



SUSTAINABILITY

FUTURE GROWTH

Client: Bank of China

Independent Environmental and Social Consultant's Monitoring Report for the Shah Deniz II – Gas Field Expansion Project

May 2017 – October 2017



Photographs taken from SD2 Project Monthly Reports.

Report Details

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Acronyms and Abbreviations

ADB	Asian Development Bank
ATA	Amec-Tekfen-Azfen
bcma	billion cubic meters per annum
BDJF	Baku Deepwater Jacket Factory
BOP	Blow Out Preventer
BTC	Baku-Tbilisi-Ceyhan
CHSS	Community, Health, Safety, and Security
EBRD	European Bank for Reconstruction and Development
ECAs	Export Credit Agencies
EHS	Environment, Health and Safety
EIA	Environmental Impact Assessment
EITI	Extractive Industries Transparency Initiative
EITC	Extractive Industries Transparency Commission
EIW	Early Infrastructure Works
EMP	Environmental Management Plan
EPs	Equator Principles
EPS	Environmental Protection Standards
ES	Environmental and Social
ESAP	Environmental and Social Action Plan
ESHS	Environmental, Social, and Health and Safety
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESMS	Environmental and Social Management System
FFD	Full Field Development
FGR	Flare Gas Recovery
FID	Final Investment Decision
FLMP	Fishing Livelihoods Management Plan
GHG	Greenhouse Gas
GIIP	Good International Industry Practice
H&S	Health and Safety
HR	Human Resource
HSES	Health, Safety, Environmental and Social
HSE	Health, Safety and Environmental
HWTF	Hazardous Waste Treatment Facility
ICA	Intercreditor Agency
IFC	International Finance Corporation
JV	Joint Venture
KPI	Key Performance Indicator
LARP	Land Acquisition and Resettlement Procedures
IESC	Lenders Independent Environmental and Social Consultant
LOMS	Local Operating Management System
LOSD	Lukoil Overseas Shah Deniz
MEG	monoethylene glycol
MMP	Management and Monitoring Plan
MODU	Mobile Offshore Drilling Unit
MOP	Mutual Operations Plan
MP	Management Plan
MSDS	Material Safety Data Sheet
NGO	Non-Governmental Organisation
NO2	Nitrogen Dioxide
OHS	Occupational, Health and Safety
OMS	Operating Management System

PIC	Project Information Centre
PPE	Personal Protective Equipment
PSA	Production Sharing Agreement
PS	Performance Standard
PR	Performance Requirement
RAP	Resettlement Action Plan
SCP	Southern Caucasus Pipeline
SCPx	SCP Expansion
SD	Shah Deniz
SD2	Shah Deniz Stage 2
SDB	SD Bravo
SDB-PR	SDB Production and Risers
SDB-QU	SDB Quarters and Utilities
SEP	Stakeholder Engagement Plan
SGC	Southern Gas Corridor CJSC
SMP	Social Management Plan
SOCAR	State Oil Company of the Azerbaijan Republic
SOP	Standard Operating Procedure
SPS	Safeguard Policy Statement
ST	Sangachal Terminal
Sustainability	Sustainability Pty Ltd
TAP	Trans Adriatic Pipeline
TANAP	Trans Anatolian Pipeline
TKAZ	Tekfen Azfen Alliance (construction contractor)
TSP	Total Suspended Particle

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Executive Summary

Introduction

Sustainability Pty Ltd (Sustainability) was appointed as the Lenders' Independent Environmental and Social Consultant (IESC) by the Bank of China, acting as Inter-Creditor Agent (ICA) for the Lender group financing Lukoil Shah Deniz (LOSD). This report details the IESC's desk-based monitoring exercise for the period May 2017 – October 2017. It presents the IESC's understanding and assessment of the Project's compliance against Lender standards and provides the status of the Project's environmental and social performance based on information provided by the Project Operator.

Summary of Key Findings

The following table provides a summary of the key monitoring findings for this desk-based monitoring exercise for the period May 2017 – October 2017.¹ The table shows any newly open items, any follow-ups on issues identified in previous environmental and social monitoring, as well as any closed recommendations related to previously open issues. Items in the table are identified by number of the audit (X.Y), where Y is the related action item number. The text descriptor may be updated in subsequent monitoring exercises to reflect current conditions; however, the item number will remain as this reflects the same broad issue and its evolution to closure. The relevant project standards and/or reference to the applicable Lender Environmental and Social Standards to which the issue refers are also included.

All issues are categorised as High, Medium, Low, or Observations, reflecting the level of non-conformance in terms of the magnitude and/or on time frame in which an impending risk might occur (short-term, medium-term, long-term). Descriptions of the categories are as follows²:

- **High:** Level III critical non-conformance;
- **Medium:** Level II non-conformance;
- **Low:** Level I non-conformance;
- **Observation**

In summary, the IESC notes:

- There remain no high or medium level non-compliances.
- 2 low non-compliances, and 1 observation were able to be closed during this monitoring exercise.
- 5 observations remain open at this this monitoring exercise.
- No new non-conformances or observation findings were added during this monitoring exercise for the period May – October 2017.
- The SD2 Project has continued to operate at a high standard, in compliance with Lender requirements during this monitoring period.

¹ This table is provided in further detail in Section 3.2.

² See Section 3.1 for detailed definitions of non-conformance.

Visit / Issue #	Monitoring Exercise	Closing Date	Description	Non-conformance	Ref	Status	Comments / Report Reference
Stakeholder Engagement and Grievance Management							
1.1	Sep 15 May 16 Apr 17 Oct 17	Oct 17	Disclosure of the Project management plans	Low	IFC PS1 SEP EBRD PR 10	Closed	In September 2017, the Operator published a detailed “Summary of Shah Deniz Stage 2 Environmental and Social Management” on its website, thereby fulfilling the requirements for public disclosure. The IESC notes that the Operations Management Plans will shortly supersede those for Construction, and recommends that these are similarly publicly disclosed online, including at the local community level in an appropriate format.
1.2	Sep 15 May 16 Apr 17 Oct 17		Consultation with affected communities, including communities in the areas of the associated facilities, and key stakeholder groups.	Observation	IFC PS1 SEP EBRD PR10	Open	Summary evidence of stakeholder engagement at the construction phase does not provide sufficient details on responses to affected communities, summary feedback and adjustment to management plans as a result of consultations. Verification on effectiveness of engagement with stakeholders is sought by the IESC for the next site visit.
1.3	Sep 15 May 16 Apr 17 Oct 17		Procedure for external communications with external stakeholders, including verification with stakeholders.	Observation	IFC PS1 SEP EBRD PR10	Open	The procedure for external communications, including the methods for screening, tracking and the resulting response in the management system, has not been evidenced and could not be verified by the IESC with stakeholders.
1.4	Sep 15 May 16 Apr 17 Oct 17		IESC unable to verify that the grievance mechanism is operational and effective for affected communities	Observation	IFC PS1 SEP EBRD PR10	Open	Project data has been provided on grievances however the IESC has been unable to verify this issue with any external stakeholders. This includes on grievance mechanism operation and grievance summary feedback to affected communities
2.10	Apr 17 Oct 17		IESC verification required of independence of newly established EITC process, including reporting criteria, and ability of civil society to participate in the resource governance space (and	Observation	IFC PS1 EBRD PR10	Open	Azerbaijan withdrew from the Extractive Industries Transparency Initiative (EITI) in 2017 and established its own initiative, the Extractive Industries Transparency Commission (IETC). IESC is concerned about the potential lack of independent oversight of the EITC, and the ability for the EITC to choose its own reporting criteria which may exclude those areas for which Azerbaijan was suspended from the EITI. The IESC is reassured by the Operator's

			by association, open and free engagement with the Operator).				October 2017 update, including independent international oversight of the EITC, and inclusion of civil society actors in EITC processes. Follow-up at the next site visit to assess ongoing progress.
Community Health, Safety, and Security							
1.7	Sep 15 Apr 17 Oct 17		No monitoring or management plan in place to determine or respond to potential impacts to communities in the Project area due to population influx. Verification sought with external stakeholders.	Observation	IFC PS4 IFC EHS 23	Open	Influx was scoped out at the ESIA Phase due to a closed camp, however with demobilisation ongoing of the construction workforce and fewer forward employment opportunities available in the current Azeri market, the mechanism for tracking potential impacts of the demanned workforce on communities remains unclear. Verification with external stakeholders is additionally sought by the IESC.
Resettlement and Livelihoods Improvement							
1.8	Sep 15 May 16 Apr 17 Oct 17	Oct 17	Disclosure of the Fishing Livelihoods Management Plan (FLMP)	Low	ADB SPS IFC PS1 EBRD PR1	Closed	In September 2017, the Operator published a detailed "Summary of Shah Deniz Stage 2 Environmental and Social Management" on its website, including the FLMP, thereby fulfilling the requirements for public disclosure. Further, the Operator has conducted extensive and ongoing consultation with affected fisherfolk on the contents of the FLMP.
2.9	May 16 Apr 17 Oct 17	Oct 17	Timely completion audit for fishing livelihoods based on results of ongoing monitoring results / feedback.	Observation	IFC PS5 ADB SPS EBRD PR5	Closed	In the May 2016 site visit, IESC noted that the Operator intended to undertake a completion audit in late 2016 and observed that this would likely be too soon to be able to clearly demonstrate that livelihoods have been sustainably restored. At the April 2017 IESC visit, the Operator advised that additional livelihood restoration measures had been undertaken in September 2016. A 3 rd Household Monitoring Survey was completed in November 2016 which surveyed all 48 fishermen (5 of whom reported a deterioration in living standards). Operator conducted additional engagement with these fishermen to further understand the reasons. The result of this engagement was reported in the October monitoring exercise, whereby the Operator had conducted the Completion Audit.

1. PROJECT SUMMARY

PROJECT NAME	Shah Deniz Stage 2 (SD2)
PROJECT LOCATION	Sangachal, Azerbaijan
NATURE OF PROJECT	Lukoil Overseas Shah Deniz (LOSD) investment into BP SD2 Project. The Project comprises upstream gas Stage 2 operations, including: <ul style="list-style-type: none"> • Two new bridge-linked offshore platforms; • 26 gas producing wells; • 500km of subsea pipelines; • Upgrades to the offshore construction facilities; • Expansion of the Sangachal Terminal (ST).
PROJECT CAPACITY	16 billion cubic meters per year (bcma) of gas production
PROJECT KEY DATES	Construction: 2014 - 2018 Target First Gas: 2018
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REPORTING PERIOD	May 2017 - October 2017 (6 months)
REPORT NUMBER	BAC002_IESC Desk-Based Monitoring Report_Rev0

2. INTRODUCTION

2.1 Background

Sustainability Pty Ltd (Sustainability) was appointed as the Lenders' Independent Environmental and Social Consultant (IESC) by the Bank of China, acting as Inter-Creditor Agent (ICA) for the Lender group financing Lukoil Shah Deniz (LOSD).

The Shah Deniz (SD) gas field lies approximately 100km south east of Baku, within the Azerbaijani sector of the Caspian Sea. Development of the oil field is being pursued in stages under the terms of a Product Sharing Agreement (PSA) between the state Oil Company of the Azerbaijan Republic (SOCAR) and a consortium of foreign oil companies, including LOSD. LOSD is a 10% shareholder of BP Shah Deniz.

The SD Stage 1 (SD1) development commenced in 2006, while this environmental and social monitoring relates to the second stage of development of the Shah Deniz field, SD2. Lender involvement and financing of the SD2 development requires both pre-finance due diligence and post-finance project construction and operation assurance related to the various environmental, health, safety, and social performance standards relevant to the Project. After the Environmental and Social (E&S) due diligence was completed in July 2015, Lenders required external and independent health, safety, environment, and community (HSEC) compliance monitoring of Project activities during construction and operations. The Lender group includes the European Bank for Reconstruction and Development (EBRD), the Asian Development Bank (ADB) and the Black Sea Trade and Development Bank.

This report details the IESC's desk-based monitoring exercise for the period May 2017 – October 2017. It presents the IESC's understanding and assessment of the Project's compliance against Lender standards and provides the status of the Project's environmental and social performance based on information provided by the Project Operator covering the period from May 2017 to October 2017.

2.2 Project Description

The SD2 Project aims to deliver 16Bcma of gas sales, with peak condensate rates of 85Mbd through the installation of additional wells within the high-pressure gas-condensate SD Contract Area located approximately 100km south east of Baku. Full Field Development (FFD) of the Shah Deniz Contract Area is being pursued in stages.

The SD1 development is in the north-eastern portion of the field and commenced production in 2006. The development included:

- A fixed platform (denoted SD Alpha) with drilling and processing facilities limited to primary separation of gas and liquids; and
- Two marine export pipelines to transport gas and condensate to onshore reception, gas-processing and condensate facilities located at the Sangachal Terminal (ST), approximately 60km south west of Baku.

Oil and gas are currently exported from ST following stabilisation and dehydration respectively via three main export pipelines:

- The Baku-Tbilisi-Ceyhan (BTC) Pipeline transports oil from ST through Azerbaijan, Georgia and Turkey to the Ceyhan Terminal located on the Turkish coast of the Mediterranean Sea. From Ceyhan the oil is distributed to international markets.

The pipeline covers a distance of 1,768km and has eight pump stations along the route with the head pump station installed at ST.

- The Western Route Export pipeline is 829km in length and transports oil from ST to the Supsa Terminal located on Georgia's Black Sea coast.
- The South Caucasus Pipeline (SCP) transports gas from ST to Azerbaijan, Georgia, and Turkey. It became operational in late 2006 and on 30 September 2006 began transporting gas to Turkey from the SD Stage 1 project. The SCP is 691km in length and runs parallel to the BTC Pipeline to the Turkish border where it is linked with the Turkish gas distribution network.

The SD2 Project represents the second stage of SD field development and is planned to comprise:

- A fixed Shah Deniz Bravo (SDB) platform complex including a Production and Risers (SDB-PR) and a Quarters and Utilities (SDB-QU) platform, bridge linked to the SDB-PR;
- 10 subsea manifolds and 5 associated well clusters, tied back to the fixed SDB platform complex by twin 14" flowlines to each cluster;
- Subsea pipelines from the SDB-PR platform to the ST comprising:
 - Two 32" gas pipelines (for export to the ST);
 - One 16" condensate pipeline (for export to the ST); and
 - One 6" MEG pipeline (for supply to the SDB platform complex);
- Onshore SD2 facilities at the ST located within the SD2 Expansion Area; and
- Up to 26 producer wells.

The Early Infrastructure Works (EIW) were completed at the ST in 2015, prior to installation of the SD2 onshore facilities, and included:

- A new access road;
- Clearance and terracing of the SD2 expansion area; and
- Installation of storm water drainage and surface water/flood protection berms.

Associated Facilities include the Amec-Tekfen-Azfen (ATA) Yard, and the Baku Deepwater Jackets Facility (BDJF) where topsides and jackets are being constructed respectively; the Serenja Hazardous Waste Treatment Facility (HWTF); and gas export pipeline projects: South Caucasus Pipeline Expansion (SCPx); the Trans Anatolian Pipeline (TANAP) and the Trans Adriatic Pipeline (TAP).

2.3 Construction Status

The SD2 Project construction was over 95% complete in terms of engineering, procurement, and construction at the time of the desktop assessment (for the period ending October 2017). The Project remains on target for offshore first gas from Shah Deniz Stage 2 in 2018.

Project activity includes construction at all offshore and onshore sites and fabrication yards including the ST, ATA yard near Baku, BDJF and along the pipeline route comprising the Southern Gas Corridor (SGC).

In June, a significant milestone was achieved in the Project with the sail away and installation of the Quarters and Utilities (QU) platform topsides unit – the first topsides unit built for the Shah Deniz Stage 2 platforms. Offshore, the topsides unit was successfully floated over and installed on top of the QU jacket which was already at its location in a water depth of 94m. The Production and Risers (PR) topsides unit was completed, with the sail away of this second topsides unit for offshore installation occurring in September 2017, followed shortly after by the installation of the bridge.

The Subsea Construction Vessel “Khankendi” was commissioned to commence vessel management services. Furthermore, fabrication and deliveries continue to meet the 2019 subsea installation programme.

With respect to drilling and completions, the Maersk Explorer and Istiglal rigs operated to schedule during the period May 2017 – December 2017.

The expansion of the Sangachal terminal is progressing to schedule, with the plan to be able to process the additional SD2 gas volumes when these come online.

2.4 Applicable Project Standards

As documented in the SD2 ESIA, the applicable project standards are based on:

- Standards agreed with the Azerbaijan Ministry of Ecology and Natural Resources and implemented at existing BP operational sites;
- BP corporate governance; and
- Applicable international and national standards.

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 mitigation measures. The basis for evaluating the Project in terms of Lender policies is defined as follows:

- Equator Principles III (2013);
- EBRD Performance Requirements, 2014;
- EBRD Environmental and Social Policy, 2014;
- Relevant EU Directives:
 - EU EIA Directive - 85/337/EEC Council Directive on the assessment of the effects of certain public and private projects on the environment (EIA Directive). The EIA Directive of 1985 has been amended three times, in 1997, in 2003 and in 2009 and is now codified by Directive 2011/92/EU of 13 December 2011.
 - 2009/147/EEC The Birds Directive; and
 - 92/43/EEC Council Directive on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive).
- International Finance Corporation (IFC) Sustainability Framework (2012) including the Environmental and Social Performance Standards (PSs);
- IFC General Environmental Health and Safety (EHS) Guidelines;

- ADB Safeguards Policy Statement (SPS) and other social requirements (ADB Policy on Gender and Development (GAD), 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 (ESMPs); Environmental and Social Action Plan (ESAP) / Corrective Action Plan; Stakeholder Engagement Plans (SEPs) including internal and external grievance mechanisms; and health and safety provisions and records for the Project;
- Applicable national laws in Azerbaijan;
- Conformance with international environmental agreements and good international industry practice (GIIP); and
- Any other environmental or social regulation or standard as the Lender Group may indicate they expect to apply to the Project.

Project-specific standards include those required under the PSA between the Operator and the Government³. The detailed legal regime for the joint development and production sharing of the SD field is set out within the PSA signed by BP, its co-venturers, and SOCAR in June 1996 which was enacted into law in October 1996. The PSA prevails in the event of conflicts with any present or future national legislation, except for the Azerbaijani Constitution; the highest law in the Republic of Azerbaijan. The PSA sets out that petroleum operations shall be undertaken "in a diligent, safe and efficient manner in accordance with the Environmental Standards to minimise any potential disturbance to the general environment, including without limitation the surface, subsurface, sea, air, lakes, rivers, animal life, plant life, crops, other natural resources and property".

2.5 Sources of Information

The IESC completed a desk-based review for the period May - October 2017 to assess compliance with the environmental and social audit criteria. The review and audit were based on:

- Publicly available ESIA documentation;
- Information provided to the IESC addressing the document request submitted in November 2017.
- Information provided to the IESC during site visits in 2014, 2015, 2016, and 2017;
- Information provided by BP in 2014, 2015, 2016, and 2017 in response to IESC information requests; and

A list of the documents provided by the Operator to the IESC in December 2017, and used to prepare this Report, is provided in Appendix A.

2.6 Report Organisation

This report is organised as follows. All requirements delineated in the Monitoring Scope of Works – Annexure 1: Format of Environmental and Social Monitoring Report are covered. The format has been customised slightly to better align with Lender Standards and increase functionality.

³ Until such time that the SD specific Environmental Protection Standards (EPS) have been signed by all parties as required under Article 26.1 of the PSA, the standards set out in Part II of Appendix 9 to the PSA apply to production activities. The EPS was formally approved via signed Letters from SOCAR and the MENR in 2008. The protocol for their entrance into legal force has been signed by BP on behalf of the SD partners and SOCAR, but has yet to be signed by the MENR.

- Section 1: Project Summary
- Section 2: Introduction
- Section 3: Findings
- Section 4: Environmental and Social Management Capacity
- Section 5: Environment
- Section 6: Social
- Section 7: Cultural Heritage

2.7 Scope of this Review

The IESC reviewed the Operator's available monitoring reports detailing the Project compliance with the Applicable Standards. The IESC's scope includes assessment of the technical adequacy of the Project's ESHS management system and review of any other socio-environmental documentation deemed necessary for its analysis. This includes:

- Any report issued by any Government agencies / ESHS supervision / audit / inspections reports.
- ESHS permits and licenses.
- Internal ESHS inspection and audit reports.
- Environmental Monitoring reports according to the approved ESHS system (effluents, emissions, groundwater, soil, biological monitoring, etc.).
- Implementation monitoring reports of the Fishing Livelihood Management Plan (FLMP)
- Compliance to labour requirements and core labour standards
- Accidents, incidents, and related reports.
- Information disclosure and public consultation processes.
- Community engagement records and reports.
- Grievance procedures, records and reports.
- Non-compliance reports and/or records.
- Contractors' ESHS performance reports.
- ESHS KPIs developed for the Project.
- Status of compliance with any applicable Corrective Action Plan ("CAP").

In executing the scope of work for the desk-based review, the IESC has relied on BP provided data and information to complete this review.

3. FINDINGS

3.1 Description of Non-Conformances

This section tabulates a summary of the Action Items identified by the IESC, based on the outcomes of IESC monitoring. The table below includes newly open items, any follow-ups on issues identified in previous environmental and social monitoring. Any closed recommendations related to previously open issues are also included.

Items in the table are identified by number of the audit visit (X.Y), where Y is the related action item number. The text descriptor may be updated in subsequent monitoring exercises to reflect current conditions; however, the item number will remain as this reflects the same broad issue and its evolution to closure. The relevant project standards and/or reference to the applicable Lender Environmental and Social Standards to which the issue refers are also included.

All issues are categorised as High, Medium, Low, or Observations, reflecting the level of non-conformance in terms of the magnitude and/or on time frame in which an impending risk might occur (short-term, medium-term, long-term). Descriptions of the categories are as follows:

- **High:** Level III critical non-conformance, typically including observed damage to or a reasonable expectation of impending damage or irreversible impact to an identified resource or community and/or a major breach to a commitment as defined in Project documents or the Applicable Lender Environmental and Social Standards. A level III non-conformance can also be based on repeated Level II non-conformances or intentional disregard of specific prohibitions or Project standards;
- **Medium:** Level II non-conformance representing a situation that has not yet resulted in clearly identified damage or irreversible impact to a sensitive or important resource or community, but requires expeditious corrective action and site-specific attention to prevent such effects. A Level II non-conformance can also represent a significant breach of a commitment, or a risk of a significant breach if not expeditiously addressed, requiring corrective action as defined in Project documents or applicable Lender Environmental and Social Standards. A Level II non-conformance can also be based on repeated Level I non-conformances;
- **Low:** Level I non-conformance not consistent with stated commitments as defined in Project documents, but not believed to represent an immediate threat or impact to an identified important resource or community. A Level I non-conformance can also represent a minor breach of a commitment requiring corrective action as defined in applicable Lender Environmental and Social Standards;
- **Observation:** A situation that could eventually become inconsistent with stated commitments as defined in Project documents and/or in the applicable Lender Environmental and Social Standards, and that could lead to non-conformance if not addressed.

3.2 Summary Findings Table

The following table references both the non-conforming due diligence findings as well as new items identified in this monitoring exercise.

Abbreviations on standards referenced in the table are as follows:

- IFC PS IFC Performance Standards
- IFC EHS IFC Environment, Health and Safety Guidelines
- EBRD PR EBRD Performance Requirements
- ADB SPS ADB Safeguards Policy Statement
- ESMP Specific Environmental and Social Management Plans

Visit / Issue #	Monitoring Exercise	Closing Date	Description	Non-conformance	Reference	Status	Comments / Report Reference
Stakeholder Engagement and Grievance Management							
1.1	Sep 15 May 16 Apr 17 Oct 17	Oct 17	Disclosure of the Project management plans	Low	IFC PS1 SEP EBRD PR 10	Closed	<p>At the time of the initial due diligence, the FLMP was the only ESMP publicly disclosed (on the ADB website only). The remaining ESMPs were not publicly disclosed in line with Lender E&S Standards.</p> <p>In September 2017, the Operator published a detailed "Summary of Shah Deniz Stage 2 Environmental and Social Management" on its website⁴, thereby fulfilling the requirements for public disclosure of the Construction Management Plans.</p> <p>The IESC notes that the Operations Management Plans will shortly supersede those for Construction, and recommends that these are similarly publicly disclosed online, including at the local community level in an appropriate format.</p> <p>This item is closed, as at the desk-based monitoring exercise (October 2017).</p>
1.2	Sep 15 May 16 Apr 17 Oct 17		Consultation with affected communities, including communities in the areas of the associated facilities, and key stakeholder groups.	Observation	IFC PS1 SEP EBRD PR10	Open	<p>Summary evidence of the operator BP and contractor TKAZ stakeholder engagement at the construction phase does not provide sufficient details on responses to affected communities, summary feedback and adjustment to management plans as a result of consultations. Verification on effectiveness of engagement with key stakeholders such as community members and representatives, fisherfolk, and local government representatives is sought by the IESC for the next site visit.</p>

⁴ https://www.bp.com/content/dam/bp-country/en_az/pdf/ESIAs/SD2-ESIA/SD2_Appendix_9_Eng.pdf

							This item remains outstanding as at the second (October 2017) monitoring visit.
1.3	Sep 15 May 16 Apr 17 Oct 17		Procedure for external communications with external stakeholders, including verification with stakeholders.	Observation	IFC PS1 SEP EBRD PR10	Open	The procedure for external communications, including the methods for screening, tracking and the resulting response in the management system, has not been evidenced and could not be verified by the IESC with external stakeholders. This item remains outstanding as at the second monitoring visit (October 2017).
1.4	Sep 15 May 16 Apr 17 Oct 17		IESC unable to verify that the grievance mechanism is operational and effective for affected communities	Observation	IFC PS1 SEP EBRD PR10	Open	Project data has been provided on grievances however the IESC has been unable to verify this issue with any external stakeholders. This includes on grievance mechanism operation and grievance summary feedback to affected communities This item remains outstanding as at the second monitoring visit (October 2017).
2.10	Apr 17 Oct 17		IESC verification required of independence of newly established EITC process, including reporting criteria, and ability of civil society to participate in the resource governance space (and by association, open and free engagement with the Operator).	Observation	IFC PS1 EBRD PR10	Open	Azerbaijan has recently withdrawn from the Extractive Industries Transparency Initiative (EITI) and established its own initiative, the Extractive Industries Transparency Commission (EITC). IESC is concerned about the potential lack of independent, global oversight of the newly established EITC process, and the ability for the EITC to choose its own reporting criteria which may exclude those areas for which Azerbaijan was suspended from the EITI. The IESC is reassured by the Operator's October 2017 update, including independent international oversight of the EITC, and inclusion of civil society actors in EITC processes. Follow-up at the next site visit to assess ongoing progress.
Community Health, Safety, and Security							
1.7	Sep 15 Apr 17		No monitoring or management plan in	Observation	IFC PS4	Open	Influx was scoped out at the ESIA Phase due to a closed camp, however with demobilisation

	Oct 17		place to determine or respond to potential impacts to communities in the Project area due to population influx. Verification sought with external stakeholders.		IFC EHS 23		ongoing of the construction workforce and fewer forward employment opportunities available in the current Azeri market, the mechanism for tracking potential impacts of the demanned workforce on communities (e.g. influx, antisocial behaviour) remains unclear. Verification with external stakeholders is additionally sought by the IESC. This item remains outstanding as at the second monitoring visit (October 2017).
Resettlement and Livelihoods Improvement							
1.8	Sep 15 May 16 Apr 17 Oct 17		Disclosure of the Fishing Livelihoods Management Plan (FLMP)	Low	ADB SPS IFC PS1 EBRD PR1	Closed	The FLMP has been previously disclosed on the ADB website but not on the Operator's website, and is therefore non-compliant with Lender standards to provide for wider disclosure of a key Project document. In September 2017, the Operator published a detailed "Summary of Shah Deniz Stage 2 Environmental and Social Management" on its website, including the FLMP, thereby fulfilling the requirements for public disclosure. Further, the Operator has conducted extensive and ongoing consultation with affected fisherfolk on the contents of the FLMP. This item is closed, as at the desk-based monitoring exercise (October 2017).
2.9	May 16 Apr 17 Oct 17		Completion audit for fishing livelihoods	Observation	IFC PS5 ADB SPS EBRD PR5	Closed	In the May 2016 site visit, IESC noted that the Operator intended to undertake a completion audit in late 2016 and observed that this would likely be too soon to be able to clearly demonstrate that livelihoods have been sustainably restored. At the April 2017 IESC visit, the Operator advised that additional livelihood restoration measures had been undertaken in September 2016. A 3 rd Household Monitoring Survey was completed in November 2016 which

						<p>surveyed all 48 fishermen (5 of whom reported a deterioration in living standards). Operator is currently (April 2017) conducting additional engagement with these fishermen to further understand the reasons.</p> <p>The result of this engagement was reported in the October monitoring exercise, whereby the Operator had conducted the Completion Audit. The afore-mentioned 5 fishermen indicated that they perceived the process for compensation had been transparent and well implemented, and that their income decrease was due to the lack of fish in the area around what they refer to as the "SD2 zone" and because there are limited opportunities to fish in other locations. There was no specific feedback on what aspects of the Project (if any) could have caused impacts to fish availability. The Completion Audit noted no clear evidence was provided as to why livelihoods were impacted for a small minority of fishermen, when the rest of the members of their crew reported no deterioration in living standards. The IESC is satisfied that the Completion Audit was conducted timeously, and was informed by the results of engagement with affected fishermen. The IESC further notes the continued availability of the Grievance Mechanism.</p>
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3.3 Summary of Incidents of Violations and Non-Compliance

Issue	Summary Detail
Recorded dates and responsible agencies	No regulator action reported
Nature of non-conformance	
Violation or non-conformance based on what environmental standards and regulations	
Results of investigations and reviews	
Corrective actions, deadlines, identification of responsible parties; Short term remedial action; Long term preventative measures	

3.4 Summary of Incidents of Environmental, Health Concerns and Safety Accidents

Issue	Environment Incident Summary	OHS Incident Summary ⁵
Incident recorded dates and responsible agencies	2 reportable incidents (24/07/2017 & 21/06/2017). ⁶ See Section 5 for further detail on these incidents.	<ul style="list-style-type: none"> • 1 high potential incident (06/10/2017), • 2 lost time Incidents requiring a day away from work (15/06/2017 & 26/06/2017), • 7 reportable incidents (safety), (28/08/2017, 30/08/2017, 21/10/17, 07/08/2017, 26/07/2017, 15/06/2017, & 26/06/2017), • 0 reportable incidents (health).⁷
Scale of damage / injury (if any)	None	None reported
Authorities in charge of investigation / recording	Ministry of Environment and Natural Resources (MENR)	Ministry of Labour and Social Protection of the Population (MLSP)
Results of investigations and reviews	None reported	None reported
Corrective actions, deadlines, identification of responsible parties Short term remedial action Long term preventative measures	Offshore Oil Spill Contingency Plan; Pollution Prevention Management Plan; Waste Management and Minimisation Plan ⁸	OHS Management Plan ⁹
Other environmental, health and safety initiatives which have been planned or implemented	<ul style="list-style-type: none"> • Offshore Oil Spill Contingency Plan shared with MENR and accepted by the Ministry of Emergency Situations in 2015. • Environmental inspections of chemical storage completed. 	<ul style="list-style-type: none"> • Campaigns implemented targeting various issues, including, "Personal Hygiene Campaign¹¹", and continuation of the "Finish Strong Campaign".

⁵ As reported to IESC in Responses to Lukoil Lenders' Requests_November 2017 provided to IESC.

⁶ Responsible Agency not provided to the IESC.

⁷ *Ibid.*

⁸ Details on corrective actions taken, associated deadlines, identification of responsible parties, short-term remedial action and long-term preventative measures were not provided or assessed by the IESC in relation to the incidents.

⁹ *Ibid.*

¹¹ Project Monthly Report, Shah Deniz 2 Project, July 2017.

	<ul style="list-style-type: none"> Continuation of the “Finish Strong Campaign”.¹⁰ 	<ul style="list-style-type: none"> HSE Review conducted prior to achieving successful and safe completion of PR sail away at ATA. Time-Out for Safety conversations held for PPE requirements, lack of signs, barrier management, housekeeping at various locations. Planned initiatives include a focus on working over or near water due to load-in process and manual handling at ATA; and work at heights refresher training at Sangachal.¹²
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¹⁰ Project Monthly Report, Shah Deniz 2 Project, September 2017.

¹² Project Monthly Report, Shah Deniz 2 Project, September 2017.

4. ENVIRONMENTAL AND SOCIAL MANAGEMENT CAPACITY

Compliance summary:

- 1 Low Non-Conformance was closed out during this monitoring period, related to Stakeholder Engagement (see Section 4.5), namely the disclosure of project management plans; and
- There are 5 open observations, all of which are related to Stakeholder Engagement (Section 4.5) and Grievance Management (Section 4.6).

4.1 Environmental and Social Management System

The desk-based review confirmed the ongoing implementation of the SD2 environment, health and safety management system in line with BP's corporate Health, Safety, Security and Environment (HSSE) commitment statement Project policies. The contractor HSSE Plans are developed in alignment with BP's Project and Program HSSE Plans which provide a rigorous framework for ensuring the protection of worker safety, compliance with HSSE requirements, social responsibility, and protection of the environment. The documents reviewed¹³ demonstrated a clear commitment to HSSE policies and achieving leading practice performance objectives for prevention of accidents, prevention of pollution, management of waste and engagement with nearby communities, among others. Competent teams of health, safety, environment, and social professionals who are effectively resourced and trained implement the health, safety, environment, and social management systems in place at the SD2 constructions sites.

The BP oversight of contractors to ensure compliance with HSSE requirements is clearly evident through a structured program of HSSE audits, contractor self-verification and BP HSSE oversight, as demonstrated in the Project Monthly Reports (May-September 2017). The oversight process includes BP HSE personnel actively engaging with contractors during construction activities to observe safety behaviours and develop HSE leadership. BP's HSSE management systems being implemented for the SD2 Project are mature systems that have been effective in management of BP's operational HSSE risks in the Caspian region. The Operator enforces BP's 8 Golden Rules for safety for all Project-related activities undertaken by BP personnel, contractors, and sub-contractors. The ST and offshore facility construction contractor HSSE plans are aligned with these systems and include robust processes for: contractor and sub-contractor management; legal compliance; crisis and emergency management; reporting of performance; HSE Organisation; and, assurance planning.

The risk management tools employed for the SD2 Project construction are proven processes that have been effective for existing operations at SD and throughout BP's operations in the Caspian Region. The risk management processes include clear methods for identification of health, safety and environmental risks and include consideration of health, public safety, and security risks to communities. Risk assessments are undertaken through the ESIA, ENVID, HAZOP and HAZID processes with input from workers. Risk registers are maintained that prioritise significant risks and identify risk management controls that apply the mitigation hierarchy; whereby risks are avoided where possible or mitigated to ensure risks are acceptable where avoidance is not possible.

The SD2 HSSE risk register is maintained through the Project Management Control System (PMCS), an electronic tool to facilitate the capture, assessment, monitoring, controlling and

¹³ See Appendix A for Document List.

communication of project risk. The construction facilities utilise clearly defined permit to work systems for hazardous activities such that safety controls are managed, communicated, and reviewed for each activity. Permit to work process provide effective controls for working at heights, access to confined spaces, electrical work, hot work and for working within excavations. The SD2 Project has implemented Risk – Talk – Check (RTC) processes which are designed to facilitate worker involvement with the risk management and hazard perception to ensure HSSE risks are understood and are being effectively implemented.

The communication of HSSE related issues and reporting of performance was evident through the desk-based review of documentation. This includes the scheduling of regular formal and informal meetings and recording of minutes. Communications with Project workers include the opportunity for worker input to HSSE programmes and clear authority for workers to stop work if unsafe practices are observed. HSSE reporting is a continuous process with various formats used to track construction HSSE performance against Project targets and statutory requirements.

BP's HSSE requirements include the requirement for contractor HSSE management systems be aligned with ISO standards: ISO14001 and OHSAS18001. The ATA and BOS Shelf contractors are externally certified to ISO standards and BP holds ISO14001 certification for its regional operations in the Caspian.

BP's AGT Region manages BP's operation in Azerbaijan and implements environmental and social management programmes through the Local Operating Management System (LOMS). The environmental management component of the LOMS is certified to the ISO14001 standard for environmental management systems. The SD2 Construction Phase Environmental and Social Management System (ESMS) has been developed by BP and Includes: commitments register; legal register; Environmental and Social Management and Monitoring Plan (ESMMP); monitoring and inspection schedule; and, the implementation of an audit tracking and corrective action tracking system. The main design and construction contractors are required to conform fully to the BP SD2 Construction Phase ESMS and to develop their own construction phase ESMS that will integrate with the SD2 Construction phase ESMS. The construction phase ESMS provides a framework for implementation of the ESIA commitments and for the coordination and review of the environmental and social performance of the Project throughout construction.

The Mobile Offshore Drilling Unit (MODU) facility, used for offshore well development drilling, is operated by third party contractors who are required to implement their own independent Environmental Management System (EMS) already in place. Alignment of the plans, procedures, and reporting requirements of the rig and AGT Region EMS is achieved through the development of an EMS interface document which defines clearly how all activities will be managed to ensure a safe and environmentally acceptable working environment, including the roles and responsibilities relevant to environmental management. The EMS interface document is a live document and is reviewed annually at a minimum. Both the BP EMS and the Rig Operator EMS monitor the same targets and objectives that are separately audited as part of their internal review process. Communications lines are in place to ensure the effective sharing of the findings and action lists.

The Construction Phase ESMS has been developed for implementation by the Operator and construction contractors, in line with the SD2 Construction Phase E&S Management framework. The ESMMP underwent a significant update in March 2017 to include aspects on commissioning and transition to Operations.

It is evident that a robust process is in place to ensure a managed transition to operations of the environmental and social management system. The Operator is currently developing a range of measures to ensure that the environmental and social aspects and impacts are effectively managed during the process of transition from contractor managed construction activities, through to commissioning and ultimately to the implementation of operations. These transitional measures are being developed and implemented in a staged manner as construction packages are being completed.

The IESC notes that with respect to the transition to operations activities, internal reviews have been conducted in the period since the IESC's site visit for both offshore and onshore operations readiness. These included E&S requirements, and the Operator did not identify any gaps. Furthermore, operating plans and procedures have all been identified and are being updated in line with the schedule. Environmental asset assurance and design verification has been completed. Operations teams are aware and have been trained in all operations phase ESIA commitments. Close-out reports are being updated as the Project progresses. Cultural heritage reports will be handed over to the operations team as required. Regional sensitivity maps have been updated, and lessons learned have been captured and will continue to be updated through the transition.¹⁴

4.2 Management Programs

The SD2 Project and delivery teams are required to use the 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, the SD2 Environmental and Social Compliance Register that includes ESIA commitments. As noted above, a key focus of the SD2 HSEC management is on ensuring effective transition to operations, and specifically the close-out and/or handover of ESIA and permit commitments to the operational ESMMP.

4.3 Organisational Capacity and Competence

It has previously¹⁵ been observed by the IESC that the Operator has assembled a team of competent professionals to manage the environmental and social performance function from within the BP AGT Regions Team, supported by external experts as required. The IESC notes the trend of decreasing contractor dedicated HSE personnel as construction packages are completed for hand-over to operations and as contractor personnel numbers decrease. SD2 Operator HSE personnel are now established to fulfil the organisational requirements for commissioning, hand-over and operations. The IESC reviewed organisational structures and key roles for the ST operator's team and confirmed that the HSE resource allocations are appropriate to implement the HSE programmes in place for construction and to further develop the commissioning and operational HSE programmes. The IESC will follow up this point at the next site visit to verify demonstrated ongoing organisational capacity and competence.

¹⁴ November 2017: SD2 Lukoil Lenders' Requests and Responses.

¹⁵ Independent Environmental and Social Consultant's Monitoring Report for the Shah Deniz 2 Gas Field Expansion Project, Sustainability Pty Ltd, July 2017 (monitoring period May 2016 – April 2017).

The SD2 Project continues to measure and review the effectiveness of its HSE management systems, including the capability and competence of personnel, through:

- BP Corporate HSE assurance audits, including compliance with operator requirements, commitments, and statutory obligations;
- BP Self verification and reporting against key HSE indicators and annual performance review or organisational HSE effectiveness and capability; and
- BP's HSE oversight of construction contractors through field observations; verification of HSE plan implementation and review of HSE improvement action outcomes and effectiveness.

Core HSE functions are supplemented by external contractors for waste management, via a centralised waste management service provider on construction sites and emergency response capability for fabrication and offshore activities where spills to the marine environment are a significant risk.

The SD2 onshore social impacts and community programmes are implemented between the contractor Community Liaison Officers and BP Regional community/social team personnel. The contractors are responsible for the day-to-day liaison and engagement with local communities relevant to construction activities and workforce, including management of community grievances relevant to construction environmental impacts, social issues, and employment. The BP Regional team provide oversight of the contractor social impact management processes and provide a broader social engagement function relevant to BP's activities in the Caspian, including all onshore and offshore activities, community development initiatives and implementation of strategic social programmes to fulfil socio-economic commitments and obligations of the SD2 Project.

4.4 Emergency Preparedness and Response

Emergencies are managed for the SD2 Project through the BP Crisis Management and Emergency Response framework which includes an established response mechanism, site response teams, country-based incident management team and regional business support team and an executive support team based in London. BP has a Baku emergency response team consisting of 120 personnel and mutual operating plan on management of emergency situations between the BP AGT Region and the Azerbaijani Ministry of Emergency Situations.

The SD2 Project has identified potential emergency scenarios that may impact on health, safety, the environment, and communities. Emergency response plans are developed for significant scenarios and training drills are undertaken on a regular basis to ensure operational readiness and familiarity with emergency response requirements.

Emergency response capability is maintained at all work areas including medical and first aid facilities, on site ambulances, incident management teams and rescue capability. The SD2 onshore project maintains a worker exclusion area where the construction project overlaps with the identified risk zone from the operating SD1 facilities.

In the April 2017 monitoring site visit, the IESC observed the overlapping emergency response functions between the TKAZ construction contractors at the ST SD2 site with the operational BP emergency responsibilities for commissioning areas. A range of commissioning HSE plans have been established to ensure effective integration of emergency capabilities during the transitioning period at ST. The IESC was unable to assess the ongoing integration of emergency response

capabilities in this desk-based review, and will conduct verification thereof at the next monitoring site visit.

The SD2 onshore Project undertakes 20 emergency response exercise drills per year, of these, 2 to 3 exercises involve external and government emergency response providers in addition to the BP-AGT emergency team. The offshore delivery units undertake 6-7 emergency response exercises annually. Each work site undertakes a weekly site muster and evacuation drill. Records of emergency response drills, exercise reports and debrief reports were reviewed by the IESC (see below paragraph). It is noted that the total number of various oil spill response exercises scheduled for 2017 is 48.¹⁶

The IESC viewed an emergency response drill report conducted during the May – October 2017 monitoring period, which was sufficient in level of detail, scope and participation to demonstrate compliance (see also Section 7.2 on community health, safety, and security). Project monthly reports provided to the IESC for the monitoring period also indicate the conduct of emergency drills at Project sites during the monitoring period, including fire drills, emergency evacuation drills, medivac and oil spill drills. The IESC notes that several detailed emergency response drills reports were also reviewed in the last monitoring exercise (May 2016-April 2017 period), which demonstrated compliance, including notification and liaison with relevant public emergency authorities.¹⁷ The IESC will follow up at the next site visit about emergency response exercises specifically in relation to drilling and loss of containment.

BP's emergency response capability includes global contracts with two well control providers with capability to deploy equipment, including cap and stack containment, and expertise to any of BP's operations throughout the world. It is noted that this equipment is located in the USA and there is no ready access to well control containment equipment for the Caspian drilling and operational activities.

4.5 Stakeholder Engagement

Both BP and TKAZ employ community liaison offices in the local communities surrounding ST personnel. The community liaison offices provide a conduit for communications and engagement with local communities through provision of information and receiving grievances. TKAZ and BP have community engagement personnel within their teams at the SD2 onshore construction site at ST. BP-led meetings in these communities have been primarily aimed at fishing livelihoods management plan issues, although meetings have also been held regarding emergency response readiness, and in partnership with TKAZ regarding employment and de-manning initiatives and activities.¹⁸

The Operator reports continued engagement with local communities near the onshore construction works at ST through meetings held by the construction contractor TKAZ, with BP attendance. Engagement activities include:

- Meetings held in June 2017 with fishermen who reported livelihood deterioration during the last Household Monitoring Survey 3 (see Section 6.2.2 for further detail);
- Monthly Labour Management Forums held across delivery lines. The Operator provided the Labour Management Forum dashboard template to the IESC, which shows that community engagement / relationship management as a core item for

¹⁶ Full Lukoil Slidepack_April 2017.

¹⁷ Oil Spill Response Training and Exercise Summary Report, Briggs, 27 July 2017.

¹⁸ IESC Interview with BP at Baku Headquarters, 05042017.

discussion and action at these fora¹⁹ (see Section 6.1 for further discussion on labour); and

- Project Information Centres (PICs) in place in the Sangachal Project Affected Communities. SD2 Project Update Brochures for the PICs were being prepared (at the time of writing desk-based review) to include Project status updates, noise monitoring results, cultural heritage monitoring results, start-up information and contact information. Engagement on brochure content is planned for January 2018.²⁰

Further, the Operator advised, in relation to specific engagement conducted with civil society actors, that Joint Review Sessions were conducted during this monitoring period. These sessions are conducted to provide the Azerbaijan Authorities with assurance on the completion of SD2 Project construction activities and readiness for operation. A joint review process has been initiated prior to hook-up and commissioning of the Project. The joint review is divided into two separate processes for the offshore facilities (including subsea pipelines) and onshore facilities, including participation of the following State Authorities²¹:

- Ministry for Energy;
- State Oil Company of Azerbaijan;
- State Committee for Supervision of the Safe Conduct of Work in Industry;
- Ministry of Environmental and Natural Resources;
- Ministry of Emergency Situations;
- State Committee for Construction and Architecture (for onshore facilities);
- State Labour Inspectorate;
- State Fire Brigade; Navy Hydrography Services;
- Ministry of Health.

For offshore facilities, this review was held on the 07th June 2017, and for onshore facilities this is scheduled for 06th December 2017.

No community grievances were reported to have been lodged during the monitoring period (May – October 2017), although grievance logs or similar were not sighted by the IESC.²² The previous monitoring report notes the Operator reports that community members appear comfortable raising concerns at meetings, many of which are addressed immediately, while others are logged for follow-up with the individuals concerned, and that most concerns are about unemployment of community members especially with construction ending in 2017. The last monitoring report for the period May 2016-April 2017, also notes that the current focus of community meetings is discussing the demobilisation process in place.²³ With demobilisation substantially underway, it appears that the Operator is appropriately shifting its engagement focus, with operations in sight,

¹⁹ Responses to Lukoil Lenders' Requests Slide Pack, November 2017.

²⁰ SD2 Lukoil Lenders' Requests and Responses, November 2017.

²¹ SD2 Lukoil Lenders' Requests and Responses, November 2017.

²² SD2 Lukoil Lenders' Requests and Responses, November 2017.

²³ SD2_Lukoil Additional Documents Requested.

to communicating start-up information and new/changing community contact details with local communities.²⁴

Stakeholder engagement logs, and meeting minutes were not provided for IESC review. The IESC is therefore unable to assess whether information disclosure and engagement activities of the Operator provided local communities and other relevant stakeholders with access to timely, relevant, understandable, and accessible information, in a culturally appropriate manner, free of manipulation, interference, coercion and intimidation. This includes the frequency and number of engagement activities, type of engagement, stakeholders engaged (including vulnerable people), outcomes of engagement, grievance management actions and outcomes. Again, this evidence is strongly requested to be provided to the IESC at the next monitoring event, to allow a full assessment to be made. The IESC would also like to verify stakeholder engagement outcomes with affected community members in line with good international industry practice at the following site visit in 2018.

The IESC notes that at the time of the initial due diligence (2014), the FLMP was the only ESMP publicly disclosed (on the ADB website only). The remaining ESMPs were not publicly disclosed in line with Lender E&S Standards. In September 2017, the Operator published a detailed “Summary of Shah Deniz Stage 2 Environmental and Social Management” on its website, thereby fulfilling the requirements for public disclosure. This long-standing non-conformance item is now able to be closed, as at the desk-based monitoring exercise (October 2017).

4.5.1 Human Rights and Transparency

BP adheres to the provisions on human rights as set out in the International Bill of Human Rights and the International Labour Organization’s Declaration on Fundamental Principles and Rights at Work. These include the rights of the Company’s workforce and those living in communities affected by its activities. BP sets out its commitments in its human rights policy and code of conduct. The Company operating management system (OMS) contains guidance on respecting the rights of workers and community members. In 2016, BP continued to identify and address potential human rights impacts in the areas of recruitment, workforce welfare, land acquisition and livelihood, as well as other related issues in affected communities. Specific activities have included quarterly social risk review sessions, a revision of the human rights response plan; technician forums (two in Azerbaijan, one in Georgia); a people forum day in Ankara; over 650 BP employees have participated in training sessions on the Code of Conduct (which includes human rights policy), regular human resources visits to offshore and onshore sites; and the establishment of monthly labour management forums and quarterly labour management committees. BP is currently in the process of aligning its business with the UN Guiding Principles on Business and Human Rights, using a risk-based approach.²⁵

A focus area of the IESC at the last site visit in April 2017, was in relation to human rights and transparency given the withdrawal of Azerbaijan from the Extractive Industries Transparency Initiative (EITI) in March 2017. Suspension was based on Azerbaijan’s lack of progress on implementation of recommended reforms in relation to human rights and civil society, specifically, the lack of an enabling environment for civil society, which is a violation of the initiative’s requirements on multi-stakeholder engagement and of its Civil Society Protocol²⁶. Subsequent to its withdrawal from the EITI, Azerbaijan established its own independent Extractive Industries

²⁴ SD2 Lukoil Lenders’ Requests and Responses, November 2017.

²⁵ BP Azerbaijan, Sustainability Report, 2016.

²⁶ EITI Announcement, 2017. “Azerbaijan Withdraws from the EITI”. <https://eiti.org/news/azerbaijan-withdraws-from-eiti>

Transparency Commission (EITC) on the 05th April 2017. The EITC is to ensure transparency in extractive industries by setting up the process for reporting about state revenues from production of natural resources, similar to the EITI. The process intends to comply with relevant international requirements and obligations, and includes involvement of relevant state institutions as well as foreign companies and civil society actors working in Azerbaijan's extractive industries.

In the last monitoring report, the IESC noted concern about the potential lack of independent global oversight of the EITC, the ability for the EITC to select its own reporting criteria which may exclude those areas for which Azerbaijan was suspended from the EITI, and the ability of civil society to freely participate in the resource governance space in Azerbaijan (which may also impede the Operator's ability to conduct effective engagement with these stakeholders). The IESC understands that BP is now actively involved in Azerbaijan's EITC activities.²⁷ The Operator has indicated that upon the formal inauguration of the EITC, extractives companies in Azerbaijan, including BP, signed an agreement (similar in content to the previous memorandum of understanding with the EITI) with the EITC, as a sign of commitment to transparency. Moreover, it is noted that the EITC has representatives from extractive companies, Government, and civil society. The IESC also notes the participation of civil society actors, and international organisations, among others at EITC meetings, in addition to the engagement of an international firm (Moore Stephens) to prepare the inaugural report of the EITC. To a large extent, this addresses the IESC's concerns described above. The IESC will follow up at the next site visit to confirm ongoing implementation of these newly implemented measures, including international oversight and inclusion of civil society actors in EITC processes.

4.6 Grievance Mechanism

As described above (see Section 4.5), the Operator reported no grievances for this monitoring period (grievance logs or similar were not sighted by the IESC). The IESC notes that in the previous monitoring period, a total of 28 grievances were lodged, all of which were in relation to employment²⁸. As construction is nearly complete, with the accompanying demanning process²⁹ in place (and thus higher levels of unemployment within local communities), the IESC notes that this sharp decrease in grievances seems uncharacteristic. The IESC was unable to establish whether this drop was due to a genuine lack of grievances or whether this was possibly due to other factors such as a changing community liaison personnel in the transition to operations and corresponding change in the reporting/lodging of grievances (or lack thereof), among other possible reasons.

The IESC will follow this up at the next site visit, including, verification of the grievance management process to confirm accessibility and understanding of the mechanism, feedback in relation to the closing of grievances raised as well as reporting back to the community on the type and numbers of grievances, in line with good international industry practices. IESC hopes to be able to meet with external stakeholders at subsequent monitoring visits to verify satisfaction levels and obtain comments from grievance mechanism users, including reporting back to communities on grievance summary data and Operator responses.

²⁷ SD2 Lukoil Lenders' Requests and Responses, November 2017.

²⁸ IESC Interview with BP at Baku Headquarters, 05/04/2017.

²⁹ Employment numbers dropped steeply from 16,187 in the last monitoring period to 7,606 by October 2017.

5. ENVIRONMENT

There are no non-compliances or observations noted in this Section.

5.1 Pollution Prevention and Resource Efficiency

5.1.1 Oil Spills and Protection

Environment spills during construction are identified as a key risk due to the potential for discharge to the marine environment and soil contamination. The SD2 Project reports all spills outside of containment that exceed 1L in volume, with the data being reported in BP's project performance reporting, including to government authorities, and in the BP public Sustainability Reports. There was 1 reportable oil spill between May 2017 and October 2017 (i.e. the monitoring period)³⁰. All spills were investigated by the Project team and corrective and preventative actions identified and implemented. In the first, a crane operator was moving a 4.5te container. When the container was positioned over the galley laydown handrails, control of the crane was lost, and the crane slewed to the south without operator input. The low boost pressure alarm sounded. When the load was over the sea in a safe position on the south side of the platform, the crane operator pressed the Emergency Stop button to prevent further movement. A maximum of 700 litres was spilled on board, with approximately 10 litres of hydraulic oil spilled to the sea.³¹ The IESC will follow up with the Operator at the next site visit in relation to corrective actions taken, deadlines, identification of responsible parties, and long-term preventative measures, among others.

The development drilling campaign being completed by the Istiglal and Heydar Aliyev MODUs have had no significant well control or spill incidents during the campaign to date. The current drilling activities indicate that the Maersk Explorer is on target to complete drilling operations on SDF-02 (WS2) by late October, and the Istiglal rig finished completion and well clean-up operations on SDD-01 (WF1) and has now commenced completion operations on SDD-02, the 2 of 4 West Flank wells. Data on incidents for this monitoring period was not provided by the Operator, although it is noted that the Project Monthly updates provided, note that no significant issues were reported.

The SD2 drilling program has implemented the Operator's well integrity standards including Blow Out Prevention (BOP) valve testing during drilling and BOP inspection at surface on a regular frequency. The BOP inspection program includes certified inspection by an external third party. The IESC notes the extensive mandatory well control training provided to BP Operational and contractors involved in SD2 drilling.

The total number of various oil spill response exercises scheduled for 2017 is 48. During this desk-based monitoring exercise, the IESC reviewed one offshore oil spill response exercise report provided as evidence, and notes a comprehensive process remains in place including clear delineation of roles and responsibilities, procedures, communication, training, and incorporation of lessons learned. Adequate resources are available for oil spill response, evidenced in the drill report sighted (in addition to the drill reports provided for the last monitoring exercise). It is also noted that in 2015, the Operator worked with the Ministry of Emergency Situations on BP oil spill desktop and field drills as well as BP participation in a major emergency response exercise organized by the Ministry.³² The IESC recommends that similar multi-party exercises are again

³⁰ The 2nd spill was a grey water spill, which is discussed in Section 5.1.5.

³¹ Responses to Lukoil Lenders' Requests Slide Pack, November 2017.

³² Full Lukoil Slidepack_April 2017; Tekfen-Azfen Alliance Spill Emergency Exercise, Sangachal Terminal. July 2016; Saipem Offshore Construction Vessels Emergency Drill Report. May 2016; Briggs, Oil Spill Response Training and Exercise Summary Report. March 2016; Briggs, Oil Spill Response Training and Exercise Summary Report. August 2016.

conducted to ensure effective emergency response provisions are in place moving into the operations phase of the Project (and the corresponding organisational and personnel changes). The IESC will follow up on this issue at the next site visit.

5.1.2 Waste Management

The IESC reports no change to findings from the previous monitoring report.

The construction phase Waste Management and Minimisation Plan (10/1/14) has been developed and implemented by BP for all Project delivery packages and specifies how BP and its contractors will comply with Project waste management commitments as specified in the ESIA. The plan aligns with BP's AGT Region Waste Manual and establishes waste management requirements under the framework of the SD2 ESMMP. The Plan includes key responsibilities and accountability; waste forecasting requirements; segregation; application of the waste management hierarchy; organisational structure; training; monitoring and reporting. Waste records include the requirement to use BP's waste transfer tracking system for all Project activities.

A sewage treatment plant was installed as part of the expansion of the ATA yard for the SD2 construction work. The plant consists of 7 bioreactors with a total capacity to treat 300m³ per day. Treated wastewater is monitored monthly and discharged to the sea, as per regulatory requirements, via an outfall or reused for dust suppression on site. The monitoring data to date indicates compliance with the discharge water quality criteria for the wastewater treatment plant.

Wastes at the ATA and BDJF are segregated on site and taken to a centralised waste accumulation centre where a BP managed waste contractor transfers wastes to various waste treatment, recycling and disposal facilities. The waste contractor inspects wastes to ensure segregation is taking place at the construction yards and will return loads that are not appropriately segregated. A total of 500 tonnes per month of waste is generated at the ATA facility and includes biomedical wastes, chemical containers, and other hazardous wastes.

Hazardous waste includes isocyanate wastes from the flow line pipe-coating process. By the end of construction over 20 barrels of isocyanate waste will have been removed by appropriately licenced hazardous waste contractors. A full inventory of the hazardous materials and wastes used and generated by the Project during the construction and operational phases for onshore and offshore activities are included in the ESIA Chapter 5 Project Description. Predicted volumes and waste streams for hazardous materials are provided. Hazardous waste streams have been identified for the Project based on existing BP AGT region operations. The construction phase SD2 Pollution Prevention MP has been developed for all Project delivery teams and includes requirements for hazardous material management and chemical selection to ensure that ESIA commitments are complied with.

5.1.3 Air

Key GHG emission reduction considerations in design included flare reduction measures; offshore gas compression preferred above onshore compression; offshore flaring chosen over offshore venting; direct drive gas turbines onshore selected in preference to electric drives; and, waste heat recovery on onshore compression gas turbines. The SD2 Project is required to report GHG emissions annually during construction and operations in line with current reporting for the SD and AGC project reports and in accordance with the BP AGT Region HSSE Policies. The SD2 Project has committed to the implementation of GHG monitoring, management and reporting consistent with the procedures already in use on existing ACG Platforms. The publicly available

annual report, BP Azerbaijan Sustainability Report 2016, includes the GHG emission data for BP's Caspian offshore operations and the ST.

The ATA facility manages dust emissions through regular watering of unsealed areas using treated water from the site sewage treatment plant. No regular dust and noise monitoring is undertaken surrounding the facility due to the lack of sensitive land use surrounding the ATA yard and the proximity of the Baku-Salyan Highway.

The Operator reports³³ that stack emission sampling ports have been provided on all SD2 combustion equipment, both onshore and offshore, to enable annual stack emission monitoring during operations. Initial emissions testing will be undertaken following introduction of hydrocarbons in early 2018. Vendor testing will be carried out using an analyser during the initial run of the machinery to confirm the emissions are as per manufacturers' specifications. Following this initial testing, stack emissions monitoring will be undertaken as part of the Regional environmental team's programme. The stack emission testing from turbines and compressors will not commence until commissioning. The IESC will look further at those monitoring programmes at this stage.

Resource efficiency measures adopted for flaring for onshore and offshore facilities is consistent with the Global Gas Flaring and Venting Reduction Voluntary Standard (part of the World Bank Group's Global Gas Flaring Reduction Public Private Partnership program) and the World Bank Group's sector-specific EHS Guidelines. Onshore Flare Gas Recovery (FGR) will be used on both the high pressure and low-pressure flare systems to minimise hydrocarbon flows to flare stacks under normal operations. There will be no continuous flaring or venting under normal operations. Flare combustion efficiency will be optimised to achieve 98% efficiency, in line with GIIP. FGR was not chosen for offshore facilities due to safe design constraints on the SDB platform. SD2 flaring activities in the monitoring period included MODU well clean-up and well test flaring, and onshore and offshore flaring during operations (including start-up) – pilot, purge, and non-routine flaring due to trips, maintenance and emergencies. With respect to MODU well clean-up flaring the Operator indicated that during the monitoring period the following activities occurred:

- Updated well clean-up flaring estimates for the North Flank and West Flank included in SD2 Istiglal MODU Upgrade, North Flank and West Flank well clean-up and wellhead cleaning Environmental Technical Note (ETN) (under SD2 Management of Change);
- Well clean-up flaring completed at the North Flank (4 wells) in 2017 and actuals recorded;
- Emission volumes for the North Flank were 14% - 17% lower than estimated within the ETN;
- West Flank clean-up is planned for 2018.

With respect to onshore flaring activities, the Operator reports updated onshore flaring scenarios for SD2 have been included within the SD2 Onshore Crossover ETN taking into account:

- Post-ESIA SD2 design refinement; and
- Ullage within new onshore facilities to process additional SD Alphagas.

³³ SD2 Lukoil Lenders' Requests and Responses, November 2017.

The updated scenarios result in a reduction of gas flared onshore over the Life of Field by 20% (as compared to the SD2 ESIA estimate).

5.1.4 Noise and Vibration

Baseline noise at all four nearby communities, Azim Kend, Sangachal, Umid and Massiv 3, was completed and reported in the ESIA. Monitoring during construction and the baseline surveys show regular noise levels at nearby communities above the daytime criteria of 65 dB (LAeq). The cause of exceeding noise levels has been attributed to a range of contributing sources including highway traffic, power stations, existing ST operational noise and trains. The Sangachal village noise monitoring presented the highest noise levels recorded over the construction period, as this site is located closest to the Baku-Salyan Highway and the Sangachal Power Station. During SD2 construction, 22 day and 6 night time noise survey rounds have been completed and data is presented for the monitoring at nearby communities during community meetings. Several individual noise levels above the daytime criteria of 65dB were recorded. These were attributed to sources such as car horns and vehicles on the highway and passing trains. There have been no instances where the action trigger has been reached due to SD2 activities.

BP advises that construction noise from SD2 activities has generally not been audible at monitoring locations during the surveys. Noise from SD2 vehicle reversing alarms, intermittent hammering, on site engine/compressor noise and from vehicles undertaking pipeline installation activities was recorded, but noise levels from these sources were not recorded above the daytime criteria. With regard to night time noised monitoring, noise levels recorded were typically above the upper trigger level of 45 db, attributable to noise sources from the Gas Station at Massiv 3, ST and from Salyan highway. There have been no instances where the action trigger has been reached due to SD2 activities. BP advised that there have been no noise complaints received from communities through the formal grievance process since construction works commenced on SD2.³⁴

5.1.5 Water

Produced Formation Water (PFW) from the SD2 operations has been subject to further investigation to ensure sufficient capacity, including contingency, for suitable disposal of the waste water produced during the processing of SD2 gas. The base case for PFW disposal for SD2 is to use the SD1 process water management system and to dispose of treated water through re-injection offshore to the AGC well field using existing infrastructure. The current PFW system at ST has capacity of 75,000 bls/day and is expected to substantially exceed the required volumes of both SD1 and SD2 PFW disposal requirements. However, the Operator is continuing to evaluate alternative PFW management options should the volumes of PFW exceed estimates or in the case that the re-injection at AGC is no longer available³⁵.

With respect to hydrotest discharges to the environment that have occurred since April 2017, including water quality and volumes, the Operator notes the following:

- Leak test, calliper survey and inline inspection:
 - Planned discharge volumes: 3,797m³; and
 - Actual Discharge volume: 3,733.6m³.

³⁴ Responses to Lukoil Lenders' Requests Slide Pack, November 2017.

³⁵ *Ibid.*

- Dewatering (currently ongoing):
 - Planned discharge volume: 1,652m³; and
 - Actual discharge volume: 277m³.

In relation to spills, the second reportable spill occurred when the construction contractor struck a gravity fed sanitary waste water treatment third party line with an excavator and punctured a hole in the line which led to the release of approximately 760 litres of grey water. The Operator reports that the spills were cleaned up immediately.³⁶ The IESC will follow up with the Operator at the next site visit in relation to corrective actions taken, deadlines, identification of responsible parties, and long-term preventative measures, among others.

5.2 Biodiversity Conservation and Ecological Management

5.2.1 Protection and Conservation of Biodiversity

The SD2 Project construction at ST includes the pipelines from the beach crossing to the terminal which pass a coastal zone which includes wetlands (or wadi) located to the east of the SD2 expansion area. The works in this area are nearing completion and no further land disturbance is expected. There have been no reported incidents of impacts to wildlife or conservation values for the terrestrial or marine environments due to the construction operations at SD2 for the 2017 period. Pre-existing soil and water contamination was identified and reported in the initial ESIA baseline studies prior to civil works commencing for SD2, which identified possible sources of contamination from nearby pipelines and neighbouring land use. There was evidence of pre-existing free phase oil on water located in wetlands near to the neighbouring power station. The SD2 project maintains a monitoring programme to identify the cause of contamination at the wetlands area and monitor the ecological use of these wetlands by birds and other fauna. The results of ecological monitoring are reported annually to the Ministry for Environment.

³⁶ Responses to Lukoil Lenders' Requests Slide Pack, November 2017.

6. SOCIAL

Compliance summary:

- 1 Low Non-Compliance was closed out during this monitoring period, in relation to Disclosure of the FLMP (see Sections 4.5, and 6.2).
- 1 Observation was able to be closed out in relation to Fishing Livelihoods (see Section 6.2.2), namely the completion audit for fishing livelihoods.

6.1 Labour Working Conditions

6.1.1 'Worker and Sub-Contractor Management

The status of Project employment as of the end of October 2017 is provided in Table 1. The employment numbers peaked for the construction phase (in August 2016) and de-manning commenced in the third quarter of 2016 at Project sites in response to completed work packages. Between the last monitoring site visit conducted (April 2017) and this desk-based monitoring exercise (May 2017- October 2017), employment numbers dropped steeply from 16,187 to 7,606³⁷. The Project is implementing a de-manning strategy aimed at minimising the impacts of reduced employment as the Project moves towards completion. Workers are provided minimum of 1-month notice prior to redundancy taking affect. A completion payment is provided at the end of employment for workers who have been engaged for a minimum of 12 months. The completion payment exceeds the requirements of local labour laws and is made under Project employment conditions.³⁸

Other aspects of the de-manning strategy include ensuring the timing of redundancies avoids periods when large numbers of workers are released in any one time and maximising the potential for contract labour to move between work packages and contracts when the skills are requirements allow. It is also noted that BP community development projects in neighbouring communities aim to increase the opportunities for broader income generation and employment. Relevant projects that BP supports³⁹ include, among others:

- Health awareness sessions;
- IT Essentials course for Sangachal and Umid communities;
- Social infrastructure improvement in Yevlakh, Ujar and Samukh communities;
- Regional microfinance programme with the European Bank for Reconstruction and Development;
- English for Communities; Azerbaijan oil and gas scholarship programme;
- Establishment of Big Data Sciences Research and Training Centre at ADA University;
- Agricultural Vocational Education: Development of New Occupations;
- Vocational training for communities; and
- Build Your Future Project.

³⁷ Responses to Lukoil Lenders' Requests Slide Pack, November 2017.

³⁸ Ibid.

³⁹ BP Azerbaijan Sustainability Report, 2016.

The IESC again notes the opportunity to link current and future community development initiatives more explicitly with the de-manning / demobilisation process (which may result in increased unemployment in neighbouring communities, influx issues, fewer supply chain / enterprise development opportunities, and a potential increase in social nuisance issues). The IESC would like to interview those employees responsible for community development initiatives, as well as verify community development activities and outcomes with local communities and beneficiaries at the next visit.

Meetings with local communities are reported to include discussion of changes to contract labour requirements during the Project construction period (see Stakeholder Engagement section). The de-manning program is also discussed with SOCAR and Labour unions. Labour Management Forums are in place to discuss and resolve key HR/IR issues relevant to contracts and BP personnel working on the SD2 construction. The Labour Management Forum Dashboard includes covering the following topics: Workforce Communication and Engagement; Terms and Conditions; Disciplinary Action / Disruption / Absenteeism; Training and Competency Enhancement; Community Engagement / Relationship Management; External Engagement (Government / Non-Governmental / Media); and Demobilisation. The IESC was not able to review minutes from the Labour Management Fora for this desk-based monitoring exercise.

The IESC commends the effectivity of the Labour Management Fora in place to manage de-manning, including top-level management participation. As noted in the previous monitoring report, there remains a potential for an increase in grievances as the de-manning process escalates and there are fewer future employment opportunities for particular skillsets. The IESC would like to verify the Operator-reported data, including meeting minutes from Labour Management Fora, with key stakeholders at the next site visit, in line with good international industry practices.

Table 1 Manpower Status (October 2017)

SD2 Key Contractors Manpower Status		
Offshore Facilities		
Job Category	Nationals	Expats
ATA (Decks)		
Professional	525	66
Non-Professional	276	0
Total	801	66
Grand Total: 867		
BOS Shelf (Jackets)		
Professional	1,431	495
Non-Professional	737	0
Total	2,168	495
Grand Total: 2,663		
Marine and Subsea		
Saipem (M&S)		
Professional	470	282
Non-Professional	115	0
Total	585	282
Grand Total: 867		
Baku Shipyard and Keppel		
Professional	0	0
Non-Professional	0	0
Total	0	0
Grand Total: 0		
Bredero Shaw (CPC)		

Professional	0	0
Non-Professional	0	0
Total	0	0
Grand Total: 0		
Onshore Facilities		
TKAZ (Terminal)		
Professional	2,348	217
Non-Professional	644	0
Total	2,992	217
Grand Total: 3,209		
Other		
SWIFT MS		
Professional	.40	-
Non-Professional	-	-
Total	-	-
Grand Total: 0		
TOTAL MANPOWER: 7,606		

6.1.2 Worker Accommodation

The IESC had the opportunity to visit the accommodation platform topside at the site visit in April 2017, which was nearly complete and commissioning for which was underway. The sail away occurred in June of 2017. The IESC notes that the facilities are appropriate, and exceed the requirements of good international industry practice.⁴¹

6.1.3 Worker Grievances

The ESIA describes grievance handling and the site audit confirmed it is in place and being implemented. The Employee Relations MP also requires that a grievance process be implemented for contractors. The Employee Relationship MP required of each contractor also includes a grievance mechanism.

The Labour Management Forum reviews worker grievances such that there is BP oversight of grievances that are being managed by individual contractors. External grievances are predominantly regarding employment issues as evidenced through the community meeting summaries provided by BP^{42, 43}. The Operator reported 4 labour related grievances received by the Onshore construction contractor between April and October 2017⁴⁴. Given the size of the workforce and the scale of demanning in the monitoring period, there are a low number of grievances registered. The IESC would again prefer to see more detailed records on the contractor engagement activities including the detailed content of each reported grievance and resolution processes for employment grievances.

There have been no significant labour or community disputes as a result of de-manning so far, which is indicative that the process in place is being managed effectively. However, IESC notes that the potential for an increase in grievances during the de-manning process remains high, given the fewer future employment opportunities for particular skillsets. This will again be followed up during the next site visit.

⁴⁰ Information not provided in *Responses to Lukoil Lenders' Requests Slide Pack, November 2017*. IESC unable to establish whether this is due to there being no employees under Swift MS, or whether this is an error in the presentation of the Slide Pack.

⁴¹ EBRD/IFC Guidance Note "Workers' accommodation: processes and standards", 2009.

⁴² SD2_Lukoil Additional Documents Request.

⁴³ SD2 Lukoil Lenders' Requests and Responses, November 2017.

⁴⁴ Ibid.

6.1.4 Procurement and Supply Chain

BP contractors and their employees are required to act consistently with the Company's code of conduct and human rights policy. The standard model contracts that BP procurement teams use when agreeing new contracts include requirements for suppliers to respect internationally recognized human rights in their work for BP, with a specific prohibition on the use of forced or trafficked labour. Working with industry peers, BP have developed a human rights due diligence process that can be used to screen suppliers in a consistent way anywhere in the world. This process has been piloted with potential suppliers in 2016 and is reported to be subject to wider use in 2017⁴⁵. IESC will follow up at the next site visit as to the use of this tool for SD2.

It is also noted that BP procurement is largely from Azerbaijan by Azeri workers, which has facilitated close oversight of procurement and the supply chain and minimised the risks of child and forced labour. Further, IESC observes that procurement and supply chain risks will be somewhat reduced with the move from construction to operations and the corresponding decrease in the number of workers / contractors in the supply chain.

6.2 Land Acquisition, Resettlement, and Livelihoods Restoration

6.2.1 Land Access Agreements

Although the midstream gas pipeline expansion project for the SCPX is not core to the scope of this review (as it is an associated facility), it is noted that significant land acquisition and compensation has been progressed and reported in the *BP Azerbaijan 2016 Sustainability Report*. Following execution of land lease agreements across the SCPX right-of-way (ROW) in Azerbaijan, BP completed compensation payments to 2,921 private land owners/users and 65 municipalities. In addition, there were a number of factual user agreements executed and compensations made. The compensation process and principles have been conducted in line with BPs guide to land acquisition and compensation framework, which is generally aligned with IFC Performance Standards and guidance. No involuntary resettlement has taken place as part of the SCPX project.

6.2.2 Fishing Livelihoods

The ESIA process identified that local commercial fishing in the Sangachal area would be subjected to economic displacement during the period of enforcement of a marine exclusion zone around the gas export pipeline shore crossing. The Marine Exclusion Zone was a temporary measure during which all vessels would be excluded from entering a formally enforced zone. The Project had developed a Fishing Livelihoods Management Plan (FLMP) in 2015 as a framework for identification of impacted fishermen, determination of compensation; established a mechanism for engagement and a grievance process. The SD2 Project FLMP states the commitment to "ensure that the livelihoods and living standards of small-scale fishing households affected by SD2 activities are restored to, or where possible, improved above pre-Project conditions" (FLMP 2015). The FLMP has been continually reviewed in response to feedback and in response to project changes. For example, the initial compensation arrangements were put in place for 43 fishermen deemed eligible under the FLMP framework. However, the 1st Household Monitoring Survey undertaken in June 2015 resulted in reconsideration of eligibility and a further 5 fishermen were included in the compensation arrangements (as reported in the IESC July 2015 Report), (see **Error! Reference source not found.**).

⁴⁵ BP Global Sustainability Report. 2016.

Since July 2015, an independent consultant (AECOM) has completed quarterly monitoring of the 48 eligible fishermen. The surveys have indicated that 100% of respondents (48 fishermen) continue to fish in Sangachal Bay. The key issues from the household survey that have been considered in the review of the FLMP arrangements include⁴⁶:

- Vast majority (43 of 48 fishermen) reported either an improvement or no change in household living standards.
- Following Household Survey 3, five fishermen reported a deterioration in household living standards since December 2014. The Close Out Survey was conducted to collect information from these five fishermen, who reported that:
 - Process for compensation has been transparent and implemented well.
 - Income decrease is due to the lack of fish in the area around what they refer to as the 'SD2 zone', and because there are limited opportunities to fish in other locations.
 - No specific feedback on what aspects of the Project (if any) could have caused impacts to fish availability.
- No clear evidence was provided as to why livelihoods were impacted for a small minority of fishermen when the rest of the members of their crew reported no deterioration in living standards.

With respect to compensation:

- 100% of fishermen considered their crew has more fishing assets now than in December 2014 (prior to the commencement of the FLMP activities).
- The leaders of fishing crews 2 and 3 reported that asset compensation has helped their crews maintain household living standards.
- Crew leader 1 reported a decline in his crew's living standards, but also reports pending less than the full asset compensation amount.

Perceptions of BP from the surveys indicate:

- Generally improving perceptions of BP over time (from the 1st survey to the third), specifically with respect to perceptions of SD2 communications and FLMP implementation. 92% of fishermen considered BP communication and FLMP implementation effective.
- 8% (4 fishermen) considered communications and FLMP implementation had not been effective (decrease from 26% in the first survey). The majority (43 fisherman) reported either an improvement or no change in household living standards, and 5 fishermen reported a deterioration in household living standards since December 2014, due to declining fishing incomes, but all consider their crews' assets to have increased since December 2014 (see above).

⁴⁶ Responses to Lukoil Lenders' Requests Slide Pack, November 2017.

The FLMP completion audit was completed in Q3 of 2017. Conclusions from the completion audit include:

- The implementation process, including methods and tools used to determine eligibility and entitlement and to record compensation payments adhered to the process that was set out within the FLMP;
- Adaptations to the implementation process were effective in responding to: feedback on increased eligibility, to findings from livelihood monitoring, and to the increased duration of the MEZ.
- Fishermen were kept engaged throughout the design and implementation of the FLMP, with positive feedback received from them on the effectiveness of this communication;
- Monitoring showed that for the vast majority, households' livelihoods either improved or remained the same since commencement of SD2 construction activities.

The Operator notes that the next steps will include:

- Ongoing engagement to provide reminders that the MEZ is no longer in place, and to give updates on Project activities; and
- Further impacts to fishermen are not anticipated. However, the Grievance Mechanism continues to be available to fishermen in case there are any outstanding grievances that may arise in relation to the past or any perceived ongoing impacts of the Project on fishing livelihoods.

The IESC notes that the residual issues noted in the last monitoring report (in relation to ongoing investigations by BP on the 5 fishermen who reported a decline in living standards, as described above), have been adequately closed out to the mutual satisfaction of all parties involved. The IESC is satisfied that the Grievance Mechanism is remaining in place for the foreseeable future and will assess this at the next monitoring opportunity.

Furthermore, as described in Section 4.5 on Stakeholder Engagement, the FLMP had been previously disclosed on the ADB website but not on the Operator's website, and was therefore non-compliant with Lender standards to provide for wider disclosure of a key Project document. In September 2017, the Operator published a detailed "Summary of Shah Deniz Stage 2 Environmental and Social Management" on its website, including the FLMP, thereby fulfilling the requirements for public disclosure. Further, the Operator has conducted extensive and ongoing consultation with affected fisherfolk on the contents of the FLMP (as described in this section).

7. HEALTH AND SAFETY

Compliance summary:

- There was 1 observation noted by the IESC in relation to Community Health, Safety and Security (see Section 7.2).

7.1 Worker Health and Safety

The SD2 construction project had maintained an excellent safety record, consistent with the requirements of GIIIP delineated by EBRD and IFC performance standards and guidelines⁴⁷, for the period from commencement of construction to the desk-based monitoring in October 2017. The Project had amassed over 126 million Execute man-hours worked, and achieved an overall rolling 12-month Recordable Injury Frequency Rate (RIF) of 0.09 and a total RIF of 0.05, since the commencement of construction⁴⁸. This includes the activities for marine and subsea, onshore construction, offshore construction and SCPX. As a comparison, the relevant industry standards for RIF established by the International Association of Oil and Gas Producers (IOGP) is 0.56 and International Pipeline and Offshore Contractors Association (IPLOCA) is 0.24 (IOGP and IPLOCA data have been normalised to 200,00 as per BP practice). There have been no fatalities on the Project to date; and between April 2017 and October 2017, 1 high potential incident, 2 injuries requiring a day away from work, and 7 recordable injuries.⁴⁹ The IESC will follow up with the Operator at the next site visit in relation to corrective actions taken, deadlines, identification of responsible parties, and long-term preventative measures, among others.

The IESC again focused specifically on the offshore drilling HSE performance for this desk-based monitoring exercise. There are currently 2 drilling rigs operating. As of September 2017, the Maersk Explorer was conducting drilling operations with the target to complete by the end of October 2017. During the monitoring period, the Istiglal rig relocated to the West Flank area and finished completion and well clean-up operations. By September, the Istiglal had commenced completion operations on the second of 4 West Flank wells⁵⁰. The IESC did not review incident statistics specific to drilling during this monitoring period, although it is noted that the previous monitoring site visit report documented that there were no HIPOs or major incident announcements associated with drilling in 2016 / 2017 (up to the site visit). This will be followed up during the next site visit.

BOP testing is completed every 5 years, as per the schedule. There are global contracts in place with 2 well control providers who can mobilise to site immediately to provide assistance. Further, BP requires all employees to attend well control training every 2 years. It is also noted that drilling contractors are requiring their employees to attend well control training on the off-year (i.e. employees are attending well control training every year).⁵¹

The IESC has, at previous site visits, observed a strong safety culture at all construction sites and an established relationship between BP and the contractors who have all had experience in working with BP since the AGT Project construction. This included the use of PPE, dual language safety signs, barriers to prevent access to unsafe areas, permits to work, safety inductions for visitors and the availability of medical treatment and emergency response facilities/capability

⁴⁷ Including the World Bank Group Environmental, Health, and Safety Guidelines for Offshore Oil and Gas Development; and the General EHS Guidelines.

⁴⁸ Responses to Lukoil Lenders' Requests Slide Pack, November 2017.

⁴⁹ Ibid.

⁵⁰ Project Monthly Report, Shah Deniz 2, September 2017.

⁵¹ Istiglal and Maersk Explorer HSE Performance Report.

onsite.⁵² This strong safety culture is exemplified by the ongoing outstanding safety statistics for this monitoring period (May-October 2018).

112 million Execute km had been driven for the Project to date without a serious project related traffic accident⁵³. Traffic use on the Baku-Salyan Highway poses significant risk to Project workers as this is the main route taken for workers who commute daily to the offshore construction facility yards and the onshore construction site at ST. Traffic management to reduce risk includes the use of busses for workers and strict enforcement of Project defined speed limits.

Working at heights, lifting, use of ladders, confined space entry and hazards from dropped objects remain key HSE focus areas for the offshore constructions yards, as evidenced in the Project Monthly Reports⁵⁴. The contractors and BP have retained increased verification and oversight of these focus areas to ensure safety controls remain in place and effective during the transition. Further, the IESC notes ongoing behavioural safety initiative in place, which BP and contractors had developed to address hand injuries⁵⁵.

Safety observations are formalised through a behavioural observation safety program that requires workers to document safe work observations undertaken during normal work activities. Specialist contractor HSE personnel support the program.

The offshore construction process includes a change register for any changes that occur to the original design which had been subjected to a comprehensive risk assessment. The change register provides a record of variation in design and any additional risk management controls that may be required

It was noted that BP had commenced some nightwork at the ST in the lead up to the transition to operations in 2018. It is noted that there has been no increase in safety incidents as a result of nightwork, and this is to be commended. BP advised that there are several high risk activities that do not take place at night

7.2 Community Health, Safety, and Security

In relation to community safety, BP reported in the site visit meetings that, where appropriate, local communities are involved in scenario planning for emergency response. BP also advised that drills involve internal and external communications with various community members through the existing community engagement process (contractor and BP led processes). Furthermore, it is not clear to the IESC (from the records reviewed of community meetings) whether community meetings include debriefing / awareness processes with neighbouring communities. The IESC would like to verify the emergency response measures in place, particularly those related to community communications and involvement, at the next site visit.⁵⁶

Noise monitoring is undertaken at SD2 onshore construction site at the nearby communities to ST to verify compliance with agreed noise criteria and determine if Project construction activities are significantly contributing to breach of noise criteria. The Project specified noise criteria have been derived from British Standard, BS5228-1:2009. An action trigger occurs when criteria are exceeded on three sequential occasions during the same monitoring round due to Project activities.

⁵² IESC Visit to ATA Yard 06042017; and IESC Visit to Sangachal Terminal 06042017.

⁵³ Responses to Lukoil Lenders' Requests Slide Pack, November 2017.

⁵⁴ Project Monthly Reports provided for monitoring period (May – October 2017).

⁵⁵ Project Monthly Report, Shah Deniz 2 Project, July 2017.

⁵⁶ IESC Interview with BP at Baku Headquarters, 05042017.

Baseline noise at all four nearby communities, Azim Kend, Sangachal, Umid and Massiv 3, was completed and reported in the ESIA. Monitoring during construction and the baseline surveys show regular noise levels at nearby communities above the daytime criteria of 65 dB (LAeq). The cause of exceeding noise levels has been attributed to a range of contributing sources including highway traffic, power stations, existing ST operational noise and trains. The Sangachal village noise monitoring presented the highest noise levels recorded over the construction period, as this site is located closest to the Baku-Salyan Highway and the Sangachal Power Station. During SD2 construction 22 day and 6 night time noise survey rounds have been completed and data is presented for the monitoring at nearby communities during community meetings. A number of individual noise levels above the daytime criteria of 65dB were recorded. These were attributed to sources such as car horns and vehicles on the highway and passing trains. There have been no instances where the action trigger has been reached due to SD2 activities.⁵⁷

BP advises that construction noise from SD2 activities has generally not been audible at monitoring locations during the surveys. Noise from SD2 vehicle reversing alarms, intermittent hammering, on site engine/compressor noise and from vehicles undertaking pipeline installation activities was recorded, but noise levels from these sources were not recorded above the daytime criteria. Regarding night time noised monitoring, noise levels recorded were typically above the upper trigger level of 45 db, attributable to noise sources form the Gas Station at Massiv 3, ST and from Salyan highway. There have been no instances where the action trigger has been reached due to SD2 activities. BP advised that there have been no noise complaints received from communities through the formal grievance process since construction works commenced on SD2.⁵⁸

The Project potential for influx was scoped out at the time the ESIA was prepared on the grounds that the camp is closed. However, during this period of de-manning there is no evidence of a system for monitoring potential influx (e.g. coordination with local government agencies or other organisations), particularly as the economic environment in Azerbaijan into which this workforce will be laid off will be more challenging in finding future work opportunities. This point was noted in the last monitoring report. At that time, BP noted that that there have so far, been no community-reported grievances in relation to influx, or any other nuisance issues related to the de-manning that has already occurred. The IESC looks forward discussing this aspect at the next site visit, including verification with local communities.

⁵⁷ Responses to Lukoil Lenders' Requests Slide Pack, November 2017.

⁵⁸ *Ibid.*

8. CULTURAL HERITAGE

8.1 Protection of Cultural Heritage

The SD2 construction at ST includes provision of ongoing monitoring of potential impacts to Cultural Heritage and a watching brief for works being undertaken outside of past detailed heritage surveys. Monitoring was being undertaken by local experts in consultation with the Ministry for Culture and Tourism. The initial surveys were completed as part of the investigations undertaken for the Early Infrastructure Works (EIW) EIA prepared and submitted for approval to the Ministry of Environment. The EIW EIA included details of the Cultural Heritage Monitoring and Management Plan and the Chance Find Protocol to be implemented during construction. These surveys were originally completed in 2011 and identified the two most significant heritage sites being a nearby Caravanserai and Sand Cave site located nearby to the pipeline shore crossing. Both sites are protected under cultural heritage laws but have been considered to have low national significance. The Project's cultural heritage plan commits to maintaining a watching brief during earthworks to identify any potential cultural heritage aspects or finds during excavations and land disturbance. The majority of areas subject to the SD2 watching brief have been previously disturbed by earlier ground clearance and construction activities. The watching brief was completed in Q3 2017, with a Close-out Report issued in Q4 2017. The watching brief was conducted over 123 weeks (718 person days on site). No archaeological sites or archaeological features were found during the SD2 watching brief. The majority of Isolated Finds identified are considered to be the result of rural seasonal activities and/or short-term economic activities during the Medieval Period. There were also a small number of XV-XVII Century finds. No permanent settlement or buried archaeological deposits were found.⁵⁹ The IESC did not review the Close-out Report as part of this desk-based monitoring exercise, and requests that this is made available for review at the next site visit monitoring. The IESC requests to review the Close-Out Report issued in Q4 2017 during the next monitoring exercise.

Monitoring of vibration near the Sand Cave heritage site has been undertaken by the SD2 Project to protect the site from potential damage from Project related activities near the shore crossing and pipeline beach pull site where water winning ponds were constructed approximately 100m from the Sand Cave site. The vibration monitoring was designed to confirm if vibration from construction activities were below criteria that would have potential to damage the site, which is a State protected monument and considered fragile. Site specific criteria for vibration, including both continuous intermittent criteria, was developed by SD2 based on Codes of Practice, heritage protection advice and baseline vibration monitoring results and action triggers were developed. 11 rounds of vibration monitoring were completed at the Sand Cave during the pipeline landfall construction activities that included rock breaking, piling and pile removal. Monitoring results show that 89% of vibration levels (10 monitoring results) were recorded below the continuous criteria and 1 result was recorded above the intermittent criteria. The action trigger was not reached, but the Project did amend the piling technique to reduce vibration in response to the monitoring results. No damage to the Sand Cave site was observed throughout the works.⁶⁰

⁵⁹ Responses to Lukoil Lenders' Requests Slide Pack, November 2017.

⁶⁰ Full Lukoil Slidepack_April 2017.

Appendix A Document List

2017 Evidence List

File or Information Title	Contents
May 2017 – October 2017	
SD2 Lukoil Lenders' Requests and Responses, November 2017.	IESC document request and Operator responses.
Responses to Lukoil Lenders' Requests Slide Pack, November 2017.	Presentation slides detailing HSSE updates
Project Monthly Report, Shah Deniz 2 Project, May 2017.	
Project Monthly Report, Shah Deniz 2 Project, June 2017.	
Project Monthly Report, Shah Deniz 2 Project, July 2017.	
Project Monthly Report, Shah Deniz 2 Project, August 2017.	
Project Monthly Report, Shah Deniz 2 Project, September 2017.	
Oil Spill Response Training and Exercise Summary Report, Offshore OSR Nofi Current Buster 2 & Boom Vane 1.5m Deployment Exercise.	Emergency Drill Report
BP in Azerbaijan Sustainability Report. 2016.	Provides a range of information on business performance in Azerbaijan during 2016 (publicly available report).
Summary of Shah Deniz Stage 2 Environmental and Social Management, September 2017 https://www.bp.com/content/dam/bp-country/en_az/pdf/ESIAs/SD2-ESIA/SD2_Appendix_9_Eng.pdf	Publicly disclosed E&S Management Plans on the Operators website.
May 2016-April 2017	
Shah Deniz 2 Project Monthly Reports (May 2016 – February 2017)	Monthly Project Updates
Full Lukoil Slidepack_April 2017	SD2 HSSE update presentation to IESC by BP
SD2_Lukoil Additional Documents Requested	Additional info requested by IESC and provided by BP, including Oil Spill Response activities, community engagement; grievance management, and fishing livelihoods management.
Tekfen-Azfen Alliance Spill Emergency Exercise, Sangachal Terminal. July 2016.	Spill response exercise report.
Saipem Offshore Construction Vessels Emergency Drill Report. May 2016.	Emergency Drill Report.
Briggs, Oil Spill Response Training and Exercise Summary Report. March 2016.	Oil Spill Response Drill. Report.
Briggs, Oil Spill Response Training and Exercise Summary Report. August 2016.	Oil Spill Response Drill Report.
SD2 Environmental and Social Management and Monitoring Plan.	Updated with commissioning and transition to operations aspects.
Istiglal and Maersk Explorer HSE Performance Report	Drilling rigs HSE performance report and data.
SOCAR EITC Statement. April 2016.	Extractive Industries Transparency Commission summary and links.
BP Global Sustainability Report. 2016.	Global business performance during 2015 (publicly available report).
IESC Visit to ATA Yard 06042017.	Offshore delivery progress and activities at ATA Year, HSE performance; project progress.
IESC Visit to Sangachal Terminal 06042017.	ST development progress; activities at ST; HSE performance.

BP in Azerbaijan Sustainability Report. 2015.	Provides a range of information on business performance in Azerbaijan during 2015 (publicly available report).
IESC Interview with BP at Baku Headquarters, 05042017.	