used to carry out an evidence-based social impact assessment. Impacts to villages neighbouring the Sangachal Terminal – and other areas of social influence – are not differentiated to reflect their different circumstances in the impact assessment. The baseline social data provided in the ESIA appears to be of insufficient detail to allow effective monitoring of the effectiveness of social impact management programmes within affected communities.

Management systems and plans

The IESC notes that the Project has various management plans in place for its existing Shah Deniz operations, and that Construction phase management and monitoring programmes favour impact and risk avoidance. They include measurable targets and indicators and assign clear roles and responsibilities for time bound implementation. However, there are some deficiencies identified in social management plans, including unplanned but predictable developments such as the failure to prescribe management planning response where monitoring demonstrates Project related population influx into local communities.

Environmental and Social Management Plans have not been disclosed with the ESIA, which is a requirement of Lender performance standards. However, there is sufficient evidence to suggest that the ongoing community engagement processes in place for the SD Project include a structured and systematic engagement process with local communities, that communicates potential impacts and how the Project proposed to manage and mitigate these impacts. Furthermore, the Operator has communicated and presented the results of various studies and monitoring data regarding dust, noise and health impacts to the communities surrounding the terminal. The intent of lender standards in regards to the disclosure of environmental and social management plans can therefore be partially demonstrated through the record of engagement with affected communities in regard to these management and mitigation measures. However, the IESC recommends that full disclosure of the

documented management plans for the SD2 Project would ensure full compliance with Lender standards, policies and GIIP.

The IESC notes in the audit that the Operator has assembled a team of competent professionals to manage the environmental and social performance function from within the Operator's team supported by external experts as required, such as in development and delivery of the ESIA's.

Stakeholder engagement, consultation and disclosure

The ESIA documents the disclosure steps that were taken (namely, scoping consultation workshops and draft ESIA report release for consultation), as well as the high level issues that were raised during the consultation process. The ESIA consultation was recognised as being appropriately undertaken, with evidence from past communications demonstrating that issues raised by local communities have informed the SD2 Project's local employment targets established for construction activities. Outside of the ESIA-specific engagement meetings, records of consultation meetings were reviewed from the SD2 Project Engagement Log from December 2010 through to March 2015 in the communities of Umid, Sangachal Village and Azim Kend.

It is not evident that efforts were made to also engage with those communities who may be impacted by associated facilities (construction yards, waste facility), or whether third parties in cooperation with the Operator to achieve this purpose carried out any consultation.

Monitoring

The Shah Deniz operator has implemented an Environmental Monitoring Programme (EMP) designed to provide a consistent, long-term set of data, with the objective of ensuring an accurate picture of potential impacts on the surrounding environment. The EMP follows a 10 year schedule and detailed monitoring plans are prepared for the next 3 years, with outline planning for the following 7 years. Offshore marine monitoring has been conducted with the primary focus being the benthic environment as sediments and their associated biological communities are widely considered to be the source of the most reliable indicators of ecological status and impact.

In terms of onshore terrestrial operations, effort has focused on environmental monitoring in the vicinity of the Terminal in the form of terrestrial ecosystem monitoring, bird surveys, ambient air quality monitoring, and groundwater and surface water quality monitoring. In addition, nearshore fish monitoring and bio-monitoring has been conducted within Sangachal Bay and future surveys are proposed to be conducted in accordance with the 10 year schedule.

The ESIA describes the process of expansion of the environmental monitoring programme for the SD2 Project, to integrate operational monitoring of key discharges carried out by the Operator. The aim of regular monitoring is to establish an understanding of trends over time, taking into account results of concurrent regional surveys and initial baseline data. Combined with operational discharge monitoring, this approach provides a robust basis for assessing the impact of Project operations, and for comparing the observed impact with that predicted in the ESIA.

LABOUR AND WORKING CONDITIONS

IFC Performance Standard 2: Labour and Working Conditions / EBRD PR 2: Labour and Working Conditions

No substantial deficiencies were identified against labour and working conditions criteria.

RESOURCE EFFICIENCY AND POLLUTION PREVENTION

(IFC Performance Standard 3, EBRD Performance Requirement 3, ADB Safeguard Policy Statement).

No substantial deficiencies were identified against resource efficiency and pollution prevention criteria.

COMMUNITY HEALTH, SAFETY AND SECURITY

IFC Performance Standard 4: Community Health, Safety and Security / EBRD PR 4: Community Health, Safety and Security

Community health, safety and security issues are not specifically assessed in the SD2 or the Early Infrastructure Works ESIA documents (for example, antisocial behaviour and social conflict), or they are scoped out (for example, road/rail disruption, health and safety risks and impacts as a result of onshore pipeline works).

The Operator has described health, safety and environment leadership, planning and management, legal and regulatory framework, health and safety, security, environmental and social responsibility, contractor management and self-verification in the Programme HSE Management Plan for the construction phase of the Project, demonstrating an established system in place for addressing emergencies and other hazards that may impact communities. As with other management plans, the specific documented plans have not been publicly disclosed, which is inconsistent with the intent of the Lender Group policies and requirements. However, records of community engagement reviewed by the IESC included communications, via public meetings, provided to potentially impacted communities on the measures proposed in response to emergencies and specific mitigations taken to ensure community safety during construction and operations.

INVOLUNTARY RESETTLEMENT

IFC Performance Standard 5: Land Acquisition and Involuntary Resettlement / EBRD PR 5: Land Acquisition, Involuntary Resettlement and Economic Displacement

The Project ESIA discusses options to optimise land take with the intention of avoiding or minimising environmental and social impacts in the Project design stage. However, the Project does result in some economic displacement of fishing households as a result of the construction activities surrounding the shore crossing of the gas export and MEG pipelines.

Impact assessment on enforcement of the marine exclusion zone recognised the potential impact to small-scale fishermen, resulting in a fishing livelihood baseline survey being undertaken to gather additional information on small-scale fishing activities within Sangachal Bay and the nearshore environment. The baseline determined that livelihood restoration is required to compensate the fishermen's temporary loss of access to natural resources of the Bay. The Project has developed and implemented as Fishing Livelihoods Management Plan (FLMP) which describes the mechanisms to be used to engage with Project-affected fishing households, the validation of information underpinning the impact assessment and to ascertain their preferences and priorities in relation to mitigation measures. Further, the Plan specifies measures to address the needs of vulnerable fishing households.

The Project has reached agreements with the identified impacted fishermen households, including support workers. The IESC has reviewed the details of compensation measures which have been made to affected households and which are subject to further payments in accordance with the agreements made. Evidence of effective engagement with affected fisherman has been reviewed including minutes of meetings, participant registers and information presented to the relevant parties.

The IESC reviewed the basis of compensation entitlements and the basis for determining eligibility for compensation. These monetary compensation measures have been subject to a verification process and were amended as an outcome of the engagement process with the affected fisherman. A specific grievance process

has been implemented for the FLMP with records of recent grievances raised by fisherman who were not identified as eligible for livelihood restoration. The SD2 Project has advised that these grievances are being investigated and acted upon in accordance with the established process documented in the FLMP Grievance Procedure.

The IESC notes that the SD2 Operator has not publicly disclosed FLMP and that such disclosure is necessary to fully comply with Lender policies and requirements. The IESC recommends that the FLMP be made publicly available.

BIODIVERSITY CONSERVATION AND SUSTAINABLE MANAGEMENT OF LIVING NATURAL RESOURCES

IFC Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources / EBRD PR 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources

No significant deficiencies identified by the IESC.

INDIGENOUS PEOPLES

IFC Performance Standard 7: Indigenous Peoples / EBRD PR 7: Indigenous Peoples

It is considered that the criteria for Indigenous Peoples are not triggered for this Project.

CULTURAL HERITAGE

IFC Performance Standard 8: Cultural Heritage / EBRD PR 8: Cultural Heritage

Tangible heritage

The IESC notes a lack of evidence of targeted consultation relating to cultural heritage with individuals or groups with specialist interests, outside the regulatory bodies.

EBRD PR 8: Cultural Heritage

Intangible heritage

The Lender standards require the assessment of intangible cultural heritage. The Project footprint is relatively contained and occupies land/marine routes that are not expected to restrict communities/households' preservation of intangible cultural traditions or practices. Moreover, the social baseline studies undertaken and interface with the Institute of Archaeology and Ethnography have not indicated any risk created by SD2 Project on this issue.

CONCLUSION

The review and audit findings identified a comprehensive environmental and social impact assessment process has been undertaken for the SD2 Project, which is generally considered to be a high standard, consistent with GIIP. The ESIA represents the latest assessment for the SD Project that was initially subject to ESIA for Stage 1 in 2002. The 2014 ESIA has been developed from a body of knowledge gained from operation of the Stage 1 Project since 2006 and the associated environmental and social monitoring and management programmes that have continued since the initial ESIA studies. The operational knowledge gained from the SD Project, together with the understanding gained on the environmental and social aspects of the Project have informed the identification, scoping and assessment of impacts for the 2014 Project ESIA.

Lender requirements in regards to disclosure of environmental and social management programmes, including EBRD's PR1 (paragraphs 14 and 15) and PR10 (paragraph 17): The publicly available ESIA and supporting documents do not include an Environmental and Social Action Plan and did not include all of the proposed mitigation measures and implementation issues, specifically, the Environmental and Social Management Plans. This includes the Stakeholder Engagement Plan and the Fishing Livelihood Management Plan (FLMP). However, the IESC has observed evidence of engagement with potentially impacted communities, including the fisherman at Sangachal Bay that demonstrates that there has been effective disclosure of environmental and social management and mitigation measures, including livelihood restoration plans, through public meetings and targeted stakeholder meetings. The IESC has also reviewed all of the ESMPs and these are consistent with GIIP. Moreover, the FLMP is now available through links on the EBRD and ADB website.

In general, the ESIA provides a systematic and detailed assessment of the significant environmental and social aspects of the Project. Baseline environmental and social data are comprehensive, being developed from monitoring programmes refined over a 10-year period, although some limitations of social baseline have been identified for the onshore components of the Project, which are located away from the Sangachal Terminal and surrounding areas (including the construction shipyards). The impact assessment methodology is sound and consistent with GIIP. The impact assessment scoping process used for the ESIA has applied past Project experience to identify those environmental and social aspects that are likely to be significant for SD2. This process allows the Operator to design the Project such that significant impacts are avoided where possible or substantially mitigated using proven methods and technology.

The deficiencies identified through the environmental and social audit are largely due to differences between the environmental and social performance criteria applied by the Lender Group and the compliance requirements applied for the SD Project, which are reflected in the ESIA, including the statutory requirements and the Project Operator (BP) standards. The most significant variation from Lender Group standards and policies relates to the lack of public disclosure of documented environmental and social management plans and stakeholder engagement plans developed for the construction and operational phases of the Project.

The IESC notes that some deficiencies identified through the ESR and audit may have resulted from to limited access provided to the IESC to Project information. It is recognised that LOSD, as the party seeking finance from the Lender Group, is not the operator of the SD Project and has both limited ability to influence the environmental and social performance and limited ability to demonstrate the Project's environmental and social compliance with Lender Group policies and standards.