



ASEAN & BIMSTEC

Workshop on Deep Seabed Resources and The Blue Economy

Strengthening National Capacities for Coastal and Seabed Mineral  
Development

Coastal and Seabed Management in EIA System

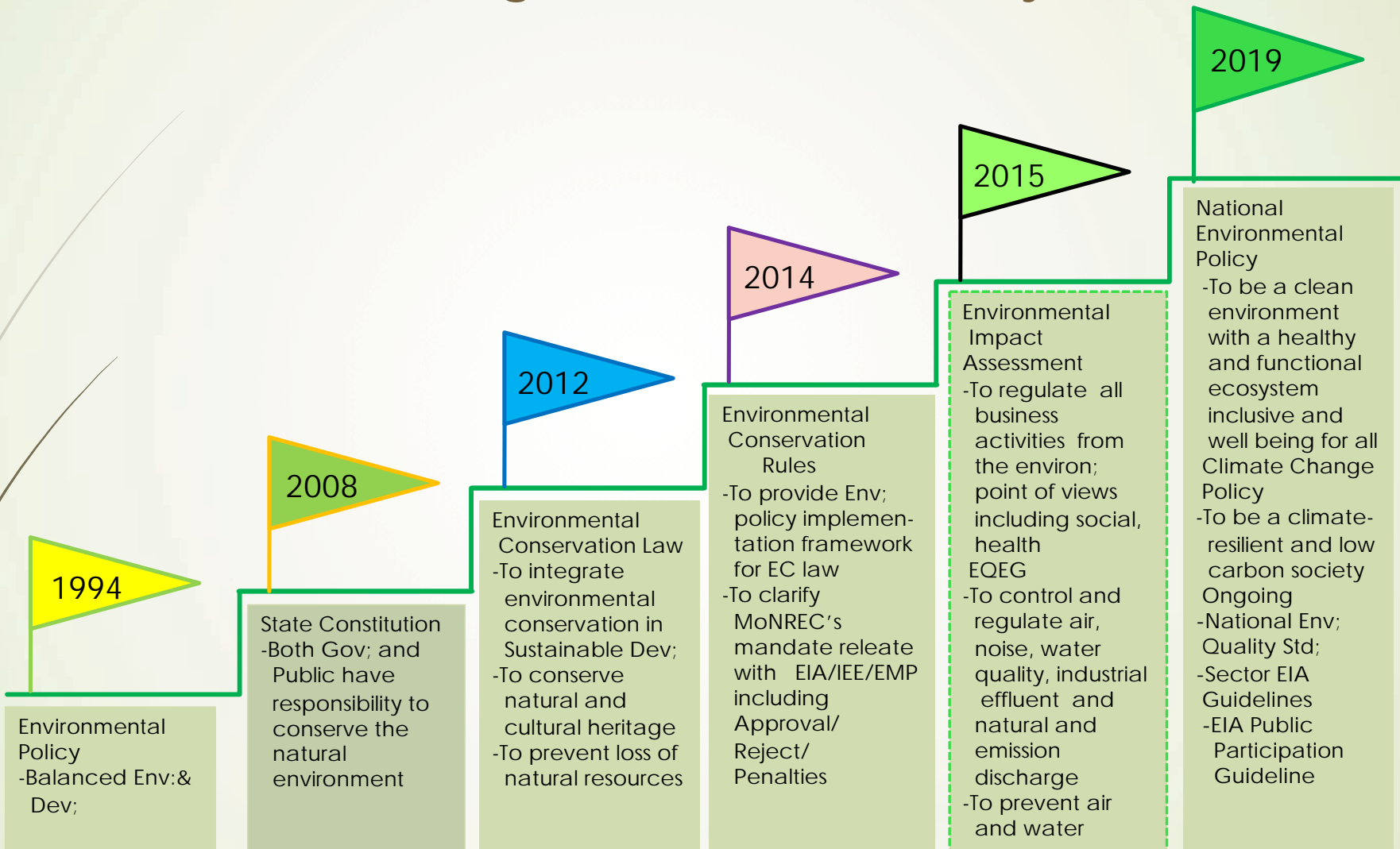
10.9.2019  
Park Royal Hotel

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# Environmental Legislation Timeline in Myanmar



# Myanmar EIA System

- Proposed projects may be legally required to undergo an EIA or IEE depending on the project type and size, and as specified in the EIA Procedure.
- At its discretion, Ministry can also require existing projects to undergo EIA or IEE or EMP.
- EIA reports must include an assessment of the environmental risks and the identification of appropriate mitigation and monitoring measures.
- EIA reports must also have an environmental management plan to specify how these measures will be actioned.
- Following a review of the EIA report, if comply with EIA procedure, Ministry will approve the project by issuing an Environmental Compliance Certificate.
- Approved projects must then submit EIA monitoring reports to Ministry every 6 months.
- Ministry has the mandate to apply financial penalties or halt projects for projects that repeatedly fail EIA compliance.

# Myanmar EIA System

## SCREENING

Environmental Management Plan

Investigations & Reporting

Review & Approval Process

Initial Environmental Examination

Third Party Confirmation

Investigations & Reporting

Review & Approval Process

Environmental Impact Assessment

Third Party Confirmation

Scoping

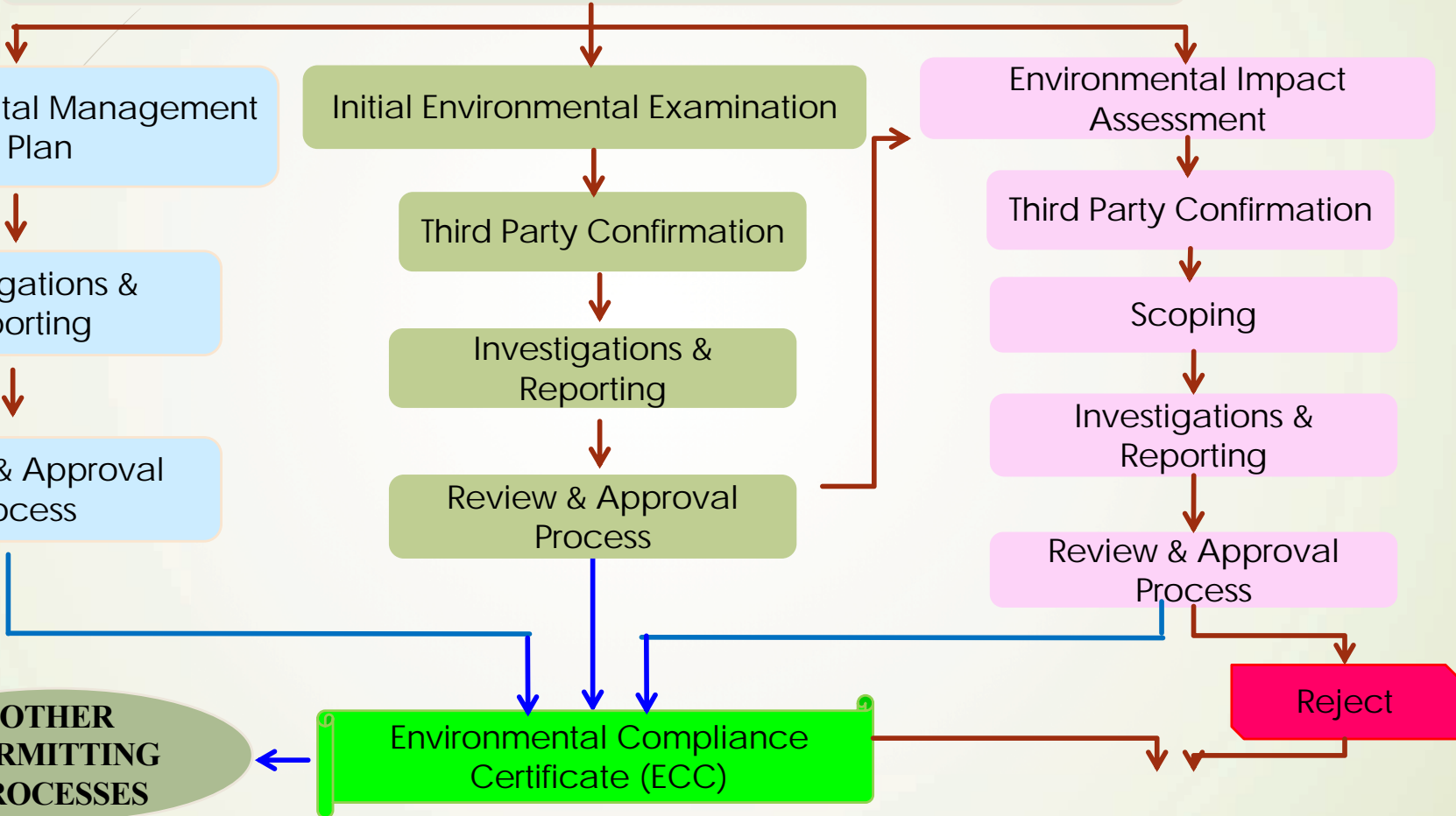
Investigations & Reporting

Review & Approval Process

OTHER PERMITTING PROCESSES

Environmental Compliance Certificate (ECC)

Reject



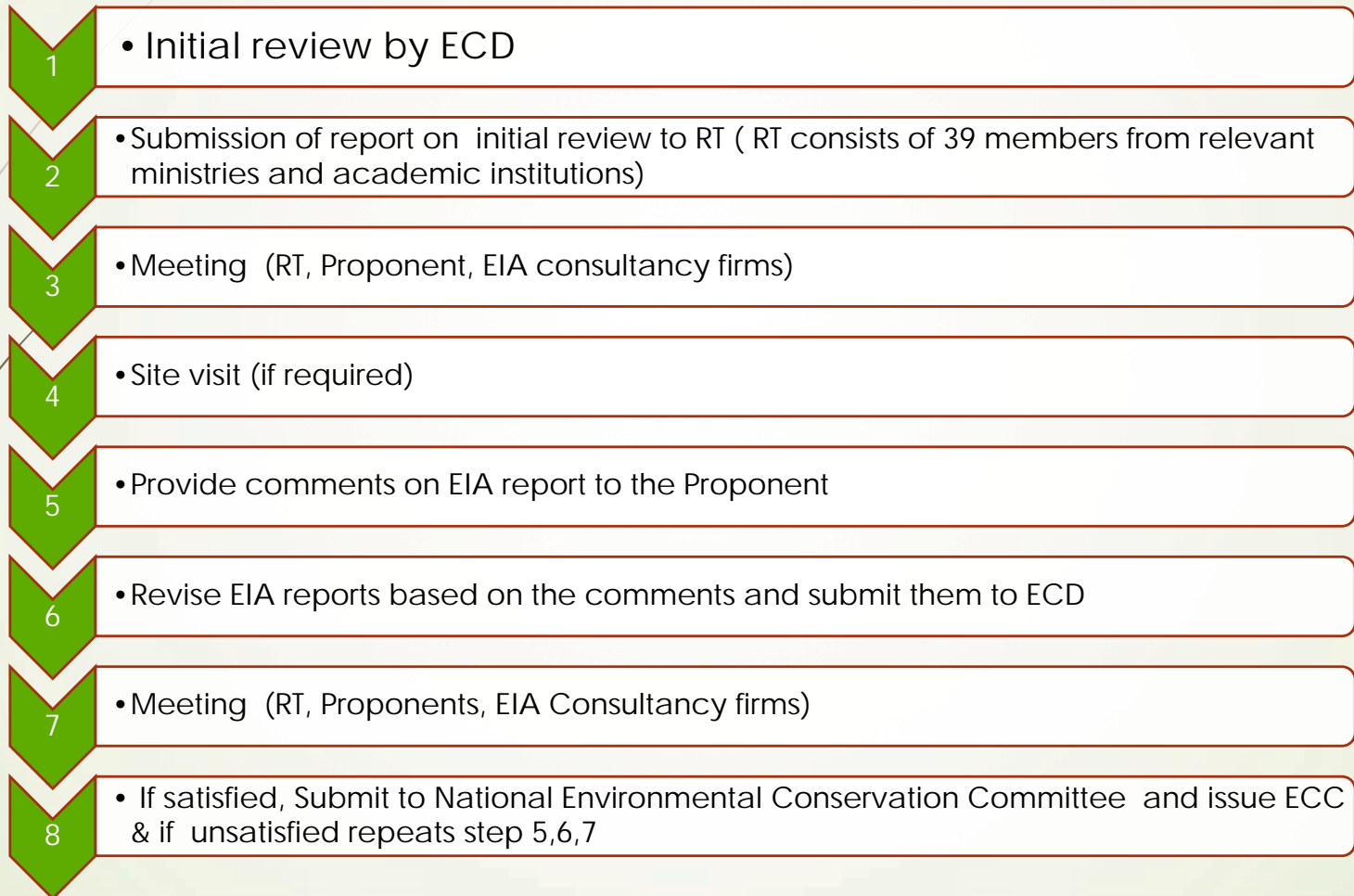
# Myanmar EIA System

## Assessment Categories for Sea Business

No.	Type of Economic Activity	IEE	EIA
1	Offshore Oil and Gas Seismic Surveys	All Sizes	
2	Offshore Oil and Gas Exploration Drillings		All Sizes
3	Offshore Oil and Gas Production drilling and production activities; offshore pipeline operations, offshore transportation, compressor stations and storage facilities; ancillary and support operations; and decommissioning		All Sizes
4	Marine and Coastal Fish Raising and Aquaculture	Total water surface $\geq$ 1 ha but $<$ 100 ha	Total water surface $\geq$ 100 ha
5	Oyster Raising and Pearl Production	$\geq$ 50 ha but $<$ 200 ha	$\geq$ 200 ha
6	Extraction of Rock, Gravel or Sand from a River or Marine Waters	$\geq$ 1,000 m <sup>3</sup> /a but $<$ 50,000 m <sup>3</sup> /a	$\geq$ 50,000 m <sup>3</sup> /a

# Myanmar EIA System

## EIA Review Process



# Coastal and Seabed Management in EIA System

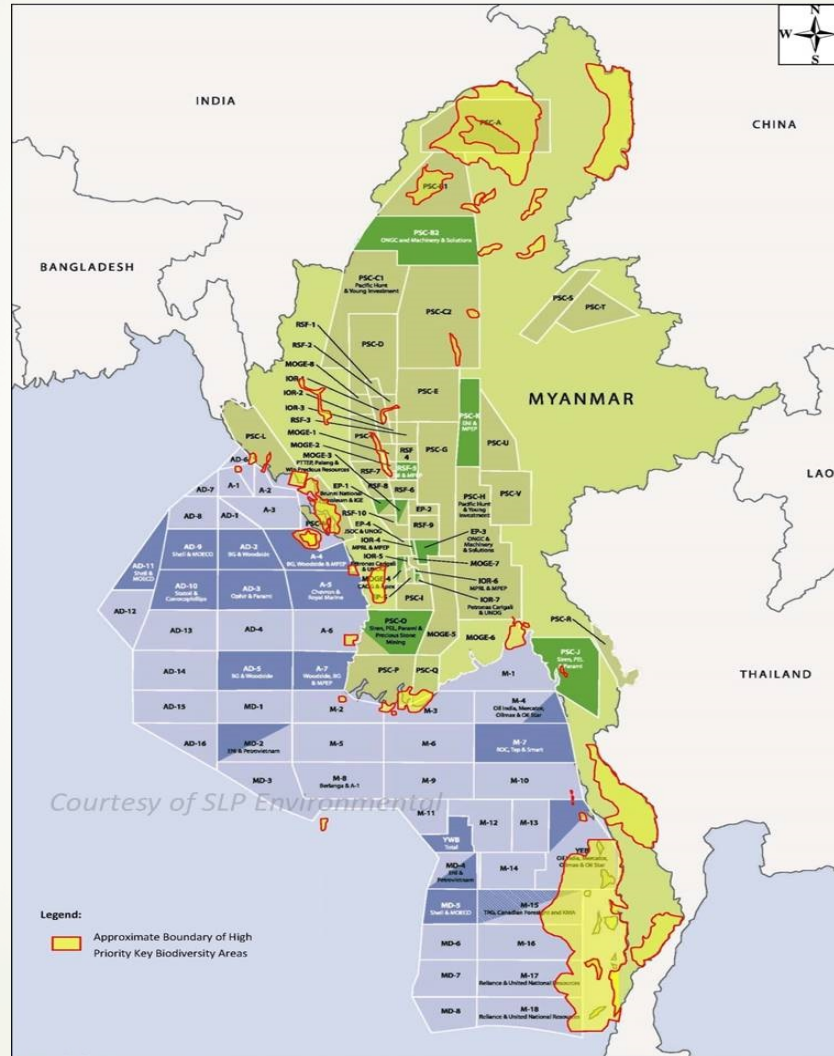
## Guidance for Offshore Business Activities

- Key Biodiversity Areas ( KBAs) or sensitive areas (require an EIA )
- Baseline surveys/data focus on ecologically important habitats
- Offshore Oil and Gas Development > IFC EHS guidelines for offshore oil and gas development (IFC 2007 and 2015)
- Risk of disturbance > JNCC (2017)
- Biodiversity Conservation > IFC Performance Standard 6



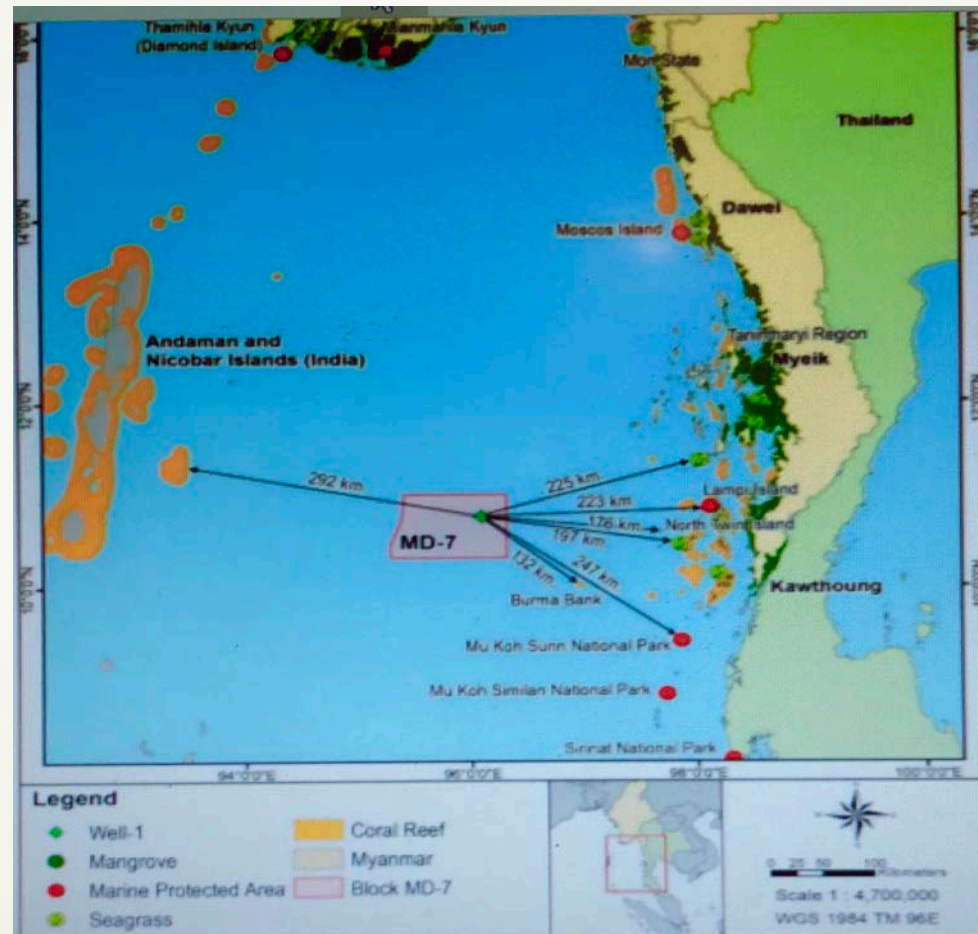
# Coastal and Seabed Management in EIA System

Key Biodiversity Area for Oil and Gas Business



# Coastal and Seabed Management in EIA System

## Sensitive Areas near Block MD-7



Source: <http://themimu.info/>, modified by ERM, 2019

# Coastal and Seabed Management in EIA System

## *Physical Components*

Geography and Oceanography;  
Climate and Meteorology;  
Geology;  
Seawater Quality; and  
Sediment

## *Biological Components*

Marine Fishes;  
Plankton;  
Benthos;  
Seabirds;  
Marine Mammals;  
Sea Turtles;  
Sensitive Ecosystems; and  
Protected Areas

# Costal and Seabed Management in EIA System

## Impacts of Oil and Gas Activities

	Seismic	Exploration	Production
Air Pollution	√	√	√
Noise and Vibration	√	√	√
Water Resources	√	√	√
Waste Water	√	√	√
Solid Waste	√	√	√
Hazardous Waste	√	√	√
Biodiversity	√	√	√
Marine Mammals and other noise sensitive species	√	√	√
Fisheries	√	√	√
Greenhouse Gas Emission		√	√
Accident	√	√	√
Health			√
Traffic		√	√

# Costal and Seabed Management in EIA System

## Impacts and Mitigation Measures for Oil and Gas Activities

Activities	Aspects	Potential Impacts	Mitigation Measures	Responsibility
Rig Mobilization and Installation	<ul style="list-style-type: none"> <li>-Discharge of Oil containing water, waste water, sewage</li> <li>- Rig placement</li> </ul>	Impact to sea water quality	<ul style="list-style-type: none"> <li>- Operate project vessels with MARPOL 73/78</li> <li>- Wastewater treatment</li> <li>- Lay anchors directly to seabed without dredging</li> </ul>	Project Proponent
Well Drilling	<ul style="list-style-type: none"> <li>-Discharge of mud and cutting</li> <li>- Discharge of Oil containing wastewater</li> </ul>	Impacts to sea water and sediment quality, seabed characteristic , marine ecology	<ul style="list-style-type: none"> <li>- Optimize drilling design</li> <li>- Water Based Mud</li> <li>- Synthetic Based Mud</li> <li>- OCC discharge with standard</li> <li>- MARPOL73/78</li> <li>- Prior Treatment and discharge more than 12 nautical from nearest shore</li> </ul>	Project Proponent

# Costal and Seabed Management in EIA System

Environment Management Plans for Offshore Oil and Gas Business

- ❖ Emergency Response Plan (ERP)
- ❖ Waste Management Plan
- ❖ Oil Spill Response Plan (OSRP)
- ❖ Ballast Water Management Plan
- ❖ Drill Cuttings and Fluid Management

# Monitoring

Project proponent shall monitor the factors as below -

- ROV Images of Seabed
- Water Quality
- Marine Fauna
- Plankton
- Benthic Communities
- Sediment sampling
- Water Disposal
- Drill Cuttings
- Chemical

## Relevant Legislation

Project proponent shall follow the laws/Rules/conventions as below -

- The Protection of Wildlife, And Wild Plant and Conservation of Natural Areas Rules(2002)
- Meinmahla Kyun Wilsanctuarydlife (Noti; no.91/1993)
- Thameehla Island (Noti; no. 289/1970)
- Longlone Bok Island (Noti; no.243/1927)
- Lampi island (2004)
- Ross Island (2004)
- The Myanmar Marine Fishries Law (9/90)
- Myanmar Territorial Sea and Maritime Zones Law (14/2017)
- The ASEAN Marine Water Quality Criteria,2002
- International Convention on the Protection of Pollution from Ship London (MARPOL) 1973, 1978
- United Nations Convention on Law of the Sea
- MoU on conservation on Wetlands of International Important especially as Waterfowl Habitat (1987)
- IUCN Red List of Threatened Species



## Conclusion and Suggestion

- Capital Investment is high
- Technology
- Environmental Impacts
  - Awareness to Authorities and Investors
  - Strengthening the institutional framework



Thank You for Your Kind Attention