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Guidance on Practice for Environmental and Social Impact Assessment of Pipelines

GP 43-05

BP GROUP
ENGINEERING TECHNICAL PRACTICES

Foreword

This is the first issue of BP Engineering Technical Practice (ETP) GP 43-05. This document will be updated on a periodic basis to include new BP experiences and any additional ESIA issues and requirements.

This is not a standalone document. It shall be used in accordance with the requirements of ETP document GP 43-00. It shall also be read in conjunction with BP's Environmental Stewardship Operating Standard.

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Introduction

All BP activities have the potential to influence, positively and/or negatively, the quality and diversity of the natural environment and to change the economic and socio-cultural systems of communities where we operate. BP has a rigorous Environmental Stewardship Process that is defined in the BP Environmental Stewardship Operating Standard and which seeks to establish lifecycle environmental and social management processes. Environmental and Social Impact Assessment (ESIA) forms part of the Environmental Stewardship Operating Process and seeks to identify and minimise the adverse impacts of BP operations.

This document provides guidance on the planning, management and implementation of ESIA for pipeline projects through all stages of the asset development life. It provides references to BP Group and wider industry standards for ESIA practice.



1. Scope

This document provides Guidance on Practice for the planning, management and implementation of the Environmental Social Impact Assessment (ESIA) process for pipeline projects through all stages of asset life. The document:

- a. Is applicable to onshore and offshore pipelines.
- b. Is primarily for the Engineering and Technical Authorities (EA and TA), project and commercial managers, project developers and planners, environmental specialists, engineers and pipeline operations staff. It aims to provide a “first point-of-call” for all involved or associated with pipeline ESIA activities.
- c. Provides guidance on implementing BP’s Environmental Stewardship process throughout the lifecycle of a pipeline project.
- d. Identifies the key interfaces, management processes, and working methods that should be maintained to ensure the successful delivery and implementation of the ESIA process throughout the asset life.
- e. Provides links to a repository of relevant Corporate and Industry Standards supported by reference to examples of BP experiences on this and associated issues. This remains a dynamic reference document as future experiences and lessons are archived in the ETP Library as they become available.

2. Normative references

BP

GP 43-07	Guidance on Practice for Selection of the Design Basis for Pipelines.
GP 43-08	Guidance on Practice for Selection and Use of Industry Codes and Standards.
GP 43-10	Guidance on Practice for Route Selection for Pipelines.
GP 43-24	Guidance on Practice for GIS and Mapping.
GP 43-17	Guidance on Practice for Risk Management for Pipelines.
GP 43-27	Guidance on Practice for Terrain Evaluation and Ground Hazard Assessment for Pipelines.
GP 43-29	Guidance on Practice for Land Acquisition for Pipelines.
GP 43-45	Guidance on Practice for Site Restoration for Pipelines.

World Bank

OP 4.01	Operation Policy - Environmental Assessment.
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3. Terms and definitions

For the purpose of this GP, the following symbols and abbreviations apply:

BDA	Bilateral Development Agency
BU	Business unit
CVP	Capital Value Process
EA	Engineering Authority



ECA	Export Credit Agency
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESMS	Environmental and Social Management System
gHSEr	Getting Health, Safety, Security, and Environment Right
GIS	Geographic Information System (in context of mapping and databases)
HGA	Host Government Agreement
HSSE	Health, Safety, Security, and Environment
IFC	International Finance Corporation
IFI	International Financial Institution
KPI	Key performance indicator
MFI	Multilateral Financial Institution
MOC	Management of Change
MPCP	Major Projects Common Process
NGO	Non-Governmental Organisation
OGP	Oil and gas producers
PCDP	Public Consultation and Disclosure Plan
PHSER	Project Health, Safety, Security, and Environmental Review
PSA	Production Sharing Agreement
RAP	Resettlement Action Plan
ROW	Right of Way
E&S	Environmental and Social
SEA	Strategic Environmental Assessment
Stakeholders	Organisations or individuals outside BP who have an interest in the pipeline

4. Background

Compared to other forms of transport such as road or rail, pipeline systems provide a safe and efficient means of transporting a wide range of products including gas, oil, petroleum products, chemicals, and water. They are found in all parts of the BP Group, from upstream flow-lines to export pipelines in all segments, including downstream delivery of raw materials and chemical and refined products.



ESIA is a process in which the breadth, depth, and type of analysis necessary depends on the nature, scale, and potential impact of the proposed project. Pipeline ESIA evaluates a project's potential environmental and social risks and impacts in its area of influence. It examines project alternatives; identifies ways of improving project selection, routing, positioning of facilities, planning, design, and implementation. In so doing it prevents, minimises, mitigates or compensates for adverse environmental impacts, enhancing positive impacts; and, includes the process of mitigating and managing adverse environmental impacts throughout project implementation.

- a. Preventive measures shall be favoured over mitigation or compensatory measures.

The effective integration of ESIA processes into the core pipeline promotion, planning, engineering, construction, and operation phases is a key success factor in managing both internal operational and gHSEr needs, whilst meeting and exceeding external expectations.

- b. Risk assessment, security, and safety considerations shall be addressed in parallel to environmental issues.

5. Application and purpose

5.1. General

- a. The ESIA is a major deliverable within the CVP and shall receive expert attention from the beginning of Access throughout the project to ensure alignment with the CVP.
- b. This document shall be applied in all business segments and at all locations that are operated by BP.
- c. The BU Leader, supported by the EA, TA, and the BU E&S Manager, shall ensure that appropriate systems and reviews are put in place to meet the requirements referenced in this document.
- d. At locations where BP does not have operational control, BP shall determine the degree to which the requirements of this document should apply, to an extent that is consistent with the sensitivity of the project.
- e. Subject to existing contractual constraints (to the extent that they cannot be renegotiated), the requirements of this document shall be applied to projects in which BP has operational control during the appropriate stages of the asset's life.

This ETP has been developed to ensure that BP adopts a standard approach around the world, irrespective of national requirements, but with a level of detail that is commensurate with the sensitivity of a project.

The earlier in the project life cycle that environmental and social issues are identified and assessed, the easier and more cost-effective it is to optimise planning and management processes. Assessment should, therefore, begin at the Access/Country Entry stage of a project and be integrated with engineering design and the contract tendering process. Addition of design and operational changes late in project definition carries significant cost penalties from both facilities engineering and schedule standpoints.

- f. The basic elements that shall be required to enable an assessment are listed below:

The level of detail varies with the CVP stage.

1. A description of the project.
2. Justification for the project proceeding.



3. An evaluation of project alternatives.
4. Compilation of a register of applicable legislation, standards, policies, and guidelines.
5. A description of the existing environment and social conditions.
6. Identification and assessment of potential environmental and social impacts.
7. A statement of environmental and social objectives and measurement criteria.
8. Identification of environmental and social impact mitigation measures.
9. Environmental and social management programme.

ESIA is a useful tool to achieve sound, rational, and sustainable environmental and resource management. It is not purely a regulatory approvals hurdle and should not be used to provide justification for engineering and operational decisions that have already been made.

5.2. Effective ESIA

An effective ESIA:

- a. Allows early identification of project risks – see also GP 43-17.
- b. Provides opportunities to eliminate and mitigate risks and impacts throughout the design, construction, and operational lifetime of a pipeline project.
- c. Facilitates stakeholder and community engagement.
- d. Provides the information that is required by the relevant authorities so they can make an informed consent decision.

An ESIA is often a mandatory precursor to obtaining consent to build the pipeline.

6. ESIA standards

- a. The project shall define applicable standards at the Access stage.

More than one standard may apply.

- b. BP standards and requirements shall apply to all projects.

The most significant interfaces for ESIA are found in the following documents:

- gHSEr.
- Process Safety and Integrity management (PSIM).
- BP Group Environmental Stewardship Operating Standard.
- MPCP.
- BP Upstream Environmental Expectations (to be superseded by the BP Group Environmental Performance Requirements).
- BP Upstream Guidelines for New Projects.
- BP Group Environmental Reporting Guidelines.

- c. National ESIA/EIA legislation for the country of operation shall be identified at the Access or Appraise stage and shall be applicable to all projects within that country unless an HGA, PSA, or similar legal document takes precedence. Requirements may vary between countries.

The guiding premise of the Environmental Stewardship Operating Standard is that alignment with relevant regulatory requirements for the ESIA process and the regulatory approvals processes are mandatory, as is compliance with the additional level of assessment required by BP.



For certain projects, the relevant regulatory requirements will be set out in an HGA, PSA, or similar document which may take precedence over national legislation.

- d. For projects requiring external finance (IFI, MFI, BDA, ECA, etc.), the ESIA requirements of the funding organisation shall also be applicable.

A common ESIA framework has been developed by the MFIs, although some differences remain between the requirements of each organisation.

The majority of MFIs have signed up to the Equator Principles, which provide a framework for the institutions to manage environmental and social issues in project financing. Under the Equator Principles, projects have to meet set criteria in order to qualify for loans. The criteria are available on www.equator-principles.com.

- e. The following documents are particularly relevant, but shall be checked for accuracy and relevancy before use:
1. IFC Safeguard Policies, e.g. World Bank OP 4.01.
 2. World Bank Pollution Prevention and Abatement Handbook
 3. Other World Bank and IFC Guidelines
- f. Relevant guidelines on specific aspects of ESIA shall be identified for each project and applied as appropriate. These shall include the European Community (EC) Guidelines on the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions (1999) and the series of EIA updates issued by the World Bank.
- g. Wider guidance for best practice for the management of environmental and social issues during pipeline construction should, as applicable, be obtained from:
1. [Environmental Guidelines for International Onshore Pipeline Construction \(IPLOCA\) \(2004\): http://www.iploca.com](http://www.iploca.com).
 2. Canadian Guidance - Environmental Handbook for Pipeline Construction, Alberta Environment, 1988.
 3. [International Petroleum Industry Environmental Conservation Association \(IPIECA\) http://www.ipieca.org/swfs/home.swf \(home page\)](http://www.ipieca.org/swfs/home.swf).
 4. [OGP http://www.ogp.org.uk/ \(home page\)](http://www.ogp.org.uk/) includes guidance on specific habitats, e.g. mangrove, arctic, etc.
- h. Local guidance on the management of environmental and social issues during pipeline construction shall be identified during the pre-Appraise stage of a project.

7. ESIA stages

Several different ESIA documents that may be required during the life of a project are:

- a. Strategic Environmental Assessment – Access stage

A SEA is usually the responsibility of the local government although they may seek to pass responsibility to a developer or group of developers. A SEA is likely to be undertaken before a pipeline project is initiated, e.g. at country or region entry.

- b. Scoping Study – Appraise stage

A Scoping Study shall be prepared during the Appraise stage to identify the key issues to be addressed during the Preliminary and/or Full ESIA.

The production of a Scoping Study enables the production of a more concise and focused ESIA.



The requirement to submit a Scoping Study to the Regulatory Authority is determined by the applicable legislation and the scale and nature of the pipeline project.

c. Preliminary ESIA – Select stage

A preliminary ESIA is not mandatory, but provides useful guidance to the project team. It is not normally submitted to the Regulatory Authority.

d. Full ESIA – Define stage

1. A full ESIA shall be conducted for BP pipeline projects.
2. It shall be prepared by independent specialist consultants and meet the requirements of national legislation and any international finance institutions that are providing funding for the project.

e. Implementation documents – Execute and Operate stages

A suite of documents is required during the Execute and Operate stages. The number of documents and level of detail is commensurate with the complexity of the project and sensitivity of the receiving environment. The range of documents should encompass the contracting philosophy and ensure that the tendering contractors have adequate and succinct information to enable them to address and cost environmental and social elements of the work.

1. A Commitments Register shall be produced and issued to tendering contractors. It shall detail all commitments given in the ESIA and related project documents.
2. An ESMP or ESMS shall be prepared to detail delivery mechanisms for the commitments. A separate ESMP may be required for each of the Execute and Operate stages.

An Environmental and Social Action Plan is required if the project is externally funded.

f. Decommissioning ESIA

1. The need for a decommissioning ESIA shall be determined before a pipeline system is decommissioned.
2. The need shall be determined by the potential for the proposed activities to have adverse environmental or social impacts. In addition, any contractual obligations regarding ownership of the pipeline and associated facilities after the term of the operational licences shall be taken into account.

8. Sensitivity screening

Not all projects require the same level of ESIA because sensitivity to pipeline construction varies between areas and projects.

- a. For each pipeline project, an ESIA screening assessment shall be undertaken in accordance with the process detailed in **Annex 1 of the Environmental Stewardship Operating Standard**.
- b. The screening assessment shall identify:
 1. Critical environmental and social risks.
 2. Potential impacts.
 3. Liabilities.
 4. Significant or unusual regulatory compliance requirements.



5. Other concerns of the national and international stakeholders.
- c. Screening shall be initiated as early as possible in the life cycle of the project or potential project.
- d. Screening is required for new access opportunities.
- e. Screening and categorisation shall be revised at the Appraise, Select, and Define stage gates of CVP.
- f. On completion of the screening process, the project area shall be assigned into one of three categories using the nomenclature A, B, and C to indicate the outcome of the process.

The categories indicate the potential environmental and social sensitivity of the area, with Category A being the most sensitive. Table 1 defines the categories and the required ESIA processes and related activities for each category.

Table 1 - Sensitivity categorisation and ESIA requirements

Category	Definition	Processes	Examples
A	Projects likely to have significant adverse environmental impacts (using a precautionary principle) which are sensitive, diverse, or unprecedented. These impacts may affect an area broader than the sites or facilities subject to physical works. Projects which are likely to attract the attention of external stakeholders because of long-standing issues, such as proximity to or operations within protected areas, regardless of the severity of the impacts. Projects impacting or associated with sensitive areas where the engineering or management solutions are based on novel technology or where the technology/ engineering solution is uncertain or unclear.	Screening, Preliminary, Option Selection, and Project ESIA's Project shall demonstrate that best available scientific knowledge has been sourced, consulted and incorporated in the ESIA's Mandatory Environmental and Social Overview document PCDP plan initiated during the CVP ACCESS stage and becoming progressively inclusive Mandatory dedicated PEER Assist looking specifically at the ESIA and PCDP prior to each CVP gate PHSER review of the ESIA commitments and PCDP responses Consider establishment of an External Advisory Panel on entering the CVP SELECT stage Consider establishment of a project specific website on bp.com from CVP ACCESS stage with disclosure of the Environmental and Social Overview and PCDP questions and responses	New Projects: Kovytko Pipeline, Pacific LNG Pipeline, Alaska Gas Pipeline Existing Projects: BTC Pipeline, SCP, Northstar, Guangdong Pipeline
B	Projects whose potential adverse environmental impacts on human populations or environmentally important areas including wetlands, forests, grasslands, and other natural habitats are less adverse than those of Category A projects. These impacts are site-specific; few if any of them are irreversible; and in most cases, mitigation measures can be designed more readily than for Category A projects.	Screening, Preliminary, Option Selection and Project ESIA although with a narrower scope than for a Category A project PCDP plan initiated during the CVP SELECT stage and becoming progressively inclusive PHSER review of the ESIA commitments and PCDP responses	
C	Project likely to have minimal or no adverse environmental impacts. Generally Brownfield sites, project upgrades or minor modifications, or projects within habitats which are already significantly degraded.	ESIA scope may vary from project to project, but is narrower than that of Category B Consultation on final option selected as a means of informing the public	

9. Alignment with the capital value process

The ESIA process is fully aligned with and integrated into the project lifecycle as detailed in the Environmental Stewardship Operating Standard. The results of project screening and ESIA categorisation (clause 8) at the outset of a project determines the level of environmental and social impact assessment and analysis required to manage these risks at the project and Group level.

