

# UNPLANNED EVENTS

## INTRODUCTION

An **unplanned/ accidental event** is a foreseeable unlikely incident with a very low probability of occurrence.

Such unwanted events, that are not anticipated to occur as part of the project must be considered and analysed in the EIA assessment.



Booms installation, Eni 2014

## MODELLING CONDUCTED

Three accidental spill scenarios events were assessed in the EIA Report to predict their consequences:

- Accidental **oil spill due to a vessel collision**;
- Accidental **oil spill due to a blowout**; and
- Emergency **release of Non-Aqueous Drilling Fluid (NADF)** due to the **emergency disconnection of the riser**.

The simulations have been performed without the response and mitigation measures applied. This is an **unrealistic situation with no mitigation and response actions**.

In reality Eni and its contractor will immediately **activate the Contingency Plan to promptly react** to the emergency, limit the environmental impacts and solve the emergency situation.

## LIKELIHOOD / PROBABILITY OF A SPILL

- The **probability of a blowout is very low** where the frequency of occurrence is  $2.5 \times 10^{-4}$ , **1 case in 4,000 drilled wells** (OGP Report, 2010)
- Eni assesses the risk of a well blowout, from the geological factors, tools reliability and human errors, during the well design phase and considers the use and development of new technology to minimize the risk. This results in a **reduction of the blowout frequency** from  $10^{-4}$  down to  $10^{-6}$ , **1 case in 400,000 drilled wells**.

## RISK SIGNIFICANCE ON MARINE & COASTAL

### I) HABITATS AND SPECIES

- A slick resulting from all 3 scenarios would **spread in a south-westerly direction** and would be **unlikely to reach the shore**
- **Dissolved aromatic hydrocarbon concentrations may persist** in the top few meters of the water column beneath the slick from a blowout potentially **resulting in toxicological effects in marine fauna** coming in contact with the slick for extended periods.

### II) LIVELIHOODS, FISHING, TOURISM

- Result of the modelling indicates that **no significant shoreline oiling would occur**, and it is therefore, unlikely that the unplanned release of hydrocarbons would affect the operations of the nearshore fisheries
- Extent of loss of livelihood would depend of the severity of the spill and how long **clean-up operations** take to complete
- In a vessel to vessel collision there is a risk of injury or fatalities to crew or passengers on other vessel and loss of work
- Disturbances and damages to fishing/tourism would result in the **temporary stand-by and loss of access** during the implementation of the oil spill contingency plan.

## UNPLANNED EVENTS POST MITIGATION MODERATE ALARP RISK SIGNIFICANCE

IMPACT	KEY MITIGATION/MANAGEMENT MEASURES
<p>Based on above 3 defined unplanned emergency scenario,</p> <p>Oil or Diesel or drilling fluid (NADF mud) spills could impact on:</p> <ul style="list-style-type: none"> <li>- Offshore and coastal marine and avian fauna and seabirds</li> <li>- tourism</li> <li>- small-scale subsistence fisheries</li> <li>- pelagic longline fisheries</li> </ul>	<ul style="list-style-type: none"> <li>• Prior to operations, Eni shall define and implement, in case of spill, the Oil Spill Contingency Plan (OSCP) and Emergency Response Plan (ERP) for each well.</li> <li>• Prior to drilling operations, Eni will adopt several control measures, starting from the well design and engineering phases</li> <li>• During drilling operations, formation and drilling parameters are monitored in real-time to early detect possible anomalies and control the well</li> <li>• Eni will develop a Communication Plan to be implemented in event of an accidental oil spill</li> </ul>
<p>Vessel collision on community health and safety</p>	<ul style="list-style-type: none"> <li>• Eni shall distribute a Notice to Mariners prior to the commencement of the drilling operations to inform them of drilling activities, including timing and location</li> <li>• Project vessels to inform other ships and boats by radio announcements of the location</li> <li>• Project vessels to use signals, lights and markings to increase visibility</li> <li>• Project vessels to enforce a 500m radius safety/exclusion zone</li> </ul>