




PTT Exploration and Production Public Company Limited

Issue and Stakeholder Management System Guideline
(ISMS Guideline)

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1. Objective

The purposes of this guideline are as followings:

- To provide guidance for identification and managing social impacts and responding to stakeholders' concerns across PTTEP operations and in accordance with PTTEP Risk Management
- To provide guidance for strategic stakeholder engagement in all company activities specially in operation area
- To enhance cooperation among all responsible functions in project management process
- To create and maintain our social license to operate for domestic and international projects

2. Scope of Application

ISMS guideline shall be applied to all activities over PTTEP and the company subsidiary has operational control, and shall cover the entire lifecycle of the assets or operation from inception through decommissioning and abandonment. New acquisitions, which involve potential impacts on people from the acquisition of land also applied.

This guideline should be used by all PTTEP and contractors' employees and should be used in conjunction with the PTTEP Community Relations and Management Policy and Issue and Stakeholder Management Procedure

3. Definition

Terminology	Description
Corporate Social Responsibility (CSR)	Refer to the ethical principle that an organization should be responsible for how its behavior might affect society and the environment.
Creating Shared Value (CSV)	Improving CSR by policies and practice that enhance the competitiveness of a company while simultaneously advancing the economic and social conditions in the communities in which it operates

(Cont.)

Terminology	Description
Crisis	A major or catastrophic event (out of control emergency). A crisis could result in sustained national impacts over a prolonged period of time; almost immediately exceeds resources normally available to the company, local authorities and country in the impacted area; and significantly interrupts governmental operations and emergency services to such an extent that national security could be threatened.
Donation	Define as a gift given by physical or legal persons, typically for charitable purposes and/or to benefit a cause. A donation may take various forms, including cash, in-kind or both. It also may consist of emergency, relief or humanitarian aid items, development aid support, and can also relate to medical care needs.
Engagement	An organization's efforts to understand and involve stakeholders and their concerns in its activities and decision-making processes.
Emergency	An occurrence or event, natural or human caused, that requires an emergency response to protect life, property, and environment. The external assistance may or may not be needed to supplement the company efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a major or catastrophe in any part of the company premises.
Issue	Refer to events or circumstance that result in positive or negative impacts on the company. The issue may involve environmental and social aspects or a combination of multiple issues. The issue may be short-term or long-term depending on the management approach with scope covering local, national, or global levels. In accordance with ISO 31000 - PTTEP Risk Management Process; an issue is called a "Risk Event".
Issue and Stakeholder Management	Refer to the process of analyzing, understanding, and planning to respond to events, circumstances, and stakeholders in which the organization is (or should be) involved, so that the negative impacts are mitigated. Positive impacts and company reputation can also be enhanced through issue and stakeholder management.

(Cont.')

Terminology	Description
Philanthropy	Charitable giving. It often has little relation to business objectives, even though it may be addressing a community or societal need. Strategic philanthropy, however, is designed to enhance competitive context, aligns social and economic goals and improves a company's long-term business prospects.
Risk	An event maybe happens. Once it happens, there will be unpleasant consequences e.g., property damage, financial loss, project value deterioration, reputation damage, environmental impact, unachievable target/objective, etc.
Social Enterprise (SE)	Commercial strategies to maximize improvements in human and environmental well-being. Can be structured as a for-profit or non-profit. SE as its subsidiary and generate funds to help start-up, aiming to do public goods to promote financial sustainability for such entities and groups. Selling goods and services in the open market, social enterprises reinvest the money they make back into their business or the local community. Do not depend on philanthropy and can sustain over the long term.
Social Impact	Refer to any potential or actual change that has an impact on surrounding community and workers, resulting from the business activity to be support.
Social License to Operate	Define as existing when a project has the ongoing approval within the local communities and other stakeholders, ongoing approval, or broad social acceptance and, most frequently, as ongoing acceptance.
Social Risk	Define as a combination of probability of certain hazard occurrences and the severity of impact resulting from such occurrence.
Stakeholder	Refer to persons, a group of people or agents both in and out of operational areas who have direct or indirect influences in the decision-making processes which affect goals and success of the organization. Stakeholders also refer to those who have been affected by the company decision making process and those who are interested in the operations. Shareholders and financial institutes are not included.

4. Role and Responsibility

The Stakeholder Management and Social Responsibility Department (TSR) is responsible for preparing, reviewing, and updating the ISMS Guideline, as well as supporting its implementation. Additionally, TSR team reviews ISMS reports from each asset/project and provide advice or recommendations for deploying ISMS mitigation plans.

Furthermore, TSR assists the management team in communicating and collaborating with other functions within PTTEP's operational assets, both domestically and internationally, to ensure the implementation of these guidelines across all relevant PTTEP projects, thereby ensuring conformity and performance. The main responsibilities of TSR include:

1. Establishing and maintaining relationships with key stakeholders such as government bodies, communities, NGOs, etc., to facilitate PTTEP's business operations.
2. Coordinating with various PTTEP assets to ensure timely and appropriate responses to stakeholder inquiries.
3. Effectively supporting company operational activities through social risk management.

The Asset Public Affairs Staff, Asset Coordinator, or Asset/Project Manager is responsible for revisiting and developing the ISMS report and reporting to the Asset VP/SVP annually. Each asset/project's ISMS report should be implemented and reviewed in accordance with this guideline. The ISMS report must be submitted annually to the Stakeholder Management and Social Responsibility Department (TSR) for consolidation.

The roles and responsibilities of PTTEP operational units in ISMS are divided into 4 groups:

- **Responsible - R:** Person (s) responsible for managing, executing, and overseeing the activities to completion.
- **Accountable - A:** Person (s) responsible for setting directions and goals of each activity who also holds the final accountability for the success of each activity.
- **Consulted - C:** Person (s) responsible for supporting and providing knowledge and guidance in order to effectively execute the activity.
- **Informed - I:** Person (s) involved in the activities (excluding those described above) to ensure that all relevant persons are aware of on-going activities.

Table 1: Roles and Responsibilities of PTTEP Operational Unit

Process	Responsibilities within PTTEP's Functions			
	Responsible	Accountable	Consulted	Informed
1. Define				
Establishing the Context	- Public Affairs Manager	- Asset VP	- TSR	- Asset SVP
	- Asset/Project Manager	- TSR	- SSHE	- TCS
2. Analyze				
Social Risk Assessment	- Public Affairs Manager	- Asset VP	- TSR	- Asset SVP
	- Asset/Project Manager	- TSR	- SSHE	- TCS
Stakeholder Identification and Prioritization	- Public Affairs Manager	- Asset VP	- TSR	- Asset SVP
	- Asset/Project Manager	- TSR	- SSHE	- TCS
Risk Treatment (Mitigation Plan)	- Public Affairs Manager	- Asset VP	- TSR	- Asset SVP
	- Asset/Project Manager	- TSR	- SSHE	- TCS
3. Execute				
Implement Mitigation Plan	- Public Affairs Manager	- Asset VP	- TSR	- Asset SVP
	- Asset/Project Manager	- TSR	- SSHE	- TCS
Communications	- Public Affairs Manager	- Asset VP	- TSR	- Asset SVP
	- Asset/Project Manager	- CBK	- TCS	- TCS
4. Evaluate				
Evaluation	- Public Affairs Manager	- Asset VP	- TSR	- Asset SVP
	- Asset/Project Manager	- TSR	- TCS	- TCS

Acronyms:

- SVP: Senior Vice President
- VP: Senior Vice President
- CBK: Branding, Communication and Knowledge Intelligence Division
- TCS: Technology, Carbon Solution, and Sustainable Growth Group
- TSR: Stakeholder Management and Social Responsibility Department

The ISMS reports from all assets will be used as important supported evidence for DJSI, EIA Audit, SSHE Audit, Internal Audit, 56-1 One Report, SD Report etc.

5. Rationale

The PTTEP Sustainability Framework comprises 3 main components namely; High Performance Organization (HPO); Governance, Risk Management and Compliance (GRC); and Sustainable Value Creation (SVC). The balance among the three components will support PTTEP’s journey towards sustainability.

Operating under the sustainability framework, PTTEP is confident that this strong foundation together with conscious consideration of all stakeholders’ interests will ultimately enable us to ensure energy security, deliver value, and foster sustainability.



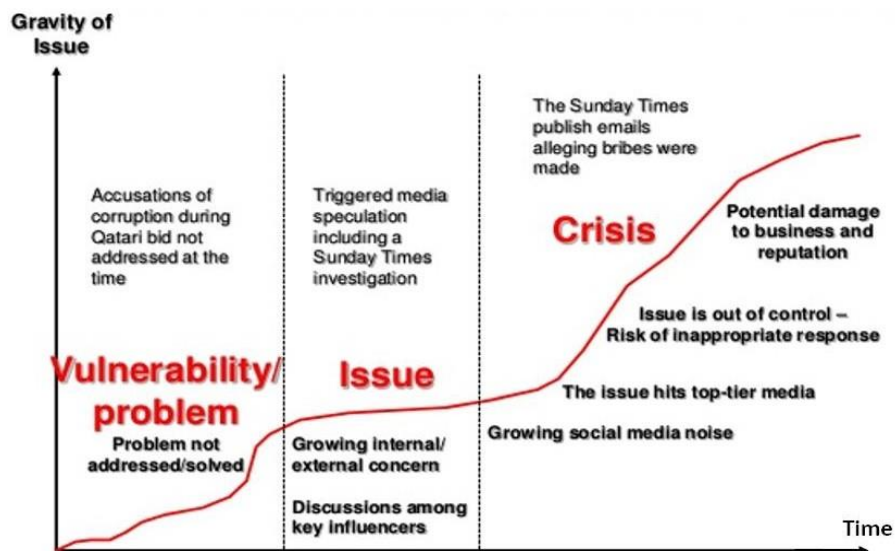
Picture 1: PTTEP Sustainable Development Framework

PTTEP realizes that mismanaged of social issues and stakeholders could damage reputation and directly impacts loss of stakeholder trust. In 2013, PTTEP developed Issue and Stakeholder Management System (ISMS) as a guide practice to standardize the analysis, planning, monitoring and evaluation of social risks from all relevant company activities and its stakeholders across all parts of operational activities.

PTTEP believes that effective engagement and partnerships with stakeholders in the wider society will lead the organization to continue its path of sustainable growth, hand in hand with the growth of the community, society, and the global community. PTTEP uses the ISMS Guideline for all PTTEP’s operational sites globally. ISMS Guideline implementation enables us to obtain and maintain our “Social License to Operate”. License to operate is part of social in sustainable development framework of PTTEP.

ISMS was developed in alignment with international standards including International Finance Corporation's (IFC) Performance Standards on Environmental and Social Sustainability and applied with ISO 31000 practices as core element to assess and manage social risks. The guideline provides the process to manage social impacts on communities in operational areas. The system helps capturing knowledge to foresee and mitigate potential negative impacts that prevent assets and projects from achieving objectives.

ISMS is a mechanism to identify, assess, prioritize, mitigate, and monitor social risks that may impacted to company activities in order to protect PTTEP from business losses and/or reputation damage.

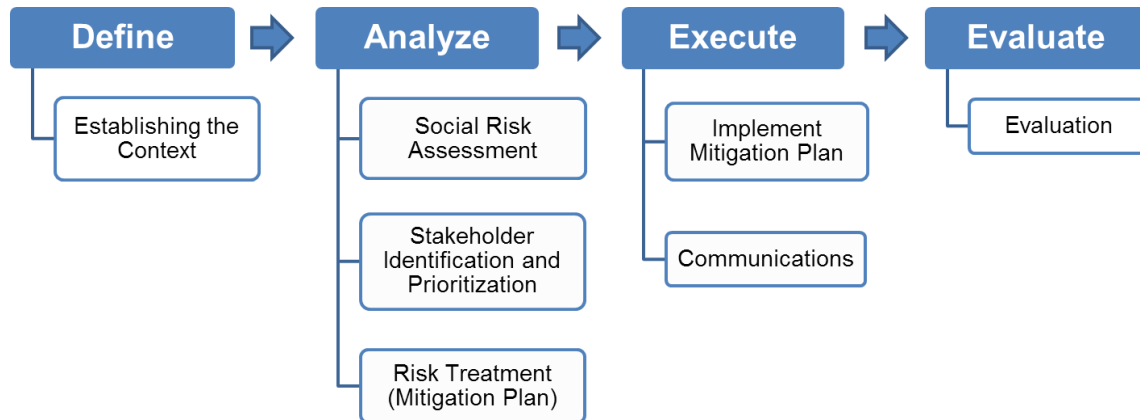


Picture 2: Lifecycle of an issue

6. Issue and Stakeholder Management System (ISMS) Process

ISMS is a proactive system that provides guidelines on practices to manage social risks across PTTEP operations. The system is broadly applied across the organization, including contractors and primary suppliers over which the organization has control or influence. ISMS process consists of 4 processes as follows:

- 1. Define:** To define the framework in relation to internal / operational context and external context of issue and stakeholder management
- 2. Analyze:** To analyze the social risks and stakeholders: identify, evaluate, and prioritize both issues and stakeholders relevant to the defined context
- 3. Execute:** To execute, implement and communicate mitigation plan
- 4. Evaluate:** To evaluate the results



Picture 3: ISMS Process

6.1 Define

Establishing the Context is about clearly defined issue and stakeholder management framework in relation to operational context and desirable outcomes. To clearly define changes in the operating environment both in terms of internal and external factors that PTTEP must consider when assessing risks.

Table 2: Description of Context

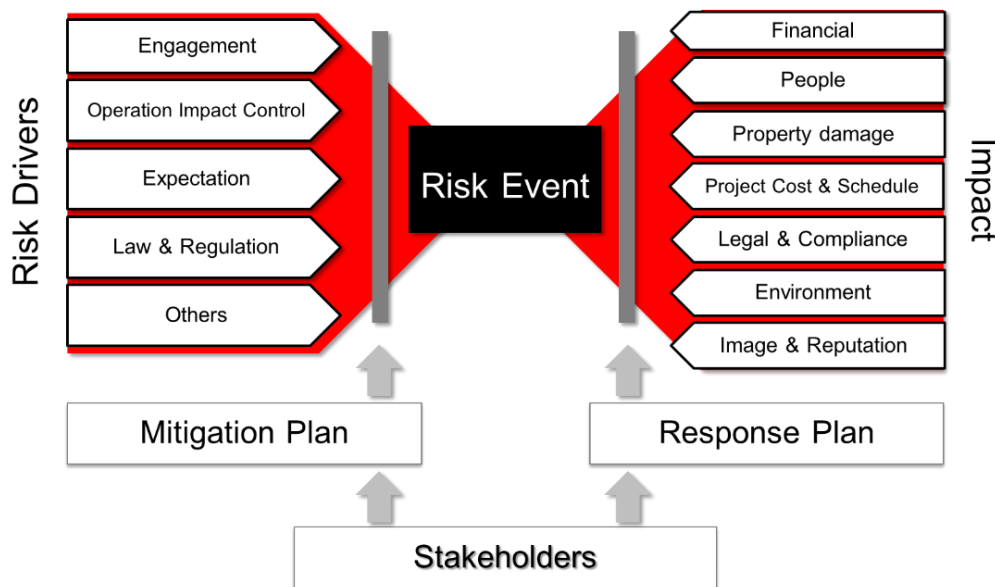
Context	Description / Examples
1) Project Description and Background	- Basic information of asset/project - Identify operation plan/activities throughout the project lifecycle
2) Project Phase	Identify project phase i.e. Acquisition, Exploration, Production & Development, Relinquish & Abandonment & Decommissioning
3) Operating	PTTEP Operating or Non-Operating
4) Project Name	Name of asset/project
5) Period	How long does this risk cover? e.g. January-December 2024
6) Objective	The purpose of social risk analysis
7) Critical Success Factor	- Expected results if the mitigation plans are met. - The factor that is necessary for achieving the objective.
8) Internal Context	The internal factors can be identified by the factors that originate within PTTEP that impact the achievement of objectives e.g. organization structure, internal process, human capability, company culture and etc.

Table 2: Description of Context (Cont')

Context	Description / Examples
9) External Context	The external factors that impact the achievement of objectives e.g. local content, geopolitical, the culture of people in the area, law and regulations and etc.
10) Project Location	Figure of project location - Offshore Operation: covers the distance from the concession block to the coast including the supply base and surrounding communities. - Onshore Operation: covers the distance from the concession block to surrounding communities.

6.2 Analyze

To analyze on social risk assessment, Bow-Tie Analysis Model¹ and Risk Matrix² will be used as a tool to identify potential risk event, risk drivers, and formulate mitigation plan to prevent risk event to occur.


Picture 4: Social Risk Analysis Model

Source:

1. Bow-Tie Analysis Guideline (12147-GDL-SSHE-401/00/04-R02, Revision No.2, 25 Apr 2022)
2. Risk Management Standard (12142-STD-001-R05, Revision No.5, 16 Jun 2022)

Identifying and managing issues have to influence across all parts of company business and can affect the reputation. Early identification of potential issues and stakeholder can lead to effective stakeholder engagement plan. In this process the guideline will show how to identify the vital circumstances with relevant key stakeholder that might impact or prevent the company achieve its objective.

6.2.1 Social Risk Assessment

The issue can be defined as an emerging matter which could impact on the business and affect reputation. The process is developed to determine how best to identify potential issues. Identifying issues at the earliest opportunity in the planning phase of project development help the business achieve its objectives with minimum negative impacts from society.

Based on project context allow PTTEP to deliberate and identify risks impacted on such business objectives.



Picture 5: Social Risk Assessment Process

Social Risk Assessment process can be conducted as follows:

6.2.1.1 Address Risk Event

Address a risk event that may occur and impact to company's activities or operation. Review situational context and generate a list of risk events that might enhance, prevent, degrade, or delay the achievement of the objectives. Risk event should be S.M.A.R.T.

S	Specific	<ul style="list-style-type: none"> be clear and specific on the desired achievement
M	Measurable	<ul style="list-style-type: none"> can determine the success of the execution e.g. KPI, How much?, How many?
A	Achievable	<ul style="list-style-type: none"> targets set are realistic and achievable
R	Relevant Realistic	<ul style="list-style-type: none"> support the upper level objectives (Achievable) targets have to possible and feasible
T	Time-bounded Timely	<ul style="list-style-type: none"> deadline is determined each target needs a time-bound goal to establish a sense of urgency

Picture 6: S.M.A.R.T.

Example of risk event:

- Operation disruption from stakeholder.
- Community protest and close Zawtika Operation Center.
- Fishery group protest against Zawtika Phase 1C and 1D and drilling operation.
- Landowners/Hand-dug well owners protest against land acquisition and compensation for their lands and access road during operation.
- Local media can distribute about the misleading or fraud news upon our operation.
- Government of Indonesia resubmit lawsuit against PTTEP AA, PTTEP PLC and PTT Group PLC for environmental damage from Montara Oil Spill.
- Negative News on PTTEP in Indonesia National media.
- Project objections trigger a public hearing which results in 1-2 year delay in project approval.
- Aboriginal Consultation identifies a high value, traditional use or culturally significant area on the project development area, which requires additional mitigations or results in a project delay.

6.2.1.2 Identify Risk Drivers

Identify risk drivers of that risk event. Risk drivers can be identified to 5 components as follows:

- 1) Engagement
- 2) Operation Impact Control
- 3) Expectation
- 4) Law and Regulation
- 5) Others

Risk Driver - Component 1: Engagement

Stakeholder relation is a particular aspect of dialog. It is the active and regular management of the relationship between an operation plant, office or facility and the local communities around it. Community relations may mean “getting to know your neighbors.”

Being ready is the key success of stakeholder engagement, by studying geopolitical and socio-economic of the surrounding area. It will help PTTEP to understand the local context leading to the selected target group for engagement.

It is not necessary to put the resource to engage with all stakeholders at the same level, being strategic and learning from stakeholder and social risks which allocate resource and manpower can produce a better outcome.

Example of risk drivers in component of engagement:

- Failure to inform the operation plan.
- Failure to inform the operation plan no less than 15 days or 30 days (follow by EIA).
- Misconceptions about how E&P businesses e.g. oil price, reserve crude oil, royalty and etc.
- Misunderstand of oil stains and tar ball.
- Outside NGOs evolve into local communities.

Risk Driver - Component 2: Operation Impact Control

Operation Impact Control mainly concern with physical impacts from operating activities.

Example of risk drivers in component of operation impact control:

- Contractor Company do not follow the SSHE rules.
- Logistics (speed limit, noise, dust).
- Expected compensation for fisheries boats, if the fishing gear is moved or stored, or loss of opportunity in fishing areas.
- Traffic of ships, maybe a boat accident happened.
- Drilling or Decommissioning Techniques & Methods
- Local Employment
- Water Management
- Waste Management

Risk Driver - Component 3: Expectation

Expectation management is the process of managing stakeholders for communicating with stakeholders to identify their needs and addressing issues in resolving conflict situations and achieving the project goals. When expectations of the stakeholders are actively managed, the project gets a higher likelihood for success. Stakeholder needs don't always have to be fulfilled.

Efficient expectation management is finding mutual benefits of stakeholders and the company. PTTEP should continuously negotiate and influence the desires of the stakeholders to achieve strict conformity of project goals and expectations and maintain the project management effort.

Example of risk drivers in component of expectation:

- Social Development Projects (CSR, CSV, SE)
- Philanthropy and Donation

Risk Driver - Component 4: Law and Regulation

PTTEP conducts its business as a responsible corporate member of the society to observe the laws of Thailand and the countries we operate in.

PTTEP is committed to following international best practices on managing stakeholder concern and control unavoidable potential issue. And ensures that all employees including contractor are understood and follow the law and regulation.

Example of risk drivers in component of law and regulation:

- Land ownership (e.g. Agricultural Land Reform Office)
- Royalty
- Follow by EIA or DEA
- Liability for Rigs to Reef (Decommissioning)

Risk Driver - Component 5: Others

Besides the 4 key components of risk driver which mentioned above, the other uncontrollable factors from the external party may bring the damage or impact to company's operation.

Example of risk drivers in component of others:

- The other E&P company or contractor in the same operational area or vicinity of PTTEP has the problem with surrounding communities; their conflicts may affect to PTTEP's operation e.g. the protest, the road blockage and etc.

6.2.1.3 Analyze Impact

Analyze impact which may occur by that risk event. The impact can be classified to 7 aspects as follows:

- 1) Financial
- 2) People
- 3) Property Damage
- 4) Project Cost and Schedule
- 5) Legal and Compliance
- 6) Environment
- 7) Image and Reputation

6.2.1.4 Prioritize Impact & Likelihood

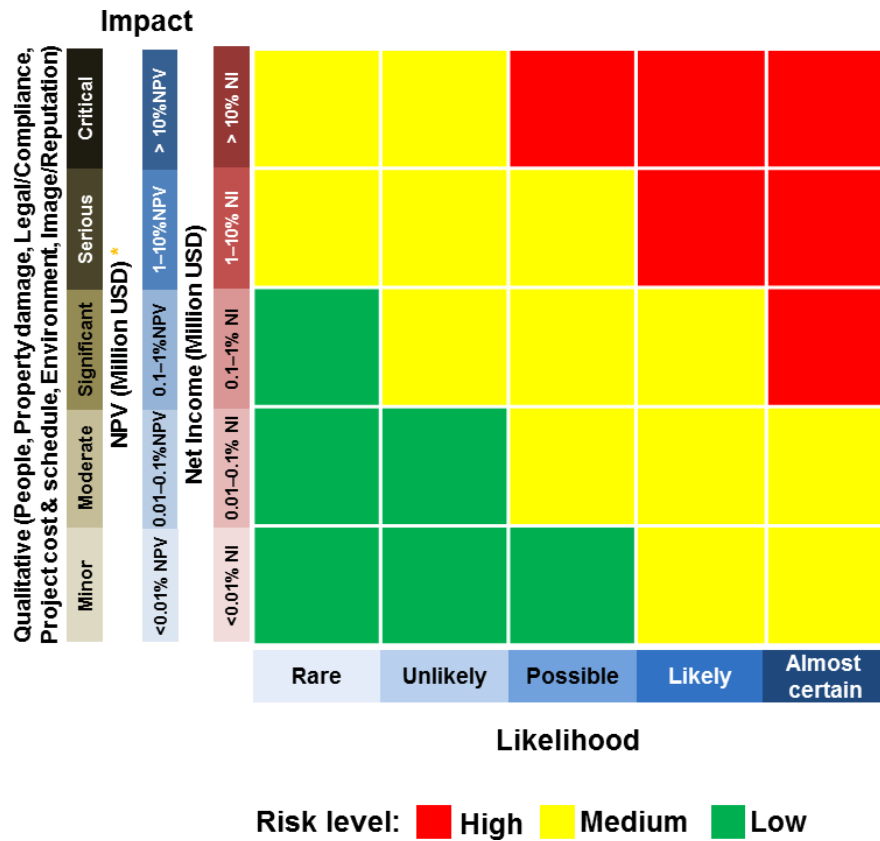
Prioritize the risk event by plotting in Risk Matrix to foresee a likelihood of occurrence. Any social risk event that is plotted in red zone should be given highest priority for mitigation, whilst other social risks in the yellow and green zone should be managed in suitable manner.

Table 3: Impact Criteria

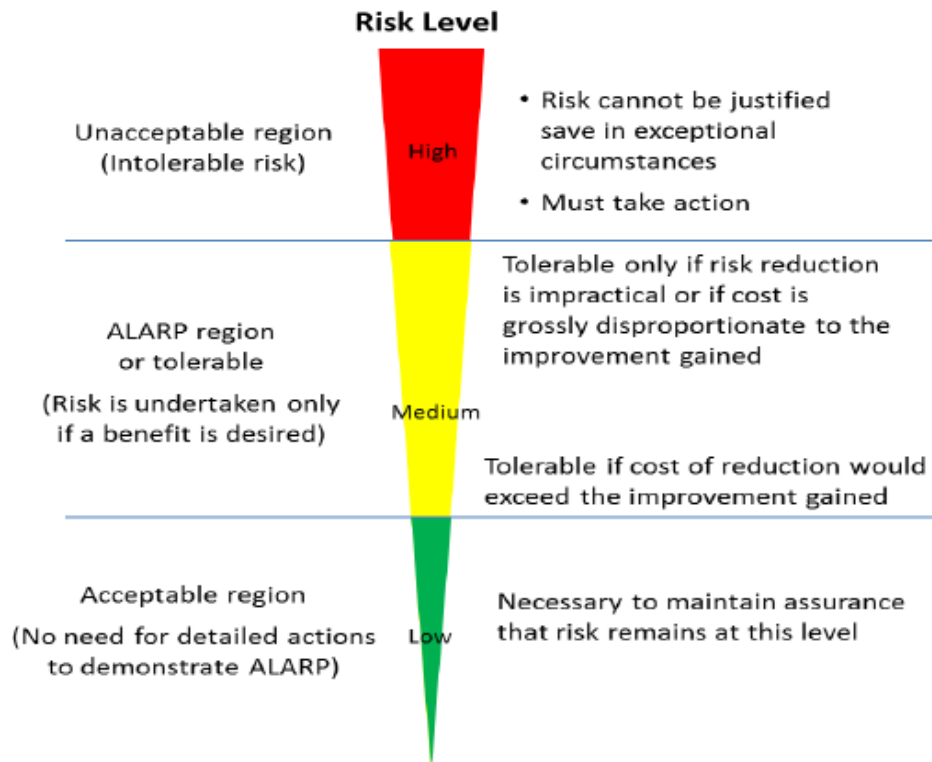
Impact Rating	Financial	People	Property damage	Project cost & schedule	Legal/ Compliance	Environment	Image/ Reputation
Critical (5)	> 10% of NI/NPV/EMV	Multiple fatalities	Loss >\$50M	Impact on cost or schedule >10%	<ul style="list-style-type: none"> Dismissal of Board and Management Revocation of any licenses or permits Imprisonment >12 mths Fines/Compensations; <ul style="list-style-type: none"> ➢ Thai Laws: > 5M THB, ➢ Foreign Laws: > 1M USD 	<ul style="list-style-type: none"> Spill >100,000 bbl Tier 3 International assistance 	<ul style="list-style-type: none"> International media coverage Formal complaint from international authority
Serious (4)	1% - 10% of NI/NPV/EMV	<ul style="list-style-type: none"> Multiple Lost Work Day Case (LWDC) One permanent disability One fatality 	Loss between \$5-\$50M	Impact on cost or schedule 5%-10%	<ul style="list-style-type: none"> Suspension of stock trading Suspension of any licenses or permits Imprisonment 6-12 mths Fines/Compensations; <ul style="list-style-type: none"> ➢ Thai Laws: 1M-5M THB, ➢ Foreign Laws: 200k-1M USD 	<ul style="list-style-type: none"> Spill > 10,000 bbl Tier 2 Regional assistance 	<ul style="list-style-type: none"> National media coverage Local community protest with national influencer
Significant (3)	0.1% - 1% of NI/NPV/EMV	<ul style="list-style-type: none"> Single LWDC Multiple Restricted Work Day Case (RWDC) 	Loss between \$100k - \$5M	Impact on cost or schedule 2.5%-5%	<ul style="list-style-type: none"> Imprisonment ≤ 6 mths Fines/Compensations; <ul style="list-style-type: none"> ➢ Thai Laws: 300k-1M THB, ➢ Foreign Laws: 10k-200k USD 	<ul style="list-style-type: none"> Spill > 1,000 bbl Tier 1 Localised effect 	<ul style="list-style-type: none"> Regional media coverage Online media spread Local community protest with provincial/state influencer
Moderate (2)	0.01% – 0.1% of NI/NPV/EMV	<ul style="list-style-type: none"> Medical Treatment Case (MTC) Single RWDC 	Loss between \$10k - \$100k	Impact on cost or schedule 1.25%-2.5%	<ul style="list-style-type: none"> Fines/Compensations; <ul style="list-style-type: none"> ➢ Thai Laws: <300k THB, ➢ Foreign Laws: <10k USD 	<ul style="list-style-type: none"> Spill > 1 bbl Minor effect 	<ul style="list-style-type: none"> Local media interest Influenced online media post Local community aggregation
Minor (1)	< 0.01% of NI/NPV/EMV	Minor injury with First Aid	Loss <\$10k	Impact on cost or schedule <1.25%	<ul style="list-style-type: none"> No penalty Breach but can be resolved without any actual punishment 	<ul style="list-style-type: none"> Spill < 1 bbl Slight effect 	<ul style="list-style-type: none"> No news coverage Non-influenced online media post Local community complaint

Table 4: Likelihood Criteria

Rating	Rare (1)	Unlikely (2)	Possible (3)	Likely (4)	Almost Certain (5)
Frequency of Occurrence / Likelihood of Occurrence	Event occurrence is remote and/ or never heard of in the E&P industry	Event has occurred few times in the E&P industry OR is unlikely to occur in PTTEP	Event has occurred several times in the E&P industry OR occurred once in PTTEP OR may occur in PTTEP	Event has occurred several times per year in the E&P industry OR more than once per year in PTTEP OR occurred at the same location OR is likely to occur in PTTEP	Event has occurred frequently in E&P industry OR occurred more than once per year at the same location OR is expected to occur in PTTEP



Picture 7: Risk Matrix

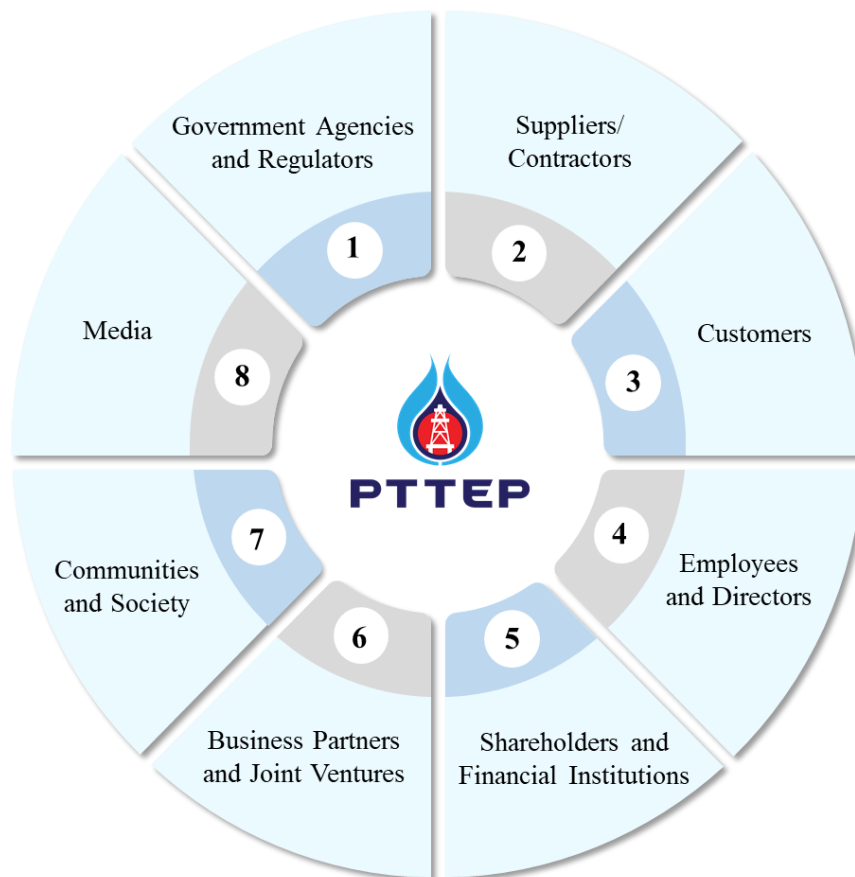


Picture 8: Triangle of Risk Regions

6.2.2 Stakeholder Identification and Prioritization

6.2.2.1 Stakeholder Identification

The first step in the process of stakeholder management is stakeholder identification to determine who your stakeholders are. The Company may have a large number of stakeholders in different dimensions and concerns. To make it more understandable, PTTEP classified its stakeholders into 8 groups in alignment with international standards and peers.



Picture 9: Group of Stakeholders

Group 1: Government Agencies and Regulators

Government agencies refer to ministerial level, sub-ministerial level, departments, public sector units, cover at the regional, national and international levels, as well as related organizations and institutions with roles in policy formulation, regulatory oversight, business operations, approvals, permits, and the development of standards that companies must adhere to.

Group 2: Suppliers/Contractors

Suppliers refer to individuals or organizations that provide goods and/or services to the company.

Contractors refer to individuals or organizations that undertake or contract to perform specific work for the company as specified in the contract.

Group 3: Customers

Customers refer to buyers of products and services from PTTEP.

Group 4: Employees and Directors

Employees refer to employees within PTTEP and employees of companies within the PTTEP Group

Directors refer to PTTEP Board of Directors.

Group 5: Shareholders and Financial Institutions

Shareholders refer to institutional investors and retail investors.

Financial institutions refer to institutions involved in capital allocation and financial investment transactions (such as banks, investment funds, mutual fund companies), credit rating agencies, securities companies, securities analyst, financial related associations such as the Investors Associations, and insurance companies.

Group 6: Business Partners and Joint Ventures

Business partners and Joint ventures refer to organizations that collaborate and jointly engage in business with shared investments, including capital, assets, labor, technology, land, personnel, or other resources, under mutual agreements or contracts to achieve the mutual business objectives.

Group 7: Communities and Society

Communities and society refer to the communities in proximity to operation areas, communities along the pipeline route, fishery groups in offshore operation areas, occupational groups, volunteer groups, non-profit organizations, independent organizations, associations, foundations, private companies, educational institutions, as well as local and regional government organizations in the areas where the company operates and do not have

authority or permission to control or approve the company's operations. This also includes the people in the area/province/country where the company operates.

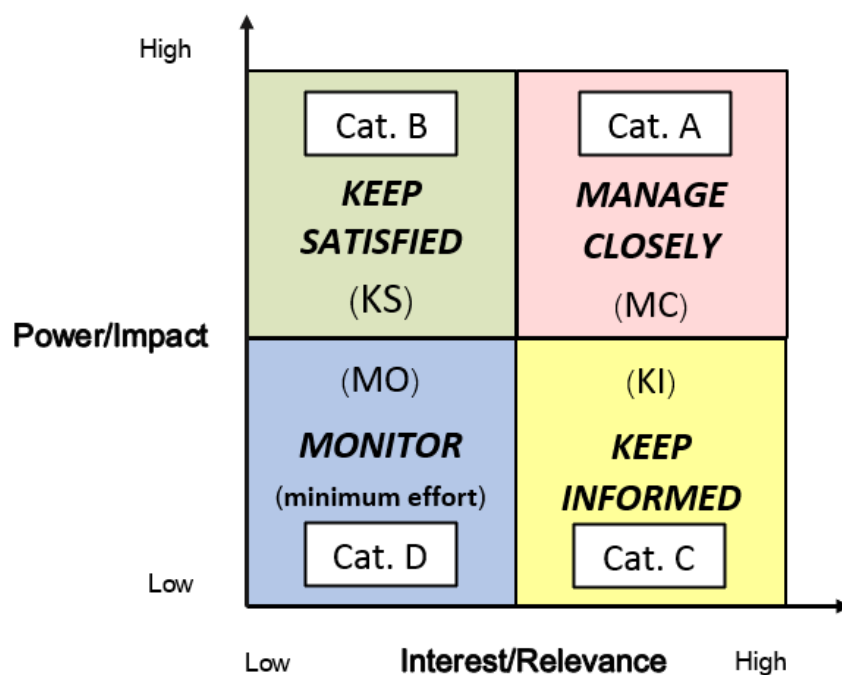
For more details on the communities in the PTTEP operation area, please refer to Appendix 1.

Group 8: Media

Media refer to a person or group in the profession or media business, serving as intermediaries in presenting information, news, and various types of content to the public at large, whether in traditional media formats such as print, radio broadcasting, television broadcasting, and online media, such as websites, Facebook, etc.

6.2.2.2 Stakeholder Prioritization

After listing all concerned stakeholders, the next step is to prioritize them by power/impact and interest/relevance and plot the details on a stakeholder prioritization map as shown in Picture 11, to classify them by their impact and interest in PTTEP business activities. One purpose of this methodology is to help identify and categorize stakeholder groups, so that appropriate attention can be given to each group according to the level of engagement needed. Description of power/impact and interest/relevance is shown in Table 5.



Picture 11: Stakeholder Prioritization Mapping

Table 5: Description of Power/Impact and Interest/Relevance

	Description / Examples
Power/Impact	<p>Power / Impact means the ability of stakeholders to create an impact on organization's operations. For example,</p> <ul style="list-style-type: none"> • Remove, grant or influence "license to operate" • Restrict access to resources, operating sites or intellectual capital • Damage or build company reputation • Contribute or detract from companies' ability to learn and innovate • Restrict or provide access to investment funds • Provide useful early warning signals about emerging issues and risks or cause distractions diverting management attention and time from core activities depending on the context of engagement
Interest/Relevance	<p>Interest / Relevance means the response of stakeholder to the organization's operations. For example:</p> <ul style="list-style-type: none"> • Direct financial dependence (e.g. who depend on you for wages, purchases, grants) • Indirect financial dependence (e.g. whose livelihoods depend on you through your contributions to the regional economy, or for example low income customers who depend on low prices for basic goods which you may provide) • Non-financial dependence (e.g. those who depend on you for essential services) • Non-financial impairment or risk from your operations (e.g. through air or noise pollution or from risk to health for consumers of your products)

Source:

- Account Ability, the United Nations Environment Programme, and Stakeholder Research Associates, 2005.
- The Stakeholder Engagement Manual Volume 2: The Practitioner's Handbook on Stakeholder Engagement No. ISBN 1-901693-220.

According to the stakeholder prioritization mapping in Picture 11, the level of engagement for each group can be identified as follows:

Category A: High Power / High Interest (Manage Closely: MC)

These group are stakeholders who have high influence to create an impact to the company activities or company license to operate and also pay high interest to company activities. These groups must be fully engaged with make the greatest efforts to satisfy and ensure that they understand and support company activities or project.

Category B: High Power / Low Interest (Keep Satisfied: KS)

These group of stakeholders have power to create any impact to the company activities, however they pay minimal attention to company activities and movement. These stakeholders should keep them satisfied by providing adequate information. Regular visit and consultation on their interest should be conducted with these groups.

Category C: Low Power / High Interest (Keep Informed: KI)


These group of stakeholders don't have enough power to create any impact to the company activities, but they pay high attention to company activities and movement. They should be given enough information and engaged for consultation and decision on some issues. Keeping these groups adequately informed and regularly talked to will ensure that no major issues will be raised from them.

Category D: Low Power / Low Interest (Monitor: MO)

These groups do not have any impact and they also pay low attention to company activities. Company should keep monitor these groups of people; occasional communication should be made. There is no specific methodology of communication for these groups.

After stakeholder prioritization, we should evaluate stakeholder attitude that affect PTTEP or E&P business, to find out stakeholder engagement methods.

Table 6: Stakeholder Attitude Definition

Stakeholder Attitude	Definition
	<p>Negative (Red)</p> <ul style="list-style-type: none"> Stakeholders are explicitly show or express negative attitude / action / comments towards E&P business or directly at PTTEP. <p>Neutral (Yellow)</p> <ul style="list-style-type: none"> Stakeholders show no sign of objection towards project activities or no sign of support. Allow PTTEP to carry on activities <p>Positive (Green)</p> <ul style="list-style-type: none"> Stakeholders are eager to show positive ideas including be part of the committee in creating and organizing CDP program or impact mitigation solution. Stakeholder responds on behalf of PTTEP when there is a question. Stakeholder expresses that existence of PTTEP operation improves their quality of lives and welcome to have PTTEP operation in as neighbor.

Once stakeholder groups have been identified and prioritized according to the degree of potential project impacts, either positive or negative, and capacity to influence the project, a strategic approach will be developed.

The information of stakeholders (i.e. organization, name, contact detail, role and responsibility, expectation, concern, etc.) will be used as a data base to input to the stakeholder management process for a further analysis and then develop the strategic plan.

6.2.3 Risk Treatment (Mitigation Plan)

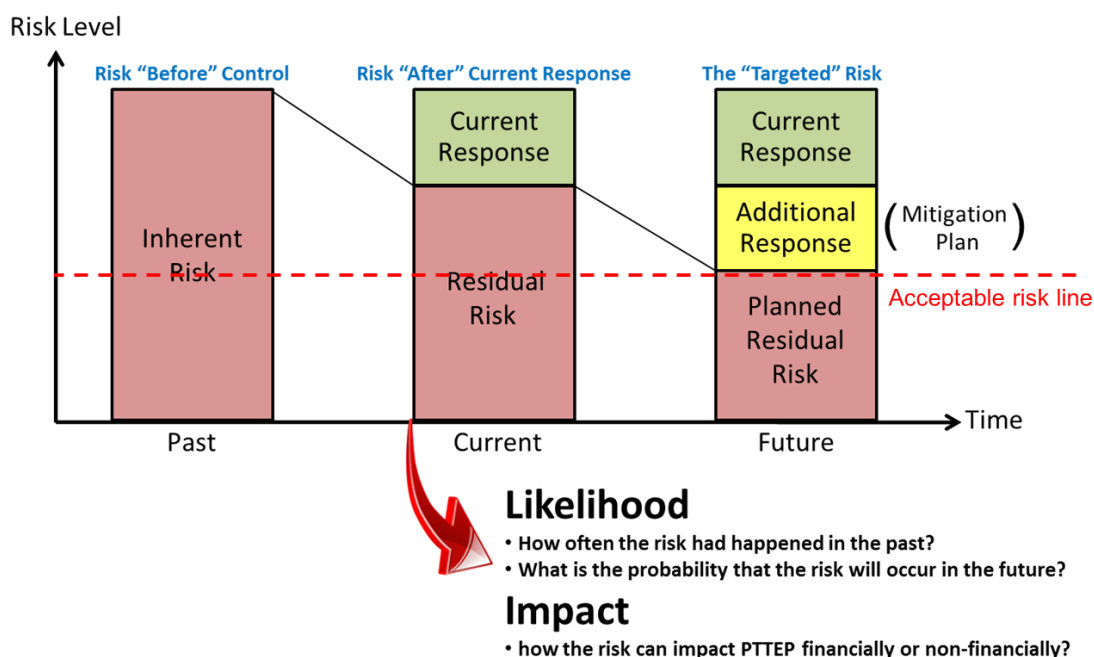
In this step, each asset/project will formulate mitigation plans and a develop stakeholder engagement strategy by considering risk drivers and stakeholder prioritization to further reduce risk level. Successful mitigation plans and stakeholder engagement strategy will achieve the following:

- Greater public understanding of the company business
- Reduce social negative impact
- Resolve conflict situations
- Enhance the company's reputation
- Gain society and community support and acceptance

The mitigation plan shall be continuously and formally reviewed as a part of the business planning process. To ensure that the strategy conforms to PTTEP Community Relations and Management Policy.

Mitigation plan can be derived from the 4T strategies, which consist of:

Take (Accept)	Accepting the risk, as all mitigating options are deployed or uneconomical and that the risk level is acceptable
Treat (Reduce)	Taking actions to reduce the likelihood and/or impact of a risk
Transfer (Share)	Transferring or sharing a portion of the risk and reward with a third party e.g. outsource, insurance
Terminate (Avoid)	Exit or avoid an activity giving rise to such risk



Picture 12: Three Stages of Risk Assessment

		Likelihood				
		Rare	Unlikely	Possible	Likely	Almost certain
Impact	Critical					
	Serious				1	
	Significant			1	2	
	Moderate					
	Minor				2	

Picture 13: Example of Reduce Risk Event

Mitigation Plan - Component 1: Engagement

Stakeholder engagement is the process used by an organization to engage relevant stakeholders for the purpose to achieve agreed outcomes. It is a two-way process, however, there are different levels and associated engagement methods depending on the nature and extent of stakeholder involvement. It can be conducted with formal and informal activities, through the communication and working with stakeholders to inform everyone of the project's information, to meet their needs and expectations, and to address issues as they occur. The key benefit is to increase support and minimize resistance from stakeholders, also to capture important information to help make adjustment and response to problem areas.

Stakeholder engagement can be conducted in a timely manner with different scale, depending upon a project progress, group of stakeholders and its degree of Impact and Interest. For example:

- Greeting on special occasions
- Regular Meeting with key stakeholders (monthly, quarterly, yearly) e.g. meeting with concerned government authorities and communities
- Technical Forum / Knowledge Sharing to better understanding of PTTEP business
- Group Meeting / Focus Group Meeting / In-depth Discussion
- Public Participation (PP), Public Hearing, Public Meeting
- Notification via communication materials/channels (letter, poster, brochure, exhibition, VDO, spot radio, etc.)
- Opinion survey to obtain the opinions both in positive and negative way
- Operation site visit for a better understanding of PTTEP business and to reduce their irrelevant concerns
- Cultural or annual event participation
- Networking activities (i.e. sport activities, lunch and dinner, etc.)
- Project partnership
- CSR / Donation

Stakeholder engagement is implemented in a timely manner to ensure we understand and manage the interests and concerns of stakeholders at every asset.

Mitigation Plan – Component 2: Operation Impact Control

To create preventive measures to reduce operation impact on the environment and community e.g. buoy installation, spills kit, traffic signs, speed limits, dust barriers or grievance mechanism.

To create a responsive plan if operations facing unavoidable circumstances from the public and community pressure e.g. secondary route if community blockage, emergency contact person if need negotiation.

Mitigation Plan - Component 3: Expectation**a) Social Development Projects**

PTTEP has developed social development projects (i.e. CSR, CSV, SE projects) under 4 themes as follows:

1. Basic Needs (BN):

- To implement projects which serve the basic needs of stakeholders in the area of 4 factors.
- To uplift a quality of life, develop an infrastructure, provide a basic human need, also including emergency relief support.

2. Education (EDU):

- To implement projects which provide support to underprivileged students to pursue their study or to develop skill of workforce to serve business and industry.
- To provide and extend an educational opportunity to the youth through the scholarship program, learning youth camp, learning instruction support and etc.

3. Environment (ENV):

- To implement projects which conserve and protect natural resources for future generation.
- To create and embed an environmental awareness e.g. reforestation project.

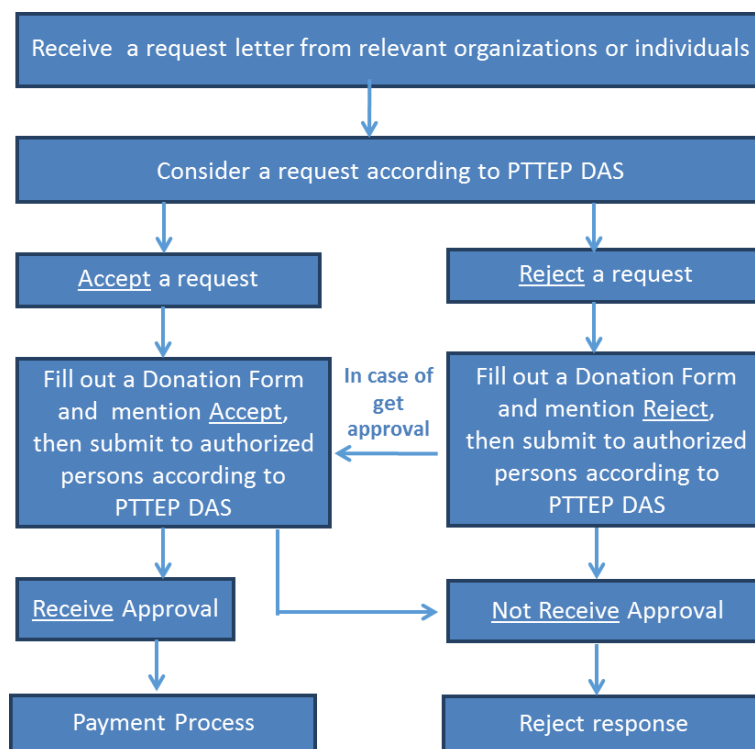
4. Culture (CS):

- To implement projects which conserve cultural heritage, maintain pride of the country.
- To create the awareness of cultural conservation both in local area and nationwide, to prolong the religious, as well as to support sport activities.

b) Philanthropy and Donation

Philanthropy and Donation can be undertaken in a variety of ways i.e. grant making, establishment of a foundation, and development of a matching funds program. PTTEP approach to philanthropic donation reflects our sustainable development commitment and our company culture. Having in place a system will ensure transparency, align with Corporate Governance & Business Ethics (CG&BE) and Standard of Practices for Anti-Corruption, and accountability in decision-making, as well as will help to manage stakeholder expectations.

PTTEP has focused its donation to 4 themes of activities which are Basic Needs, Education, Environment and Culture. To meet an objective and ensure a transparency, the company established a grant making process according to PTTEP DAS as follows:



Picture 14: Grant Making Process

Source: Donation Guideline (12140-GDL-001-R05, Revision No. 5, 5 September 2022)

After completed a donation, the company should follow up whether the requesters proceed the activities and achieve the objective that they purposed in the beginning or not. It will help the company to have reference information for consideration on a further donation request.

Mitigation Plan – Component 4: Law and Regulation

PTTEP employees including contractor must understand and follow the law and regulation of Thailand and the countries we operate in.

Mitigation Plan - Component 5: Others

Monitor news and issues in the operation area. And seek mitigation plan followed by the situation.

6.3 Execute

6.3.1 Implement Mitigation Plan

Implementation or execution of mitigation plan refers to each day decisions, processes and practices activities that ensure the mitigation plans meet the target and close the gap of risks as well as to gain the community's acceptance and license to operate for the smooth operation and enhance the company's reputation and image.

Effective mitigation plans require the setting of timeframes, measurable targets and flexible. Stakeholder feedback from the project execution is also important to evaluate the project.

Monthly activities report for each asset/project developed by asset public affairs staff, asset coordinator or asset/project manager for reporting asset VP/SVP. In addition, monthly activities report is required to submit to TSR for consolidation annually. The annual activities reports from all assets will be used as an important supported evidence for DJSI, EIA Audit, SSHE Audit, Internal Audit, 56-1 One Report, SD Report and etc.

Key Risk Indicator (KRI) is a tool to evaluate efficiency of mitigation plan. KRI is a measure used to indicate how risky an activity is. It provides an early signal of increasing risk exposure and the need for action. To ensure that risk remains at an acceptable level, KRI must be regularly monitored to swiftly respond to the changing circumstance.

Table 7: KRI Definition

Color	Levels	Definition of each tolerance level
Green	Acceptable	"Green" signifies that the business is functioning and the KRI is in line with acceptable levels.
Yellow	Tolerable	"Yellow" is used as an early warning indicator that the KRI is now beyond the acceptable level but in tolerable level. Additional responses may be required.
Red	Unacceptable	"Red" indicates that the risk is in unacceptable level and that it is highly unlikely that base KPI will be achieved.

Key Risk Indicator	Acceptable	Tolerable	Unacceptable
Number of stakeholders complain on company activities (per year)	0	>5	>10

Picture 15: Example of KRI

a) Grievance and Issue Handling

PTTEP has developed Grievance and Issue Handling Guideline to ensure that all grievances raised are managed and handled appropriately and systematically. Stakeholders can raise their grievances or complaints through public affairs staff, SSHE staff, security officer, PTTEP website, and etc.

Grievance and Issue Handling is a process to manage the complaints or plaintiffs which raised by people, communities or company's stakeholders. The complaints regard to any impact related to activities of PTTEP or its subsidiary. Grievance Handling is aimed at providing a platform to resolve complaints quickly and effectively before they escalate.



Picture 16: Grievance and Issue Handling Process

Source: Grievance and Issue Handling Guideline (12140-GDL-009-R02, Revision No. 2, 12 Jun 2024)

6.3.2 Communication

The effective communication is an essential part of doing the stakeholder management. PTTEP respects human rights equally and commits to disclose information to all PTTEP stakeholders in order to increase the understanding of the company business and promote a transparency and accountability and engendering the public trust.

PTTEP has developed the communication channels in various way as follows:

- Promote company information, its business and social development projects through the company website (www.pttep.com), mass medias as television, radio channels, newspapers, social media, and etc.
- Create a communication material such as factsheet, report, VDO, spot radio and brochure to distribute to the stakeholders and upload on company website and social media.
- Assign PTTEP staff as a company representative to convey the company message and response to the inquiries or complaint from the stakeholders.

However, in case of the crisis i.e. a protest, oil spill or other incidents which may direct or indirect affect to the stakeholders and/or the environment, PTTEP will manage and conduct a mitigation plan, following Crisis Management Plan¹, Crisis Communications Guideline² and Crisis Communications Manual³.

6.4 Evaluate

6.4.1 Internal evaluation

To track the performance of ISMS process and ensure the effectiveness of mitigation plans follow to key performance indicator (KPI) and ensure targets are met objectives.

6.4.2 External evaluation

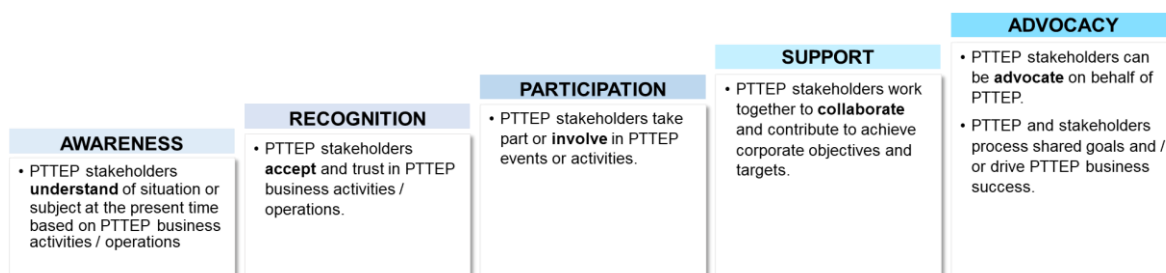
PTTEP will perform monitoring and evaluation process involves collecting data, assessing the level of engagement to receive ongoing direct feedback from key stakeholders. The insights of the data collection are used to improve the effectiveness of mitigation plans.

Source: 1. Crisis Management Plan (12148-PDR-SSHE-501/01-R05, Revision No. 5, 6 Jul 2021)
2. Crisis Communications Guideline (12145-GDL-004-R07, Revision No. 7, 12 Jan 2024)
3. Crisis Communications Manual (13077-GDL-004-R00, Revision No. 0, 25 Jul 2014)

Example of evaluation tools:

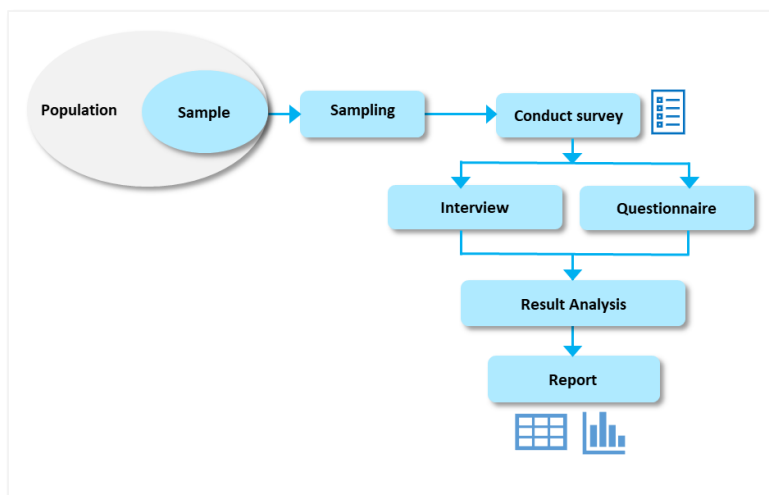
- Stakeholder Engagement Survey
- Social Return on Investment (SROI)

Stakeholder Engagement Survey is a methodology to obtain and track the engagement levels of stakeholders. The result of a survey will be used as a reference and database to improve the stakeholder management process to be more effective.



Picture 17: Stakeholder Engagement Level

Source: Adapted from AA1000SES



Picture 18: Stakeholder Engagement Survey Methodology Process

7. Review Period

The Issue and Stakeholder Management System Guideline must be reviewed every 5 years.

8. Effective Date

Effective from 24 July 2024 onwards.

9. References

9.1 PTTEP Controlling Documents

Document Number	Document Title
12147-GDL-SSHE-401/00/04-R02	Bow-Tie Analysis Guideline
12145-PDR-001-R02	Corporate Communications Work Procedures
12052-GDL-001	Corporate Social Responsibility Framework
12140-GDL-002-R00	Creating Shared Value Roadmap
12148-PDR-SSHE-501/01-R05	Crisis Management Plan
12145-GDL-004-R07	Crisis Communications Guideline
13077-GDL-004-R00	Crisis Communications Manual
12140-GDL-001-R06	Donation Guideline
12140-GDL-009-R02	Grievance and Issue Handling Guideline
12088-GLD-03-R00	Protocol Guideline
12140-GDL-002-R00	PTTEP and Joint Venture Partners Contribution Guideline
12088-GDL-002-R02	PTTEP Involuntary Resettlement Guideline
12052-GDL-006-R02	PTTEP Philanthropy Guideline
12052-GDL-005	PTTEP Social Investment Guideline
12142-GDL-001-R04	Risk Management Guideline
11035-STD-001-R04	Risk Management Standard
12052-GDL-004	Social Return on Investment
12052-PDR-001-00	Social Responsibility Work Procedures
12144-GDL-001-R03	Stakeholder Management Guideline
11001-STD-003-R04	Standard of Practices for Anti-Corruption
12165-GDL-001-R02	Sustainable Development Management Guideline
-	Stakeholder Management Plan B6/27 Project

9.2 Other Reference Documents

Document Number	Document Title
-	A Guide to Social Return on Investment, SROI Network
-	A Strategic Approach to Early Stakeholder Engagement, IFC World Bank Group
-	Community Development & Community Relations Manual, PTT PLC.
-	Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emerging Markets, IFC World Bank Group
-	Stakeholder Engagement Manual, UNEP
-	Stakeholder Engagement Tools for Action, Western and Public Child Welfare Implementation Center
ISBN 0-9738383-0-2	The Stakeholder Engagement Manual Volume 1: The Guide to Practitioners' Perspectives on Stakeholder Engagement
ISBN 1-9016932-2-0	The Stakeholder Engagement Manual Volume 2: The Practitioner's Handbook on Stakeholder Engagement
-	The Toolkit: A better way to do business – External Affairs in the 21 st Century

10. Appendices

Appendix 1: Description of Communities around PTTEP Operation area

Appendix 2: Tools for Situational Analysis

Appendix 3: Tools for Stakeholder Analysis

Appendix 4: Tools for Social Risk Identification

Appendix 5: Bow-Tie Risk Analysis

Appendix 6: Tools for Risk Treatment (Mitigation Plan)

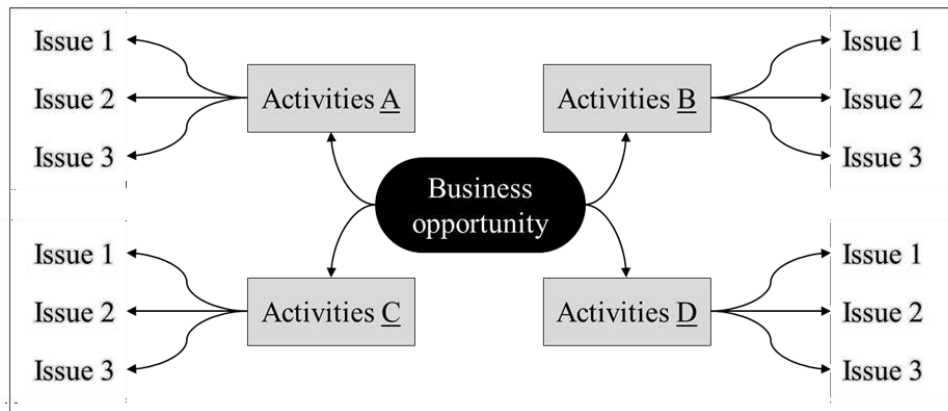
Appendix 7: Tools for Reporting and Monitoring

Appendix 2: Tools for Situational Analysis

Situational Analysis Tools for establishing the context.

Tool 1: Mind map

- 1) Identify subjects of mind map e.g. the subjects are PTTEP's projects.
- 2) Consolidate documents, information and raw data before proceeding with the mind map.
- 3) Breakdown each activity and issues based on relevancy and relationship.
- 4) Use figures, keywords or phrases, and colors for categorization.
- 5) Review and verify all data input.



Picture 19: Example of Mind Map

Tool 2: Internal-External Context Analysis Checklist

- 1) Hold the brainstorming session to discuss the direction of changes within an asset's business environment.
- 2) For internal context, identify PTTEP strength, weakness considering strategic and organizational nature of the operation such as operational strategy, human and financial resources, technological capacity.
- 3) For external context, brainstorm threats and opportunities as well as significant issues that could be caused by Political, Economic, Socio-Cultural and Technological changes in the environment where PTTEP operates.
- 4) Identify stakeholders and objectives by defining the relationships that are interdependent with the organization, the impacts that might occur and what each wants out of the relationship.
- 5) Determine the evaluation criteria. Decide what level of risk. PTTEP is prepared to accept for a particular event or activity.

Table 8: Example of Internal Context Analysis Checklist

Changes in Resources	People & Process Competencies
<ul style="list-style-type: none"> • Capital Investment • Land and location • Infrastructure facility and equipment • Life cycle stage of project Business model such as acquisition and merger 	<ul style="list-style-type: none"> • Human Capital • Skills and Expertise • Process and Technology Knowledge and Intellectual property
Profile	Value Chain
<ul style="list-style-type: none"> • Reputation and Brand equity • Organizational culture • Legal Consideration 	<ul style="list-style-type: none"> • Contractor and External provider • Suppliers' performance, vulnerability, and dependency • Reciprocal arrangement

Table 9: Example of External Context Analysis Checklist

Political & Legal	Socio-Cultural & Demographic
<ul style="list-style-type: none"> • Government stability and likely changes • Laws: Anti-trust, laws relating to the E&P industry, tax laws, regulation of transfer for capital and labor, Employment, Health and safety • Regulation/de-regulation • Bureaucracy • Trade control • Government involvement in trade unions and agreements • Stability of the local political system • Intervention of political figure Corruption level 	<ul style="list-style-type: none"> • Population and demographics <ul style="list-style-type: none"> ○ Size and Growth rate ○ Age distribution and life expectancy rates ○ Sex distribution ○ Family size and structure ○ Level of education ○ Mobility • Immigration and emigration rates • Social classes, Cultural significance • Minorities, Religion and beliefs • Health consciousness, emphasis on safety • Lifestyles and attitudes toward work, leisure, career and retirement • Attitudes toward E&P Industry • Heighten (unreasonable) expectations

Table 9: Example of External Context Analysis Checklist (Cont')

Economic	Environmental
<ul style="list-style-type: none"> • Level of economic indicators: Growth rates, Inflation rate, Interest rates • Distribution of income • Average disposable income level • Unemployment rate and trend • Trade flows and patterns • Availability of relevant resources • Other key industries / employers in the area 	<ul style="list-style-type: none"> • State of the Environment • Endangered species • Climate change issues • Waste management and Recycling infrastructure and practices • Attitudes toward and support for E&P industry as well as renewable energy sectors • Laws regulating environmental pollution • Air and water pollution
Technological	Other factors such as Ethical and International
<ul style="list-style-type: none"> • Technological level of E&P industry • Technological level of supplier and customer industries • Technological level of communication infrastructure • Internet infrastructure and penetration • Government's technology incentives • Lifecycle phases of relevant technology and infrastructure 	<ul style="list-style-type: none"> • Freedom of the press

Tool 3: SWOT analysis

Match external opportunities and threats with internal strengths and weaknesses, as illustrated in the matrix below:

		External Factor: PEST Analysis	
		Opportunities (O)	Threats (T)
		1.	1.
		2.	2.
		3.	3.
		4.	4.
Internal factors: PTTEP	Strengths (S)	SO "Maxi-Maxi" Strategy Strategies that use strengths to maximize opportunities . Potential Social Development Projects, Response Plan	ST "Maxi-Mini" Strategy Strategies that use strengths to minimize threats .
	1.		
	2.		
	3.		
	4.		
External factors:	Weaknesses (W)	WO "Mini-Maxi" Strategy Strategies that minimize Weaknesses by taking advantage of opportunities .	WT "Mini-Mini" Strategy Strategies that minimize Weaknesses and avoid threats . Potential Risk Events
	1.		
	2.		
	3.		
	4.		

Picture 20: SWOT Strategic Alternatives Matrix

This step helps identifying strategic alternatives that address the following additional questions:

- Strengths and Opportunities (SO) - How can you use your strengths to take advantage of the opportunities?
- Strengths and Threats (ST) - How can you take advantage of your strengths to avoid real and potential threats?
- Weaknesses and Opportunities (WO) - How can you use your opportunities to overcome the weaknesses you are experiencing?
- Weaknesses and Threats (WT) - How can you minimize your weaknesses and avoid threats?

Note: The WT quadrant generally contains key risk and is treated with defensive strategies.

Appendix 3: Tools for Stakeholder Analysis

Tool 4: Stakeholder Ranking Table

- 1) Select and identify key stakeholders in the Stakeholder Ranking Table.
- 2) Prioritize stakeholders based on level of their influence on the project and level of impacts they are affected by the project.
 - Level of influence on the project is assessed by considering the following factors: Authority, Urgency, Legitimacy and Proximity.
 - Level of impact by the project is assessed by considering the following factors: Likelihood, Vulnerability, Duration and Scale. This aspect may be considered both in terms of Impact of Stakeholder to the Project and Impact of the Project to the Stakeholder & Stakeholder Expectations.
 - Attitude of Stakeholder (Positive, Neutral, Negative).
- 3) Pairing the level from 2.1 and 2.2 and fill in the Stakeholder Prioritization Mapping.
- 4) Differentiate stakeholders by using the Influence / Impact Grid (from high to low level) in order to determine appropriate communication channels.

Stakeholder	Responsibility / Concern	Attitude	Influence	Impact	Prioritization Mapping			
					MO	KI	KS	MC
Group 1: Government agencies, Regulators								
• Organization Name	input data		High	High				x
• Organization Name	input data		High	Low			x	
Group 2: Vendors and Contractors/Suppliers								
• Organization Name	input data		Low	High		x		
• Organization Name	input data		Low	Low	x			
Group 3: Customers								
• Organization Name	input data	color	High / Low	High / Low				
• Organization Name	input data	color	High / Low	High / Low				
Group 4: Employees								
• Organization Name	input data	color	High / Low	High / Low				
• Organization Name	input data	color	High / Low	High / Low				
Group 5: Shareholders, Investment & Financial Institution								
• Organization Name	input data	color	High / Low	High / Low				
• Organization Name	input data	color	High / Low	High / Low				
Group 6: Business Partners, Consortium, Joint Ventures								
• Organization Name	input data	color	High / Low	High / Low				
• Organization Name	input data	color	High / Low	High / Low				
Group 7: Communities								
• Organization Name	input data	color	High / Low	High / Low				
• Organization Name	input data	color	High / Low	High / Low				
Group 8: Independent/Public organizations, NGOs, Academics								
• Organization Name	input data	color	High / Low	High / Low				
• Organization Name	input data	color	High / Low	High / Low				
Group 9: Press and Medias								
• Organization Name	input data	color	High / Low	High / Low				
• Organization Name	input data	color	High / Low	High / Low				

Picture 21: Stakeholder Ranking Table

Table 10: Example of Stakeholder related Risks Catalogue

Government Agencies and Regulatory	<ul style="list-style-type: none"> • Heighten control due to incident of E&P industry as a whole • Defer approval of permit process • Revoke of current permit • Fine • Infringement of competitive clause Enforcement of law due to non-compliance
Employees and contractors	<ul style="list-style-type: none"> • Occupational Health and Safety Incident • Inappropriate ethical behaviors and business orientation • Inconsistency of governance / Non- compliance in Code of Conduct in operations or agreements • Perceived preferential treatment • Assertion of association power in negotiation / Union issues • Increased misdemeanor and demoralization Mob / Strike
Communities and Society	<ul style="list-style-type: none"> • Interruption of commercial/occupational means • Affected Security, Health and Safety livelihood • Affected environmental, social and cultural heritage • Unfavorable influx of non- local residence • Pressures to existing services/ infrastructure • Conflicting land use • Unreasonable expectation on compensation and benefit • Misjudgments based on heighten expectation toward PTTEP • Non substantive claim/ attack to PTTEP for political purpose
Media	<ul style="list-style-type: none"> • Incorrect information about PTTEP in media, publics • Inappropriate reference of E&P issues to PTTEP • Unfavorable reaction of NGO on E&P project • Misperception on Transparency

Appendix 4: Tools for Social Risk Identification

Tool 5: Social and Environmental Risk Checklist

- 1) Consider activities during each stage of the project.
- 2) Hold brainstorming session to identify potential issues during each activity and fill out the checklist.
- 3) Add potential issues identified which are not listed in the checklist.

Table 11: Example of Social Environmental Checklist – Offshore Exploration

Project Activities	Impacts	Related Issues
Prior to the exploration		
<input type="checkbox"/> Seabed survey	<input type="checkbox"/> Seawater	<input type="checkbox"/> Limitation of fishery area
<input type="checkbox"/> Transporting of drilling rig to the project area	<input type="checkbox"/> Seabed Sediment	<input type="checkbox"/> Changing of livelihood
<input type="checkbox"/> Rig installation	<input type="checkbox"/> Navigation	<input type="checkbox"/> Safety
<input type="checkbox"/> Others (specify)	<input type="checkbox"/> Fishery	<input type="checkbox"/> Visual impact
	<input type="checkbox"/> Others (specify)	<input type="checkbox"/> Job opportunity
		<input type="checkbox"/> Labor and human right
		<input type="checkbox"/> Forest conservation
		<input type="checkbox"/> Community security and safety
		<input type="checkbox"/> Stakeholder expectation
		<input type="checkbox"/> Others (specify)
Drilling Phase and Well Logging		
<input type="checkbox"/> Drilling of exploration well	<input type="checkbox"/> Marine life	<input type="checkbox"/> Biodiversity impacts
<input type="checkbox"/> Discharge of contaminated cutting mud	<input type="checkbox"/> Fishery	<input type="checkbox"/> Oil / chemical spill
	<input type="checkbox"/> Others (specify)	<input type="checkbox"/> Limitation of fishery area
<input type="checkbox"/> Transporting of chemical, equipment and waste onshore		<input type="checkbox"/> Waste management
		<input type="checkbox"/> Safety
<input type="checkbox"/> Others (specify)		<input type="checkbox"/> Noise and vibration
		<input type="checkbox"/> Visual impact
		<input type="checkbox"/> GHG emission
		<input type="checkbox"/> Contractor
		<input type="checkbox"/> Others (specify)

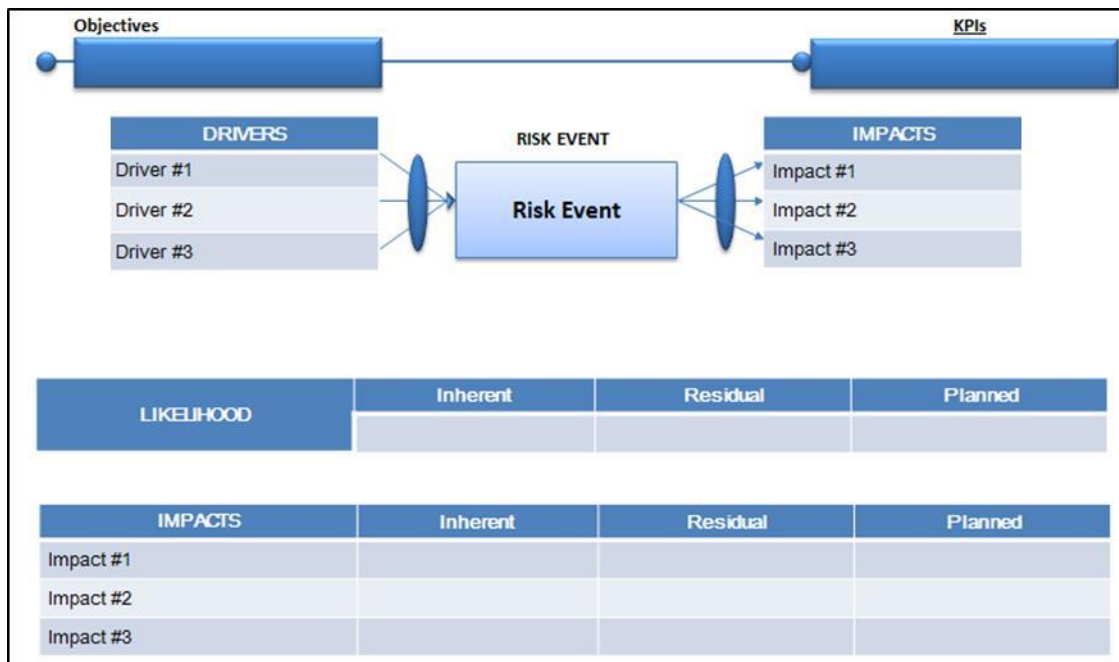
Table 11: Example of Social Environmental Checklist – Offshore Exploration (Cont’)

Project Activities	Impacts	Related Issues
Well testing		
<input type="checkbox"/> Well testing	<input type="checkbox"/> Air quality	<input type="checkbox"/> Limitation of fishery area
<input type="checkbox"/> Discharge of Wastewater	<input type="checkbox"/> Fishery	<input type="checkbox"/> Waste management
and contaminated waste	<input type="checkbox"/> Others (specify)	<input type="checkbox"/> Safety
water from barge and rigs		<input type="checkbox"/> Visual impact
<input type="checkbox"/> Garbage and hazardous		<input type="checkbox"/> Odor
waste management		<input type="checkbox"/> Water and soil contamination
<input type="checkbox"/> Others (specify)		<input type="checkbox"/> GHG emission
		<input type="checkbox"/> Community security and safety
		<input type="checkbox"/> Green area conservation
		<input type="checkbox"/> Others (specify)
Decommissioning and Rig Removal		
<input type="checkbox"/> Decommission	<input type="checkbox"/> Petroleum spill	<input type="checkbox"/> Oil / chemical spill
<input type="checkbox"/> Rig removal	<input type="checkbox"/> Fishery resources	<input type="checkbox"/> Biodiversity impacts
<input type="checkbox"/> Garbage and hazardous	<input type="checkbox"/> Others (specify)	<input type="checkbox"/> Waste management
waste management		<input type="checkbox"/> Safety
<input type="checkbox"/> Others (specify)		<input type="checkbox"/> Water and soil contamination
		<input type="checkbox"/> Landslide
		<input type="checkbox"/> Forest conservation and preserved forest
		<input type="checkbox"/> Contractor
		<input type="checkbox"/> Others (specify)
Abnormal Condition		
<input type="checkbox"/> Oil / chemical spill	<input type="checkbox"/> Impacts to fishermen	<input type="checkbox"/> Biodiversity impact
<input type="checkbox"/> Vessel collision	<input type="checkbox"/> Water quality	<input type="checkbox"/> Safety
<input type="checkbox"/> Falling object	<input type="checkbox"/> Others (specify)	<input type="checkbox"/> Changes of livelihood
<input type="checkbox"/> Blow-out		<input type="checkbox"/> Odor
<input type="checkbox"/> Fire		<input type="checkbox"/> Water and soil contamination
<input type="checkbox"/> Typhoon		<input type="checkbox"/> Landslide
<input type="checkbox"/> Others (specify)		<input type="checkbox"/> Expectation of compensation
		<input type="checkbox"/> Forest conservation and preserved forest
		<input type="checkbox"/> Community security and safety
		<input type="checkbox"/> Contractor
		<input type="checkbox"/> Others (specify)

Appendix 5: Bow-Tie Risk Analysis

Tool 6: Bow-Tie Risk Analysis

- 1) Define the Key Event clearly as Risk Event.
- 2) Identify drivers that trigger the incident events (IE) as well as the chain of events preceding the Risk Event that can cause the problem.
- 3) Describe the existing Control Measures (C) preventing the events from occurring.
- 4) For each Control Measure, identify Escalation Factor and Escalation Factors Control. Identify the future preventive control barriers that should have stopped the chain of events.
- 5) Identify potential Consequences and existing Mitigation Measures to prevent Risk Event leading to the Consequences.
- 6) Identify future Mitigation Strategy required should the Risk Event occur. For each Mitigation Measures, identify escalation factors.
- 7) For each Control Measures, Mitigation Measure and Escalation Factor Control, Critical Response Plan, Social Development Projects, and Stakeholder Engagement Plan tasks to be developed.



Picture 22: Example of Bow-Tie Analysis Tool

Appendix 6: Tools for Risk Treatment (Mitigation Plan)

Tool 7: Solution Tree Analysis

1) Conduct root cause analysis and brainstorming session with relevant stakeholders in order to come up with the solutions to address the issues. Solution development can be divided into 3 levels.

- Mitigation Measures - for environmental and social impact issues which can be managed by existing mitigation measures or technologies.
- Engagement Strategy and Plan - to communicate project information, create a good relationship, obtain enquiries and seek satisfaction.
- Community Investment - for the issues which cannot be mitigated. The offset plan has to be identified.

2) Identify alternatives to address the issues. Factors required for successful solution include man, material, method, machine and money.

3) Assess the output and outcome from the solution.

4) Define Input, Output and Outcome Indicators.

5) Review and verify all data input.

Table 12: Example of Mitigation Measures

Key Risk Event	Oil / Chemical Spill
Results from Root Cause Analysis / Relevant Stakeholders	<ul style="list-style-type: none"> • Cause: Fuel, diesel or chemical may be spilled during the transportation, storage, or refilling processes, or leaked from transporting pipeline, equipment, or during the maintenance of machine or drilling equipment • Relevant stakeholder: Workers on the rig and support vessel
Mitigation Measures	<ul style="list-style-type: none"> • All chemicals shall be stored in the designated areas • Only adequate quantities of chemicals for drilling activities shall be stored on the rigs and support vessels to minimize chemical storage areas • Chemicals shall be segregated based on their characteristics. Chemical handling shall follow relevant standards to prevent chemical spill • Spill control plan shall be in place and appropriate • Exercises shall be conducted
Location / Duration	<ul style="list-style-type: none"> • Location: Support vessels and rigs • Duration: Prior to the exploration

Table 13: Example of Risk Management Plan

Strategic Areas	Mitigation Measures
Performance Objectives	<ul style="list-style-type: none"> • Set financial, strategic and operational objectives • Set social, environmental and safety performance objectives • Comprehensive schedule of activities
Risk Mitigation	<ul style="list-style-type: none"> • Definition of risks identified and proposed actions for how they will be mitigated, Risk Registry • Contingency plans to manage alternative risk scenarios
Stakeholder Engagement	<ul style="list-style-type: none"> • Keeping track of commitments made, Commitment registry • Community consultation processes • Strategies for engaging with government agencies and local civil society • Use participatory processes (that are inclusive and gender sensitive)
Compliance and Assurance	<ul style="list-style-type: none"> • Legal requirements, international standards, company policies, or best management practices (as applicable) that govern activities being conducted • How compliance to legal requirements and conformance to company policies and standards will be monitored
Safety and Security	<ul style="list-style-type: none"> • Security arrangements for personnel and contractors • Strategies for dealing with conflict and the presence of illegal activities (e.g. drugs, smuggling) • Emergency response procedures
Environment	<ul style="list-style-type: none"> • Set stringent environmental standards • Communicate standards at local, regional, national level from posting on community bulletin boards to contractual stipulations
Land Acquisition	<ul style="list-style-type: none"> • Engage with government for proactive community consultation • Good practice in resettlement/compensation processes, reference existing guidance on land resettlement / Compensation
Governance/ Revenues	<ul style="list-style-type: none"> • Ensure future transparency on revenue payments / anticorruption • Include revenue share for locality in contracts
Grievance Management	<ul style="list-style-type: none"> • Community access to lodge complaints, Grievance registry • Mediation or negotiation processes, including potential external experts
Reporting and Communication	<ul style="list-style-type: none"> • Internal and external communications plan

Tool 8: Stakeholder Engagement Plan

1) Provide a central database where all relevant parties can access. All commitments should be acknowledged and responded to ensure stakeholder satisfaction.

2) Document stakeholder information (contact, engagement activities, issues, concerns, commitment, and enquiries, PTTEP's responses and media coverage) into the database.

3) Regularly review and update the database as the project information or influence of the stakeholders to the project or stakeholder attitude may change over time.

Table 14: Example of Stakeholder Engagement Plan

Stakeholder	A group of commercial fishermen
Objective	<ul style="list-style-type: none"> To create good relationship with a group of commercial fishermen who are working in the project area
Methodology	<ul style="list-style-type: none"> Informal meeting with the group leader
Key Message	<ul style="list-style-type: none"> Objective of the meeting Accurate project information Benefits to the community
Duration	<ul style="list-style-type: none"> As soon as possible before the project operation Ongoing process

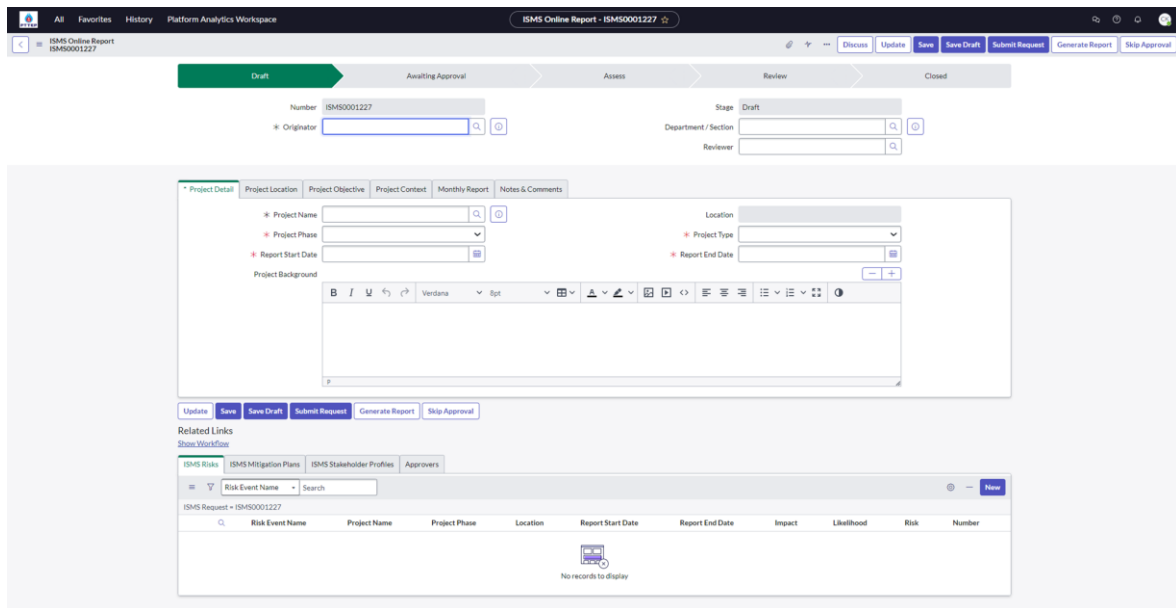
Table 15: Example of Social and Community Investment

Key Risk Event	Limitation of fishery area
Results of Root Cause Analysis / Relevant Stakeholders	<ul style="list-style-type: none"> Cause: Safety zone has been specified at the radius of 500 m around the drilling rig to prevent accidents as determined in the Petroleum Act Relevant Stakeholder: A group of commercial fishermen who are working in the project area
Community Investment	<ul style="list-style-type: none"> Releasing of larvae of marine life PTTEP's educational funding Contributions to communities impacted by disasters
Location / Duration	<ul style="list-style-type: none"> Location: Nakhon-si-thammarat or Songkhla Duration: As soon as possible before project operation

Appendix 7: Tools for Reporting and Monitoring

Tool 9: ISMS Online Report

Users or authorized personnel for each asset or project should access the ISMS online system via the following link: https://oneclick.pttep.com/pttep?id=home_page to complete reporting details, including risk events, mitigation plans, and stakeholder analysis as well as to report any issues throughout the year.



The screenshot displays the 'ISMS Online Report - ISMS0001227' interface. At the top, a progress bar shows the stages: Draft (active), Awaiting Approval, Assess, Review, and Closed. Below the progress bar, there are input fields for 'Number' (ISMS0001227), 'Stage' (Draft), 'Originator', 'Department / Section', and 'Reviewer'. The main section is titled 'Project Detail' and includes tabs for 'Project Location', 'Project Objective', 'Project Context', 'Monthly Report', and 'Notes & Comments'. The 'Project Detail' tab is active, showing fields for 'Project Name', 'Project Phase', 'Report Start Date', 'Location', 'Project Type', and 'Report End Date'. Below these fields is a rich text editor for 'Project Background'. At the bottom, there is a 'Related Links' section with tabs for 'ISMS Risks', 'ISMS Mitigation Plans', 'ISMS Stakeholder Profiles', and 'Approvers'. The 'ISMS Risks' tab is active, showing a search bar and a table with columns: Risk Event Name, Project Name, Project Phase, Location, Report Start Date, Report End Date, Impact, Likelihood, Risk, and Number. The table currently displays 'No records to display'.

Picture 23: ISMS Online Report