# THE REPUBLIC OF LEBANON

# National Oil Spill Contingency Plan in the Lebanese Waters

**Version 1** 

February 2017

#### Plan Maintenance and Amendment Procedure

#### Plan Custodian

The Government of Lebanon assigns the Ministry of Public Works and Transport – the Directorate General of Maritime and Land Transport (MOPWT-DGLMT) as the National Competent Authority (NCA) required by the Oil Pollution Response and Co-operation (OPRC) Convention. The MOPWT – DGLMT is also the custodian of the National Oil Spill Contingency Plan (NOSCP), responsible for its development, maintenance, updating, revisions and amendments. It will ensure that any revision to the NOSCP is distributed to all Plan holders and that the record of amendment is completed.

#### **Plan Administration:**

If any major change occurs which affects or could affect the validity or effectiveness of the plan to a material extent, MOPWT-DGLMT shall convene the National Oil Spill Planning Committee, to revise the plan and submit any amendments to all plan holders within 1 month of the amendment being agreed.

Monthly checks are to be made of all contact numbers by the document holders and any changes should be reported to the plan custodian.

#### **Review Period**

The National Oil Spill Planning Committee will meet annually or following the use of the plan in an oil spill incident or training exercise to agree any amendments that these events have demonstrated to be required.

Notwithstanding the annual review cycle, document holders may send corrections or updated information to the plan custodian for consideration at any time.

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#### **Volume A- Strategy and Processes**

- 1. Introduction
- 2. Oil Spill Prevention
- 3. Preparedness
- 4. Response
- 5. National Response Strategy
- 6. Recovery
- 7. Annexes

#### **Volume B - Risk Assessment**

- 1. Introduction
- 2. Risk Assessment
- 3. Oil Spill Modeling
- 4. Conclusion
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#### Volume C - Roles and Responsibilities

- 1. Introduction
- 2. Incident Command Structure
- 3. Lebanese National Oil Spill Response Organization Responsibilities by Stakeholder
- 4. Key Responsibilities and Tasks

#### **Volume D - Supporting Documents**

- 1. Training and Exercise
- 2. Guidance for the Development of Tier 1 Plans
- 3. Behavior and Fate of Oil
- 4. Response Strategy Guidance
- 5. Spill Sampling
- 6. Environment and Socio-economic Sensitivities
- 7. Waste Management
- 8. Use of Dispersant
- 9. Wildlife Response
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- 11. Health, Safety, and Security
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## Volume A1- Strategy and Processes (In Arabic)

### Volume C1 - Roles and Responsibilities (In Arabic)

# National Oil Spill Contingency Plan in the Lebanese Waters

# VOLUME A STRATEGY AND PROCESSES

# **Version 1**

February 2017

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# **Abbreviations**

CLC	Civil Liability Convention
CNRS	National Council for Scientific Research
CU	Coordination Unit
DGO	Director General of Oil
DOCL	Documents Unit Leader
EDL	Electricité Du Liban
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
HFO	Heavy Fuel Oil
HNSU	Host Nation Support Unit
IAP	Incident Action Plan
ICAG	Incident Command Advisory Group
ICS	Incident Command System
IMS	Incident Management System
IMT	Incident Management Team
IMO	International Maritime Organization
IPIECA	Global Oil and Gas Industry Association for Environmental and Social Issues
ITOPF	International Tanker Owners Pollution Federation
JMOC	Joint Maritime Operations Chamber
LAF	Lebanese Armed Forces
LO	Liaison Officer
LIC	Local Incident Commander
LOI	Lebanese Oil Installations
LPA	Lebanese Petroleum Administration
MARPOL	International Convention for the Prevention of Pollution from Ships 73/78
MOA	Ministry of Agriculture
MOC	Ministry of Culture
MOE	Ministry of Environment
MOEW	Ministry of Energy and Water
MOF	Ministry of Finance
MOFA	Ministry of Foreign Affairs
MOI	Ministry of Industry
MOIN	Ministry of Information
MOIM	Ministry of Interior and Municipalities
MOL	Ministry of Labor
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МОРН	Ministry of Public Health
MOPWT	Ministry of Public Works and Transport
MOPWT- DGLMT	Ministry of Public Works and Transport – Directorate General of Land and Maritime Transport
МОТ	Ministry of Telecommunications
NCA	National Competent Authority
NEBA	Net Environmental Benefit Analysis
NOSIC	National Oil Spill Incident Commander
NOR	National Operations Room
NOSCP	National Oil Spill Contingency Plan
NRF	National Response Framework
OGP	[International Association of] Oil & Gas Producers
OIM	Offshore Installation Manager
OPRC	Oil Pollution Preparedness Response and Cooperation Convention 1990
OPRL	Offshore Petroleum Resources Law
OSCP	Oil Spill Contingency Plan
OSR	Oil Spill Response
PAR	Petroleum Activities Regulations
PRO	Public Relations Officer
POLREP	Marine Pollution Report
REMPEC	Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea.
SCAT	Shoreline Clean-Up Assessment Technique
SEA	Strategic Environmental Assessment
SRP	Shoreline Response Plan
SITREP	Situation Report
TIP	Technical Information Paper (ITOPF)

#### **Definitions**

**Activate** – To place a unit on an active status, to begin a process or procedure to respond to an incident.

**Affected Ministry** – Ministry under whose jurisdiction a spill occurs

**Alert** – to make another party aware.

**Contingency** – A resource or process put in place as part of a plan to respond to an incident which has not yet occurred.

**Dispersant** – a product, comprising a surfactant and solvent, designed for the purpose of promoting the dispersion of oil in water and preventing recoalescence.

**Exclusive Economic Zone** – The exclusive economic zone (EEZ) extends seaward to a distance of no more than 200 nautical miles (370 km) out from its coastal baseline. The exception to this rule occurs when exclusive economic zones would overlap; that is, state coastal baselines are less than 400 nautical miles (740 km) apart. When an overlap occurs, it is up to the states to delineate the actual maritime boundary. In the EEZ, the coastal State has sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources; for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds. It has jurisdiction with regard to the establishment and use of artificial islands, installations and structures; marine scientific research; the protection and preservation of the marine environment;

**Flashpoint** – the temperature at which oil vapors will ignite, given a source of ignition.

**Governorate Shoreline Response Plan** – a plan put in place by coastal governorates to support shoreline protection and clean-up activities. These plans will be in support of the National Response Framework, the National Oil Spill Contingency Plan (this plan) and other local facility oils pill response plans. They will focus on logistical support, manpower, transport and waste management resources.

**Lead** – The entity within a Unit with primary responsibility for the Units functions

**Lead Agency** - The authority within the national government designated under this plan as having responsibility for response to oil spills within their jurisdiction.

**Leak** – any release of hydrocarbon product from damage to a vessel, pipeline, valve, tank or another oil handling infrastructure.

**Maritime Public Domain of the Republic of Lebanon** – this is all marine waters within Lebanese jurisdiction including the Territorial Sea and the Exclusive Economic Zone (EEZ)

**Mobilize** – To assemble and move people or resources to a new purpose or location in response to an incident.

**Net Environmental Benefit Analysis –** the assessment of the advantages and disadvantages of different oil spill clean-up responses; including their comparison among each other and with natural clean-up.

**National Operations Room** – the National Operations Room (NOR) is a response room established at the presidency of the Council of Ministers (COM) to respond to National

Disasters and Crisis according to a defined National Response Framework (NRF) for management crisis and disasters.

**Oil -** means petroleum in any form including crude oil, fuel oil, sludge, oil refuse and refined products.

**Oil pollution incident** (oil spill) - means an occurrence or series of occurrences having the same origin, which results or may result in a discharge of oil and which poses or may pose a threat to the marine environment, or to the coastline or related interests of one or more States, and which requires emergency action or other immediate response.

**Offshore unit** - Any fixed or floating offshore installation or structure engaged in gas or oil exploration, exploitation or production activities, or loading or unloading of oil.

**Petroleum Activities** - The planning, preparation, installation and execution of activities associated with a subsea Reservoir, such as Reconnaissance, Exploration, Production and exploitation, laying pipelines, Development of Facilities, Production from Reservoirs, Transportation, as well as cessation of any such activities and decommissioning of a Facility. Transportation of Petroleum in bulk by vessel and vehicle shall not be included.

**Plan Custodian** – the agency or ministry with responsibility for implementations and management of the National Oil Spill Response Plan.

**Preparedness** – action taken by a state, or private company to prepare for an oil spill

**Response** - Any actions taken to prevent, reduce, monitor or combat oil pollution

**Sea ports and oil handling facilities -** Those facilities which present a risk of an oil pollution incident and includes, inter alia, sea ports, oil terminals, pipelines and other oil handling facilities.

**Sectoral Center** – A response center established by the Affected Ministry to support any emergency response including oil spills.

**Shall** – a requirement of an agency, ministry or other entity to carry out an action or task to support the contingency planning process of response actions.

**Ship** - A vessel of any type whatsoever operating in the marine environment and includes hydrofoil boats, air-cushion vehicles, submersibles, and floating craft of any type,

**Support Agency -** The entity assigned to provide assistance to the Unit Lead in support of the response

**Territorial Sea** – The area, also known as territorial waters, includes all waters from the national baseline out to 12 nautical miles from the baseline

**Tier** – refers to the level of response required to combat a spill.

#### 1 INTRODUCTION

#### 1.1 Aim and Purpose

#### 1.1.1 Aim

The Lebanese Government regards the pollution of the coastal environment as a serious threat. Therefore, an immediate response to incidents causing, or with the potential to cause, significant pollution is required. As a signatory of various conventions, Lebanon has an obligation to protect and preserve the marine environment and to produce a National Oil Spill Contingency Plan (NOSCP) (referred to as "the Plan"). Accordingly, and in line with Article 29 of Environmental Protection Law 444/2002, on the protection of the marine coast and environment from pollution, Lebanon has developed this NOSCP with a response system that features an integrated structure, which clearly defines responsibilities when responding to an oil spill situation, and yet allows sufficient flexibility to adapt to changing or unforeseen circumstances.

#### 1.1.2 Purpose

This NOSCP provides guidance on incident management, the method and structures of coordination and communication, the general resources that may be brought into play and the circumstances in which Lebanon deploys national and, if necessary, international assets to respond to a marine oil pollution incident, in order to protect the overriding public interest. It provides a strategic and operational overview intended to inform and guide Government Departments, Governorates, Municipalities, Environmental, Port and Harbor Authorities, Health bodies and senior managers of response organizations - including those of industry. It is based on the principle that after preserving human life, the key priorities are to protect human health, protect the marine and terrestrial environment, protect the country's socio-economic assets and ensure that everyone is informed.

#### 1.2 Objectives

The objectives of this National Oil Spill Contingency Plan, match and amplify the International Maritime Organization (IMO) objectives for a NOSCP, and as such it:

- Establishes a viable operational organization with representation from all concerned agencies.
- Identifies the national high risk areas.
- Identifies priority coastal areas for protection and clean-up.
- Provides a minimum level and appropriate types of pre-positioned pollution response equipment in accordance with article 6(2) of the OPRC Convention.
- Prevents the spread of further pollution from identified oil spills.
- Controls the spill source and clean-up existing pollution.
- Employs Net Environmental Benefit Analysis (NEBA) to ensure that the chosen recovery strategies do not cause further damage to the environment.

#### 1.3 Scope

This plan defines the response to maritime oil spills in the Maritime Public Domain of the Republic of Lebanon which includes the Territorial Sea and the Exclusive Economic Zone (EEZ) as well as from the shoreline. In addition, it includes the response to oil spills entering the Lebanese EEZ

from external sources. It does not cover Hazardous and Noxious Substances spills (HNS) or overboard loss of shipping containers, which can be added in later updates of the Plan.

#### 1.4 Legal Perspective

The NOSCP is prepared in implementation of Lebanon's general obligations under the following international conventions, namely:

- The International Convention relating to Interventions on the High Sea in Cases of Oil Pollution Casualties, 1969 ratified by Decree No. 9226 dated 12 October 1974, under which the contracting states are provided general powers on the high sea as may be necessary to prevent, mitigate or eliminate danger to its coastline or related interests from pollution of the sea by oil or the threat thereof, following upon a maritime casualty or related acts.
- The Convention for the Protection of the Mediterranean Sea Against Pollution, 1976 (the Barcelona Convention) and the 1976 Dumping Protocol and 1976 Emergency Protocol, ratified by Decree-Law No. 126 dated 30 June 1977. Under the Barcelona Convention, the contracting states are required to take appropriate measures to prevent, abate, and combat pollution of the Mediterranean Sea. Under the Dumping Protocol, the contracting states are required to issue instructions to appropriate services to report potential pollution by ships and aircrafts by certain types of waste and matter including oil. Under the Emergency Protocol, the contracting states are required to report any oil spill and to cooperate in the case of a large oil spill.
- Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities (Athens, 17 May 1980) (ratified by Law No. 292 dated 22 February 1994, under which the contracting states are required to establish suitable measures to combat pollution of the Mediterranean Sea emanating from any source or activity within the territory of the contracting state.
- The United Nations Convention on the Law of the Sea, 1982 (UNCLOS) ratified by Law No. 295/1994, under which the contracting states are required to take measures to prevent, reduce and control pollution of the marine environment and cooperate to develop and implement contingency plans against pollution.
- The International Convention for the Prevention of Pollution from Ships (MARPOL) 1973, as modified by the Protocol of 1978, and its five Annexes, particularly Annex I "Regulations for the Prevention of Pollution by Oil" that contains regulations on the prevention and reduction of marine pollution by accidental or operational discharges of oil, whose implementation should be ensured by Lebanon. In addition to other required documents, such as, the Oil Record Book and the International Oil Pollution Prevention Certificate, oil tankers of 150 gross tonnage and above, and every other vessel of 400 gross tonnage and above are required to have on board an oil pollution emergency plan named Shipboard Oil Pollution Emergency Plan (SOPEP), as approved by the vessel's flag state administration. Annex 6 is related to air pollution, and whilst this would be a very good Annex to which Lebanon should accede, it is not relevant to this NOSCP

More specifically, the NOSCP is prepared in implementation of Lebanon's obligations under the Oil Pollution Preparedness, Response and Cooperation Convention, 1990 (OPRC) ratified by Law No. 605 dated 20 November 2004. `

At the national level, this NOSCP is prepared in implementation of the following legislation:

- Environmental Protection Law No. 444/2002 under which the MOPWT-DGLMT, the MOE and the competent authorities are required to cooperate for the protection of the marine environment from pollution, including developing plans and managing shoreline protection activities (article 29.2). In addition, it is required to take the necessary measures to prevent marine pollution resulting from ships, marine transport vessels, vehicles or erections in the Lebanese territorial waters (article 32).
- Under the Petroleum Activities Regulations issued by Decree No. 10289/2013, the offshore operators are required to prepare and regularly update and develop an emergency response plan. (Article 138). The ERP is to be compatible with the National Emergency Framework.

#### References:

- <u>http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-(MARPOL).aspx</u>
- <a href="http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-on-Oil-Pollution-Preparedness,-Response-and-Co-operation-(OPRC).aspx">http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-on-Oil-Pollution-Preparedness,-Response-and-Co-operation-(OPRC).aspx</a>

#### 2 PREVENTION PROVISIONS

Prevention of oil spills will always be preferable to the costly and long term damage that oil spills can cause to environmental and socio-economic resources. Globally, while the amount of oil produced and transported has increased as the world's economy has expanded, the overall number of large tanker spills has significantly decreased. This reduction is primarily due to efforts by The International Maritime Organization, National Governments and companies to develop more effective preventive measures. This experience will be used wherever possible in Lebanon.

Prevention requires continuous assessment and improvement in every phase of operation in which oil is produced, transported, stored, and marketed. Lebanon will need to devote significant resources in order to develop personnel capabilities and procure, utilize and maintain equipment designed to prevent oil spills during each phase.

This will require the development of standard operating procedures and significant personnel training, as well as the provision of modern technology and equipment. Following these appropriate standard operating procedures, as well as ensuring that regular and planned maintenance is carried out and recorded, will help to ensure the safe operation of equipment, hence aiding in achieving the goal of preventing spills from occurring.

#### 2.1 Spill Prevention from Land Based Sources

All industrial and oil handling facilities, for example factories, storage areas, oil terminals and automobile filling stations that have any oil discharge to drains, streams or any watercourses must have the following: -

- A permit: A permit to discharge limited amounts of oil (provided by the MOPWT-DGLMT according to Article 31 of Law 444/2002 and based on a decree to be issued by the Council of Ministers, upon the proposal of both the ministers of Environment and of Public Works and Transport in accordance with Article 30 of Law 444/2002). Currently, Annex 3 of Decision 8/1 of 2001 sets maximum allowable discharge limits for liquid waste discharged into the sea from existing and new facilities (all types and not specific to oil handling facilities).
- **Oily Water Separator or Interceptor:** All drains must therefore be fitted with an oily water separator, capable of reducing the oil concentration in the discharge to the level specified by MOE. Alternatively, the drain must be fitted with an interceptor to collect the discharged oil and prevent it from entering any outlet to the sea. It must be regularly maintained and emptied to ensure oil does not overflow, especially during times of heavy rain.

#### 2.2 Spill Prevention from Oil Terminals

All oil terminals should be legally licensed. Licensed terminals must be certified as being in full compliance with normal terminal and tank regulations. Decree No. 5509 11/8/1994, does not seem to be fully respected. For example, many of the current terminals, built illegally during the war, have not been properly certified.

This Decree determines the general regulatory requirements for the establishment, construction and operation of installations for petroleum derivatives and liquid petrochemical products as well as for transport tankers and distribution stations for petroleum products. The requirements

and specifications in the Decree cover the following elements: (1) Classification of oil and petrochemical derivatives based on flash point and boiling point; (2) Specifications and requirements for open sea berths, based on types of berth (conventional and single mooring) and maximum dead weight tonnage of unloading vessel; (3) Specifications and operation of undersea pipeline; (4) Requirements for navigation safety, environmental protection, and firefighting during unloading (Emphasis on preparedness and response in the case of an oil spill during unloading); (5) Storage including specification for oil storage above and underground tanks (locations, distances, sizes, bunding) and for manifolds, including provisions for firefighting, security and safety, and environmental protection (including oil separator ponds); (6) Oil delivery and tanker specifications; and (7) Distribution station specifications.

Chapter 3.4 of the decree states the requirements for environmental protection from an oil spill including (1) the provision of a pump that empties the undersea pipeline in the case of a defect, (2) the provision of floating booms on stand- by during unloading to limit the movement of a spill, (3) the provision on standby during unloading an emergency boat equipped with dispersants approved by the MOE and with spraying equipment and the provision of necessary quantities in store, (4) continuous field inspection during unloading activities, (5) annual inspection of pipeline and flexible hoses with pressure testing, (6) provision of a boat for fire-fighting on standby.

All new shoreline installations must be correctly sited after approval by MOPWT-DGLMT and the hazard to people and the environment beyond the site boundary must be taken into consideration. These issues will be considered as part of a full Environmental Impact Assessment study as stipulated by Decree 8633/2012.

#### 2.3 Spill Prevention in Ports and Harbors

Spills from ports and harbors may come from a number of sea or land based sources. Historically, worldwide, bunkering operations have proved to be the main cause of harbor spills. So inspection of facilities and procedures should be made in line with ratified international conventions and national legal requirements. As a minimum, harbors should:

- Bund oil storage tanks, and store all oil drums in a bunded area
- Regularly inspect any oil carrying pipeline.
- Provide end connectors with drip trays.

#### 2.4 Spill Prevention from Vessels in Lebanese ports

As a signatory to MARPOL and OPRC, Lebanon is also a signatory to the Mediterranean Memorandum of Understanding on Port State Control. Accordingly, all vessels calling at Lebanese ports are liable to be inspected for compliance with these international regulations. In particular, it is important that tankers are inspected to ensure that they are carrying a Certificate of Insurance under the Civil Liability Convention.

#### 2.5 Spill Prevention from Offshore Installations

The requirements for spill prevention from offshore installations are extensive explained in the OPRL (132/2010) and PAR (10289/2013).

The Offshore Petroleum Resources Law (OPRL) No. 132 dated 24 August 2010, Articles 29.1, 29.3, and 32, requires a detailed EIA study as part of any plan for "Development, Production, Transportation, storage or utilization" submitted by the operator on behalf of the Right Holder.

In addition, the Petroleum Activities Regulations (PAR) Decree No. 10289 dated 30 April 2013 comprises requirements for well drilling, the establishment of offshore facilities, as well as Health Safety and Environmental requirements that contribute to the prevention of spills for offshore activities.

#### 3 PREPAREDNESS

#### 3.1 Key entities

In line with international best practice this National Oil Spill Contingency Plan (NOSCP) has been established based on a thorough assessment of oil spill risk within Lebanon. This risk assessment can be found in Volume B. The strength of the NOSCP and its response system lies in its integrated response structure; this clearly defines the responsibilities when responding to oil spill situations, yet allows sufficient flexibility to tailor spill response to the special circumstances of a given incident. To assist the implementation process, key entities will be required to develop internal standard operating procedures and take part in trainings and drills.

Under this plan the National Competent Authority is designated as the MOPWT-DGLMT. The key responsibilities of the NCA include:

- Responsibility, and therefore the accountability, for Oil Pollution Preparedness and response as required by OPRC Article 6 1) a) (i).
- Responsibility as custodian of the NOSCP.
- Assessment of the requirement to activate the NOSCP.
- Assigning the National Oil Spill Incident Commander (NOSIC) and acting as NOSIC if appropriate

As Plan Custodian, i.e. the owner of the NOSCP, the MOPWT-DGLMT will be responsible, and accountable, for:

- Production, maintenance and updating of the plan including taking into consideration any changes in the legal framework.
- Co-ordination of a National Contingency Planning Committee to ensure ongoing improvement in national capability.
- Ongoing training and exercise program
- Approval of facility/operation specific Oil Spill Contingency Plans
- Approval of local governorate Shoreline Response Plans (SRPs)
- Distribution of the plan

As the Ministry of Environment (MOE) has a legal responsibility for protection of the environment in Lebanon they must work closely with the MOPWT-DGLMT to ensure preparedness for oil spill and to manage a response to a tier 3 incident. Volume C of this plan outlines their responsibilities within the Incident Management Structure, however, it is anticipated that the MOE, MOPWT-DGLMT and the Affected Ministry will work closely during assessment of all incidents in order to ensure that environmental protection is at the forefront of all response efforts.

There are a number of government ministries with oversight on spill-related issues, and all are represented within the Incident Command Structure. These entities are also members of the National Oil Spill Planning Committee, which will be facilitated by the MOPWT-DGLMT as NCA. They can include, but are not limited to:

- Ministry of Public Works and Transport –Directorate Land and Maritime Transport (MOPWT-DGLMT)
- Ministry of Environment (MOE)

- Ministry of Energy and Water Lebanese Petroleum Authority (LPA)
- Ministry of Energy and Water Directorate General of Oil (DGO)
- Ministry of Energy and Water –Lebanese Oil Installations (LOI)
- Lebanese Armed Forces (LAF)
- Civil Defense
- Ministry of Agriculture (MOA)
- Ministry of Industry (MOI)
- Ministry of Interior and Municipalities (MOIM)
- MOIM General Security Force (MOIM GSF)
- Ministry of Information (MOIn)
- Ministry of Public Health (MOPH)
- Ministry of Labor (MOL)
- Ministry of Justice (MOJ)
- Ministry of Telecommunications (MOT)
- Ministry of Finance (MOF)
- Ministry of Culture (MOC)

This group will allow input from all ministries on all oil spill issues and allow collaboration for oil spill response training and exercise. The individual roles and responsibilities for each of these stakeholders are outlined in Volume C.

In the event of an oil spill incident, the National Operations Room (NOR) for Disaster Management will be notified and activated, if needed, depending on the tier level and escalation of the incident.

#### 3.2 Organizational Response Structure

The response organization required to deal with a Tier 3 incident in this plan is based upon an internationally recognized Incident Command System (ICS) used widely by oil companies and national governments. The ICS approach provides a structured and flexible response organization which can be matched appropriately to the scale of the incident.

Figure 3.1 below shows an outline of this response structure with further details on oil spill roles for each of the responsible parties presented below. A key advantage of the system is that it is based on function and role and therefore with a suitable quota of personnel the response can be maintained over many weeks and months.

The National Oil Spill Incident Commander (NOSIC) is supported by the NOSIC support staff comprising public affairs, security and safety, legal as well as technical specialists and commands four General Staff response groups namely Operations, Planning, Logistics and Finance. In addition, the NOSIC may receive strategic guidance, limitations and priorities from an Incident Command Advisory Group (ICAG) comprising high-level representatives from appropriate Government Ministries. This support is flexible and NOSIC may consult different members depending on the nature of the incident.

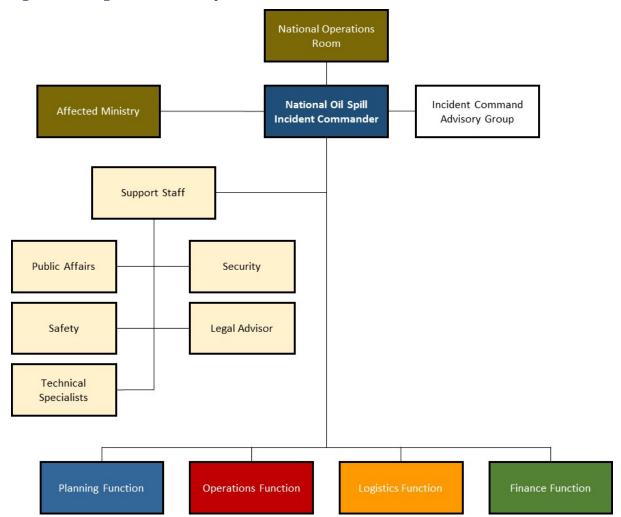


Figure 3.1: Organizational Response Structure

#### 3.2.1 Key Elements of the ICS system within the Lebanese Context

#### 3.2.1.1 National Oil Spill Incident Commander (NOSIC)

The NOSIC has overall operational tactical incident management authority. Key individuals nominated for the NOSIC role will be fully trained for the role in advance and have taken part in oil spill response exercises in the role of NOSIC. The MOPWT-DGLMT, MOE and Affected Ministry will assess the spill and the tier 3 potential. In the event that a tier 3 is likely to be declared a NOSIC will be given command and the NOSCP will be formally activated.

#### Key Responsibilities:

- Take tactical command of the incident
- Name the incident for use in all correspondence and documentation
- Establish the Incident Command Centre
- Mobilize the ICAG, NOSIC Support Staff and the General Staff
- Identify the response objectives, priorities and strategies to be followed
- Co-ordinate the work of the Command and General Staffs

- Ensure planning meetings are scheduled as required
- Ensure that all adequate safety measures are in place.
- Approve the Incident Action Plan (IAP)
- Facilitate de-mobilization when appropriate
- Inform and liaise with NOR

The agency that will assume the role of National Oil Spill Incident Commander in charge of this function depends on the nature of the spill and will be:

- **MOPWT-DGLMT** For a spill at sea (shipping), a spill on land (loss of containment), a spill in a port, a spill where the source is unknown, and for a spill that originated from outside Lebanese territorial waters.
- **LPA-** For a spill that is created due to off shore O&G exploration activities.

Each of these agencies will, in advance and as part of their sectoral contingency planning activities, designate personnel who, in the event of a tier 3 oil spill, would fulfill the role of NOISC. Whilst the MOE has no operational jurisdiction over potential oil spill risk it does have a responsibility for environmental protection and so it is required to work closely with the MOPWT-DGLMT and/or LPA in spill assessment. The MOE will then work closely with the NOSIC, through the ICAG and/or the Planning Section to minimize environmental impact.

#### 3.2.1.2 Affected Ministry

Although a NOSIC will either be from the MOPWT-DGLMT or the LPA, there may also be another Affected Ministry. This will be the Ministry, Authority or Directorate with jurisdiction over the area of the spill. In the event of a tier 1 or 2 spill, the Affected Ministry will support the Local Incident Commander (LIC) and may well activate its Sectoral Center. The Sectoral Center will oversee the response at a local level providing support as necessary. Whilst at a national level, they may manage business continuity issues, e.g. ensuring that fuel and other imports are diverted from the affected port and are able to be maintained. The Ministries and areas of responsibility are summarized in Table 3.1.

Table 3.1: Affected Ministry

Ministry	Area of Responsibility
DGO	APIC Terminal spills
LOI	Oil Installations at Zahrani and Tripoli
EDL	Power station terminals at Zouk, Zahrani, Deir Aamar, Hreesha, and Jiyeh
MOPWT-DGLMT	Unknown or cross boundary spills
MOI	Onshore coastal industries

#### 3.2.1.3 Incident Command Advisory Group (ICAG)

The ICAG is a key group that sits alongside the Incident Management Team (IMT) but is not involved in the day to day management of the spill. The group is made up of representatives of Ministries, Authorities and Directorates that are directly affected by the spill and their role will be to advise the NOSIC on issues relating to their areas of jurisdiction, or areas where they may

have a specific expertise. The NOSIC retains authority to make the final decision. The ICAG composition is based on the nature of and specifics of the incident and will be flexible. ICAG members are unlikely to all mobilize to the Incident Command Center but will be available to give advice as required. Members must:

- Have jurisdictional authority or functional responsibility under law for the incident
- Have the capability to provide impact on response operations
- Be specifically charged by law with managing or coordinating a major aspect of the incident response
- Have full authority to make decisions and execute tasks on behalf of their own organization to assist the response
- Have the resources to support participation in the response organization.

The ICAG function must be clearly separate from that of the National Operations Room (NOR), see section 3.2.2. The ICAG function is to support the NOSIC and the IMT with specific technical knowledge that may be required to make decisions regarding operational cleanup tactics. As for the NOR, it is responsible for strategic decision making relating to areas of national significance such as finance, media and international assistance.

#### 3.2.1.4 National Contingency Planning Committee

Members of the ICAG will form a National Contingency Planning Committee to be used by the NCA as a forum for discussing issues affecting the NOSCP, such as training, exercises, and any plan updates or changes that may be required. The committee will be chaired by the NCA and meet as is necessary. Objectives should be established by the NCA, in order to prioritize areas of work or capacity building that may be required to continually improve the plan, and hence preparedness in Lebanon.

#### 3.2.1.5 Joint Maritime Operations Chamber (JMOC)

This is the main 24-hour contact channel for communications and notification of oil spill incidents. All spills in Lebanese waters shall be reported to JMOC. These reports shall then be passed instantaneously to the MOPWT-DGLMT and MOE and then to other affected ministries. The role of JMOC during spill activities will be in line with normal operations, i.e. they will communicate and co-ordinate marine traffic.

#### 3.2.2 Integration with the National Response Framework

The National Response Framework (NRF) in Lebanon is in place to manage all national disasters. In the event of a disaster requiring intervention and management at the national level, the NRF operations center (National Operations Room - NOR) will be activated. The NOR follows a system of three levels of response, these are classified as:

- GREEN ALERT: Management is within normal operations with limited impact and geographical extent.
- YELLOW ALERT: Operations require partial alert of the NOR, as well as the notification of the Prime Minister. Reporting to the Prime Minister every three hours.

• RED ALERT: Full alert of the NOR. Reporting to the Prime Minister every hour.

A Tier 3 oil spill may be evaluated by the NOR as a Yellow or Red Alert depending on the escalation of the incident. Accordingly, the NOR is partially or fully activated, respectively, for each level of alert. In all cases, the NOSIC will remain the lead party responsible for the oil spill response activities. The Co-ordination Unit (CU) (via a Liaison Officer - LO) at the NOR will maintain communications with the NOSIC to coordinate the following:

- National and strategic priorities: Whilst the NOSIC and the incident command teams will be responding to the spill, making decisions regarding response strategy and tactics, the NOR may define high level national strategic priorities.
- Communication: Sharing of information and media management between the NOR and the NOSIC communication teams.
- Facilitation of international assistance: the request of international aid process will be as follows:
  - If the NOR is partially or fully activated, the CU LO will facilitate the process by communicating the needs, the requests and the offers to be approved by the Prime Minister. If deemed appropriate, the required cells at the NOR will be activated and support will be provided through the Host Nations Support Unit.
  - If the NOR is not activated, the Minister of the Affected Ministry will contact the Prime Minister directly who will then facilitate the request as appropriate, and will request accordingly the support of the NOR needed cells. If circumstances changed, then the NOR may upgrade their response at any time.

In the case of a Tier 2 oil spill, a Green or Yellow Alert will be declared by the NOR depending on the escalation of the incident. The incident will be managed by the LIC and closely monitored by the Sectoral Centre and the Minister.

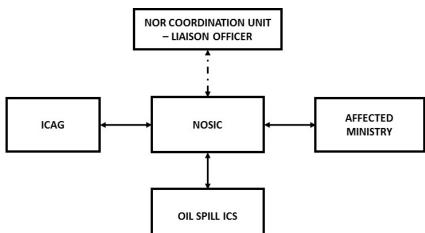


Figure 3.2: Interaction with the NRF

#### 3.3 Tiered Oil Spill Response

#### 3.3.1 The Tiered Response Concept

Tiered preparedness and response provide a structured approach to establishing oil spill preparedness, and crucially, a mechanism to build the required response effort. Historically, tiers have been classified by the size and location of a spill and whilst this is still the case to some degree, new interpretations define the tier according to the resources required to respond to the incident, not the scale of the incident itself. The tiered model enables the planner to consider a specific range of capabilities, which can be cascaded through the tiers according to requirements. It emphasizes that there are no rigid boundaries between the tiers, and promotes the development of tailored capabilities corresponding to risk.

This approach, in line with international best practice as per IPIECA-OGP Good Practice Guideline Tiered Preparedness and Response (2015), has been adopted by Lebanon to enhance and update the structure of the national oil spill preparedness and response.

Response capabilities are defined as the resources required to deal with the spill incident, including the response management requirements, and can be broadly considered as response personnel, response equipment, and additional support requirements. A response capability is categorized according to whether that capability is held locally (Tier 1), regionally (Tier 2) or nationally/ internationally (Tier 3). These tiers, which will be used to define tiered response in Lebanon, are detailed in Table 3.2 below.

In addition, this tiered response concept has been designed to fit with levels of activation of the NRF and NOR described in section 3.2.2.

Table 3.2: Definition of oil spill tiers.

OSR Tier	Response Capability	Response Management	NRF Level
1	Port/facility/operators locally held resources used to mitigate spills that are typically operational in nature occurring on or near the facility or operation.	<ul> <li>Response can be managed within the capability of port authority, facility or offshore installation by the Local Incident Commander</li> <li>Local/facility approved OSCPs to be activated.</li> <li>MOPWT-DGLMT/LPA and Affected Ministry to oversee clean-up</li> <li>Limited impact and geographical extent.</li> </ul>	<ul> <li>GREEN</li> <li>No alert to the NOR</li> <li>Included in working hours reports to the Prime Minister only.</li> </ul>
2	Resources held regionally/nationally that may increase response capability or to introduce more specialist technical capacity.	<ul> <li>Spill will continue to be managed by the Local Incident Commander at the facility with additional support from the Affected Ministry as appropriate.</li> <li>Regional resources will provide additional support as necessary. Additional support may potentially come from mutual aid agreements between a group of industry operators, industry funded oil spill response cooperatives, specialized Tier 2 services or local commercial service providers.</li> <li>Activation of Governorate Shoreline Protection and Clean-up Plans will be required in the case of oil pollution reaching shorelines outside the port or facility or offshore installation.</li> </ul>	• No alert to the NOR • Requests for governmental assistance through Minister of the Affected Ministry directly to the Prime Minister.  YELLOW • Reporting to the PM every 3 hours
3	Resources available at a national level, including international resources which may be called upon in the event of Tier 1 and 2 resources being overwhelmed.	<ul> <li>NOSIC from the MOPWT or LPA will assume command as appropriate and once a Tier 3 incident is formally declared</li> <li>The National Incident Management Structure will be mobilized.</li> <li>The NOR will be notified directly by the NOSIC</li> </ul>	<ul> <li>YELLOW</li> <li>Requests for governmental support through the NOR Co-ordination Unit.</li> <li>Reporting to the PM every 3 hours         RED     </li> <li>Full activation of the NOR, following assessment of NOSIC reports.         Requests for information through the Co-ordination Unit.     </li> <li>Reports to the Prime Minister every hour</li> </ul>

#### 3.3.2 Escalation of Tiers

The requirement for the escalation of the response effort (tier) will become clear once the size, location and risk of the spill has been determined. If the LIC feels unable to adequately deal with the incident at a local level, he may then request, through the Affected Ministry, additional resources and expertise from central government. In addition, he may also request additional resources from adjacent operations, local contractors or the regional governorate (activation of the regional Shoreline Response Plan, SRP, see section 3.4.1). If this additional support is still not sufficient, then the MOPWT-DGLMT and Affected Ministry may make the decision that the incident should be escalated to a Tier 3 triggering the activation and establishment of the ICS, mobilization and deployment of national response resources, and access to the necessary funding.

#### 3.4 Local and Facility Plans

In line with the tiered response concept as outlined above, it is a requirement of this plan that all oil handling facilities, ports, and offshore installations develop an operation specific oil spill contingency plan. In addition, coastal Governorates must consider potential shoreline impact from marine spills, and their Regional Centers must make plans for clean-up of shoreline within their jurisdiction through the development of a Shoreline Response Plan (SRP).

Facility level plans should be developed to cover small spills from specific operations in specific areas, i.e. Tier 1 spills. The appropriate equipment and resources should also be in place to combat these spills. In the event of a larger tier 2 spill, these facility plans must make provision for accessing additional resources through the ministry, other local industry specialist contractors, or the regional Governorate. If the oil impacts the shorelines surrounding a facility, but outside of its jurisdiction, the regional governorates will activate their local SRP for support. These plans will be supported by national equipment stockpiles where appropriate.

Oil Spill Contingency Plans for spills from oil handling facilities, ports and harbors, and offshore installations are an essential component of a national contingency plan. These facility plans must align and integrate with other local area plans, regional governorate plans, and the NOSCP. The format of these plans is the responsibility of the facility or governorate. However, there are key elements, provided in Volume D of this plan, which must be included.

#### Special Considerations for Offshore Exploration and Production Installations

Due to the large volumes which may potentially be released from an offshore well, operators should pay particularly attention to source control. This is the responsibility of the operator. During an offshore spill, source control will be run by the operator in parallel to national oil spill response activities.

#### 3.4.1 Governorate SRPs

Under this NOSCP, coastal Governorates have a responsibility to prepare for shoreline clean-up within their area of jurisdiction, through the development of a Governorate Shoreline Response Plan (SRP). Such plans will use the local response capabilities and structures of the ministries' representatives and other government entities within the Governorate. This should be in line with regional plans established under the NRF.

It is foreseen that Governorates will have access to national response equipment and to national response expertise, where appropriate. Consequently, Regional Plans should focus on the following elements:

- Provision of man power for beach clean up
- Provision of facilities for waste management with relevant ministries
- Logistical support including responder welfare, transport, PPE, etc.
- Response management facilities
- Simple oil spill training

#### 3.4.2 Consultation and Approval of Plans

All facility level plans and governorate plans must be approved before they can be considered for full implementation. Ports, terminals, and onshore facility plans must be sent to MOPWT-DGLMT for approval. Offshore exploration and production plans should be sent to the LPA for approval. In addition, plans should be sent to a number of statutory consultees. Consultees do not approve plans, however they may give valuable guidance and advice; in some cases, i.e. with dispersant standing approvals, they may have a regulatory requirement. Comments provided by these consultees should be confined to matters for which they have formal responsibility, or a function which they may be asked to fill. Ministries and Directorates that should be consulted are shown in Table 3.3 below, together with guidance on the areas on which they may comment. All consultees will undertake to review the plan in a timely manner, and revert with comments as soon as is practicably possible. The plan may not be fully approved unless all of the consultee comments, particularly where there is a legal requirement, have been taken in to consideration.

Table 3.3: Plan consultees

FACILITY	MOPWT-DGLMT	LAF	MOE	NOR	MOIM - Civil Defense	Governorate	MOEW	MOI	ЭОМ	MOA
Ports and Harbors OSCP	A	С	С		С	С				С
Oil importing facilities OSCP	A	С	С		С	С	С	С		С
Oil storage facilities OSCP	A	С	С		С	С	С	С		С
Offshore Installation OSCP	С	С	С		С		A			С
Governorate SRP	A	С	С	С	С	С			С	С

A: Approval Agency

C: Consulted Agency

Once agreed and approved, the final copy of the plan must be circulated to all consultees. If minor changes are made, then the consultees must be supplied with the amended pages in a timely manner. Changes to the plan may be due to lessons learned at oil spills or exercises, changes in

operations, or organizational changes within a company or organization. The plan amendment will then be circulated to all plan holders with a report explaining the changes that have been made.

All plans must be reviewed every year and sent to the approving authority every three years.

#### 3.5 Training and Exercises

Oil spill training is required for all levels of response personnel, from equipment operators, shoreline supervisors, incident management team members, to incident commanders and senior staff with oil spill responsibilities. The International Maritime Organization has prepared a set of training courses to deliver training to each of these levels. This should be followed by the government and facilities alike, in identifying training requirements and planning a schedule of training to fulfill these requirements. An outline of the IMO training courses is given in Volume D.

This will be supplemented by small local Tier 1 response exercises designed to teach equipment operation, management roles and responsibilities, as well as co-ordination with government agencies and local authorities. More complicated Tier 2 exercises will co-ordinate the sectoral response of several installations and local contractors with these external agencies. Every 2 years, a "full scope" Tier 3 exercise will be held to train and test the full NOSCP, and if necessary, international response involving the mobilization of the NOR and all relevant national departments and agencies. An outline of types of exercises which may be used, along with their recommended frequency is given in Volume D.

This plan requires that the MOPWT-DGLMT, as NCA, establishes a national program for training and exercises in support of this plan.

#### 3.6 Financing

In order to build capability to respond to oil spills, relevant Ministries should allocate funds for associated activities (human resources, training, etc.) and assets (facilities, equipment, etc.) as part of their annual budgeting process.

#### 4 RESPONSE

Receiving the initial notification of an oil spill incident and establishing a response in a timely and appropriate manner will be critical to the overall success of the oil spill response operations. The following sections cover the key steps in these first stages of response namely:

- Notification and Activation
- Initial Response
- Spill Assessment and Tier Allocation

Once these steps have been taken, then the appropriate level of response resources may be mobilized and the response established. This process is summarized in Figure 4.1. Once a response is established, it can be maintained over weeks and months as necessary using the planning cycle shown in section 5.7.

#### 4.1 Notification and Activation

For ALL spills in Lebanon, the notification and activation procedure shown in Figure 4.1 should be followed. The procedure follows five steps and ensures that:

- A notification can be made 24 hours per day.
- The National Competent Authority (MOPWT-DGLMT), Ministry of Environment, and the Affected Ministry are notified as soon as possible following a spill from any source.
- These key Ministries are able to assess an incident as soon as possible and mobilize resources in a timely manner.
- In the case of a Tier 3 incident and activation of this Plan, a NOSIC is appointed as soon as possible and the Incident Management Structure is established.

The five key steps in notification and activation are:

**STEP 1**: The spill source or spill observer notifies JMOC.

**STEP 2:** JMOC notifies the MOPWT-DGLMT as NCA, as well as the MOE and the Affected Ministry. JMOC ensures a POLREP has been completed.

**STEP 3**: The MOPWT-DGLMT, MOE, and Affected Ministry assess the incident and assign response tier. Any immediate actions required to ensure safety of life are taken and as much information as possible is gathered from the response site.

**STEP 4:** All other immediate stakeholders, i.e. ICAG members, are notified of the incident via JMOC and the POLREP.

**STEP 5:** Mobilize response resources as appropriate. In the case of a tier 1 or 2 incident, this will be done through the Affected Ministry. In the case of a tier 3 incident and the activation of this plan, the NOSIC will be appointed from a pre-identified group from either the MOPWT-DGLMT or LPA. They will then assume command and mobilize the Incident Command Structure as appropriate, see Volume C.

The initial notification may come from a number of sources, see Figure 4.1. As per this procedure, it will be the responsibility of JMOC to pass on that notification to MOPWT-DGLMT, MOE and the Affected Ministry. A notification may come through a number of communication channels, i.e.

telephone, marine VHF or email. If not already completed, a POLREP form (Volume D- Annex 3) should be requested from the spiller. However, in the case of a spill from a member of the public or an unidentified source, the POLREP should be completed by JMOC. This form may then be used to notify stakeholders of the incident.

#### 4.2 Initial Response

Initial actions are primarily taken by those at the spill site in order to:

- Ensure safety of life
- Identify the source of the spill
- Isolate the source of the spill
- Ascertain the responsible party
- Gather information in order to create as accurate a picture as possible and to enable Government Ministries and Agencies to support with the most appropriate level of response.

In addition, stakeholders who will form part of the incident response structure will receive the notification and begin to mobilize as necessary. All these factors are given as initial response action checklists for each key stakeholder in **Table 4.1**.

As part of this initial response phase, a response tier level must be defined. At a national level, this tier definition is the responsibility of the MOPWT-DGLMT as the NCA, along with the MOE and the Affected Ministry.

#### 4.3 Spill Tier Allocation

Once notified the MOPWT-DGLMT, as NCA, together with the MOE and Affected Ministry will assess the incident to determine the likely tier of response and whether it is necessary to activate the NOSCP. The spill should be assessed in line with the tier levels outlined in section 3.3, with consideration given to the following:

- The type of oil and hence a prediction of its behavior in the marine environment, processes to consider are outlined in Volume C.
- The actual/potential scale of pollution
- Environmental conditions (i.e. weather, wind, tidal streams, sea state, temperature)
- Available resources (both personnel and equipment)
- The potential for long term response requirements
- The need for maritime intervention
- The geographical and physical extent
- Environmental and/or economic sensitivity, refer to volume D.
- International impact

For spills close to an operation/facility or close to shore, the initial spill assessment will be carried out at the local level, and then reported to the MOPWT-DGLMT, MOE and Affected Ministry. The LIC will assess whether they are able to clean up the spill with their own resources. For a spill that is, due to its size, nature and circumstance, clearly a Tier 1 spill, the Affected Ministry will

make contact with the LIC and ensure that operational actions are reported and documented and that the response is formally terminated.

For incidents with potential to become tier 2 or 3 incidents, prompt tier assessment becomes critical, as national support to the response will be required as soon as possible in order to minimize impact. For Tier 2 or 3, this may require the quick mobilization of national aerial surveillance resources (Aerial surveillance techniques are detailed in volume D), and consultation with the National Center for Remote Sensing (under CNRS) to provide oil spill modelling data and/or remote sensing images. The MOE, MOC and MOA, either at a local level through rangers or at the national level, depending on the scale of the incident, may provide additional assessment of environmental and economic sensitivities.

Table 4.1: Initial Response Phase: Stakeholder Key Actions and tiered response escalation

#### **RESPONSE SCENARIOS**

Affected Ministry and summarized as:

- Spill from offshore installation: **LPA**
- Spill from onshore oil storage facility, tanker offloading operations: <u>DGO, LOI or EDL</u>
- Spill from ship, in a port or harbour or from an unknown source: MOPWT-DGLMT

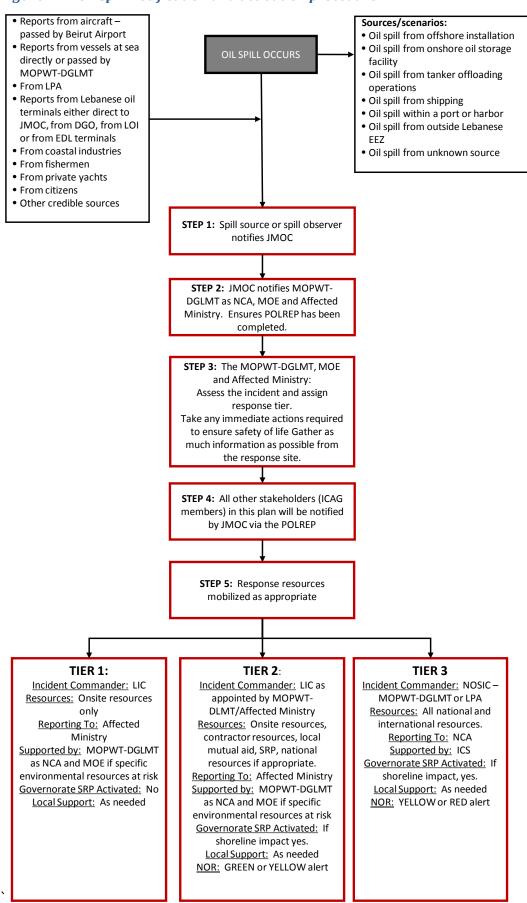
#### INITIAL ACTIONS: Key involved parties

#### All other stakeholders should:

- In the event of a Tier 2 incident be prepared to support the Sectoral Center as required.
- In the event of Tier 3 incident be prepared to mobilize and undertake the role within the national incident management team.

RESPONSE ESCALATION. See section 3.3 for definition of response tiers.		
TIER 1	TIER 2	TIER 3
In line with the initial actions outlined above facility manager, captain or the Offshore Installation Manager (OIM) will mobilize the facility/operation OSCP. If the incident can be managed with the resources on site, the spill will remain a Tier 1 response. The Local Incident Commander will report regularly to the facility or operational duty manager, the Affected Ministry and MOPWT-DGLMT  Incident Commander: LIC as defined by the OSCP Incident Management: Organisation OSCP and incident management procedures Interaction with NOR: None Response Resource: Local onsite resources only. Escalate to Tier 2/3 if:  • Response resources, equipment, manpower or expertise, are not sufficient to deal with the incident.  • The oil spill spreads outside the area of jurisdiction of the spiller i.e. impacts other local facilities, or shorelines  • Support required from the national oil spill response i.e. aerial surveillance.	Response Resource: Organisation resources, supported by national resources as required.  Escalate to Tier 3 if:  The spill impacts a large area i.e. more than one	A large scale incident requiring the National Incident Management Structure to be mobilized as described in this plan.  Incident Commander: NOSIC  Incident Management: National Incident Management Teams  Interaction with NOR: YELLOW or RED alert Response Resource: National and International resources.

Figure 4.1: Oil spill notification and activation procedure



## 4.4 Establishing a Response

# 4.4.1 Appointment of an Incident Commander

The assignment of an Incident Commander must be made as soon as possible following a spill. In the event of a Tier 1 spill, the spill may be dealt with by the spiller at a local level using their own resources. The Affected Ministry, in conjunction with the MOPWT-DGLMT as necessary, will oversee the incident as necessary.

In the event of a tier 2 spill, with the spiller requiring additional resources the following actions may be taken at a national level:

- The MOPWT-DGLMT, MOE, and Affected Ministry should be prepared to send trained personnel with experience of oil spill response to the scene to make an assessment and support the LIC.
- The Affected Ministry may be required to activate its Sectoral Center to support the incident and deal with any business continuity issues.
- If necessary, due to size or complexity of the incident, the MOPWT-DGLMT and Affected Ministry may appoint a more senior LIC to manage the spill, with support from local and possibly national resources.
- Local Governorates will activate their SRP as necessary to deal with oil hitting the shoreline outside the jurisdiction of the spiller or other industry.
- The MOPWT-DGLMT will be prepared to mobilize national resources to support the incident, which will most likely involve aerial surveillance assets, but may also include equipment from the national equipment stockpile.
- In the event of a Tier 2 offshore incident, the LIC and his staff are likely to remain colocated with the oil company spill management team, working closely with the LPA and reporting to the MOEW Sectoral Center.

In the event of a Tier 3 incident, the National Oil Spill Incident Commander will be either from the MOPWT-DGLMT or LPA. These personnel are identified in advance by their relative Ministries, have experience in spill response or spill response exercises, and must have undergone full training, in line with the training matrix (Volume D).

#### 4.4.2 Response Structure

The LIC will assess whether they are able to clean-up the incident with their own resources and, together with the MOPWT-DGLMT, MOE and Affected Ministry, the incident will be formally assessed and classified. If resources on site are sufficient to respond, then the incident will remain a tier 1. If the LIC is unable to combat the spill using resources on site and additional resources are required to support the incident, then the Affected Ministry and other local resources will be mobilized and a tier 2 will be declared. If a shoreline impact is likely then the governorate SRP will be activated via the Regional Center, to support shoreline clean-up. For a tier 2 oil spill incident, the NOR may or may not be partially activated to the yellow level. If at yellow, they must be kept informed every 3 hours and requests for government support will be through the Coordination Unit LO. If at Green, then the Affected Ministry may still request government support but this will be through normal communication channels at minister level.

In the event of a larger incident, where the spill will require the mobilization of national and international resources, then the NOSCP will be activated. The MOPWT-DGLMT, MOE and Affected Ministry will appoint a NOSIC, declaring a tier 3 incident. They will mobilize the Incident Command Team as appropriate, including the appropriate members of ICAG, and inform the NOR.

# 4.5 Spill Response Resources

# 4.5.1 Local Response Resources (Tier 1 and 2)

#### 4.5.1.1 Tier 1

As required by the tiered response system, oil handling facilities and operations will have the necessary equipment to respond to a spill within a specific local area of jurisdiction. These resources will be deployed rapidly in the event of a spill.

#### 4.5.1.2 Tier 2

For spills which exceed this capability, it will be necessary to progress to Tier 2, either to bring in resources from neighboring facilities or from a spill contractor. These resources are to be available within a specified time, normally four hours. Each operation must make a provision for tier 2 response within their contingency plan. If there is a shoreline impact outside of the spiller's area of jurisdiction, this will require mobilization of the regional governorates SRP which will provide access to resources such as transport, storage areas, manpower and welfare. In some circumstances, national oil spill response equipment may be used at a tier 2 level; management will remain at the local level but with supervision by the MOPWT-DGLMT and/or Affected Ministry.

#### 4.5.2 National Response Resources

As part of the requirements of OPRC, Lebanon shall maintain a national stockpile of equipment. This stockpile of equipment, together with other national resources, i.e. aerial surveillance capabilities and oil spill sampling, will be made available to the response in the following circumstances:

• In the event of a tier 3 spill being declared and the NOSCP activated

- At the request of a LIC managing a tier 2 spill where oil is impacting areas outside the area of jurisdiction of just one facility or operations, and may have required the mobilization of equipment and resources from neighboring operations, tier 2 contractors or local governorates.
- In the event of any spill from an unknown source where the MOPWT-DGLMT, as NCA, is managing the response.

In line with the risk assessment and this plan, the MOPWT-DGLMT, as NCA, will make provision to provide, a tier 3 response resource, whether owned, or through a contractor, or provided by industry to support specific operations. This response resource will:

- Be positioned in strategic locations along the coastline
- Be well maintained and packaged ready for fast deployment
- Be specific to the risks and response strategies identified by the risk assessment and modelling (see Volume B).

National resources currently available in Lebanon are given in Volume D- Annex 5. Currently this equipment is held at the following locations:

- LAF Equipment: Beirut Naval Base
- Civil Defense Equipment: Jounieh Marine Rescue Base with small stockpiles at Jiyyeh and Tyre.

For oil spill sampling, which is conducted to determine the source of an oil spill or to assess oil in water concentrations, academia could be approached to provide assistance with vessels and laboratory analysis. The MOA Department of Fisheries, who have good working relationships with local fishing syndicates, may provide resources at a local level, such as the provision of small boats for oil spill response activities.

#### 4.5.3 International Resources

Under the Emergency Protocol of the Barcelona Convention, Mediterranean countries have access to the spill response resources of neighboring countries. REMPEC is the organization in the region responsible for management of the agreement for oil spill mutual aid. They are experienced in oil spill response, and work to build relationships to facilitate assistance in the event of a spill. Each member of REMPEC is asked to provide focal points for contact with in each country. In Lebanon REMPEC focal points are within the MOE and MOPWT.

In the event of a spill requiring international assistance the NOSIC will identify the needs and request to facilitate mobilization either through REMPEC (with the coordination of the focal point), or with other governments (non-REMPEC Aid) in coordination with the CU within NOR.

Where possible Memoranda of Understanding should be developed with other regional states, with whom Lebanon enjoys diplomatic ties, to ease the process of mutual aid, in the event of an oil spill incident in the eastern Mediterranean.

## 4.5.3.1 Importing of Equipment

The Lebanese Customs Administration (MOF) is responsible for ensuring that all goods entering and exiting Lebanon do so in accordance with the relevant laws and regulations. In the event of

a Tier 3 oil spill, large amounts of equipment and stores would be required to enter Lebanon quickly to support the response. In these circumstances, it is imperative that rapid and effective customs clearance procedures are in place to affect entry. This would be done through the following procedures:

**Importation of Equipment:** Under certain conditions, the Director of Lebanese Customs can authorize, for a period not exceeding three months, the import under temporary status of machinery and equipment for the conduct of works and projects of public concern. This includes equipment in support of oil spill response (Article 278 of the Customs Law). In the case of an emergency, verbal authority can also be granted and a decree for customs exemption issued retrospectively.

**Customs Tariffs:** Customs tariffs apply to all imports unless they are provided as grants. However, the following caveat applies:

When equipment is imported under temporary status it is, therefore, not subject to customs. If subsequently it becomes permanent status, then customs tariffs are applied, unless the equipment is provided as a grant. In this case, the equipment remains exempt.

#### **References:**

Customs Law - Decree 4461 dated 15 December 2001

#### 4.6 Finance

In line with Lebanese laws, namely Law 444/2002 for the Protection of the Environment and the Offshore Petroleum Resources Law 132/2010, the party responsible for pollution is required to compensate for damage accordingly. However, in the event of an oil spill, there will be immediate costs that the state will have to cover, in order to respond in the most effective manner, until the longer term financing is in place, or, in the case of a spill from an unknown source, until the responsible party is identified. These may include payment for response resources from the private sector, or compensation for those individuals immediately and critically affected by the spill. It is critical that this claims management process is as efficient as possible, and will involve representatives at the local level.

At the level of the particular governmental entities, a specified amount of the annual budget can be reallocated from different budget lines to cover emerging response expenses. Such reallocation should follow the internal financial procedures of each entity.

Further funding will be facilitated through the following mechanisms:

- The transfer of credit from the country's budget reserve based on a decree following a
  request from the concerned ministry sent to the MOF for the combat of a disaster,
  whereby the request is studied and a decree is proposed to be approved as per standard
  procedures.
- The opening of an additional exceptional credit by a law, knowing that the President of the Republic is allowed by law to open exceptional credits below a certain ceiling.

• Ensuring funding through the Higher Relief Council based on a request from the concerned administration presented based on standard procedures, knowing that the source of funding may be from the treasury as a credit given to the HRC for this purpose or through the budget of the HRC itself.

In order to manage these procedures in the event of an oil spill the Ministry of Finance is head of the Finance Section of the Incident Management Structure and so will be in direct contact with operational requirements which should allow efficient transfer of the necessary funds. The Finance Section will also manage compensation payments.

In the cases of tanker incidents Lebanon is signatory to the CLC convention. This is a monetary resource, funded by tanker owners, that is available through the P&I Clubs. This is a strict liability fund and therefore all tanker spills, with only a few exceptions, will qualify for this funding. There is, however, a ceiling based upon gross tonnage of the vessel.

# 5 NATIONAL RESPONSE STRATEGY

In the event of a major oil spill under Lebanese jurisdiction, the priorities for response are:

- The safety of the public and all responders
- Control of the source of the pollution, and prevention of any further pollution
- Containment of any pollution to the environment
- Mitigation of the effects of pollution on the environment and socio-economic assets

Although each oil spill is unique, an overall national oil spill response strategy can be developed based on the following factors:

- The identification of key environmental and socio-economic factors (Volume D)
- A qualitative risk assessment, identifying worst case and most likely response scenarios (Volume B)
- Modelling of carefully selected response scenarios to give:
  - An understanding of behavior and fate of likely oils in the marine environment;
  - Likely resources at risk
  - A timescale for shoreline impact.

This will allow decision-makers at a national level to determine response strategies and procedures required to combat the pollution. As part of the planning process, this has been carried out in Lebanon and is detailed in Volume B.

The response strategies that will be used in Lebanon are given in table Table 5.1. Those key to each of the response scenarios are then detailed in the sections below.

Table 5.1: Response strategy

National Response Strategy	Lebanese Context
Source control	Source control will be critical to minimizing the overall impact of a spill
Monitor and evaluate	Spill assessment requires accurate information about fate and effects of the oil. This information should be passed to the planning team to use to inform response strategy selection and response evaluation.
Use of dispersants	Oil spill modelling showed that in the event of a spill of crude oil from shipping or offshore drilling activities there is likely to be a sufficient time window to treat the oil with dispersant before the oil enters shallow waters. Use of dispersants is the only large scale oil spill clean-up method for oil spills. If there are significant quantities of oil at sea, then dispersants will prevent, or reduce, shoreline impact. This will give a net environmental benefit.  (See national policy on use of dispersants section 5.5, with further
	guidance in volume D).
Protection of sensitive areas	The most significant oil spill risk in Lebanon is from onshore oil storage facilities. In this scenario, shoreline impact and therefore environmental impact is likely to be significant. Protection of sensitive areas will be critical to minimizing overall impacts. Guidance on environmental and socio-economic resources and their prioritization is given in volume D, together with sensitivity maps.
Offshore Containment and Recovery	Lebanon imports significant quantities of heavy fuel oil (HFO). As dispersants are unlikely to be effective on HFO, the only response option in the event of a spill of this nature at sea will be the use of booms and skimmers for containment and recovery.
Shoreline clean up	Most of the scenarios modelled showed a possibility of shoreline impact, and therefore Lebanon should prepare for shoreline clean-up.

A response strategy has been developed for each of the spill scenarios that have been modelled, giving consideration to the conditions of each spill. Full analysis of the scenarios modelled and the suitable response strategies can be found in Volume B of this plan.

From assessment of these scenarios, general guidelines for response can be identified for spills in Lebanese waters, as well as for spills which may originate outside of the Lebanese EEZ. These are detailed in the sections below.

#### **5.1** Spill from offshore installation:

<u>Offshore well blowouts of a crude product:</u> This would be the worst case scenario. In this case, alongside **source control**, preparations should be made for **monitoring and surveillance** and assessment of the effectiveness of **dispersant** use. Dispersant is the only strategy that may reduce the impact of oil beaching in the shoreline. **In-situ burning** may also be considered as well as **containment and recovery** operations. **Shoreline protection** and **shoreline clean-up** operations should also be mounted.

Offshore well blowout of condensate: An offshore well blowout of condensate shows only a small probability of shoreline impact. In addition, the condensate is a light product and so therefore rapid evaporation of close to 100% in 24 hours would be expected. Consequently, the only likely response action would be **source control** and **monitoring and surveillance**. In the unlikely event of the oil threatening the shoreline, further actions may be required for some sensitive **shoreline protection** and **shoreline clean-up**.

# 5.2 Oil spill of Heavy Fuel Oil (HFO) from onshore storage facility or tanker offloading operations

Large spills of HFO close to shore i.e. from an on land source, or a tanker inbound to an import berth, would require **source control** and **monitoring and surveillance** operations. Dispersants are unlikely to be effective, as heavy fuel oil is too viscous, and in addition, relatively shallow waters may threaten seabed marine life. Consequently, focus will be on **containment and recovery at sea** where possible, with **protection of priority areas** and **shoreline clean-up**.

# 5.3 Large offshore oil spills from shipping or an unknown source

Significant spills from a shipping incident or an unknown source at sea (from inside or outside Lebanese waters) may involve a variety of oil types, and therefore, the response strategies are more difficult to define. In event of an incident of this nature, the response will be largely at sea through **monitoring and surveillance**, **dispersant** application, and **containment and recovery** operations within the EEZ, as appropriate. Rapid sampling and analysis of the oil and a dispersant application test may help to decide on the appropriate response. If necessary, **shoreline protection and clean-up** operations should be undertaken.

#### 5.4 Strategy Selection

Whilst the most appropriate response strategy can only be selected on a case by case basis, knowledge of the limitations of response strategies and how oil will behave in the marine environment can help to guide response decisions. The simple decision tree in Figure 5.1 below should be used to guide response choices. Further information on behavior and fate of oil in the marine environment can be found in Volume D.

The key factors which may influence strategy choice are discussed in Table 5.2 below, and should be considered when developing a response strategy.

Figure 5.1: Response options decision tree. **EMERGENCEY RESULTING** IN AN OIL SPILL Is spill likely to **ENSURE ADEQUATE** SOURCE CONTROL be contained **ACTIONS TAKEN** at source NO **MONITORING AND SURVEILLANCE** YES Is natural dispersion likely? NO Is oil amenable to dispersant NO YES Offshore Containment and Follow national policy on use of Recovery dispersants for approval to spray **DISPERSANT APPLICATION** (Volume D) If offshore response not sufficient to prevent beaching DISPERSANT APPLICATION FIELD

WASTE MANAGEMENT

(Volume D)

SHORELINE PROTECTION

AND CLEAN UP

(Volume D)

MONITORING

Table 5.2: Strategy Selection: Factors to consider

Factors to Consider	Monitoring and Surveillance	Dispersant	Containment and Recovery	Protection	Shoreline Clean up
Oil type	Should be used for all spills whatever their size or location. In some cases, for example for a spill of a light product offshore it may be the only response necessary.	Dispersants will be less effective on heavy oils. Lighter products i.e. gasoline and diesel will be easily dispersed without the application of dispersants.	If an oil is not amenable to dispersants, then containment and recovery will be the only option	Protecting sensitive areas will be applicable for all oils.	Shoreline clean-up is applicable to all oil types. Different techniques may be used on different oils/ shorelines.
Sea state	May be the only response in rough weather when other options may be unsafe or of little benefit.	In general, wave action will enhance the effectiveness of dispersants. However, caution should be used for lighter products as they may be easily dispersed in rough weather without the additional application of dispersants.	The success of containment and recovery operations at sea will be significantly reduced with increasingly rough sea state. If the wind reaches 20-25 knots causing breaking waves, operations become unsafe.	Severe weather and sea state may make booming operations unsafe.	Wave action on a beach may encourage natural surf washing of sediments.
Size of spill	Additional response is likely to be required for larger spills. Smaller spills are more likely to disperse and breakdown naturally before causing significant environmental impact.	For larger spills of amenable crude, when shoreline impact is likely, dispersants will be invaluable in reducing the shoreline impact.	Encounter rates will be limited by the number of vessels and amount of boom available; but resources are likely to become overwhelmed quickly.	Large spills are more likely to see the deployment of all equipment and strategies.	Larger spills are more likely to lead to shoreline impact wherever the realized location. Predictions and preparations for shoreline impact should be made as soon as possible.
Proximity to the shoreline	Additional response is likely to be required, even if the spill is relatively small.	Dispersants should not be used in shallow waters, inshore, and offshore without permission. Dispersants will help reduce the quantity of oil reaching a shoreline.	In coastal areas, containment and recovery, together with shoreline clean-up, will be the only options.	Protection of coastal resources may be more challenging, the closer a spill is to the shoreline, as there will be less time before impact.	Spills close to the shoreline are more likely to have a significant shoreline impact, requiring protection and clean-up.
Environ- mental sensitivity	Additional response is likely to be required even if spill relatively small.	Dispersants used offshore may help reduce the quantity of oil reaching the shoreline. A test spray must be undertaken to determine dispersant effectiveness.	Containment and recovery may continue in sensitive areas; additional care should be taken to minimize environmental impact.	Protecting the most sensitive areas will be a priority.	Shoreline clean-up in sensitive environments should be carefully considered, as it is possible to cause further damage during clean-up.

## 5.5 National Policy on Dispersants

# **Approval System for Dispersants**

The Ministry of Environment acts as the authority on dispersant use, and as such will approve all applications, which must undergo a NEBA assessment and will be assessed by the Ministry of Environment in conjunction with technical experts and local stakeholders. Due to the potentially short window of opportunity, any request to use dispersant should be approved or rejected within one hour. This approval process should be managed through the IMT. Specific issues relating to the assessment of NEBA may be a focus of the ICAG. The leader of the Environment Unit will then seek approval within the MOE at the Director General level or above.

Only named products which have been specifically approved by the MOE may be used as dispersants. Until such time that the MOE has an established testing (toxicity and effectiveness) and approval system for dispersants, the MOE will normally accept documentary evident to show that a named product has passed a recognized test procedure for both effectiveness and toxicity in another country. The UK list of approved dispersants is widely accepted and is included in Vol D Annex 6.

#### **Standing Approvals**

Due to weathering of oil, there is often a short 'window of opportunity' for effective dispersant spraying. Hence, in order that dispersant spraying can begin as soon as possible, it is essential that the dispersant response option is decided quickly. In terms of Tier 1 plans, this means obtaining pre-approval from the MOE. The MOE will grant standing approvals (pre-approval) to those responsible for preparing Tier 1 oil spill contingency plans. The MOE will take into account such factors as:

- The circumstances when dispersants will be used instead of the preferred option of containment and mechanical recovery.
- The environmental and economic resources which are threatened.
- The facility's own risk assessment of the "most likely" and "worst case" scenarios.
- The type of oil likely to be spilled and its characteristics (especially its viscosity and pour point).
- The adequacy of approved dispersant stocks at the site and the means of delivery within the time frame for the anticipated spill scenario.
- The volume of dispersant to be used before further approval is required

Once the MOE is satisfied that the use of dispersants will be a viable response option within the Tier 1 context, it will issue a standing approval in writing to the facility concerned, including any conditions or limitations on the use of dispersants. This approval will specify the named dispersant which has been approved. All standing approvals will be valid for 5 years unless circumstances make a shorter period more appropriate.

#### References:

- REMPEC Guidelines for the use of dispersants for combating oil pollution at sea in the Mediterranean region
- IMO Manual on Oil Pollution Section IV
- ITOPF TIP 4 Use of Dispersants to Treat Oil Spills
- IPIECA/OGP Good Practice Guide: At sea monitoring of surface dispersant effectiveness

# 5.6 Waste Management

Management of oil spill waste should be considered at the start of the spill response and should form part of the initial Incident Action Plan. Without effective waste management, the environmental and financial impact of the spill will increase. In addition, if waste cannot be effectively moved from the spill site to, as a minimum, an approved temporary storage site, then the recovery operation will be compromised and possibly stopped altogether.

All waste should be handled in line with the appropriate legislation, and all provision made for waste handling, transport, storage and disposal should be approved by the MOE. Further guidance on management of waste is given in Volume D.

# 5.7 Management of Response: Operations Planning

Once the incident has been assessed and a response organization established, response activities should, after the initial response, be moved as quickly as possible into a project management phase.

An Incident Action Plan (IAP) will be developed based on the information available at the time, and the initial actions will be issued. The IAP conveys the overall incident response objectives, priorities and strategies to operations and support staffs involved in the response to an oil spill. The IAP underpins the operations planning cycle described below and is reviewed and modified as the incident progresses. It covers one operational period, and normally plans today for tomorrow's activities. In this way, the response may be managed for an extended period of time, and the same procedure should be followed to manage demobilization and recovery.

#### **Common elements of an Incident Action Plan**

- Incident Objectives what must be done, command priorities
- Response Organization Chart who is responsible, key personnel and their staffs
- Assignment List incident response assignments
- Communications Plan- information detailing communications equipment held and frequencies to be used for each operational period
- Medical Plan information regarding medical facilities, field stations, transportation, emergency medical procedures
- Site Safety Plan identifies all site specific hazards and risks, identifies safety and health issues, conveys the safety message
- Incident Map or Chart
- Weather and Tide forecasts

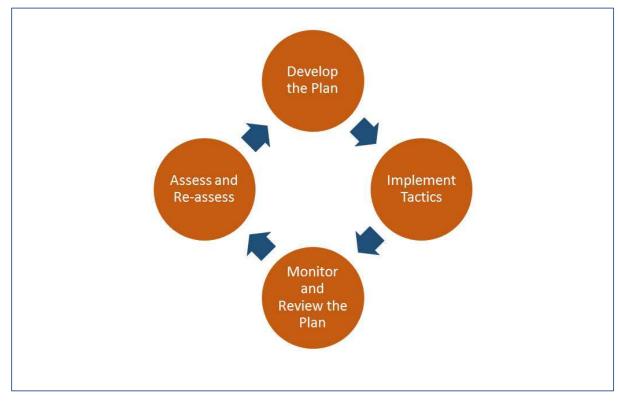
### **Additional Optional Information**

- Critical Information Requirements
- Aviation/ Marine Operations Summary
- Transportation Plan
- Decontamination Plan
- Waste Management Plan (Volume D)
- Volunteer Management Plan (Volume D)
- Demobilization Plan

The incident will be continually monitored and, in light of new information, the plan will be reassessed and modified to take account of the developing situation. New tactics will be implemented to meet objectives and contain the situation. This operations planning cycle, Figure 5.2, should be seen as a continuous process of:

- Initial assessment of the situation Including worst case scenario
- Development Planning, decision making, objective setting
- Implementation Communications of strategies and tactics to meet objectives
- Monitoring Gathering situational awareness to evaluate
- Reassessment Revise

Figure 5.2: Operations planning



# 5.7.1 Initial Brief and Transfer of Command

In the case of the incident escalating beyond the initial response phase to Tier 3, the Tier 1 or Tier 2 Local Incident Commander should prepare a written brief for the transfer of command to the

oncoming Tier 3 NOSIC, utilizing the Initial Incident Plan form 201 (Volume D- Annex 3). The Initial Incident Plan (201) will form the basis of the response for the next 24 hours. It will include basic information on the current situation and on-scene resources. Once the Tier 3 National Oil Spill Incident Commander and Command Staff arrive at the Incident Command Centre, the incident briefing and transfer of Command can take place. At this meeting, Tier 1 and Tier 2 response personnel will become part of the National Tier 3 Response Organization. The shape of the National Response Organization will be determined at this time, and clear roles and responsibilities will be issued.

Following the transfer of command, the National Oil Spill Incident Commander will obtain guidance, limitations and priorities from ICAG at the Initial Command Group Meeting, ahead of setting the incident response objectives using an Objectives 202 form. The NOSIC will then verify the objectives with selected Support and General Staff members at the Strategy Meeting before ensuring that the incident objectives, priorities and limitations are fully understood by senior and middle ranking members of the Incident Management Team at the NOSIC Support and General Staff Meeting.

# 5.7.2 Operational Planning Periods

Many Tier 1 incidents will be contained within 12 – 24 hours of the initial event and can be dealt with by facility personnel. But inside a harbor for instance, this period can be extended because of the need to clean vessel and piers. However, in the case of an extended incident, it is vital for the LIC to define the operational period for planning purposes from the outset. This will usually be a 24-hour cycle as it is unusual, but not always impossible, for operational responders to work at night. However, in a Tier 3 incident, the NOSIC Support and General staff will work around the clock. Therefore, a 12-hour work cycle is recommended with a staggered personnel handover. It is also important for the Incident Commander and Section Heads to nominate deputies to carry out their duties whilst they sleep or attend meetings and briefings. This planning cycle is shown in Figure 5.3 below.

This planning cycle will rely on effective communications between response teams, with a schedule of regular meetings. It is critical that these meetings do not take up too much time and are as specific and targeted as possible. A meeting schedule, to fit in line with the operationally planning cycle, is given in Table 5.3 below.

Figure 5.3: Operational Planning Cycle

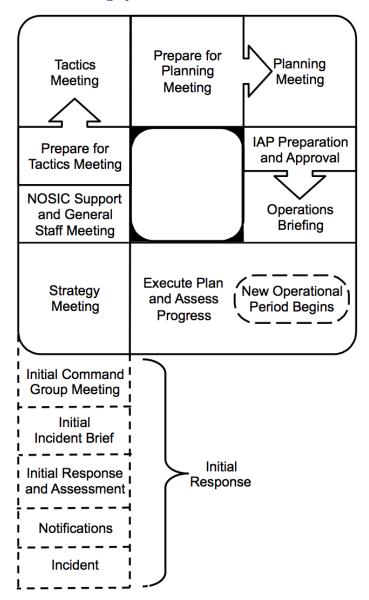


Table 5.3: Meeting schedule

MEETING / PLANNING PERIOD	OBJECTIVE	ATTENDEES
INITIAL INCIDENT BRIEFING	Outline the nature of the incident and the current status. The briefing contains: Incident type, date and time, map, situation report, extent of incident, impacted and threatened areas, current organization resources deployed or available on scene, safety briefing, current/planned objectives, escalation, worst case scenario.	Local Incident Commander National Oil Spill Incident Commander General Staff if available
INITIAL COMMAND GROUP MEETING	Review the Incident Briefing Report Identify and prioritize response objectives and organizational assignments. Define operational periods. Provides a starting point for the Incident Action Plan.	Incident Command Advisory Group (ICAG) National Oil Spill Incident Commander Document Unit Leader Operations Commander and Planning Director if available
STRATEGY MEETING	Provide initial direction to the response organization.  Develop and update objectives and identify strategies for mitigation.	National Oil Spill Incident Commander General Staff Section Heads Document Unit Leader
NOSIC SUPPORT AND GENERAL STAFF	The National Oil Spill Incident Commander will present the response objectives and strategies to the NOSIC Support and General Staffs to ensure a common level of understanding across the response organization.	National Oil Spill Incident Commander Operations Commander Planning Director Documentation Unit Logistics Director Finance Director Safety Officer Co-opted members of the NOSIC Support and General Staffs

MEETING / PLANNING PERIOD	OBJECTIVE	ATTENDEES
PREPARATION FOR THE TACTICS MEETING	This is a period of time in which tactics developed by the Operations Section will be reviewed.  Resources will be assigned to implement the tactics to meet the objectives outlined by the National Oil Spill Incident Commander.  During this time there will be close liaison between Planning, Operations and Safety.	None – this is not a meeting. The Incident Management Team must actively support:  Operations Commander Planning Director Documentation Unit Logistics Director Finance Director Safety Officer who are busy preparing for the TACTICS MEETING
TACTICS MEETING	Presentation of tactics: Operational input to the Incident Action Plan. Work analysis and outstanding actions. Hazard Risk analysis	Co-opted members of the Support and General Staffs
PREPARTION FOR THE PLANNING MEETING	This is a period of time in which the Support and General Staffs will prepare for the Planning Meeting.  Assessment of the effectiveness of current operations and deployment of resources.  The Planning Director will ensure all information, briefing material, documentation etc. is updated and available for the Planning Meeting.	None – this is not a meeting. The Incident Management Team must actively support:  Operations Commander Planning Director Documentation Unit Logistics Director Finance Director Safety Officer Communications' Technical Specialists NOSIC Support and General Staffs who are busy preparing for the TACTICS MEETING

MEETING / PLANNING PERIOD	OBJECTIVE	ATTENDEES
PLANNING MEETING	Brief the National Oil Spill Incident Commander on the Tactical Plan for the next 24-hour period Review and validate strategies employed in the response Identify resources and supporting plans required for the next operational period Review work assignments Resolve any issues prior to approval of the Incident Action Plan ensuring full support for the plan from all sections	National Oil Spill Incident Commander Planning Director Documentation Unit Situation Unit Operations Commander Logistics Director Finance Director Safety Officer
IAP PREPARATION AND APPROVAL	Update plan as required prior to approval. Planning Director to determine a deadline for completion. Approval by the National Oil Spill Incident Commander.	None – this is not a meeting.  NOSIC Support and General Staffs must provide mutual support to prepare the Incident Action Plan for approval
OPERATIONS BRIEFING	Conducted prior to shift change: Presentation of the IAP to the oncoming Operations Staff Review of Incident Command Objectives Situation Briefing Identify current response actions open and complete Operations Section brief – work assignments Discuss public affairs and public information issues Transport, communications and supply updates Safety briefing Financial implications Clarification of work assignments	National Oil Spill Incident Commander NOSIC Support and General Staffs Operations Section
EXECUTE IAP AND ASSESS PROGRESS	Implementation of the plan by the Operations Section.  New operational period begins and planned outcomes should be evaluated against actual progress.  The IAP should be reviewed and modified in light of developments and /or new information.  The planning cycle begins again with a strategy meeting to review and update incident objectives and strategies.	All NOSIC Support and General Staffs

# 6 RECOVERY

#### 6.1 Termination and demobilisation

Termination of response activities is critical to maintaining the net environmental benefit of the response (NEBA). Termination should be considered as soon as possible, ideally when establishing the response operation, in order to set site-specific clean up objectives agreed by all stakeholders. Typically, these objectives will include how much clean-up is suitable for a particular site or area, and what strategies are likely to be most effective. When these objectives have been met, the response should be terminated.

The process is as follows:

- 1. The Planning Section will advise the NOSIC when clean-up activities have met the objectives set by Shoreline Clean-up Assessment Technique (SCAT) and Net Environmental Benefit Analysis (NEBA). Further clean-up would be likely to cause more damage than the residual oil and that there is no potential for recontamination by remobilized or floating oil.
- 2. Operations and Logistics Sections will work together to conduct an orderly termination of operation and withdrawal of equipment.
- 3. Vessels that have been involved in the clean-up will be directed to a designated port, where an area will have been established to decontaminate them.
- 4. All personnel and equipment must go through decontamination before leaving site.
- 5. Response equipment to be maintained, repaired or replaced as necessary.
- 6. Consumable materials must be replaced in the National stockpile and included in the compensation claim.
- 7. Finance Section will verify and consolidate costs in a final cost report which will be submitted to the Claims Unit.

# 6.1.1 Operational Review

An operational review will be conducted to analyse response activities and identify strengths and weaknesses in the organization. Documentation Unit will provide information and materials for the final report. The report submitted to the NCA will make recommendations for improvements in procedures and modifications to the NOSCP. It may be appropriate to ask for external input to this report, for example the opinion of experts involved in the response or in some cases consultation with independent experts, who have had no input to the spill.

## 6.1.2 Restoration and Monitoring

Post spill monitoring of areas affected by the oil spill will be required to determine the level of contamination of the shoreline or biological species. Monitoring will include an extensive campaign of sampling and analysis over a period of time to observe the recovery of an area following a spill.

Monitoring programs should be agreed with the body paying compensation prior to the commencement of the work. Measures used to restore a habitat damaged by the oil for example a mangrove swamp, may also be included in the claim for compensation. These measures must be approved prior to commencement to ensure that they are 'reasonable' under the terms of the international compensation schemes for tanker spills and will enhance the natural recovery of an area.

# 6.2 Record Keeping and Claims Management

## 6.2.1 Record Keeping

Record keeping by all those incurring costs due to a spill will be critical to keeping track of costs and submitting and assessing claims. It will be the responsibility of the Finance Section to ensure that accurate records of costs incurred during the response are maintained. The records must include a narrative as to why the costs were incurred, otherwise when the claims are examined, which may take weeks or months it will be impossible to remember why actions were taken.

#### Reference:

ITOPF TIP 15: Preparation and submission of claims from Oil Pollution

### 6.2.2 Legal Requirements

For spills originating from offshore operations The Offshore Petroleum Resources Law (OPRL) and Petroleum Activities Regulations (PAR) both require offshore operators be liable for clean-up activities in the event of a pollution incident. The Environmental Protection Law (Law 444), under Article 4 and "the polluter has to pay" principle, requires all land based operations to pay for environmental damage, which could include ports and harbors.

For incidents resulting from tankers under the 1992 Civil Liability Convention (CLC 92,) claims for compensation for oil pollution damage caused by persistent oil may be made against the registered owner of the ship which caused the pollution. The ship owner is obliged to maintain insurance to cover its liability under the Convention and therefore the claims will be paid by an insurance Protection and Indemnity (P&I) Club, regardless of fault. The liability is normally limited to an amount determined by the size (tonnage) of the particular ship involved and ships carrying less than 2000 tonnes of oil cargo are exempt.

#### 6.2.3 Types of Incidents Covered

In line with the requirements for claims under the CLC 92 oil spill claims will be considered for:

- **Clean up and preventative measures:** Compensation will be paid for the cost of reasonable clean-up measures and other measures taken to prevent or minimize pollution damage.
- **Property damage:** Compensation is payable for reasonable costs of cleaning, repairing or replacing property that has been contaminated.
- **Economic loss:** Compensation is payable for loss of earnings suffered due to the oil spill, whether or not equipment is contaminated.
- **Environmental damage:** Compensation is payable for the costs of reasonable reinstatement measures aimed at accelerating natural recovery of environmental damage and also for approved scientific studies, for example to monitor the environmental recovery of the area.

# 6.2.4 Claims Management

The following general criteria must apply to all claims:

- 1. Any expense, loss or damage must actually have been incurred.
- 2. Any expense must relate to measures that are considered reasonable and justifiable.
- 3. Any expense, loss or damage is compensated only if and to the extent that it can be considered as caused by contamination resulting from the spill.
- 4. There must be a reasonably close link of causation between the expense, loss or damage covered by the claim and the contamination caused by the spill.
- 5. A claimant is entitled to compensation only if he or she has suffered a quantifiable economic loss.
- 6. A claimant has to prove the amount of his or her expense, loss or damage by producing appropriate documents or other evidence.

A claim therefore qualifies for compensation only to the extent that the amount of the loss of damage is actually demonstrated. All elements of proof are considered, but sufficient evidence must be provided. Each claim has its own characteristics, and it is therefore necessary to consider each claim on the basis of its own merits.

Although, in line with international and national legislation, the polluter will ultimately be responsible for financing the cleanup it may take months of years before all claims can be assessed and the finance assured. However interim payments can be made to those in immediate distress. Therefore, it will be necessary for the MOF to establish a claims team to ensure that those most affected by the spill can access subsistence payments as soon as possible. This team will be responsible for assessment of all claims, this is likely to require representation at a local level and the use of experts in the field to assess claims. In the case of tanker spills the International Tanker Owners Pollution Federation (ITOPF) in addition to their oil spill experts, will send in fisheries experts to assist with the production and assessment of the spill claim. For other spills affecting fisheries, this could be through the MOA Fisheries Rangers, or for other environmental damage the MOE Rangers in addition to International experienced oil spill response and environmental experts will be required to assess the validity of response techniques used.

#### Presenting a Claim

Each claim should contain the following basic information:

- The name and address of the claimant and of any representative
- The identity of the ship or facility involved in the incident
- The type of pollution damage sustained
- The amount of compensation claimed.

Claims should be made in writing and presented clearly and with sufficient information and supporting documentation to enable the amount of the damage to be assessed. Each item of a claim must be substantiated by an invoice or other relevant supporting documentation, such as work sheets, explanatory notes, accounts and photographs.

In general claims, whether from an individual, company or government, should be presented to the spiller, as under Lebanese law they will be responsible for paying the claim. For larger spills the spiller may be required to set up a dedicated claims team. In the case of large Tier 3 spills,

which may threaten livelihoods over an extended period of time, the National Oil Spill Incident Commander may establish local claims offices to deal with local claims in a timely manner. The government will therefore take responsibility to pay individual claims in the short term, with these costs then ultimately being passed onto the spiller, or their insurance company.