REVOLUTIONARY GOVERNMENT OF ZANZIBAR
MINISTRY OF INFRASTRUCTURE, COMMUNICATIONS AND TRANSPORTATION

ZANZIBAR MARINE OIL SPILL RESPONSE CONTINGENCY PLAN (ZMOSRCP)

FOR THE IMPLEMENTATION OF IMO INSTRUMENTS

APPROVAL OF THE PLAN

The Zanzibar Marine Oil Spill Response Contingency Plan is approved by:

_____

HONORABLE MUSTAFA ABOUD JUMBE
The Principal Secretary
Ministry of Infrastructure, Transportation and Communication
Zanzibar

_____

HONORABLE DR. SIRA UBWA MAMBOYA
Minister
Ministry of Infrastructure, Transportation and Communication
Zanzibar

RECORD OF AMENDMENTS

This Plan is a controlled document and the only changes permitted are those amendments issued by the Director General of ZMA.

It is the responsibility of the plan holder when issued with amendments to promptly insert them, destroy all pages, made obsolete by the amendment and inform all relevant personnel of the changes. The Plan Holder must enter the required details and sign the right hand column of the amendment sheet below to indicate this has been done.

This plan will be reviewed every two years and or as necessary after exercise programs. It will be updated through a continuous appraisal process to enhance its effectiveness in dealing with issues related to marine oil spill.

REVISION NO.	CHAPTER	TITLE	ISSUED DATE	INSERTED DATE	SIGNATURE

ABBREVIATIONS

- ATCC AIR TRAFIC CONTROL CENTRE
- DG DIRECTOR GENERAL
- ZDMC ZANZIBAR DISESTER MANAGEMENT COMMISSION
- DMI DAR-ES -SALAAM MARITIME INSTITUTE
- DMSS DIRECTOR MARINE SAFETY AND SECURITY
- EEZ EXCLUSIVE ECONOMIC ZONE
- ELO ENVIRONMENTAL LIAISON OFFICER
- ERC EMERGENCY RESPONSE CENTRE
- ESG ENVIRONMENT STRATEGY GROUP
- ETV EMERGENCY TOWING VESSEL
- IC INCIDENT COMMANDER
- IMO INTERNATIONAL MARITIME ORGANIZATION
- IMS INSTITUTE OF MARINE SCIENCE
- IOPC INTERNATIONAL OIL POLLUTION COMPENSATION FUND
- IT INFORMATION TECHNOLOGY
- ITOPF INTERNATIONAL TANKER OWNERS POLLUTION FEDERATION
- ISO INTERNATION STANDARDS ORGANIZATION
- KMKM KIKOSI MAALUM CHA KUZUIA MAGENDO
- LOU LETTER OF UNDERTAKING
- MAPRT MEDIA AND PUBLIC RELATION TEAM
- MCC MARINE CONTROL CENTRE
- MRCC MARINE RESCUE COORDINATION CENTRE
- NOTAM NOTICE TO AIRMEN
- OIM OFFSHORE INSTALLATION MANAGER
- OPRC INTERNATIONAL CONVENTION ON OIL POLLUTION PREPAREDNESS, RESPONSE AND CO-ORPORATION CONVENTION, 1990
- ORU OFFSHORE RESPONSE UNIT
- OSC ON-SCENE COMMANDER
- P&I PROTECTION & INDEMNITY CLUB
- SCC SHORELINE CONTROL CENTRE
- SCU SHORELINE CONTROL UNIT
- SDR SPECIAL DRAWING RIGHTS
- STOPIA SMALL TANKER OIL POLLUTION INDEMNIFICATION AGREEMENT
- SVP'O SECOND VICE PRESIDENT'S OFFICE
- TCAA TANZANIA CIVIL AVIATION AUTHORITY
- TDA TEMPORARY DANGER AREA

- TEU TWENTY FOOT EQUIVALENT UNIT
- TEZ TEMPORARY EXCLUSIVE ZONE
- TMA TANZANIA METEOROLOGICAL AUTHORITY
- TOPIA TANKER OIL POLLUTION INDEMNIFICATION AGREEMENT
- TPA TANZANIA PORTS AUTHORITY
- TPDF TANZANIA PEOPLE DEFENCE FORCE
- TPO TEMPORARY PROHIBITION ORDER
- UNCLOS UNITED NATIONS CONVECTION ON THE LAW OF THE SEA
- URT UNITED REPUBLIC OF TANZANIA
- VHF VERY HIGH FREQUENCY
- ZANDREC ZANZIBAR DISESTER RELIEF COODINATION COMMITTEE
- ZEMA ZANZIBAR ENVIRONMENTAL MANAGEMANT AUTHORITY
- ZMA ZANZIBAR MARITIME AUTHORITY
- ZMOSCC ZANZIBAR MARINE OIL SPILL COORDINATING COMMITTEE
- ZMOSRCP ZANZIBAR MARINE OIL SPILL RESPONSE CONTINGENCY PLAN
- ZPC ZANZIBAR POTRS CORPORATION
- ZPDC ZANZIBAR PETROLEUM DEVELOPMENT COMPANY
- ZPRA ZANZIBAR PETROLEUM REGULATORY AUTHORITY

Contents

Table of Figures

CHAPTER ONE
SCOPE AND PURPOSE

1. Introduction

1.1 Zanzibar is the semi-autonomous part of the United Republic of Tanzania which consists of two main Islands of Unguja and Pemba and about 50 other small islets as well as Zanzibar Archipelago in the Indian Ocean. It is situated on the Swahili Coast, adjacent to Tanzania Mainland. The northern tip of Unguja Island is located at 5.72 degrees South, 39.30 degrees East, with the Southernmost point at 6.48 degrees South, and 39.51 degrees east. It is located in the Southern half of the Zanzibar Archipelago, in the Indian Ocean, about 59 kilometers south of the second largest Island of the Archipelago. Zanzibar and Mainland Tanzania are separated by the Zanzibar Channel.

1.2 Zanzibar's coastline offers some of the best beaches in the world, but sand and surf vary depending on what side of the island you're on. On the east coast, waves break over coral reefs and sand bars offshore, and low tide reveals small pools of starfish, small minnows, and anemones. Up north, ocean swimming is much less susceptible to the tides, and smooth beaches and white sand make for dazzling days in the sun.

1.3 Tanzania as a party to the United Nations Convention on the Law of the Sea (UNCLOS) and the International Convention on Oil Pollution Preparedness, Response and Co-operation Convention, 1990 (the OPRC Convention) where member states are required to develop and manage a national response plan for dealing with pollution of the marine environment, therefore Zanzibar is required to meet the above obligation.

1.4 As per the Maritime Transport Act No. 5 of 2006 requires that all marine areas of Zanzibar waters have to be protected in order to preserve the marine environment. This plan is one of the tools that deal with this matter.

1.5 The key purpose of responding to a maritime oil spill incident is to protect human health, the marine and terrestrial environment. A range of national and local agencies undertake the response to incidents that threaten to pollute the sea around Zanzibar. Chapter 2 of this plan sets out the responsibilities of the organizations that

have a role in the response to marine pollution or who may become involved in such response.

1.6 The density of marine traffic, especially oil tankers, in close proximity to the coast of Zanzibar presents a fairly high risk of marine pollution from collisions, stranding and other marine accidents. Such pollution can threaten amenity beaches, the tourist industry, coastal installations, sea birds, marine life and fisheries with subsequent loss of revenue and food sources.

1.7 Zanzibar Emergency Preparedness and Response Plan is a multi hazards functional plan that sets forth appropriate actions to be taken in a response to an emergency or major disaster including potential or imminent threat of any event within Zanzibar.

1.8 Zanzibar Maritime Authority (ZMA) has been designated as the responsible Authority for the implementation and enforcement of relevant laws relating to the protection of the marine environment including the development and maintenance of the Zanzibar Marine Oil Spill Response Contingency Plan (ZMOSRCP).

1.9 The ZMOSRCP is intended:

- To identify the capabilities and resources and establish an organizational structure so that the coordinating Authority and operational contact points may be identified within each relevant agency. This includes the assignment of responsibilities for various tasks to relevant government and non-governmental agencies for the operational response to marine incidents which could results in spillage of oil or other noxious material into the Zanzibar Waters.
- To establish a framework within which the government coordinating authority and participating agencies shall cooperate to facilitate the operational aspect of oil spill surveillance and response in order to protect the marine environment from the deleterious effects of pollution arising from spillages of oil or other noxious substances.
- To promote the development of local plans in the major ports and harbours, refinery plants, oil companies and offshore installations to respond to such incidents.

1.10 This plan is parallel to other similar plans dealing with saving life at sea and protection of marine environment. Plans prepared by ports Authority and operators of oil installations should provide detailed information on the local response to marine oil spill incidents and should describe arrangements for mutual support.

1.11 This plan co-exists with major incident and security plans operated by ships, ports and offshore installations. There is a need for mutual respect between those in command and control of this plan and those in charge of all other relevant plans. This ensures that all the plans continue to function efficiently, whatever the circumstances.

1.12 This plan has been compiled in consultation with Government Ministries, Departments, Institutions and other organizations which may be involved in the response to marine pollution. In order to ensure the efficient implementation of the plan then a Memorandum of Understanding (MOU) must be signed between the relevant Zanzibar Institutions.

Objectives

1.13 The Objectives of this plan are:-

- To develop appropriate systems for the rapid detection and reporting of spillages of oil or other noxious materials or of incidents related to the operation of shipping which could result in such a spillage;
- To ensure prompt response is made to either prevent pollution or restrict the spread of the contaminants;
- To ensure that adequate protection is provided for the public health, welfare and the marine environment;
- To ensure that the appropriate response techniques are used to clean up the pollutant and that disposal of recovered material is carried out in an environmentally acceptable manner; and
- To ensure that complete and accurate records are maintained for all expenditures to facilitate cost recovery.

Areas Covered (Associated with Appendix A National and International Cooperation)

This plan covers all marine oil spill incidents in, or likely to affect, the Zanzibar Pollution Control Zone. The Zanzibar Pollution Control Zone includes Zanzibar's internal waters, territorial sea and includes the exclusive economic zone of the United Republic of Tanzania which is under the jurisdiction or control of Zanzibar.

Purpose

1.14 The purpose of this plan is to ensure that there is a timely, measured and effective response to incidents. The owners and masters of ships and the operators of offshore installations bear the Primary responsibility for ensuring that they do not pollute the sea. Zanzibar Ports Corporation likewise is responsible for ensuring that their ports operate in a manner that avoids marine Pollution, and for responding to incidents within their limits. However, ships, offshore installations and port may face problems that exceed the response capabilities that they can reasonably maintain (especially in the provision of counter pollution equipment).Therefore, ZMA may need to use national assets in the response to a marine pollution incident.

1.15 This plan sets out the circumstances in which ZMA deploys Zanzibar's assets to respond to a marine pollution incident to protect the overriding public interest. It also describes how ZMA manages these resources.

1.16 This plan does not cover the response to pollution on land, from land-based sources, save for those incidents which originate from marine vessels and which fall under ZMA's jurisdiction.

Interface with other Plans

1.17 This plan is complemented by emergency response plans and also coordinates the provision of local, National and Regional support.

1.18 All oil companies and any other companies which import/export petroleum products into/out of the country shall have a tier 1 marine oil spill emergency response plan (ERP). The ERP shall incorporate a section indicating the relationship between the specific operator's ERP and the ZMOSRCP.

1.19 Zanzibar Ports Corporation operators along the Zanzibar coastline shall maintain a tier 2 marine oil spill ERP for responding to oil spills occurring within the ports of Zanzibar. The oil companies will demonstrate capability to respond to tier 2 oil spill incident either directly or via affiliation to a competent tier 2 response organizations.

1.20 The organization experiencing a marine spill incident beyond its tier 1 or tier 2 capabilities will provide a command office at a suitable location.

1.21 If the incident is beyond tier 2, the responsible party/organization will report to ZMA who will activate tier 3 resources in accordance with their ERP and ZMA will activate the ZMOSRCP as appropriate and call for regional and international assistance as necessary.

1.22 The ZMOSRCP will subsequently be used to coordinate the field activities related to response strategy. Additional tier 3 industrial resources are available from the international oil companies' cooperatives outside of Zanzibar. Procedures for engaging the services of such organizations will be documented in individual oil company ERPs. In the event that an organization experiencing a marine spill does not subscribe to one of the above organizations, ZMA may call for international assistance and charge the polluter for the related costs. Effective communication between Government authorities and the polluter will be a key factor in getting the response actions to commence swiftly and accurately.

CHAPTER TWO
ORGANIZATION

2. General Organization

2.1 The Ministry responsible for Maritime Transport in the Revolutionary Government of Zanzibar is responsible for all matters related to marine oil pollution operations.

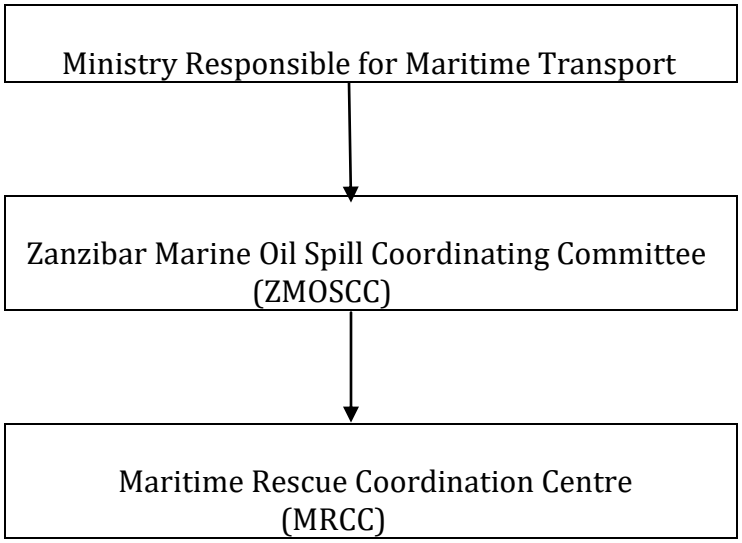
2.2 Zanzibar Maritime Authority is the regulatory Authority in relation to the marine transport and is designated as the competent authority responsible for ensuring that an appropriate response is made to any Pollution or potential pollution incident in the waters of the Revolutionary Government of Zanzibar. ZMA's activities come under the jurisdiction of the Ministry responsible for Shipping.

2.3 To deal with marine oil spill preparedness, response and cooperation the following organizational set up has been established and is responsible for the development and maintaining of capability to respond to accidents at sea which have caused or is likely to cause any kind of marine oil spill pollution. The marine oil spill pollution organization setup consists of:

- Marine Oil Spill Coordinating Committee (MOSCC) which shall comprise of representatives from all governmental bodies with an input to marine oil spill pollution response and, by invitation, such other sectors of the economy who are likely to be affected by such pollution;
- Maritime Rescue Coordination Centre (MRCC) which shall be the focal point for the receiving of all report of accident and observed pollution at sea, which shall be responsible for the operational response to accidents at sea, which have caused or likely to cause marine pollution.

2.4 The Zanzibar Marine Pollution Control organizational set up is shown in Figure 1. Parties to the organization will work closely together to ensure that the objectives of the ZMOSRCP are met in a timely and efficient manner.

Figure 1: **Zanzibar Marine Pollution Control organizational set up**



Zanzibar Marine Oil Spill Coordinating Committee

2.5 The Zanzibar Marine Oil Spill Coordinating Committee (ZMOSCC) shall comprise of representatives from all governmental bodies with an input to marine pollution response including Zanzibar Environmental Management Authority (ZEMA), Ministry responsible for Maritime Transport, Zanzibar Disaster Management Commission (ZDMC), Zanzibar Maritime Authority (ZMA), TPDF, KMKM, Marine Police Unit, Zanzibar Ports Cooperation (ZPC) and Zanzibar Fire and Rescue Services.

2.6 Other important stakeholders include but not limited to Ministry responsible for Health, Ministry responsible for Energy, Tanzania Meteorological Authority, Ministry responsible for Fisheries, and Institute of Marine Sciences. Each of the above mentioned institution has a role to play in the protection of human life, property and marine environment.

2.7 The ZMOSCC shall be chaired by the Ministry responsible for Maritime Transport and ZMA as the secretariat.

2.8 The secretariat of the ZMOSCC shall extend an invitation to participate in the committee and other government bodies with an input into marine pollution response and, by invitation, to other sectors of the economy as considered relevant.

2.9 The function of the committee is to manage Zanzibar's preparedness to respond to marine oil spill pollution and to oversee the preparation, training and exercising of stakeholders in potential marine pollution incident. This includes the overseeing, coordinating of participation and involvement in Zanzibar's regional commitments.

Responsibilities

2.10 The Ministry responsible for Maritime Transport is responsible for implementation and Enforcement of all matters related to marine oil spill response contingency planning.

2.11 The Ministry shall:

- Ensure a high state of readiness for all personnel and equipment under the ZMOSRCP;
- Establish cooperation with other States on a bilateral or multi-lateral basis and with relevant international organizations such as IMO, UNEP, etc; and
- Chair the ZMOSCC.

Zanzibar Maritime Authority

2.12 ZMA is a regulatory authority and was established by an Act of House of Representative No. 3 of 2009 which came in to force on February 2011. The Act records that it shall be ZMA's duty to strive to enhance the welfare of Zanzibar's society by protecting and preserving the marine environment.

2.13 ZMA's sectoral scope covers port and shipping services and maritime safety and security. Within the maritime safety and security sector its functions include overseeing matters related to the prevention of marine pollution from ships.

2.14 ZMA's responsibilities include:

- Being the custodian of the ZMOSRCP;

- Being the secretariat of the Zanzibar Marine Oil Spill Coordinating Committee that will oversee the preparation, training and exercising of stakeholders in advance of any potential marine pollution incident;
- Collecting the best possible information on a pollution incident, the scope, hazards and impact it constitutes and present such information to the Government through the ZMOSCC;
- Maintaining the Maritime Rescue Coordination Centre (MRCC) as the focal point for the receiving of all reports on accidents at Sea and observed pollution of the sea and the operational response to accidents at sea which have caused or is likely to cause marine pollution; and
- Collecting information on international developments on response to oil and hazardous and noxious substances pollution response

The Second Vice President's Office (SVP's O)

2.15 The Second Vice President's Office (SVP'sO) is responsible to Coordinate and Supervise all activities performed by the Revolutionary Government of Zanzibar.

Zanzibar Environmental Management Authority (ZEMA)

2.16 The Zanzibar Environmental Management Act. No. 3 of 2015 established the ZEMA and outline general principles, responsibilities and duties of environmental management within Zanzibar. The Act further established the Environmental Advisory Committee to advice the Minister responsible for Environment, a Director General, a Director of Environment and their duties in dealing with Environmental issues in Zanzibar. ZEMA is the Authority with overall responsibility for environmental issues within Zanzibar.

2.17 ZEMA is responsible for overseeing the integrity of Zanzibar's environment for sustainable Development. ZEMA also oversees the coastal strategies and activities and issue appropriate Guidelines. ZEMA has commissioned various studies into the environmental sensitivities of the Zanzibar coastline. This includes the identification and mapping of those areas. ZEMA is the Custodian of the environmental sensitivity atlas for Zanzibar.

2.18 In the event of a major oil spill pollution or potential pollution incident, ZEMA will provide Information and expert analysis on all environmental issues related to marine oil pollution to the MRCC and ZMA. This will include:

- Co-ordination and provision of environmental advice from the government Environmental agencies and authorities;
- Identification and documentation of pollution hot spots along the coastline;
- Identification of locations for the temporary and final disposal of collected oily wastes;
- Development of an oil spill drift model for Zanzibar waters;
- Determination of the degree of pollution, the restoration plans for the polluted areas and the associated restoration costs; and
- Establishment of an evaluation and monitoring programme after the clean-up operation to determine the long-term effect on flora and fauna in the affected areas.

Other Key Stakeholders

2.19 **Zanzibar Disaster Management Commission (ZDMC)** is responsible to Coordinate and supervise disaster management activities in Zanzibar.

2.20 **Ministry responsible for Health** – The responsibility for this Ministry is to provide preparedness and response to the health needs related to the emergency. This Involves to identify and meeting the health and medical needs of the victims and the responders.

2.21 **Ministry responsible for Regional Administration and Local Government** – The Ministry assists and monitors district councils' preparation of disaster management plans, which includes the response to a major pollution on the shore and coastline.

2.22 **Ministry responsible for Finance** - The Ministry responsible for Finance manages the overall revenue, expenditure and financing of the Government of the Revolutionary Government of Zanzibar and provides the Government with advice on the broad financial and economic affairs of Zanzibar in support of the Government's economic and social objectives. The Ministry is also vitally concerned with the

performance of the Zanzibar economy, international trade, monetary affairs and other aspects of the global economy that affect Zanzibar's domestic performance. Given that a major pollution incident will impact on the social, economic and international trade position, the Ministry will be closely involved at a strategic level.

2.23 **The Tanzania People Defence Force (Navy/Airforce Command)** is responsible for the protection of Tanzania's waters. Under the ZMOSRCP they can provide patrol craft, manpower and knowledge of Zanzibar's waters. Whilst carrying out their patrol duties, they may report sightings of pollution and apprehend polluters. In the event of a major oil spill incident they can provide trained manpower and enforce temporary exclusion zones in collaboration with ZMA, also may assist in the organization of reserve forces and equipment, coordinate the supply of resources as required and may take part in the actual clean up operations.

2.24 **Tanzania Police Force (Marine Unit)** is responsible for enforcing law and maintaining order, safety and security within port areas and the Zanzibar waters, internal waters, territorial sea and includes the exclusive economic zone of the United Republic of Tanzania which is under the jurisdiction or control of Zanzibar . The Marine Police Unit has vessels and manpower available to assist in the event of a major pollution incident. Where practicable the police will establish cordons to facilitate the work of the other emergency and response services in the saving of life, the protection of the public and the care of survivors.

2.25 **Kikosi Cha Zimamoto na Uwokozi** (Zanzibar Fire and Rescue Services) – During emergency situations the Fire and Rescue Services is responsible, on land and at sea for saving life and property, extinguishing or preventing the escalation of fires, search and rescue and rendering humanitarian and casualty handling services. Where appropriate these services may also be transferred to the marine environment in case of oil spill.

2.26 **Tanzania Meteorological Authority (TMA)** – Zanzibar Office is responsible for providing weather information, including current weather conditions, forecasted weather for operational planning and spilled substances movement and past weather for wind casting and determining potential pollution offenders.

2.27 **Ministry responsible for Agriculture, Food Security**- Provides policy guidance and services for modern, commercial, competitive and effective agriculture products.

2.28 **Ministry responsible for Livestock and Fisheries**– is responsible for regulating and coordinating the livestock and fishery industries of Zanzibar. Provides guidance on marine and other sensitive marine resources areas to supplement information contained within the sensitivity atlas.

2.29 **Ministry responsible for Lands** – Provision of guidance on maritime and terrestrial boundaries.

2.30 **Ministry responsible for Tourism** is mandated for the management of tourism industry in Zanzibar.

2.31 **Chief Government Chemist Laboratory Agency** – Provision of analytical services including the determination of the chemical composition and nature of the pollutant.

2.32 **Ministry responsible for Maritime Transport** is responsible for the licensing and inspection of ships in Zanzibar. Under the ZMOSRCP responsible for the co-ordination of response activities in Zanzibar.

2.33 **Kikosi Maalum cha Kuzuia Magendo (KMKM)** is responsible to provide vessels and manpower to assist in oil spill incident. Also collaborating with the other defense forces for maintaining law and order, safety and security within port areas and Zanzibar water.

2.34 **Zanzibar Ports Corporation (ZPC)** administers and operates all main ports in Zanzibar and as such is a key player in the ZMOSRCP. ZPC can provide small crafts, equipment and manpower to assist in a major pollution incident.

2.35 **Zanzibar Petroleum Regulatory Authority (ZPRA)** is responsible for oil and gas exploration, and exploitation in Zanzibar and regulates oil companies operating within Zanzibar.

2.36 **Zanzibar Utilities Regulatory Authority (ZURA)** is responsible to regulate all oil suppliers in Zanzibar.

2.37 **Dar es Salaam Maritime Institute (DMI)** is the national maritime training institute and provider of maritime expertise. The Maritime Institute runs oil pollution training courses at all levels from responders to managerial staff.

2.38 **Institute of Marine Sciences (IMS)** is an institute which conducts research and offer postgraduate and undergraduate training and consultancy services in all aspects of marine sciences. The Institute is the National Oceanographic Data Centre and provides information on ocean data and information management in Tanzania and links to other databases.

2.39 **The State University of Zanzibar (SUZA)** is responsible for providing training and conducting research in different areas including environmental aspects within Zanzibar.

2.40 **Deep Sea Fishing Authority (DSFA)** is mandated to manage fisheries within the EEZ.

2.41 **Department of Environment** is responsible for coordination of matters related to regional and International Convections and protocols on environmental affairs.

CHAPTER THREE

REPORTING PROCEDURE OF OIL SPILL INCIDENCE

3.1 An immediate response to a reported marine pollution or a risk of significant pollution is important. Incidents at sea should be reported urgently by radio or telephone to MRCC. If an incident occurs in a port, it should be reported to the harbour master who immediately informs the ZMA and MRCC. Operators of offshore installations immediately inform the MRCC, of any spill of oil or other pollutants, of any quantity. Aircraft sighting vessels polluting or pollution at sea should inform the nearest Air Traffic Control Centre (ATCC) who will forward the report to the MRCC and ZMA.

3.2 MRCC will contact the ship or offshore installation to ascertain, among other things:

- The nature of incident (collision, loss of containment, etc.);
- The number of people on board;
- The type, size and name of the ship or installation;
- The identity of the owner or operator;
- The precise location, course and speed of the ship, and its proximity to other ships, offshore installations, shallow water and shoreline
- Information on the ship's cargo, stores or bunkers, and whether any are dangerous;
- The structural and mechanical integrity of the ship or installation;
- The weather, sea state and tidal conditions;
- Any assistance available to the casualty and the intentions of the Master or Offshore Installation Manager (OIM); and
- Any measures being undertaken.

3.3 MRCC and ZMA will, initially, initiate any search and rescue response that may be required. Reports of any pollution incident or a risk of significant pollution (whether or not known to involve oil or any other hazardous substance, even if of unknown origin) will be investigated and a suitable operational response initiated.

3.4 Any other organization (for example, a port authority, oil company or environmental organization) receiving a report of marine pollution of any quantity, or a threat of marine pollution, whether from a ship, offshore installation or unknown source, should send that information immediately to the MRCC and ZMA.

3.5 Organizations sending information should make every practicable effort to identify, as a basis for decisions:

- The nature and quantity of the pollutant involved;
- Its location;
- Its source;
- The weather, sea state and tidal conditions in the area;
- State of incident, and
- Events and actions taken so far.

CHAPTER FOUR

ESTABLISHMENT OF LEVEL OF RESPONSE (Associated with Appendix B)

4.1 Following the initial notification of incidents within the jurisdiction of Ports of Zanzibar, MRCC make initial assessment and take charge for initiating any further action concerning the oil spill response. While incidents outside the ports limits MRCC will make initial assessment and report to ZMA

4.2 For the purpose of planning, tiers are used to categorize marine pollution incidents. The tiered approach to oil pollution contingency planning identifies resources for responding to spills of increasing magnitude and complexity by extending the geographical area over which the response is coordinated.

4.3 The tiers that are established under this plan shall be based on three categories;

i. Tier 1

4.4 This level will be determined as local level when oil spill incident occurs within the Port capability and all coastal line surrounding Zanzibar Island. Site specific and includes most shore-side industry with oil transfer sites, offshore installations (including rigs and platforms), pipelines and all vessels required to have a shipboard plan. All local tier sites and vessels are expected to plan for and be able to provide a clearly identifiable first response to pollution incidents for which they are responsible.

4.5 In the case of an actual or probable oil spill from a vessel, the ship's master is responsible for notifying authorities and ensuring that containments efforts begin immediately. Depending on both circumstances, resources and equipment available, the master may also initiate measures to stop further spill.

4.6 If the spill is onshore or from an offshore installation, the company, plant, or site manager is responsible for ensuring these actions are commenced without delay. After notifying MRCC of the spill, the person in charge must take immediate steps to control the spill following directions in the Emergency response plan. If that person seeks.

a support or if MRCC considers that the response needed is beyond the capability of the site to provide, the response will be escalated to tier 2.

4.7 If the spill is outside the territorial sea such an offshore installation, vessel in transit, and beyond the capability of the site to respond, control of the response passes directly from Tier 1 to Tier 3.

ii. Tier 2

4.8 This level of tier will be established if an incident of oil spill exceed the clean-up capability of Tier 1 or for which no responsible party can be identified or where the spill occurs within a marine protected area and environmentally sensitive areas a Tier 2 response will be activated.

4.9 Other conditions that may prompt a spill to escalate from a Tier 1 to Tier 2 response include high flow rate or strong winds/currents that are likely to move the oil towards sensitive areas. If the spill is beyond the capability or resources at the disposal of Tier 2 response, MRCC will escalate the response to Tier 3.

iii. Tier 3

4.10 In Tier 3 it will be determined that, when, due to size, complexity or environmental impact (occurs within a marine protected area and environmentally sensitive areas), containing and cleaning up a marine oil spill exceeds the capacity of the resources available at both Tier 1 and/or Tier 2. ZMA will assume responsibility for managing the response under the National Plan.

4.11 A regional or international assistance will be sought by the Director General of ZMA to manage the response. Response contractors, consultants and relevant agencies where agreements exist will also be part of the Tier 3 response. This level will be determined as Regional level when oil spill occur and spread to the Regional water. This includes spills of National interest for which a national contingency plan with International cooperation will be required.

4.12 After MRCC is notified of an incident of oil spill, they will analyse the incident and decide if a Regional or National response. In this case MRCC may trigger a national response if the following will happened.

- If a shipping casualty gives rise to the risk of significant pollution requiring a salvage operation;
- If there is an oil spill or any hazardous substances at sea from a ship that requires the arrangements of sea borne or air borne equipment to contain, separate, neutralise or to reduce the effects. If there is an oil spill or any hazardous substance from an offshore installation that requires the placement of seaborne, or air borne equipment by responders to separate or reduce effects which the operator of the installations does not have the capacity to deploy.
- If there is a spill of oil or any hazardous substances within the area of a Port Authority which may involve the deployment of National resources under National control to contain, disperse or neutralise it, or other action beyond the capacity of the Port Authority.

4.13 In a case of tier 3, the MRCC may activate deployment of ZMA equipment and facilities to support the Port Authorities equipment. A local response is appropriate in all other cases. In a local response ZMA will have the role to monitor the incident of oil spill and keep records of any pollution occurred in that area.

4.14 Where there is an actual or probable spill of oil into the marine environment it is the responsibility of the spiller or the person who spots the spill to notify the MRCC by the quickest means as possible.

4.15 Director General of ZMA may considers the actions that will be taken in which some of them will involve the deployment of ZMA resources, whereas other actions may engage National equipment and facilities or mobilize National resources and facilities;

a) Ordering aerial of the surveillance of the ship
b) Arranging for inspection of the ship by ZMA surveyor or other qualified person
c) Putting on standby or deploying the following;

- dispersant spraying aircraft and ships;
- oil recovery equipment

- cargo transfer equipment
- booms
- ETVs; or other tugs

d) Establishment of the availability of salvage and lightening ships (moving the ship to shelter);
e) Using statutory powers of interventions
f) Obtaining specific weather forecasts;
g) Requesting control of airspace in vicinity of the casualty; and
h) Establishing a temporary exclusion zone.

Action to be taken after initiating a Local response

4.16 Once a threat of significant pollution justifies a local response, the MRCC immediately will inform Director of Maritime Safety and Security of ZMA and Director General of ZMA of the incident. MRCC will ensure that it keeps a record of the incident and the decision made on it. When the MRCC has notified ZMA, ZMA will inform the Director General of ZEMA.

4.17 If the incident of oil spill involves ships, ZMA will lead in providing information to the Minister responsible for Shipping and other Zanzibar Government Ministers. While the ZMA triggers a Regional or National response, it will arrange for following to receive situational report.

- The Minister responsible for Maritime Transport
- The Zanzibar Environmental Management Authority (ZEMA)
- The Disaster Management Commission in the Second Vice President's Office
- The Ministry Responsible for Fisheries
- The Ministry responsible for Regional Administration and Local Government
- The Ministry responsible for Health
- The Ministry responsible for Finance
- The Tanzania Peoples Defense Forces
- The Tanzania Police Force (Marine Unit)

- Zanzibar Fire and Rescue Services
- Tanzania Meteorological Authority (Zanzibar Office)
- Zanzibar Government Chief Chemist Laboratory Agency
- Kikosi Maalum Cha Kuzuia Magendo (KMKM)
- Zanzibar Ports Corporation
- Zanzibar Petroleum Development Corporation (ZPDC)
- Zanzibar Petroleum Regulatory Authority (ZPRA); and
- Institute of Marine Science (Zanzibar Office)

CHAPTER FIVE

SETTING UP THE ZANZIBAR RESPONSE UNITS

5.1 In order to achieve a combined and coordinated response to a major incident the capabilities of the responders must be closely linked with those of the emergency services, local authorities and other agencies. In managing the counter pollution response to an incident, the hierarchy of aims is:

- First, to prevent pollution occurring;
- Second, to minimize the extent of any pollution that occurs; and
- Third, to mitigate the effects of that pollution.

5.2 The management of any response can be divided into three levels; Operational, Tactical and Strategic. The management of the response will normally be undertaken at one or more of the three levels;

Operational Level

The level at which response work is undertaken. This may be on the casualty, at sea at the polluted areas.

Tactical level

The level at which designated tactical commanders, referred to as On-Scene Commanders (OSC), determine priorities in allocating resources and at which planning and coordination of all resources involved with the response is undertaken. The tactical level is generally based near to the casualty or affected area. This maybe in Zanzibar Town coastal areas, where they will use the resources of the ZMA, or at another convenient location, near to the incident area, which will be hired for the duration of the incident.

Strategic Level

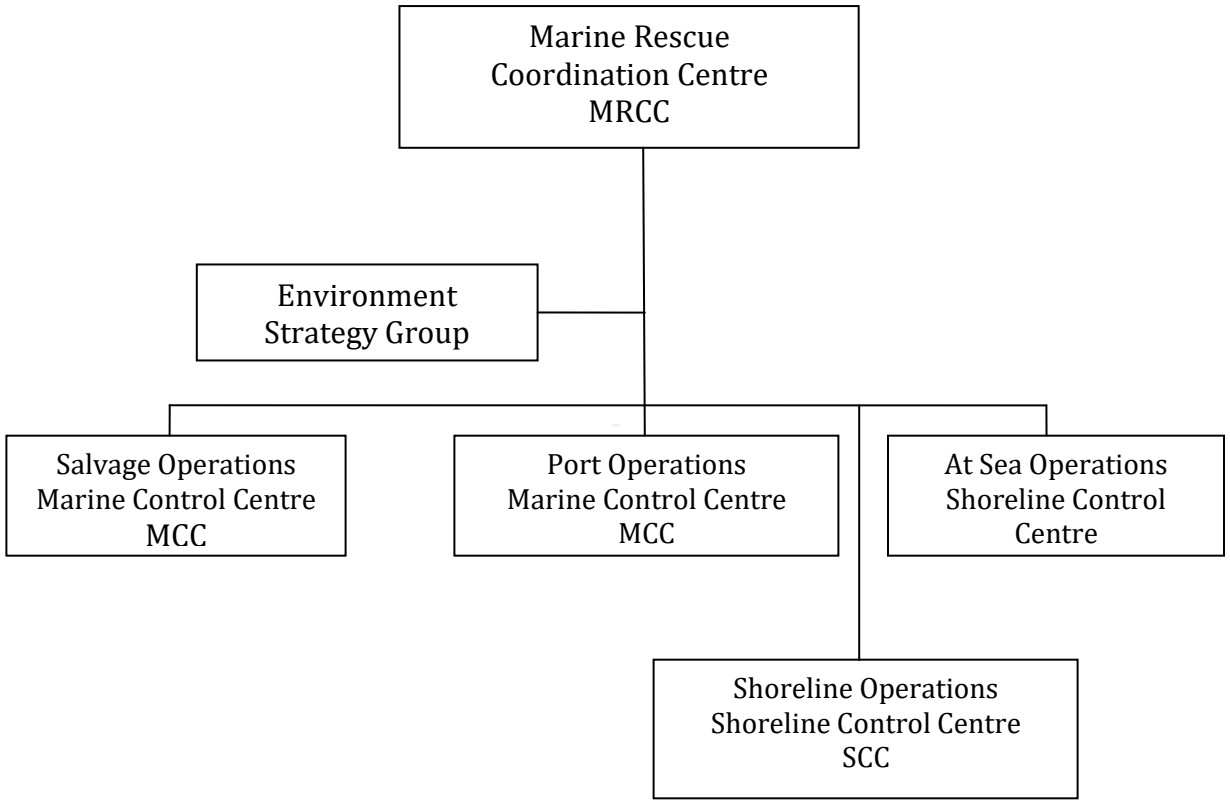
This is the management level which will determine the strategy framework under which tactical commanders will work. This strategic level of management will normally be based in Zanzibar at the ZMA office.

5.3 Operations will be initially directed and coordinated from ZMA's centre. The centre will be managed and controlled by Director of Maritime Safety and Security (DMSS) of ZMA who will be the Incident Commander (IC).

5.4 In complex operations separate, but linked, response centres, at the tactical level, may be established to direct operations under the overall direction and co-ordination of the ZMA, at the strategic level. There may be units established to control salvage operations, actions at sea, actions in port areas and actions on the coastline. An Environmental Strategy Group (ESG), headed by ZEMA, provides environmental and public health advice to the ZMA and to any response centre.

5.5 Not all incidents require all these response centres. However, the arrangements for managing the incident must allow for the possibility of salvage operations, at sea and action on shore taking place simultaneously. In some cases tactical command centres may be co-located with the MRCC. In other cases these tactical command centers may be located at the scene of the incident, away from the main command centre in Zanzibar Town. Figure 2 below shows how complex operations may be coordinated.

Figure 2: ***Response Center***



5.6 The accommodation for each Centre should have sufficient telephone lines to enable full liaison with outside bodies. Photocopier, fax and e-mail facilities are essential, although noisy equipment should be located in a separate room. Fixed VHF equipment would be desirable. Television, DVD and video facilities are extremely useful for playing back recordings from aircraft and helicopters, as well as monitoring local and national coverage of the incident. Wall space to display charts and situation boards is essential.

5.7 Those holding responsibility for keeping the situation boards continuously updated should be aware that their objective is to present a summary of the current situation and response actions being taken. A well-prepared set of situation boards and annotated charts greatly assists the preparation of:

- Press briefing notes;
- Briefing for Ministers and elected representatives; and
- Briefing for incoming relief staff.

5.8 Each centre, if established, need support from an Administration Team responsible for the general management of the unit and providing personnel for:

- Communication links between the units;
- The distribution of messages within the units;
- Keeping records of messages and expenditure;
- Taking minutes during meetings to record decisions;
- Typing services;
- Updating situation boards and charts; and
- Providing catering to the centre.

5.9 The MRCC and ZMA will act as a communications hub and can provide communication support for all response centres.

5.10 In complex response incidents the response centres (MCC and SCC) may be organized as explained in full in **Appendix E**

CHAPTER SIX
SALVAGE (Associated with Appendix C)

Shipping Causalities

6.1 When there is a threat of significant pollution, if the incident is in a port or its approaches, MRCC will inform the salvor or the master or owner of the ship and the harbour master and other assistance officers to deal with casualty and secure the cargo and bunker.

6.2 The salvage operation shall be coordinated by the salvage control unit and salvage actions may involve diving operations, beaching the casualty or ground it in shallow water and patching or filling holes. If a ship has grounded salvor may attempt to refloat it.

6.3 The MRCC states that intervention powers may be exercised and instruct those in Command of the vessel to provide them with the following information;

- Whether the owner has appointed a Salvor and if so its name and contact details.
- The broad nature of the contract between owner and Salvor
- Information on the intentions of the Salvor ; and
- Any other important information that has not yet been reported

6.4 It is for the Incident Commander to decide whether the Salvor has the capability to carry out the necessary Salvage actions, in terms of experience, personale and material. If the size of the incident requires the establishment of a centre to manage the Salvage operation then the IC will establish Maritime Control Centre.

6.5 Invited participants to the MCC will be;

- The Incident Commander (IC). This will be Director of Maritime Safety and Security of ZMA or his appointed representative.
- The Salvage Manger from the Salvage Companies appointed by the ship owner.
- A representative from the Ministry responsible for Shipping.
- The harbour master, if the incident involves a harbour or its services
- A single representative nominated by agreement between the ship owner and insurer (for both the physical property and their liabilities.
- An officer from ZMA (Duty Officer)
- A liaison officer from MRCC
- An Environmental Liaison Officer

6.6 If the IC decides to appoint one, the IC's personal salvage adviser. The IC oversee the salvage operation from the MRCC until the MCC is established and will then re-locate or appoint a representative as required.

6.7 The IC will use all the information available to assess whether the actions proposed are in the public interest. The IC will also consider what should happened if the current salvage plan goes wrong or the incident escalates in severity. The IC has been vested to exercise intervention to whatever is required in the public interest and may make control of the salvage operation by issuing directions .If the IC takes control of a salvage operation all of who have been involved will act on the directives issued. In other case the salvers may operate by agreement or with the implied approval of the IC without the need to issue further directions.

6.8 If MRCC or MCC formed will arrange for a written record to be made of all directions made by the IC and will send copies to the other response centre, if formed as soon as practicable.

Assess Casualty

6.9 If IC will determine that, it is necessary MCC to be on board in the salvage Team, the MCC will be established. Normally this Team comprises the Salvage Master and crew and IC representative. The IC representative will inform the IC of the developments on board and monitors compliance with any directions issued to those on board. However none of those on board have any power of direction.

6.10 In addition, the IC may allow others with their specific role access to the causality example cargo owners and insurers. Flag state and Port state have a statutory duty to investigate accidents falling within its jurisdiction and prompt access to witness and to other evidence facilities the work of these technical investigators.

Offshore petroleum casualty

6.11 When an incidents occurred at an offshore or onshore installation fall under the remit of the installation's oil spill plan. An offshore installation must have licences from respective Authorities. When there is a release of oil from an installation, the tasks of containing and responding to the oil on the water are identical to when a ship spill oil. Hence it shall be the duty of the offshore petroleum operator to prepare and be able to respond to the marine pollutions from their activities. In this regard the operators are required to have appropriate emergence response arrangements that guarantee access to response capability commensurate with the risks from their activities.

6.12 The approved marine spill contingency plan for the installation must identify the location for the OCU and this need to be in close proximity to the operator's

Emergency Control Centre. The operator must ensure have sufficient trained personnel to attend and support the MRCC. The administrative support required by the MRCC will be provided by ZMA.

6.13 If the ship owner or the offshore facility operator fails to engage Salvor and the incident commander if it deems necessary, ZMA will contact a Salvor or if not yet appointed will contact master or owner of the ship and the harbour master if the incident is in a port or its approaches. The master or offshore facility operator shall grant the salvor access to the facility or ship and necessary assistance.

6.14 In case of emergence, the Incident Commander shall have arrangements in place for emergency chartering of local tugs to be used for salvage. Such arrangements should be unambiguous, agreed by all parties where possible, and activated as swiftly as practicable. Where there is a serious risk of harm to persons or property, or a significant risk of pollution, it may be necessary to initiate emergency towing arrangements. The Incident Commander may request assistance from any local tug as part of the response to an incident. Some tugs may not be altogether suitable for emergency offshore towing. Weather conditions may restrict their use. Their role may therefore be to provide "first-aid" prior to the arrival of a more suitable vessel.

6.15 Except in the most severe incident, a ship is likely to retain some of its cargo and bunkers. It may be desirable to carry out a cargo and bunker transfer operation from the stricken ship to prevent or minimize further spills. It may help to move the ship to a more sheltered area such as a port or oil terminal.

6.16 It is safer to carry out cargo and bunker transfer operations in sheltered areas. However, the decision to use an area moves the risk of pollution to an area that the incident might otherwise not have affected. The incident commander will considers carefully whether to use a sheltered area and, if so, which to select. He must also consider that, time may be short and the damaged ship may not be in a condition to travel very far.The Incident Commander has access to emergency transfer equipment for use in offloading oil from a damaged or disabled ship. This will ensures that, there is suitable equipment available in Zanzibar for cargo and bunker transfer operations.

6.17 The equipment that will provides a total transfer capability, including pumps, power packs, hoses, fenders, communications equipment, protective clothing, breathing apparatus, and inert gas generators.

6.18 The following are the members of the MRCC for an incident caused by offshore installation;

- The incident Controller ,this will be DMSS his appointed representative;

- The Emergence Operations Manager, a role defined in the operator's oil spill contingency plan who will act as a liaison officer between MRCC and the Company's Emergence Response Centre.
- Operators Representative whose roles will be mentioned in the operator's oil spill contingency plan who will represent the interests of the owner, operator, contractors and liability underwriters of the offshore installation.
- ZMA duty Officer to support the IC.
  A representative from the Ministry of Transport from Mainland Tanzania if the incident occurs or threatens the resources of the jurisdiction of Mainland Tanzania.
- An Environmental Officer who will advices the IC on the environmental implications of any proposed actions. This will be appointed by the chairman of the Environmental Strategy Group.
- A specialist or technical advisor to the IC, either from ZPDC or an independent source who have the capacity to advices as the circumstances require.

CHAPTER SEVEN

AT SEA RESPONSE

Associate with Appendix D (Counter Pollution Operations at Sea)

7.1 When a national response involves a ship or offshore installation, ZMA will establish a strategic command centre in the MRCC, depending on the complexity of the operation a separate Marine Control Centre may be established. A separate MCC may be established near to the scene of the incident in order to workout planned control of the operations. In this regard the IC will appoint an on scene Commander (OSC) if the separate MCC established so as to manage the tactical response.

7.2 The MCC will comprise the following persons even though some of them will play more than one role.

- An On - Scene Commander (OSC) to manage the tactical response from the MCC;
- ZMA operations officers to manage sea borne and air borne operations;
- If ship is involved, a ZMA operations officer to manage cargo transfer operations;
- A liaison officer from the MRCC;
- A logistic officer to organise the deployment of the equipment needed and control all ZMA's financial commitments;
- If an incident involves a port or its services, a representative of the port authority.
- An Environmental Liaison Officer , nominated by the Chairman of the Environmental Strategy Group who will advise the OSC on the environmental implications of any proposed actions;
- A Public Relation Officer from ZMA who will link with the Government Press and the media; and

7.3 The IC may nominate other members from ZMA to assist in the response.

Options for the clean-up operations

7.4 The Incident Commander of the Offshore Response Unit (ORU) (subject to any instructions from MRCC in a salvage operation) decides on actions to contain, disperse, or neutralise pollutants, and to remove potential pollutants from the scene. These decisions include the following methods of response:

- Assess and monitor;
- Dispersant spraying operations;
- Mechanical recovery operations; and
- Cargo transfer operations.

7.5 The aim of any clean-up operation is to minimise the environmental, ecological, amenity or financial damage that could be caused by oil spill. In making decision between the options for clean -up, the ORU will consider the following:

- The limitations on the effectiveness of at sea clean up techniques;
- The distance from shore of the casualty;
- The type of oil spill;
- The weather conditions, wind, tide and currents; and
- The time needed to deploy resources to the scene.

Fishing restrictions

7.6 Ministries and Agencies responsible for food safety can prohibit the taking of fish and edible plants from a designated sea area when it will be proved that, the consumption of contaminated food from that area is likely to have a healthy risk to consumers. Also the responsible Agencies may restrict fishing on precautionary basis, if the resources are or are likely to become contaminated.

7.7 Ministries has the powers to issue a Temporary Prohibition Order if it is satisfied that the consumption of live bivalve mollusks or other shellfish taken from a designated shellfish harvesting area is likely to cause a public health risk. The Temporary order shall also prohibit the placing on market or the gathering of any such mollusks or other shellfish from the specified area.

7.8 Until temporary order had last, the revocation order may be issued after being proved that, there is food safety but some restriction might be lifted depending on the circumstances.

CHAPTER EIGHT
PORT RESPONSE

Powers of Port Authority

8.1 For an incident occurring inside the port's jurisdiction, the Harbour Master is in control of the incident response from the outset. Harbour Master have powers to direct the time and manner of a ship's entry into, departure from, or movement within a port. This gives a harbour master the power to regulate day to day movements within the port. However, it does not permit the harbour master to prohibit or insist upon entry.

8.2 Some port authority have powers to issue general directives. Unlike the harbour master's powers, these powers are not ship and movement specific. Neither do they enable the port authority to prohibit or insist upon a ship's entry or departure. However, these powers permit a harbour master to prohibit entry or require departure from a port. The harbour master may do so if, in his opinion, the condition of that ship, or the nature of anything it contains, is such that its presence in the port might involve a grave and imminent danger to the safety of persons or property or risk that the ship may, by sinking or foundering in the port, prevent or seriously prejudice the use of the port by other ships. The harbour master must have regard to all the circumstances and to the safety of any person or ship.

Roles of the Harbour Master and ZMA

8.3 It is envisaged that many incidents will be handled adequately by implementing the local terminal and or port oil spill contingency plan and through the combined efforts of the harbour master, salvors, ship owners and crew. In such cases ZMA may not need to issue any directions but will monitor the decisions and actions being taken and will ensure that they are being taken in the light of a full knowledge of the relevant environmental sensitivities and an understanding of the effects that might arise.

8.4 The statutory powers of ZMA empower the IC to take over command of all operations in certain circumstances. One example could be where there is an urgent need of a place of refuge for a vessel in order to lessen the risk of pollution or in the interests of safety. In such a case the IC may override the authority of the harbour master. The IC can exercise the same power in dealing with the owner of any coastal facility, privately owned or otherwise. Where possible the IC endeavors to put the notice of intervention in writing, however if this is not immediately possible, confirmation is provided when

circumstances permit. Furthermore, the control exercised by the IC need not be total. It can be limited to requiring certain general courses of action to be adopted or avoided. This control need not take the active form of giving directions. It can be in the form of monitoring the proposals and progress of operations to ensure that the wider public interest is being safeguarded.

8.5 The IC, in most cases, seeks to work with the port authority to resolve incidents. The IC can use ZMA's intervention powers in support of the port authority's management of the incident.

8.6 Where the IC is of the opinion that giving a direction to a harbour master would not be likely to achieve the desired result, or where a direction has been given, and has not achieved a sufficient result, the IC may instigate such action as deemed necessary to achieve the desired outcome. In this situation the IC will normally authorise another agency or organization (e.g. TPDF, Marine Police, KMKM, etc) to take the required action directly. Action at this level is considered most unlikely in respect of a port. However it could involve taking over operations and facilities and involve all persons or organizations acting on the IC's directions. In these circumstances any person who obstructs operations could commit a criminal offence.

Port Response - Marine Control Centre

8.7 The Marine Control Centre (or MCC) is located either at the port's own operations room or MRCC or ZMA. Some ports can cope with large salvage operations. In these ports, the IC may view it as an advantage to exercise control using the port facilities. Where the incident affects port operations, falls within the initial jurisdiction of the port or may affect port operations then the harbour master will be a member of the MCC and it may be beneficial to maintain their presence at the port so that they can keep control of other activities within the port. The decision whether to use the port or other facilities for the control centre should be predetermined in the local plan taking account of many factors, including:

- The availability and range of communications equipment (radio link with the casualty, salvors, and emergency units on scene, spare telephone lines, e-mail facilities, faxes etc);
- The need for ancillary equipment such as radar equipment for the control of port traffic;
- The availability of local knowledge of environmentally sensitive areas, bathymetry, port resources to supplement rescue, salvage and counter pollution efforts;
- Size of building and number of rooms available (large rooms for press briefings and quiet rooms for decision making by the MCC);

- The availability of support staff; and
- Location (ease of access, available parking).

Division of Responsibilities for Clean up

8.8 The responsibilities for the cleanup of pollution within the jurisdiction of port authority, whatever the source of the pollution, are as follows:

Figure 3 : **Division of Responsibilities**

Location of pollution	Responsibility for clean up
At the sea	Port authority
Jetties/wharves/structures	Port authority
Beach/Shoreline owned by the Port authority	Port authority
Shoreline (including land exposed by the falling tide)	Local authority

Shore Based Spills

8.9 Although this Contingency Plan is for marine pollution from shipping and offshore installations, it should be noted that the ZMA supports the environmental regulator (ZEMA) with appropriate resources in the event of a large shore-based spill affecting Zanzibar's waters.

CHAPTER NINE
SAMPLING OF SPILLED OIL

Obtaining samples for evidence and analysis

Identification of spills with unexplained cause and the possibilities to find the polluter responsible for these spills is very difficult. In the aftermath or during an oil spill, identification of the sources of contamination is a vital component in the allocation of costs. Correct sampling, storage, preparation and analyses of the polluting oil and its potential sources are essential if identification is to be proved beyond reasonable doubt.
The recommended procedure for collecting and forwarding oil samples for analysis are:

- Samples should be taken from the source and from the water/foreshore areas with the minimum of delay so that changes in composition due to the effects of sunlight and time are kept to a minimum.
- Every effort should be made to obtain un-contaminated sample of oil for comparison purposes, particularly if prosecution is envisaged. It should be noted that proof of identity is more easily shown by comparative analysis against a sample of origin than by deduction from special characteristics obtained from the polluting oil alone.
- In certain circumstances it may be possible to obtain samples of the pollutant using an inert type of absorbent, e.g. polypropylene. When this technique is used great care should be taken to ensure that the device for squeezing the oil out of the absorbent material and the funnel and other items in use are absolutely clean and will not contaminate the oil sample.
- At each position three samples with each sample containing of a minimum of 100 grams and probably of up to one kilogram should be taken in clear glass bottles with glass stoppers or Teflon coated lids. The stopper should be firmly tied to the bottle by wire or with twine and the lid sealed with tape. Plastic bottles should not be used.
- The bottles should be numbered and labeled. A second copy of the label for each bottle should accompany the request for analysis.

The labels should contain the following information:

- date and time of sampling,
- place where it was taken, with as much as geographical details as possible,
- direction of the movement of the oil (i.e. wind direction, current etc.), andname, signature and address of sample collector and witness.

- The bottle should be carefully packed in metal or any other crush resistant container. The outer container should clearly indicate that the contents are fragile. Refrigeration of sealed samples in the dark at less than 5ºC is recommended.

- For prosecution purposes, unless the sample is delivered personally to the laboratory it is important to adopt security measures. The measures should include:
  - sealing the bottle, preferably with wax
  - sealing the bottle's label
  - Written confirmation of delivery.
- Where convenient and where no undue delay would result, it is recommended that the staff of the approved laboratory be called to take samples.

- The official responsible for sampling shall submit a report on adopted procedure.

- It is recommended that suitable sampling devices and preferably purified containers be maintained as part of normal oil spill emergency response equipment.

- It is desirable to obtain samples of oil from the sea surface or from shorelines so that the type of oil and its character can be determined. This may be required for:
  - Development or assessment of cleanup or other response options.
  - Determining the source of the spill (Legal reasons).
  - Ecological effects assessment.
  - Determining likely persistence or future behavior of the oil.

CHAPTER TEN

SHORELINE AND ON SHORE RESPONSE

(Associated with Appendix E)

Shoreline Control Centre (SCC)

9.1 In many cases of major marine pollution incidents the pollution affects not only the marine environment but also impact the shoreline and threatens the local onshore environment. In that aspect ZMA has primary responsibility for the response to marine pollution at sea, other agencies such as ZEMA and the Ministry responsible for Regional Administration and Local Government have responsibility for the shoreline response. In order to conduct a coordinated response to major pollution incidents, that meets the requirements of the Zanzibar Operational Guidelines, so a proper framework has to be established.

9.2 At earlier stages of an incident the local government administration will establish their response, according to the details contained within their own contingency plan. When the threat of pollution to the shoreline exceeds the capability of the most affected local administration then ZMA will initiate a response according to the magnitude of the incident that local administration (or administrations) sets up a Shoreline Control Centre (SCC). The local administration is responsible for manning and managing the SCC.

9.3 Each local administration's own contingency plan should detail the mechanisms for escalating the response in accordance with the tiered response concept and should specify how to set up the SCC in the light of its own practices and organization. These plans also contain the necessary authorizations by each local administration to enable the designated officer directing the SCC to take decisions on behalf of the other local administrations concerned.

9.4 A SCC needs to contain representatives of all the local administration services that may need to participate in the clean-up operation, and representatives of all local and port authorities that may become involved. In addition, it contains an Environmental Liaison Officer (ELO) nominated by the Chair of the Environment Strategy Group.

9.5 The role of ZMA in the SCC is the provision of advice, the provision of updates and reports of response progress offshore, the provision of marine and aerial surveillance and the provision of resources and manpower.

Local Administration Contingency Plans

9.6 The local administration contingency plans should include the following or a cross reference to where such advice can be located:

- The mechanisms for escalating the response in accordance with the tiered response concept; guidance on what equipment and personnel is at the disposal of the SCC, including neighboring local administration resources;
- Arrangements for establishing working accommodation and catering arrangements for members of the SCC and Environment Strategy Group and other groups involved in the incident who may need to be in the area away from their own base;
- Arrangements for handling liaison with, if established, the ZMACC, SCC, MCC and the Environment Strategy Group; and other groups involved in the incident;
- Arrangements for handling the media, including the logistics of their presence;
- Temporary, intermediate and final storage sites and routes for the recovery, reuse or final disposal of waste;
- Maps, clearly depicting sensitive sites, access points, terrain types etc;
- Guidance on the health and safety of workers involved in preventive measures and clean-up activities;
- A mechanism for assessing the economic impact of the incident on the affected area in general should also be in place; and
- Local administrations should be aware of all the financial implications of coastal pollution and actions that can be taken for cost recovery.

CHAPTER ELEVEN

ENVIRONMENTAL ADVISE AND MONITORING

(Associated with appendix F Environmental Strategy Group)

10.1 The response to any maritime incident in Zanzibar requires a regional or national response which involves the establishment of an Environmental Strategy Group. All these involved in operation at sea which includes salvage operation and shoreline clean up need timely environmental advise.

10.2 It is the duty of the ZMA to initiate the process of formation of the Environmental Strategy Group, the core membership of this Group will be from ZEMA, relevant statutory conservation Agency, environmental and rural affairs department, fisheries department, environmental Regulators and local health body in which chairman of the Group will be selected. Also the Group may include a representative from ZMA, representative from respective local administration with appropriate skills to the incident.

10.3 The role of the Environmental Strategy Group itself is mainly to advise while other Institutions, from which individual members are drawn, will continue to exercise their statutory powers. In exercise their powers the members they will operate their powers through Environmental Strategy Group and in other occasion other members will act via their Institutions.

10.4 Environmental Strategy Group will advise on environmental aspects and public health impacts of the incident and associated response operations both real and potential. The Group is a common facility that provides comprehensive advice to all response units. The Group significantly its membership must represent all environmental and public interests considered to at risk.

10.5 The environmental Strategy Group should keep record on all advice in writing and circulate it to the response units as soon as practicable. When a response unit does not follow the Environmental advice, it is instructed to record the reasons for not doing so and inform the group. In simple incidents, the chairman will act as a co unit of the advice to the IC and all activated response units.

Monitoring

10.6 For the monitoring of oil spill movement and behavior, aerial monitoring is likely to be most effective although any other suitable means might be used such as monitoring by ship if aircraft are not immediately accessible.

10.7 The monitoring of spill and its movement and transmission of relevant reports to other Organizations. The On - Scene Commander and IC will take all necessary measures to ensure regular monitoring of the spill and its movement and its behavior in order to assess the situation properly and to decide on adequate response measures. On Scene Commander and Incident Commander may request assistance from other support Organizations.

CHAPTER TELVE

MEDIA

Associated with appendix G (Working with Media)

11.1 A major incident of marine oil spill is usually an interest to both local and international media depending on the nature and scale or tier of the incident. It is the public interest to be informed fully by the media. To keep the media at early stage of the incident may avoid the implication of distortion of the information circulating both in nationally and internationally. It is advisable that, media should receive reliable information simultaneously.

11.2 Ministries responsible for information should get first-hand information as soon as possible. From the onset, the Joint Response Committee should ensure that they have a media office in place.

Media team and designated press officer.

11.3 Media team and designated Public Relations Officers should ensure that they have a media office in place. Media team and designated Public Relations Officers from both Departments should take control of the media office. ZMA should ensure that it has an adequate media response team in place from the outset of an incident. One among the roles of the media team is to liaise on behalf of ZMA and the MRCC with the press and other government press officers.

11.4 In particular, it is the responsibility of the designated Press officer to advice ZMA and MRCC on media relations to arrange press conference and to issue news bulletins. It is necessary that, the media team ensure that, the media do not interfere with the operational activity of the emergence services or harass casualties.

Further details of the procedures for dealing with the media in an oil spill incident are in Appendix G

Press conferences

11.5 Media Team and designated Public Relations Officer from ZMA should liaise with relevant Ministries and press as soon as required. Media Team and designated Public Relation Officer shall arrange press conferences as soon as they receive any accurate information. The response team should provide information whenever they deem necessary. No journalists or reporters should have direct contact with the response team during operation as this can disturb urgent processes of operation.

Ministerial and VIP visits

11.6 It is inevitable that, in the case of a major oil spill incident, Ministers and other VIP Government officials may wish to visit the scene. A designated Senior Officer from ZMA will escort Ministers or other VIP officials on such occasion.

11.7 The media team must consider how to accommodate a Minister and any Ministerial press conference on site and advise the Press Office accordingly. The media team may be under resourced and have difficulty in coping with both the media response and the VIP visit. Consideration should be given at an early stage to enlisting the assistance of the nearest news broadcasting agency's office to handle either the visit or to help with the incident media response.

Liaison with other government departments and agencies

11.8 The media team must establish and then maintain a line of communication with the Press Officers to keep them informed of the progress of an operational response. In addition, appropriate officials must stand ready during the course of the response to provide any advice or draft statements requested by Chief Secretary or Press Office.

11.9 In the case of an incident occurring in an area covered by a devolved administration or within a port, the media team must establish and maintain a line of communication with the press office of the devolved administration and port authority to keep them informed of progress. The Media team should also look at the possibility of forming a joint press office or media centre.

CHAPTER THIRTEEN

FINACE

Associated with appendix H

(The International Regime for Compensation for Oil Pollution Damage) and Appendix I (Cost Recovery and Record Keeping)

12.1 **Appendix H** contains a brief summary of compensation regimes that may assist in the recovery of those costs. Appendix I contains guidance on the procedure that should be followed when claiming compensation.

12.2 Dealing with marine oil spill response can be a protracted and expensive process. Initially the costs of oil spill operations fall on those undertaking them. Under current legislation, those incurring expenses as part of the response operation later seek to recover them from those responsible for paying compensation.

12.3 It is essential that, from the outset, a Financial Controller is appointed and that all responders keep records of how, when, and why, they respond. These records are needed to support claims for cost recovery in respect of preventive measures and to show that the actions taken were proportionate and reasonable for the threat from pollution and the risks to safety. Also provides further guidance on the level and type of records that should be retained. All response logistics expenses shall be paid by ZMA from the Oil Spill Response Fund as it shall be established in the Regulations.

12.4 The Financial Controller shall be the Head of Finance Department of ZMA. It is vitally important that financial systems are in place, as part of contingency plans, in advance of an incident.

CHAPTER FOURTEEN
TRAINING AND EXERCISES

13.1 It shall always be a requirement of this plan that ZMA conduct regular training programmes and exercises for personnel, groups and shipping industry likely to be involved in a response to a spill from any source. These training programmes are designated to enable Zanzibar to have sufficient numbers of trained personnel to mount a credible and effective response to a pollution incident. Training programmes shall be conducted at three levels, which recognize the overall technical complexities of managing a spill response and that the associated knowledge required by personnel varies depending on their levels of responsibility. The following shall be the three levels of training to be conducted:

(1) Senior Management Level:-Level three: The focus of training shall be on the requirements of members of the Response Team from ZMA responsible for high level of decision making.

(2) Middle management: Level Two: The focus shall be on the requirements of the middle management personnel including designated Shore logistics Officers & area controllers responsible for the preparation of contingency and response plans and the management and conduct of effective spill response operations and associated logistics, administrative and financial tasks.

(3) Operator: Level one: The focus shall be on the requirements of operational personnel, those undertaking on-site clean-up operations and operating spill response equipment.24

The cost of this training shall remain with ZMA as the authority with expertise and responsible for combating oil spill.

13.2 Exercises should validate the plan and affected people should be allowed to practice, learn their roles and develop relationships. Personnel should familiarize themselves with the equipment and the plan in general. The equipment should be tested to ensure that it is in good working condition. Lessons learnt should be noted and improvements in the plan should follow. For the purposes of sharing responsibility the ZMA should share the responsibility and cost of an exercise with the stakeholders of oil spill response contingency plan as this could be very expensive. One should note that a real scenario is envisaged in the exercise.

APPENDIX A
NATIONAL AND INTERNATIONAL COOPERATION

A.1 One of United Republic of Tanzania's obligations as a signatory to the International Convention on Oil Pollution Preparedness, Response and Co-operation 1990 (the OPRC Convention) is to develop and manage a national response plan for dealing with pollution of the marine environment both in Mainland Tanzania and Zanzibar. This plan is mainly apply to Zanzibar and to some circumstances will interface with national plan and regional plan which will result the establishment of bi-lateral response and cooperation agreements with neighboring states, possible as a wider East African regional response.

A.2 Tanzania share sea boundaries with other states within the Western Indian Ocean including the Seychelles, Comoro and Madagascar.

A.3 Work is planned to develop and exercise response and co-operation agreements with these states in due course.

APPENDIX B

TEMPORARY EXCLUSION ZONES AND TEMPORARY DANGER AREAS

Introduction

B1. During the course of search and rescue and marine pollution response operations it may be necessary for the Ministry responsible for Maritime Transport to establish and affect both temporary exclusion zones and temporary danger areas in order to assist the course of the response operations. This function may be delegated to ZMA.

Temporary Exclusion Zones (TEZ)

Establishment of a TEZ

B2 Ministry responsible for Maritime Transport establishes a TEZ by giving a direction. As soon as practicable, the Ministry should promulgate the direction via the MRCC or in such a manner as to bring it to the attention of persons it is likely to affect. Within 24 hours of giving the direction, the Minister responsible for Maritime Transport in consultation with Minister responsible for Maritime Transport (URT) must send a copy to the International Maritime Organization.

Which ships may we exclude from a TEZ?

B3. A ship may enter or remain within a TEZ if:

- The direction establishing the zone permits it to do so;
- The Ministry responsible for Maritime Transport gives their consent; or
- This is in accordance with regulations made by the Ministry responsible for Maritime Transport.

B4. Apart from these ships no ship may enter or remain in a TEZ if the direction establishing the zone contains a particular statement. This is a statement to the effect that the purpose of the direction is to prevent or reduce significant pollution or the risk of such pollution within Zanzibar water or pollution control zone.

Temporary Danger Areas (TDA)

B5. A marine incident may generate considerable aircraft movement in a limited area. The MRCC may seek to inhibit flights in the vicinity of an emergency incident if it is considered essential for the safety of life or property and particularly for the protection of those engaged in the response action. The MRCC will contact the Ministry responsible for Maritime Transport and requests an Emergency Restriction of Flying Regulations. The Ministry responsible for Maritime Transport will refer the request to the Tanzanian Civil Aviation Authority (TCAA), which have the authority to establish the restriction.

B.6 Depending on the nature of the incident, the initial action is normally the establishment of a Temporary Danger Area (TDA) notified by a Notice to Airmen (NOTAM). However, if a TDA fails to meet the objective or is deemed to be inappropriate for a particular incident, Emergency Restrictions of Flying Regulations may be introduced. The Regulations make it an offence to fly within the designated Temporary Restricted Area without permission of the TCCA. Notification of the coming into force of the Emergency restriction of Flying Regulations and details of the Temporary Restricted Area are made by NOTAM and at the same time any previously established TDA is withdrawn.

B7. The TCCA is the only authority which may grant permission for aircraft to be flown within the notified airspace. Subject to overriding considerations of safety, flights by aircraft directly associated with the emergency are invariably given priority over those seeking to overfly for any other reason.

APPENDIX C
SALVAGE

Introduction

C1. Following all serious incidents, and all prevention tactics having failed, the shipowner engages commercial salvors to deal with the casualty and secure the cargo, and bunkers and any other pollutants. At an early stage, the MRCC or ZMA, or MCC instructs the salvor or as appropriate, the master or owner of the vessel, or a harbour master requiring them to give detailed information on their intentions.

C2. The IC needs to assess whether the salvor has the capability in terms of experience, personnel and equipment to carry out the salvage operation. If the IC is satisfied that the appointed salvor is capable, the salvor is regarded as being in command of the salvage operations. If the IC is not satisfied that the salvor is capable then the IC persuades, or directs, the owner or master of the casualty to engage alternative or additional salvors. The initial salvage options may include firefighting, counter-flooding, internal transfers, other actions to stabilise the ship, and perhaps emergency towing to bring the casualty to calmer waters or a place of refuge.

C3. Subsequent salvage actions may involve cargo and bunker transfer operations, diving operations, beaching the casualty or grounding it in shallow water and patching or filling holes. If a ship has grounded salvors may attempt to refloat it, using tugs and perhaps by pressurising flooded tanks or compartments with air to increase buoyancy. In exceptional cases when the salvage of the ship is not practicable, an appropriate course of action which minimizes the risk of harm to persons or property and the risk of pollution is taken.

Emergency Towing Arrangements

C4. Where there is a serious risk of harm to persons or property, or a significant risk of pollution, it may be necessary to initiate emergency towing arrangements. Such arrangements should be unambiguous, agreed by all parties where possible, and activated as swiftly as practicable. Standard operational procedures should apply irrespective of whether an Emergency Towing Vessel (ETV) is tasked from appropriate local harbour resources or is a salvage tug of opportunity.

Emergency towing requirement considerations

C5. It is difficult to establish strict or prescriptive criteria for when to use an ETV. Individual circumstances must dictate the appropriate response.

Present emergency towing arrangements

C6. The MRCC and ZMA hold a comprehensive database of harbour tugs available locally and contact details.

Places of Refuge

C7. Except in the most severe incident, a ship is likely to retain some of its cargo, bunkers and other pollutants. It may be desirable to carry out a cargo and bunker transfer operation from the stricken ship to prevent or minimize further spills. It may help to move the ship to a more sheltered area, such as a port or oil terminal.

C8. A place of refuge means a place where a ship in need of assistance can take action to enable it to stabilize its condition and reduce the hazards to navigation, and to protect human life and the environment. IMO Resolution A. 949 (23) Guidelines on Places of Refuge for Ships in Need of Assistance provides further information and guidance.33

C.9 There are a number of ports and harbours in the Zanzibar Pollution Control Zone. All of these may be suitable to provide a place of refuge. This is in addition to bays and anchorages. It is unwise to rule anywhere in, or out, as a potential place of refuge. The choice of a location as a place of refuge is driven by the circumstances of the incident, including such event-specific data as the weather, the geographical whereabouts of the incident and the type of threat posed by the vessel and its cargo.

C10. Zanzibar has compiled a partial inventory of possible places of refuge using different criteria for both anchorages and ports/harbours. The inventory is not, and does not set out to be, exhaustive, but provides a clear reference point for ZMA's Officers tasked with providing a place of refuge for a ship in danger. The inventory is used in conjunction with parameters determined on the day. A case by case assessment is made as to the suitability of the location for a place of refuge to accommodate a ship in need of assistance.

C11. It is safer to carry out cargo and bunker transfer operations in sheltered areas. However, the decision to use an area moves the risk of pollution to an area that the incident might otherwise not have affected. The IC considers carefully whether to use a sheltered area as a place of refuge and, if so, which to select. The IC has in mind that time may be short and the damaged ship may not be in a condition to travel very far.

APPENDIX D

COUNTER POLLUTION OPERATIONS AT SEA

Introduction

D1. All ships carry oil as fuel. Some carry oil as cargo, so all shipping accidents have the potential to create a risk of oil pollution. Offshore oil and gas operations also create a risk of oil pollution.

D2. Many ships carry hazardous substances other than oil as cargo. Some carry just one hazardous substance. Others carry many hazardous substances in separate tanks or containers. A single incident may therefore require a response to more than one form of pollution.

D3. ZMA forms a Marine Control Centre (MCC) at the scene of the incident to manage at-sea and aerial activities, as outlined in Chapter 7 of this Plan. This appendix summarises the response options for different forms of marine pollution.

Oil Spill

Minor oil spills

D4. ZMA can receive many reports of sightings of pollution at sea. Often the sightings may be of oil pollution with no identified source. The oil may have entered the sea during an operational discharge or because a storm disturbed a wreck. When a small amount of oil is involved, counter pollution operations are neither practical nor necessary. Instead, ZMA allows the oil to disperse naturally.

Major oil spills

D5. ZMA responds to a major oil spill at sea in several different ways. However, the aim of any response is always to minimise the damage that the oil could cause. ZMA tailors its response to each incident, consulting others as set out elsewhere in this plan.

D6. ZMA's response to a major oil spill may be:

- To assess and to monitor, allowing the oil to evaporate and degrade naturally;
- To initiate dispersant spraying operations; and/or
- To initiate mechanical oil recovery operations.

D7. All techniques for cleaning up oil pollution at sea have limitations. The distance of the casualty from shore, the type of oil, weather conditions, currents, and the time taken for resources to reach the scene can significantly affect the effectiveness of

different techniques. ZMA therefore carefully evaluates the circumstances of each incident before mobilising equipment or other resources.

D8. The most desirable option is to recover the oil from the surface of the sea. This prevents it from reaching the shoreline, reduces the possibility of damage to biological and other resources at sea and in the coastal zone, and avoids the high cost of removing oily material from the shore. In practice, however, oil recovery at sea has never been found to be fully effective.

D9. Fluid oils spilt at sea spread rapidly to cover large areas. Evaporation causes a reduction in total volume, accompanied by an increase in viscosity. Some oils may form water-in-oil emulsions. These increase the viscosity and volume of the oily material, preventing effective treatment with dispersants and increasing the difficulty of mechanical recovery. With other oils, natural dispersion reduces the amount of oil on the sea surface. The rate at which these processes occur depends on oil type and weather conditions.

Monitoring oil movement

D10. Wind and currents cause any oil remaining on the surface of the sea to drift. Computer models can predict its movement. ZMA, operating from the MCC, uses these models, advice from the Environment Strategy Group, and environmental sensitivity maps to assess the risk to resources threatened by an oil spill.

D11. If the oil is drifting, away from sensitive resources, there may be no need to initiate active response measures. However, ZMA continues to monitor the movement of the spill, because the wind direction can change rapidly. It initiates active response measures if the oil starts to move towards a sensitive resource.

D12. During incidents, surveillance aircraft monitor the movement of oil and use remote sensing equipment or visual observations to estimate the location of the greatest concentration of surface oil. Fixed-wing aircraft or helicopters survey the shoreline to assess the degree of oiling. Where possible, their crews take photographs and make recordings.

Dispersant spraying operations

D13. While many oil recovery systems are available, all may suffer limitations. It may take days to move them to the scene of an incident. The use of dispersants is often a more effective response to oil pollution.

D14. ZMA normally initiates dispersant spraying only if dispersant spraying is likely to be effective, and either:

- The Environmental Strategy Group advises that there is a significant threat of damage to birds, marine life, ecologically sensitive areas, or amenity beaches; or
- An offshore operator considers it necessary for safety reasons.

D15. Should the MCC decide not to follow the advice of the Environmental Strategy Group, it must record the reasons for this, and circulate the record to all other response centres as soon as possible.

D16. ZMA balances the likelihood of dispersant spraying being effective against its environmental consequences and cost. While dispersant spraying removes the problem of disposing of waste oil recovered on shore, dispersed oil may remain in the marine environment for a considerable time.

D17. Dispersant spraying is most effective if carried out as soon as possible after an oil spill. Research findings provide important guidance on the likely effectiveness of dispersants. They show that the time available for spraying oils that are amenable to dispersants is limited and depends on the type of oil and the weather conditions. Aerial spraying resources should therefore be alerted quickly when spraying missions are anticipated and an early decision should be made on whether and where to spray.

D18. ZMA uses information gained from aerial surveys to assess the effectiveness of the response operation, including aerial spraying, and to inform future operational decisions. Monitoring sub-surface oil concentrations from a suitably equipped ship is a more definitive indicator of dispersant performance than visual observation.

Aerial spraying operations

D19. ZMA may charter other aircraft and helicopters capable of carrying out aerial spraying of dispersants.

Shipborne spraying operations

D20. Ships can provide support for operations in harbour or coastal waters or in waters at the limit of the operating range of aerial spraying aircraft. Such ships are particularly useful in maintaining a permanent response if there is an imminent threat of a spill or a continuous release of oil.

D21. ZMA has stocks of portable sets of spray equipment for deployment on ships of opportunity. Wherever possible, ZMA will instruct aircraft (fixed or rotary wing) to direct and control ship borne spraying operations to ensure maximum effectiveness.

Oil recovery operations

D22. The recovery of spilt oil from the surface of the sea causes the least damage to the environment. There is a wide range of systems available. These generally consist of a boom to collect or contain the spilt oil and a skimmer to pick up the oil.

D23. ZMA has several types of mechanical recovery equipment available to fit to ships of opportunity. When deploying oil recovery equipment ZMA considers the following issues:

- As the equipment is ship borne, it takes time to arrive at the spill. Therefore, when the weather and other circumstances of a spill indicate that recovery of oil at sea will be effective, ZMA mobilises and deploys equipment as quickly as possible. This minimises the weathering and spread of the oil;
- Wind strength, wave height and currents greatly affect the effectiveness of booms. Most systems are unable to operate effectively if the sea is more than moderately rough. The nature of the oil and the extent to which it has weathered or formed a mousse can also impede oil recovery. ZMA selects the booming system to suit the prevailing conditions. It selects the recovery equipment that is most effective on the type and condition of oil encountered. It also identifies suitably trained and experienced operators familiar with the various recovery techniques and the safe handling and disposal of recovered oil;
- Locating the skimmer in the thickest part of the slick maximizes the rate of oil recovery. In a continuous spill, therefore, the skimming device should be close to the release point, as this is where the oil is thickest; and
- The appropriate environmental regulator, ZEMA, etc, need to plan carefully for the final transfer and shore disposal of recovered oil.

D24. Taking these factors into account, ZMA uses mechanical recovery equipment from:

- ZMA (local) stockpiles;
- The commercial sector; and / or
- Neighbouring States, under any international response and cooperation agreements (Appendix A refers).

Cleaning of oil recovery equipment

D25. It may be appropriate to establish a centralized cleaning station to deal with equipment used in oil recovery operations at sea and on the shoreline. ZMA discusses the design, location, and operation of such a cleaning station with the Environmental Strategy Group. These discussions include consideration of location, capacity, health and safety, waste disposal and support facilities.

In situ burning

D26. The purpose of in situ burning is to remove oil from the surface of the sea through combustion. If successful, only a small fraction of the original volume of oil remains as a residue. The rest of the oil enters the air column in the form of particulates and gases contained within a discharge plume. In situ burning is not a viable option in Zanzibar given the time it would take to mobilize specialized equipment and bring it to the country. It is not government policy. This appendix mentions it for reference purposes only. Any change in policy would require in depth consultation, particularly on the threat to human health and to fishing, shellfish, agriculture and the environment as a whole.

Dispersant application

D27. Dispersant chemicals are used to break down the oil slick into small droplets so that the diluting effect of the ocean is better able to reduce hydrocarbon concentrations. This strategy will not work with all oils and is not appropriate for use in certain environments.

Other Hazardous Substances

Responsibilities

Table 2 overleaf contains a list of organizations that are likely to become involved in responding to incidents involving hazardous substances other than oil, and sets out their responsibilities.

Organization	Responsibilities
Fire and rescue services	To inspect, contain and make safe suspect containers To provide hazardous chemical data to responders. To notify the ZEMA and relevant local authorities if they consider that there is a threat to human health or to the environment.
Local Administrations	To remove containers that have come ashore in consultation with fire and rescue services. To store and dispose of hazardous substances in the appropriate manner.

	To inform the MRCC
ZEMA	To provide advice to local authorities on environmental issues associated with hazardous substances. To provide advice on the handling, storage and disposal of hazardous substances.
MRCC	To receive reports of hazardous substances and containers lost at sea and found on the shoreline. To receive reports on hazardous substances and containers washed up on the shoreline. To inform the duty MRCC officer. To co-ordinate communications with a casualty.
ZMA	To assimilate information on incidents and take initial steps such as alerting the Fire and Rescue Services To disseminate information received to local authorities that ZMA consider to be under threat. To inform the appropriate fisheries department.
ZANZIBAR PORTS CORPORATION TANZANIA PORTS AUTHORITY	To provide information on ships cargoes by accessing the database of notifications from the operators of ships carrying dangerous and polluting goods.

Container ships of Hazardous substances

D28. The twenty-foot equivalent unit (TEU) fitted with doors and a hard top is the most common type of container. However, there are other types, including half-heights, open tops, flats, tanks, and out of gauge units. If an open top or half height container

breaks free, there is an immediate risk of pollution. The seriousness of the risk depends upon the type of cargo carried.

D29. A conventional hard-topped TEU fitted with doors is less likely to break open and spill its contents. If the container remains intact, nobody should open it before identifying its contents identified from the cargo manifest. If the cargo is hazardous, responders should take appropriate safety precautions before opening it. International Standards Organization (ISO) tank containers present a unique problem. Responders cannot know the integrity of the unit and its valves. If there is a risk that tanks contain hazardous materials, air and water monitoring must take place before attempting to approach or remove the tank.

Response to Lost Packaged Goods (including Containers)

D30. Such goods can be at sea, within a port area or stranded on the shoreline. The initial risk assessment is carried out by MRCC. An assessment is made to determine whether the goods are a danger to navigation and/or a threat of pollution. The MRCC is contacted as required and appropriate remedial action taken.

APPENDIX E

SHORELINE CONTROL CENTRE (SCC)

Introduction

E1. This appendix contains recommendations to local administrations on the establishment of a Shoreline Control Centre (SCC). The recommendations are equally applicable for all response centres in complex operations.

General

E2. The purpose of a SCC is to provide an organization through which local administrations can discharge their responsibilities for preventing and mitigating pollution of the shoreline. This applies to the local administration which border the Indian Ocean .The SCC should bear in mind that under international conventions, response measures and their associated costs need to be reasonable. The responsibilities of a SCC are likely to include:

- Determining the extent of the problem;
- Devising a strategy for dealing with it;
- Co-ordinating actions within that strategy (including the recovery and reuse or final disposal of waste arising from any operation);
- Monitoring progress and effectiveness; and
- Liaising with the other response units involved in the same incident and briefing the media, local politicians and the public.

E3. The coastal pollution response plan of each local administration should therefore contain provision for setting up a SCC. Local administrations may agree that another local administration will provide the SCC for their area, in which case their plan need only refer to this arrangement. The plans for the establishment of a SCC should contain arrangements:

- To enable them to act, where necessary, on behalf of more than one local administration; and
- To enable the SCC to benefit from co-operation with ZMA , statutory conservation agencies, environmental regulators, public health bodies, non-governmental organizations and any other relevant organizations.

E4. The first local administration to receive the pollution normally establishes a SCC. It may subsequently be preferable to re-locate the SCC to another local administration as the extent or emphasis of the pollution moves to that other administration's area.

E5. The SCC needs clear arrangements for adopting a strategy, deciding on the specific actions, establishing priorities between actions, and authorizing the contracts and expenditure needed to give effect to those decisions. Each local administration's plan should therefore include:

- Provisions for appointing the officer or officers authorized to take decisions on behalf of the authority, and laying down the framework within which they are to operate;
- Provisions for enabling the relevant officers of another administration which is taking the lead on behalf of a group of administrations to act on behalf of it; and
- Arrangements for determining how to divide the costs of joint local administrations action among the relevant administrations.

E6. Experience shows that it is helpful to organize a SCC on the basis of five functional teams.

- A management team;
- A technical team;
- A procurement team;
- A media and public relations team; and
- An information and administration team.

E7. The local administration normally chairs and provides administrative support to each functional team.

E8. The SCC seeks advice from the Environment Strategy Group established for the incident.

Management Team

E9. The role of the Management Team is:

- To quickly determine priorities for action in protecting sensitive areas and dealing with pollution at the various polluted sites. These decisions should be disseminated as soon as possible to those inside and outside the SCC;
- To exercise strategic management of financial expenditure;
- To maintain a log of the policy decisions taken and ensure that all other teams keep records of policy and financial decisions;
- To prepare regular situation reports on the conduct of operations for circulation to all interested parties (based on briefings supplied by the Technical Team); and
- To interact with elected representatives, central government, the public and the media.

E10. There should be one sub group of the Management Team — the strategy subgroup. The objective of this subgroup is to provide the Management Team with an overview of short, medium and long term issues to be addressed as the response evolves. The group identifies the short, medium and longer term issues for each of the functional teams to consider. They draw up a matrix identifying significant and potentially significant issues for the SCC response strategy as a whole, but especially for the Management Team to consider. Time frames for the issues could be one to three days, three to ten days and beyond ten days.

Technical Team

Reporting to the Management Team, the Technical Team is responsible for dealing with the conduct of operations by:

- Determining a reasonable strategy for dealing with pollution at the various locations (to achieve this, close liaison with the Environment Strategy Group is essential);
- Allocating resources on a priority basis determined by the Management Team;
- Informing the Management Team of any resource shortfalls;
- Allocating contractors to specific tasks as determined by the Management Team;
- Transmitting decisions to local forward control centres, team leaders, etc; and
- Monitoring the progress of operations.

E11. The Technical Team comprises representatives from:

- ZMA (scientific/technical officer);
- local administration having expertise in:
- technical and engineering services;
- waste management;
- health and safety; and
- administrative support, particularly minute taking;
- local administration liaison officers;
- Environment Strategy Group (Environment Liaison Officer (ELO)) (most likely the same individual as the ELO on Management Team);
- ZEMA;
- Police (to assist in route planning, traffic control, possible road closure, etc);
- ZMA, ZPC, Police Marine, KMKM (as appropriate) to provide local knowledge (for example, access to beaches, knowledge of local tides); and
- Representative of other (statutory) organisation as appropriate

E12. To enable the Technical Team to manage its many tasks, there should be three sub groups:

- A waste management subgroup: to prepare a plan for temporary storage of collected waste and manage the final disposal options;

- A health and safety subgroup: to ensure that proper health and safety procedures are in place and that Beach Masters or Response Team Supervisors are properly briefed in these matters; and

E13. An equipment subgroup: to ensure that the available equipment is fully utilized and to notify any requirements to the Technical Team for the Procurement Team to organize.

E14. The Technical Team must obtain a daily progress report from all Beach Masters or Response Team Supervisors. They should then review their plan and submit any revisions to the Management Team.

Procurement Team

E15. Reporting to the Technical Team, and working to them on allocated tasks, this team is responsible for:

- Procuring, marshalling and routing equipment to designated areas. However, where ZMA is to pay for resources, its prior agreement is necessary;
- Monitoring expenditure made on behalf of local administrations during the incident;
- Collating invoices with expenditure;
- Supporting claims for compensation;
- Providing the Management Team with a summary of expenditure on request;
- Monitoring the levels of deployed resources at the various locations;
- Recovering or re-deploying resources as they become surplus to requirements at the various sites; and
- Informing the Technical Team of any resource shortfalls

Media and Public Relations Team

E.16 The team should consist of local authority press officers together with a ZMA Information Technology Manager.

E.17 The Media and Public Relations Team (MAPRT) are responsible for:

- Preparing media briefings in consultation with the Management Team;
- Arranging media interviews in consultation with the members of the Management Team;
- Managing the media briefing room, established outside the confines of the SCC; and
- Ensuring that the briefing room supplies regular media briefing notices.

E.18 A public help-line may be established, depending on the circumstances and scale of the incident, to handle calls from the public. The decision to set up a help-line will be taken by the Management Team and responsibility for putting it in place will rest with the MAPRT. It is unlikely that the MAPRT

will have the resources to staff such a help-line and it is recommended that appropriately trained call-handlers be provided from a separate source. Consideration should be given as to whether local members of the voluntary sector could be utilised for this task.

E19. Call-handlers operating the help-line should refer offers of assistance, including equipment and products, to the MRCC. Offers will then be forwarded by the MRCC to the appropriate response centre. Information and Administration Team

The information and administration team consists of the local administration's staff that are responsible for the general day to day running of the SCC and the provision of administrative support to all functional teams.

E20. The team is responsible for:

- The dissemination of message traffic and information into, within and out of the SCC;
- Log keeping of message traffic and information into, within and out of the SCC;
- Providing and maintaining communication links within the SCC;
- Arranging appropriate information technology (IT) support and resources for all functional teams;
- Detailed minute taking during the Management and Technical Team discussions;
- Filing messages, minutes and records for future reference and compensation claims;
- Logging and updating of information boards and operational maps; and
- Providing catering and security to the SCC.

The Involvement of other Local Administrations

E.21 Where pollution affects more than one local authority, each should be represented in the SCC by an identified liaison officer. They should participate in meetings of the Management Team as necessary.

E.22 The specific tasks of the liaison officers should be:

- To maintain links with their local administrations;
- To provide information to the Technical Team concerning individual locations within their administrations (in particular, information which would affect the formulation of strategy);
- To collaborate with the Technical Team, to agree the strategy for dealing with pollution at the affected sites and the level of resources to be allocated to the various locations;
- To collaborate with the Procurement Team in procuring, marshalling and dispatching resources to the affected sites;
- To inform authorities of the agreed strategy and the resources allocated to the various affected sites;

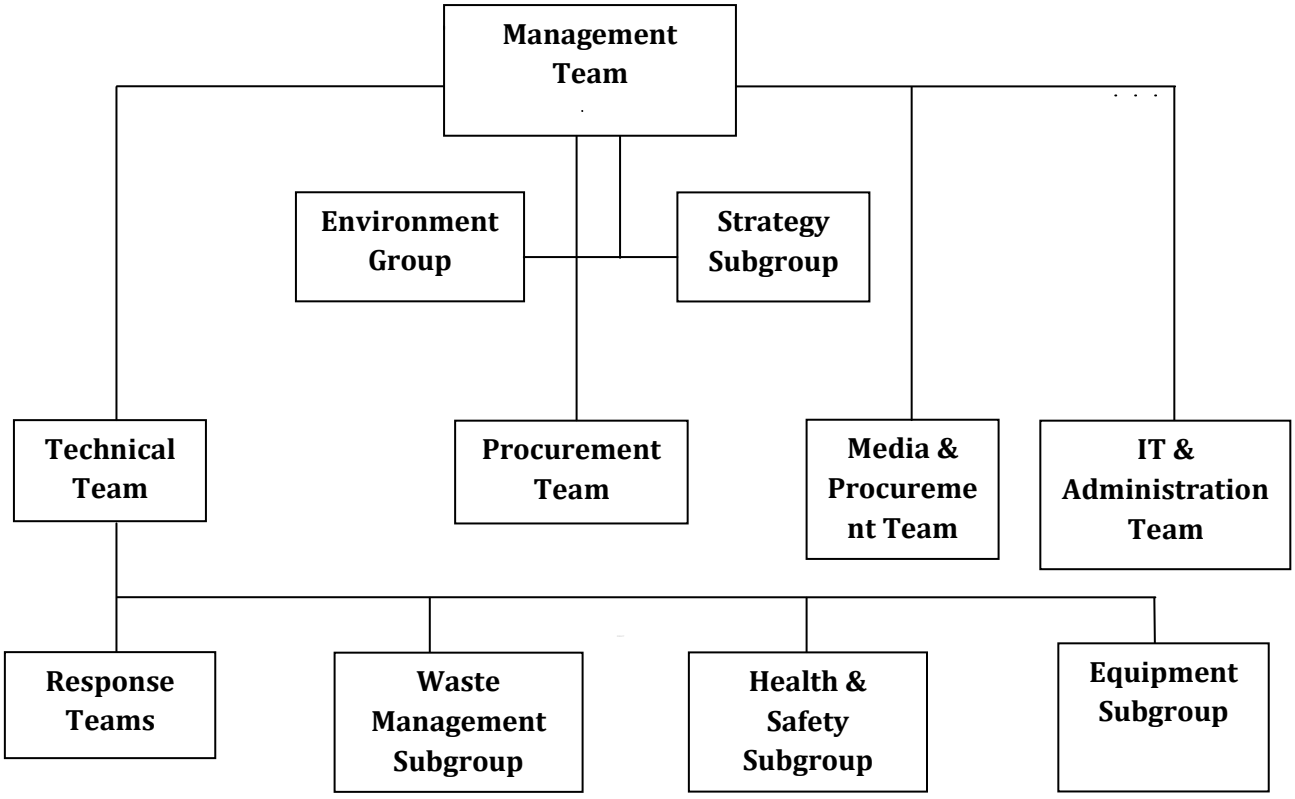
- To arrange reception of these resources at the point of use in collaboration with the Procurement Team; and
- To monitor progress of operations within their individual administrations.

E.23 Affected ports should also provide liaison officers. The specific tasks of the liaison officers should be:

- To maintain links with their port authority;
- To provide information to the Technical Team concerning individual locations within their ports (in particular, information relevant to the strategy);
- To collaborate with the Technical Team, to agree the strategy at the affected sites and the level of resources to be allocated to the various locations;
- To collaborate with the Procurement Team in procuring, marshalling and dispatching resources to the affected sites;
- To inform their ports of the agreed strategy and the resources allocated to the various affected sites;
- To arrange reception of these resources at the point of use in the collaboration within the Procurement Team; and
- To monitor progress of operations within their individual harbours.

E.24 Figure 4 below shows the suggested organization of the Shoreline Control Centre, or other response centres, if required.

Figure 4 : **Organization of the SCC**



Appendix F

ENVIRONMENTAL STRATEGY GROUP (ESG)

Introduction

F.1 This Annex aim to provide outline guidance to Chapter Ten of the Zanzibar Oil Spill Contingency Plan on how to address the environmental and public health issue of the response to a maritime incident. The outline is explaining on the procedure for establishing Environmental Strategy Group, its composition and the role of the Environmental Strategy Group that would carry out during and after an incident as well as waste management procedures.

Establishment of the Environmental Strategy Group

F.2 It is essential to establish ESG for an incident and to be facilitated by the sound contingency plan. The chair and the potential pool of Environmental Liaison Officers should be nominated and identification of suitable accommodation and facilities should be made in advance.

Composition of Environmental Strategy Group

F.3 The composition of Environmental Strategy Group will be based on the nature, scale or degree and the location of the incident.

Core members

F.4 The core members shall be composed by the following members;

- The relevant statutory nature conservation bodies
- The relevant government departments including fisheries, and other relevant stakeholders to the maritime environmental interests;
- Environmental Regulator ;
- The local public or port health bodies;
- The affected , or threatened , local administration; and
- ZMA may join the core team if it deems necessary.
- ZMA in any circumstances will maintain close liaison with the Group in the context of overall incident management and continuity.

F.5 The chairman and the core members will decide whether to increase the members of the Group to include representatives of other Organizations. The chairman and the core team also may decide to convene the Environmental Strategy Group when it is necessary to be close to the incident.

Environmental Liaison Officers

F.6 The chair nominated an Environmental Liaison Officers for each response unit established. The chair must establish lines of communications to allow the provision

of advice to the units. It is important that, the individual ELOs appointed are fit to the task in hand. The expertise varies with each incident and a pool of suitable nominees with a range of relevant experiences, knowledge, and specialisation should be identified.

F.7 In all incidents the common requirements for ELOs is broad familiarity and understand of the responsibilities and issue relating to the response centres to which they may be appointed. To ensure the transparency of the communication between EGS and response units established, only one ELO appointed to each response unit, though the ELOs may require relief of support by one or more assistants.

Terms of References

F.8 The Environmental Strategy Group has a vital role in the response to any maritime incident, especially when there might be a threat of land, air or sea pollution which involve oil or hazardous and noxious substances. The aim of environmental Group in providing advice is to minimize the impact of the incident on the environment and public health at large, the Group has to provide advice and guidance to the Incident Commander and other incident control units that may be established.

F.9 An advice of the public health officers shall be available to determine the appropriate level of response, however public health issues are normally addressed initially by the Environmental Strategy Group. Other agencies such as Ministry responsible for Health and Social Welfare may be involved to provide specialist in public health advice.

F.10 The advice provided includes the assessment of environmental risks and potential impacts arising from and incident, as well as the implications of any clean up or salvage operations. This will be achieved through;

- The appointment of an Environmental Liaison Officer for each of the response units established to deal with the incident.
- Providing advice and guidance to minimise the impact of the incident and clean up response on the environment and public health, informed by local knowledge and specific information collected;
- Using all relevant environmental information and local knowledge available.
- Monitoring the environment and assessing short and long term impact of the incident and clean up response and;

F.11 Facilitating the welfare, rehabilitation or humane disposal or impacted wildlife by the recognized animal welfare organization. In the case of wildlife causalities there is a requirement to set up a dedicated wildlife treatment centre staffed by suitably qualified personnel. All aspects concerning wildlife welfare and rehabilitation from

search and collection to release should follow established guidelines and procedures under the management of the recognized animal welfare body.

The Environment Strategy Group links with the Response

F.12 The relative of time that individual centre are operational varies according to the nature and scale of the incident. A major incident could involve the establishment of response centres for several months.

F.13 Environment Strategy Group and ELOs expertise requirements vary with each incident and pool of suitable nominees with a range of relevant experience, knowledge and specialization are identified.

F.14 The specific tasks for the Environment Strategy Group in a expanded SCC are likely to include;

- An evaluation of the relative importance of nature conservation and other environmental features at risk during an incident. This includes oil or hazardous substances and clean up;
- Establishment of agreed priorities for protection and clean up;
- Provision of advice on suitability of pre identified locations for the natural degradation of oil ;
- Provision of advice on whether proposed clean up techniques are likely to cause more damage than leaving the pollution to degrade naturally;
- Monitoring clean up to ensure operations in sensitive areas to ensure that clean up operations match the strategy agreed in the SCC ;and
- Ensuring through documentations of all decisions taken by or on behalf of Environmental Strategy Group.

The Mechanism for Advice Provision by the Environmental Strategy Group

F.15 Due to the need for prompt provision of environmental advice, it is recognized that, much or most of the advice provide by the Environmental Strategy Group to the response centres verbally or through any means of communications.

Key Tasks

The Environmental Strategy Group has the following tasks

Provide operational advice, including;

- Advising on potential and real impacts on public health;
  Advising on the relative importance of environmental features and wildlife at risk and their sensitivity vulnerability to oil or other hazardous substances and related to clean- up activities;

- Agreeing and prioritizing environmentally sensitive sites and wildlife in need of protection;
- Ensuring that priorities of clean up adequately reflect environmental concerns;
- Advising on the environmental implications of operational response measures and their effectiveness when implemented; and
- Taking in to account of data, information and seeking to resolve conflicting environmental issues and priorities within the groups remits.
- Requires a range of data , information and operational advice including;
- Human population at risk;
- Information on the distribution and seasonal status of all wildlife;
- Information on fishing grounds, spawning and nursery areas, shellfish beds and Mari -culture generally;
- Information on abstractions from discharges to and uses of all waters likely to be affected;
- Collated records of all wildlife affected by pollution, and information on fishing activities and ecosystem and ecosystem in affected areas;
- Details of the progress and success of clean- up operations;
- Advise on monitoring including;
- Risks and acute effects to public health;
- Preparation or identification of environmental baseline against which later environmental evaluations can be compared;
- Monitoring the environmental effects of clean -up operations in sensitive areas, ensuring that such activities match the Environmental Strategy Group as agreed in the relevant response centre;
- Baseline monitoring of impact on wildlife, fisheries and sensitive sites / habitats threatened by pollution.
- Initiate long term impacts assessment, including ;
- Impact on human health;
- Impact on marine mammals;
- Impact on all aspects of the natural environment.

F.16 If a situation indicates that, there is a potential for conflict of resources between members of the SCC and members of the ESG efforts should be made to coordinate requirements in order to avoid duplication. The ESG should consider that International Conventions response measures and allied costs needed to be reasonable.

Assessment of Long Term Environmental Impact

F.17 If a marine pollution incident is expected to have a significant environmental or public health impact, arrangements should be made to begin to monitor and assess the long term impact, as well as the short to medium term environmental impact which includes a public health assessment.

F.18 It is recognized that, some incidents may result in extensive pollution at the sea and coastlines. Other incidents may result in the loss of a chemical into the sea that may have not immediate impact but might be significantly bio accumulated over the years. Either type of incident may require a significant monitoring and assessment programme or a long term monitoring commitment.

F.19 In a major or long term incidents impacts assessment projects may need to be commissioned. ZEMA as the Responsible Authority in environmental issues in Zanzibar, where the incidents occurs takes the lead in coordinating the commissioning of such work. In any monitoring, data required for the impact assessment projects is collected as early stage of the incident as possible rather than waiting for two or more time for contractors to be appointed.

F.20 Therefore, it may be necessary to transfer the responsibility for coordinating, monitoring and assessment work from ESG to a new separate group concentrating on coordinating Environmental Impact Assessment at an early stage.

Appendix G

WORKING WITH THE MEDIA

Introduction

G.1 Good public communication is vital to the successful handling of any incident and should be incorporated in all contingency planning. When an incident occurs the key communications objective is to deliver accurate, clear, timely information and advice to the public.

G.2 The news media (broadcasting, print and text services) remain the primary means of communication with the public in these circumstances although websites are increasingly used to provide a further source of more detailed information and advice for the public. Advances in technology mean that live interviews and reports can be sent directly from the scene of an incident via a mobile telephone as the event unfolds, often within minutes of the events occurring. These developments mean there is a constant requirement from the media for accurate, up to date information.

G.3 It is essential that the media team:

- Identifies the agencies who are responsible for handling various aspects of the situation;
- Ensures that media activity does not interfere with the operational activity of the emergency services; and
- Ensures that the media do not harass human casualties.

G.4 A mechanism needs to be established early for responding to media enquiries (by telephone, e-mail and fax) and the logistics of arranging the daily press conferences, individual briefings. Media officers, from all responding bodies and organizations, have to take responsibility for these tasks, while others concentrate on the management of the information given to the media which can then be monitored or updated as the situation develops.

Initial Phase

G.5 In the first few minutes of the incident, possibly within an hour, ZMA needs to establish a local spokesperson to give the briefest confirmation of the incident. In general this will be their Public Relation Officer.

G.6 If it is clear that the situation is a very serious one and is likely to continue for some time, but ZMA has not had sufficient time to assess the situation, any statements should be brief and factual. They should deal only within the areas of responsibility of the person making them. It is the responsibility of the Incident Commander to agree the release of further information.

G.7 In order to minimize the risk of issuing conflicting or misleading information to the media, and bearing in mind the necessity for fast but accurate information and that press officers are likely to be based at the same location, all agencies should adopt the following approach:

- To inform the agreed initial lead agency press officer before giving verbal statements to the media and to restrict comments to matters concerning the agency that they represent;
- Before issuing news releases, to consult with the lead agency press officer. If it proves impossible to contact the lead agency in advance inform the lead agency as soon as possible afterwards;
- To contact those persons within their own organization whom the media may contact, or who may wish to make statements, and to brief them on the requirement for co-ordination with the lead agency press officer;
- If and when the incident develops to a different phase (for example, coastline cleanup operations) to consider making the lead agency the relevant local administration ;and
- When arriving on scene, to liaise urgently with other press officers and to make contact with the lead press officer to ensure that their contact details are quickly available.

Crisis Media Team

G.8 The crisis media team shall consist of ZMA, local administration, police, port authority, and any other relevant organizations.

Managing the Crisis

G.9 Once the lead agency has been agreed it is necessary to establish certain procedures:

- The initial focus of attention for the media will be the area of operations, and journalists will be searching immediately for information and briefings. During this initial period, when the buildup of emergency services resources is taking place, the exercise of control is imperative, as a means of assisting the media;

- All interested parties need to agree joint statements. Press officers from each agency need to consult closely to ensure a coordinated approach to the media;

- It is essential that the lead press officer attends and participates in the senior management arrangements for the incident. By attending such meetings, the press officer can be fully in the picture and plan the media response. The lead press officer oversees all aspects of the media response, including:

- Activities at the media liaison point or canter;
- Arrangements for the media to visit the site, possibly including transport;
- Accreditation of bona fide journalists; and
- Arrangements for overall monitoring of media output.

- Initially the media may need a reminder that, in the period immediately following a major incident, nobody can know precisely what has happened. Initial statements should focus on what is happening, what the limitations of knowledge are at the time, and what is being done to arrive at a fuller appreciation of the situation. If such statements include a commitment to provide accurate information as soon as it is available, media personnel are more likely to attend briefings and thus accept a measure of control, particularly if the briefings take place at regular intervals.

Establishing a Media Liaison Point and Centre

G.10 A media centre should be established and staffed to cope with shift changes and media pressure. This is presuppose a long-running event that requires substantial resources. This should include a Media Centre Manager, who will be a member of the SCC Management Group, Shift Managers assisted by press officers, a Resources Manager with suitable administrative and support staff and an Information Manager with the relevant IT assistance.

G.11 Suggested personnel for these positions are the heads or managers of public affairs from all the agencies involved. While the emergency remains mainly at sea, ZMA is the lead agency. When the emergency becomes mainly shore side, the lead switches to the relevant local administration. All managers should meet regularly and approve plans for the next, say, 12 hour basis.

G.12 Each of these Managers would have a specific area of responsibility within the Media Office.

Media Centre Manager

The Media Centre Manager controls and co-ordinates the media centre. The lead agency provides the Media Centre Manager.

Shift Managers

On the assumption that the event would be long running, it would be necessary to appoint two shift managers to run the office for 24 hours a day.

Responsibilities include the preparation, approval, and distribution of press releases; management of press conferences; and briefing participants.

Resources Manager

It is not essential that this person is a Press Officer. The Resources Manager should be someone with knowledge and understanding of communications and systems and with the ability to deliver the support services required by a major operation of the type envisaged. The Resources Manager's responsibilities would include the logistics of press conferences.

Information Manager

This role is crucial for managing the flow of information between the response canters and the Media Office. The Media Centre Manager may fulfill this role, but it requires the services of reliable assistants to cover shift working and periods when the Manager is involved in other meetings.

Separating Delivery from Content

G.13 Monitoring and analysis of media reporting needs to take place. This should take place elsewhere; for example by the Government media monitoring unit, or a specifically contracted commercial company.

G.14 Monitoring and analysis enables the identification of any trends reported that begin to appear misleading or overly biased. Examples include unbalanced reporting that gives too much emphasis to special interest groups or environmental concerns; undue criticism of local or national government policy; an inaccurate assessment of the situation; exaggeration. The media teams can then take corrective action and disseminate transcripts to specialists.

VIP Visits

G.15 Visits by VIPs, coordinated by the police, can lift the morale of those affected, as well as those who are involved with the response. A government Minister may make an early visit to the scene or areas affected, not only to mark public concern but also to be able to report to Parliament on the response. A government Minister visiting the scene may also be accompanied by local elected officials. It is possible that the scale of the incident may, in addition, prompt visits by senior members of Government and/or the Second Vice President. If foreign nationals have been involved, their country's Ambassador, High Commissioner or other dignitaries may also want to visit key locations.

G.16 Visits to the scene of an emergency need to take account of the local situation and the immediate effects on the local community. It may be inappropriate for

VIP visitors to go to a disaster site itself whilst rescue operations are still in progress.

G.17 VIP visits should not interrupt rescue and lifesaving work, and the police must be consulted regarding the timing of visits.

APPENDIX H

THE INTERNATIONAL REGIME FOR COMPENSATION FOR OIL POLLUTION DAMAGE

Taken from an Explanatory note prepared by the Secretariat of the International Oil Pollution Compensation Funds - July 2009.

Introduction

H1. Compensation for pollution damage caused by spills from oil tankers is governed by an international regime elaborated under the auspices of the International Maritime Organization (IMO). The framework for the regime was originally the 1969 International Convention on Civil Liability for Oil Pollution Damage (1969 Civil Liability Convention) and the 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (1971 Fund Convention). This 'old' regime was amended in 1992 by two Protocols, and the amended Conventions are known as the 1992 Civil Liability Convention and the 1992 Fund Convention. The 1992 Conventions entered into force on 30 May 1996.

H2. Due to a number of denunciations of the 1971 Fund Convention, this Convention ceased to be in force on 24 May 2002. A large number of States have also denounced the 1969 Civil Liability Convention. Therefore this note deals primarily with the 'new regime', ie the 1992 Civil Liability Convention and the 1992 Fund Convention.

H3. The 1992 Civil Liability Convention governs the liability of Ship owners for oil pollution damage. The Convention lays down the principle of strict liability for Ship owners and creates a system of compulsory liability insurance. The Ship owner is normally entitled to limit his liability to an amount which is linked to the tonnage of his ship.

H4. The 1992 Fund Convention, which is supplementary to the 1992 Civil Liability Convention, establishes a regime for compensating victims when the compensation under the applicable Civil Liability Convention is inadequate. The International Oil Pollution Compensation Fund 1992, generally referred to as the IOPC Fund 1992 or the 1992 Fund was set up under the 1992 Fund Convention. The 1992 Fund is a worldwide intergovernmental organization established for the purpose of administering the regime of compensation created by the 1992 Fund Convention. By becoming Party to the 1992 Fund Convention, a State becomes a Member of the 1992 Fund. The Organization has its headquarters in London.

H5. As at 1 July 2009, 122 States had ratified the 1992 Civil Liability Convention, and 104 States had ratified the 1992 Fund Convention. Tanzania has ratified both the 1992 Civil Liability Convention and the 1992 Fund Convention.

1992 Civil Liability Convention

Scope of application

H6. The 1992 Civil Liability Convention applies to oil pollution damage resulting from spills of persistent oil from tankers. The 1992 Civil Liability Convention covers pollution damage suffered in the territory, territorial sea or exclusive economic zone (EEZ) or equivalent area of a State Party to the Convention. The flag State of the tanker and the nationality of the ship owner are irrelevant for determining the scope of application

H7. 'Pollution damage' is defined as loss or damage caused by contamination. In the case of environmental damage (other than loss of profit from impairment of the environment) compensation is restricted to costs actually incurred or to be incurred for reasonable measures to reinstate the contaminated environment.

H8. The notion of pollution damage includes measures, wherever taken, to prevent or minimize pollution damage in the territory, territorial sea or EEZ or equivalent area of a State Party to the Convention ('preventive measures'). Expenses incurred for preventive measures are recoverable even when no spill of oil occurs, provided that there was a grave and imminent threat of pollution damage.

H9. The 1992 Civil Liability Convention covers spills of cargo and/or bunker oil from laden, and in some cases unladen sea-going vessels constructed or adapted to carry oil in bulk as cargo (but not to dry cargo ships).

H10. Damage caused by non-persistent oil, such as gasoline, light diesel oil, kerosene etc, is not covered by the 1992 Civil Liability Convention.

Strict liability

H11. The owner of a tanker has strict liability (i.e. he is liable also in the absence of fault) for pollution damage caused by oil spilled from his tanker as a result of an incident. He is exempt from liability under the 1992 Civil Liability Convention only if he proves that:

- The damage resulted from an act of war or a grave natural disaster, or
- The damage was wholly caused by sabotage by a third party, or
- The damage was wholly caused by the negligence of public authorities in maintaining lights or other navigational aids.

Limitation of liability

H12. The Ship owner is normally entitled to limit his liability under the 1992 Civil Liability Convention. The limits were increased by some 50.37% on 1 November 2003 as follows. The increased limits apply to incidents occurring on or after that date:

- For a ship not exceeding 5 000 units of gross tonnage, 4 510 000 Special Drawing Rights (SDR) (US$7million);
- For a ship with a tonnage between 5 000 and 140 000 units of tonnage, 4 510 000 SDR (US$7 million) plus 631 SDR (US$976) for each additional unit of tonnage;
- For a ship of 140 000 units of tonnage or over, 89 770 000 SDR (US$139 million).

H13. If it is proved that the pollution damage resulted from the Ship owner's personal act or omission, committed with the intent to cause such damage, or recklessly and with knowledge that such damage would probably result, the Shipowner is deprived of the right to limit his liability.

Channelling of liability

H14. Claims for pollution damage under the 1992 Civil Liability Convention can be made only against the registered owner of the tanker concerned. This does not preclude victims from claiming compensation outside this Convention from persons other than the owner. However, the Convention prohibits claims against the servants or agents of the owner, members of the crew, the pilot, the charterer (including bareboat charterer), manager or operator of the ship, or any person carrying out salvage operations or preventive measures. The owner is entitled to take recourse action against third parties in accordance with national law.

Compulsory insurance

H15. The owner of a tanker carrying more than 2,000 tonnes of persistent oil as cargo is obliged to maintain insurance to cover his liability under the 1992 Civil Liability Convention. Tankers must carry a certificate on board attesting the insurance coverage. When entering or leaving a port or terminal installation of a State Party to the 1992 Civil Liability Convention, such a certificate is required also for ships flying the flag of a State which is not Party to the 1992 Civil Liability Convention.

H16. Claims for pollution damage under the 1992 Civil Liability Convention may be brought directly against the insurer or other person providing financial security for the owner's liability for pollution damage.

Competence of courts

H17. Actions for compensation under the 1992 Civil Liability Convention against the Shipowner or his insurer may only be brought before the Courts of the State Party to that Convention in whose territory, territorial sea or EEZ or equivalent area the damage occurred. Experience in past incidents has shown that most claims are settled out of court.

1992 Fund Convention

Supplementary compensation

H18. The 1992 Fund pays compensation to those suffering oil pollution damage in a State Party to the 1992 Fund Convention who do not obtain full compensation under the 1992 Civil Liability Convention for one of the following reasons:

- The Shipowner is exempt from liability under the 1992 Civil Liability Convention because he can invoke one of the exemptions under that Convention; or
- The Shipowner is financially incapable of meeting his obligations under the 1992 Civil Liability Convention in full and his insurance is insufficient to satisfy the claims for compensation for pollution damage; or
- The damage exceeds the Shipowner's liability under the 1992 Civil Liability Convention.

H19. In order to become Parties to the 1992 Fund Convention, States must also become Parties to the 1992 Civil Liability Convention.

H20. The 1992 Fund does not pay compensation if:

- The damage occurred in a State which was not a Member of the 1992 Fund; or
- The pollution damage resulted from an act of war or was caused by a spill from a warship; or
- The claimant cannot prove that the damage resulted from an incident involving one or more ships as defined (i.e. a sea-going vessel or seaborne craft of any type whatsoever constructed or adapted for the carriage of oil in bulk as cargo).

Limit of compensation

H21. The maximum amount payable by the 1992 Fund in respect of an incident occurring before 1 November 2003 was 135 million SDR (US$209 million), including the sum actually paid by the Shipowner (or his insurer) under the 1992 Civil Liability Convention. The limit was increased by some 50.37% to 203 million SDR (US$314 million on 1 November 2003.

Organization of the 1992 Fund

H24. The 1992 Fund has an Assembly, which is composed of representatives of all MemberStates. The Assembly is the supreme organ governing the 1992 Fund, and it holds regular sessions once a year. The Assembly elects an Executive Committee comprising 15 Member States. The main function of this Committee is to approve settlements of claims.

H25. The 1992 Fund shares a Secretariat with the 1971 Fund and the Supplementary Fund (see sections 4 and 6.2 below). The joint Secretariat is headed by a Director, and has at present 27 staff members.

Financing of the 1992 Fund

H26. The 1992 Fund is financed by contributions levied on any person who has received in one calendar year more than 150 000 tonnes of crude oil and heavy fuel oil (contributing oil) in a State Party to the 1992 Fund Convention.

Basis of Contributions

H27. The levy of contributions is based on reports of oil receipts in respect of individual contributors. Member States are required to communicate every year to the 1992 Fund the name and address of any person in that State who is liable to contribute, as well as the quantity of contributing oil received by any such person. This applies whether the receiver of oil is a Government authority, a State-owned company or a private company. Except in the case of associated persons (subsidiaries and commonly controlled entities), only persons having received more than 150,000 tones of contributing oil in the relevant year should be reported.

H28. Oil is counted for contribution purposes each time it is received at a port or terminal installation in a Member State after carriage by sea. The term received refers to receipt into tankage or storage immediately after carriage by sea. The place of loading is irrelevant in this context; the oil may be imported from abroad, carried from another port in the same State or transported by ship from an off-shore production rig. Also oil received for transshipment to another port or received for further transport by pipeline is considered received for contribution purposes.

Payment of Contributions

H29. **Annual contributions** are levied by the 1992 Fund to meet the anticipated payments of compensation and administrative expenses during the coming year. Each contributor pays a specified amount per tone of contributing oil received. The amount levied is decided each year by the Assembly.

H30. The Director issues an invoice to each contributor, following the decision taken by the Assembly to levy annual contributions. A system of deferred invoicing exists whereby the Assembly fixes the total amount to be levied in contributions for a given calendar year, but decides that only a specific lower total amount should be invoiced for payment by 1 March in the following year, the remaining amount, or a part thereof, to be invoiced later in the year if it should prove to be necessary.

H31. The contributions are payable by the individual contributors directly to the 1992 Fund. A State is not responsible for the payment of contributions levied on contributors in that State, unless it has voluntarily accepted such responsibility.

International Oil Pollution Compensation Supplementary Fund

H32. On 3 March 2005 a third tier of compensation was established by means of a Supplementary Fund under a Protocol adopted in 2003. So far 24 States have ratified the Protocol. Tanzania has not ratified this Protocol.

H33. The Supplementary Fund provides additional compensation over and above that available under the 1992 Fund Convention for pollution damage in the States that become Parties to the Protocol. As a result, the total amount available for compensation for each incident for pollution damage in the States which become Members of the Supplementary Fund is 750 million SDR (US$1 160 million), including the amounts payable under the 1992 Civil Liability Convention and the 1992 Fund Convention, 203 million SDR (US$314 million).

H34. The Supplementary Fund only pays compensation for pollution damage for incidents which occur after the Protocol has entered into force for the State concerned.

H35. Membership of the Supplementary Fund is optional and any State which is a Member of the 1992 Fund may join the Supplementary Fund.

H36. Annual contributions to the Supplementary Fund will be made in respect of each Member State by any person who, in any calendar year, has received total quantities of oil exceeding 150 000 tonnes after sea transport in ports and terminal installations in that State. However, the contribution system for the Supplementary Fund differs from that of the 1992 Fund in that, for the purpose of paying contributions, at least 1 million tonnes of contributing oil will be deemed to have been received each year in each Member State.

H37. No incidents have occurred which have involved the Supplementary Fund.

H38. The Supplementary Fund, which is administered by the 1992 Fund Secretariat, has its own Assembly composed of representatives of its Member States.

STOPIA 2006 and TOPIA 2006

H39. The two-tier international compensation regime created by the 1992 Civil Liability and Fund Conventions was intended to ensure an equitable sharing of the economic consequences of marine oil spills from tankers between the shipping and oil industries. In order to address the imbalance created by the establishment of the Supplementary Fund, which will be financed by the oil industry, the International Group of P&I Clubs (a group of 13 mutual insurers that between them provide liability insurance for about 98% of the world's tanker tonnage) has introduced, on

a voluntary basis, a compensation package consisting of two agreements, the Small Tanker Oil Pollution Indemnification Agreement (STOPIA) 2006, and the Tanker Oil Pollution Indemnification Agreement (TOPIA) 2006. These contractually-binding agreements entered into force on 20 February 2006.

H40. The 1992 Fund and the Supplementary Fund will in respect of incidents covered by STOPIA 2006 and TOPIA 2006 continue to be liable to compensate claimants in accordance with the 1992 Fund Convention and the Supplementary Fund Protocol respectively. The Funds will then be indemnified by the shipowner in accordance with STOPIA 2006 and TOPIA 2006. Under STOPIA 2006 the limitation amount is increased on a voluntary basis to 20 million SDR (US$31 million) for tankers up to 29 548 gross tonnage for damage in 1992 Fund Member States. Under TOPIA 2006, the Supplementary Fund is entitled to indemnification by the shipowner of 50% of the compensation payments it has made to claimants if the incident involved a ship covered by the agreement.

H41. STOPIA 2006 and TOPIA 2006 also provide that a review should be carried out after ten years of the experience of pollution damage claims during the period 2006-2016, and thereafter at five-year intervals.

Conclusions

H42. The advantages for a State being Party to the 1992 Civil Liability Convention and the 1992 Fund Convention can be summarised as follows. If a pollution incident occurs involving a tanker, compensation is available to governments or other authorities which have incurred costs for clean-up operations or preventive measures and to private bodies or individuals who have suffered damage as a result of the pollution. For example, fishermen whose nets have become polluted are entitled to compensation, and compensation for loss of income is payable to fishermen and to hoteliers at seaside resorts. This is independent of the flag of the tanker, the ownership of the oil or the place where the incident occurred, provided that the damage is suffered within a State Party.

H43. Moreover, the 1992 Civil Liability Convention and the 1992 Fund Convention provide a wider scope of application on several points and much higher limits of compensation than the previous Conventions in their original versions.

H44. As regards the Supplementary Fund Protocol, a State will have to consider whether, in the light of its particular situation, ratification of the Protocol is in the interests of that State.

APPENDIX I
COST RECOVERY AND RECORD KEEPING

Introduction

I1. This appendix contains information on how those who respond to, or are affected by, marine pollution incidents should best go about recovering the costs that they incur.

I2. It is essential that during any counter pollution or salvage operation all those involved keep records of what they did, when and why they did it and what resources they used. There is pressure, frequently severe, to deal with new issues and problems and to relegate record keeping to a lesser priority. However, the importance of contemporary records cannot be over emphasized. It is simply not realistic to rely on memory to reconstruct events in a fast moving and possibly lengthy incident. Responders must therefore arrange to keep adequate contemporary records. These records extend from minutes of decision-making meetings to Beach Master or Response Team Supervisors' records of the number of personnel, plant and materials used on a particular beach on a particular day and who provided them. The compilation of a photographic library, with all photographs date and time stamped would be of great assistance as proof of activities. It is also important to log all messages which might serve to change the pre-arranged response.

I3. Previous experience in dealing with Ship owners' solicitors and/or the IOPC Fund suggests the following items of best practice:

- Any expense must actually have been incurred and third party invoices provided;
- Response measures must be deemed reasonable, proportionate and justifiable;
- There needs to be a summary of events — a description and justification of the work carried out at sea, in coastal waters and on shore — together with an explanation of why the various working methods were selected;
- Keep a record of the dates on which work was carried out at each site; in this context, date and time stamped photographs are extremely useful;
- Keep a record of the number and categories of response personnel, regular or overtime rates of pay and who is paying them;
- Keep a record of the travel, accommodation and living costs for response personnel;
- Keep a record of the equipment costs for each site: types of equipment used, rate of hire or costs of purchase (bearing in mind residual values to be deducted), quantity used, period of use (in use or standby);
- Ensure that any damaged equipment is photographed and assessed by an independent body prior to repair or replacement;

- During cleaning or restoration of equipment or vessels, they should not be brought to a state better than at the commencement of the hire/charter.
- Keep a record of the consumable materials; and
- Keep a record of the cost of temporary storage.

Record Keeping

I4. For the purpose of financial record keeping, it is essential to appoint a financial controller at a very early stage in the incident to keep adequate records and control expenditure. Responders should not discard any paper document (including status boards and maps used by the response canters). They should back up and catalogue information held on computer.

I5. It is not possible to specify the precise form of records, this varies with the circumstances. However, there are two principal points to keep in mind:

- The records serve a variety of purposes and are the source material for much information drawn; and
- Since responders cannot know the particular purpose that records will serve in advance, record keeping should err- on the side of too much rather than too little detail.

I6. The record should clearly show information received, decisions taken, orders given, and action taken. For example, responders may use aircraft for reconnaissance. In this case, there should be a record not only of when they called the aircraft out but of take-off times, landing times, details of any oil found, the area searched, who was on board the aircraft, who received the information and when. Records should distinguish between activities undertaken to assist the clean-up operation and any general environmental monitoring or longer-term impact studies. For dispersant spraying operations, records should specify the area of operations and indicate the duration of spraying, the amount, type, age, and efficiency of dispersant used, and the results obtained.

I7. As a further indication of the level of records required for the hiring-in of an item of equipment, ZMA would seek to clarify the following items:

- Member of ZMA staffs that are authorized and placed the order;
- Date and time item actually hired;
- Organization hired from;
- Proof that costs have been researched and that the price is not unrealistic for that item;
- Quantity of each item actually hired;
- For larger pieces of equipment (particularly chartered in vessels) it would be useful to take photographs of the condition of the item prior to using for response activities;
- If more than one item of any type, devise a system for unique identification;
- How it was delivered / transported;

- Where it was actually delivered to;
- Who took delivery;
- A daily activity record of what the item was used for;
- If item is damaged — photograph damage;
- Brief description of how the damage occurred;
- Do not repair until approval or advice has been reached with an insurance representative on site (i.e. a surveyor appointed by the insurers or ITOPF);
- Dates actually used for the response;
- Dates item on standby at the scene of the incident;
- Date off-hired;
- Was the item returned in the same condition it was hired in? and
- No betterment of equipment on return to owners.

I8. Local administrations inevitably find that this level of record keeping requires a heavy commitment in terms of minute clerks, message takers, procurement clerks and financial record keepers. There may be specialist firms that offer tracking and recording services for clean-up operations. The appointment of such a firm may be justifiable following a major spill from an oil tanker. In such a case it might be possible to recover the cost of using such firms, or temporary agency staff, from the P&I Club and the IOPC Fund. However, this depends on the particular circumstances, and it is prudent to check before employing the services of such a firm.

I9. Where the decisions involve or affect others, it is important to record their reaction at the time. It is important to record every party's reaction and the conversation covered by all parties in addition to what was agreed or points of disagreement. This applies equally to ITOPF. They report to ship owners, P&I Clubs and the IOPC Fund and are likely to offer advice to all parties involved in the response on counter pollution operations likely to be considered reasonable. It applies also to others such as cargo owners, local administrations and the Environment Strategy Group. The records should show whether they agree or express no opinion. If they disagree, the records should identify the reasons, if possible. Records should distinguish criticism made at the time of an incident from criticism made with the benefit of hindsight.

I10. Like any operation involving the expenditure of large sums of money, the usual rules of proprietary, accountability and the need for an audit trail apply.

Time Limits for Claims Arising from Pollution from Tankers

I11. Claimants should be aware that there are time limits for claims under the 1992 Civil Liability Convention and the Fund Convention. The conventions provide that claimants must secure their claims by taking legal action against the Ship owners within three years of the date on which loss or damage occurred and in any case within six years of the date of the incident.

I12. Wherever possible, claimants should seek to have their claims settled by negotiation within these periods. If this is not possible, claimants may protect their claims by taking legal action against the tanker owner, the owner's insurer and the IOPC Fund. Should this be necessary, claimants should seek legal advice.

I13. Formal legal action to enforce a claim is usually the last resort. In most cases, informal negotiations result in a settlement. Given the time limits for legal enforcement of claims, it is in everybody's interest for claimants to submit claims as soon as possible after the incident. Often, considerable time is required to compile a claim and all the substantiating evidence. If claimants anticipate delays, they should notify the tanker owner's insurers and the IOPC Fund at an early date of the intention to submit a claim at a later stage.

Claims Arising from Pollution from Tankers

Submitting a claim to the P&I Club

I14. Claimants should initially submit claims for clean-up costs under the Civil Liability Convention to the tanker owner and/or to the relevant P&I club. The tanker owner's local agent should inform claimants of the identity of the P&I club and contact details. If claimants have any difficulty obtaining this information, they should seek advice from ZMA.

I15. The P&I Clubs do not publish formal guidance on their requirements for submitting claims, but the guidance in this appendix and the IOPC Fund's claims manual should generally be appropriate.

Submitting a claim to the IOPC Fund

I16. To obtain compensation under the terms of the Fund Convention, claimants should submit their claims directly to the IOPC Fund.

I17. The IOPC Fund co-operates closely with the relevant P&I Club in investigating incidents, and in assessing and settling claims. Claimants should submit full supporting documentation to the tanker owner, the P&I Club or the IOPC Fund. Claimants who do not submit their claims to the Fund should notify it of any claim submitted to the tanker owner or P&I Club.

I18. In some cases, claimants should submit claims through the office of a designated local surveyor, for forwarding to the P&I Club and the IOPC Fund for decision. Occasionally, when an incident gives rise to a large number of claims, the P&I Club and the IOPC Fund may jointly set up a local claims office to process claims more easily. Claimants should then submit their claims to that office. The local press should carry details of how to submit claims. In all cases, the designated surveyor and the joint claims office refer claims to the P&I Club and to the IOPC Fund for decisions on their admissibility.

I19. Claims should be in writing and must contain the following particulars:

- The name and address of the claimant, and of any representative;
- The identity of the tanker involved in the incident;
- The date, place and specific details of the incident if known, unless the P&I club or IOPC Fund already knows this information;
- The type of pollution damage sustained
- The nature of the clean-up operations, or response measures, for which the claimant is seeking compensation; and
- The amount of compensation sought.

I20. Supporting documentation must link the expenses for clean-up operations (including disposal) to the actions taken at specific sites. The IOPC Fund produces a claims manual (www.iopcfund.org/publications.htm) that provides helpful guidance on how such claims should be itemized. This guidance is just as relevant for claims submitted to a P&I Club under the 1992 Civil Liability Convention.

I21. The following extract comes from the edition of the claims manual dated December 2008. Claimants should check whether a later edition is available.

Presentation of Claims

It is essential that claims for the cost of clean-up are submitted with supporting documentation showing how the expenses for the operations are linked with the actions taken. The key to the successful recovery of costs is good record keeping. A claim should clearly set out what was done and why, where and when it was done, by whom, with what resources and for how much. Invoices, receipts, worksheets and wage records, whilst providing useful confirmation of expenditure, are insufficient by themselves. A brief report describing the response activities and linking these with expenses will greatly facilitate the assessment of claims.

Spreadsheets offer a particularly useful way of summarizing some of the key information required in support of a claim. Each response organization or contractor should maintain a daily log of activities, including details of the number of personnel involved, the type and quantity of equipment and materials used and the type and length of shoreline cleaned. If response vessels are used to combat oil at sea, extracts from their deck logs covering their period of deployment provide a useful source of information.

Specific information should be itemized as follows:

- Delineation of the area affected, describing the extent of the pollution and identifying those areas most heavily contaminated (for example using maps or nautical charts, supported by photographs, video tapes or other recording media);
- Analytical and/or other evidence linking the oil pollution with the ship involve in the incident (such as chemical analysis of oil samples, relevant wind, tide and current data, observation and plotting of floating oil movements);

- Summary of events, including a description and justification of the work carried out at sea, in coastal waters and on shore, together with an explanation of why the various working methods were selected;
- Dates on which work was carried out at each site;
- Labour costs at each site (number and categories of response personnel, the name of their employer, hours or days worked, regular or overtime rates of pay, method of calculation or basis of rates of pay and other costs);
- Travel, accommodation and living costs for response personnel;
- Equipment costs at each site (types of equipment used, by whom supplied, rate of hire or cost of purchase, method of calculation of hire rates, quantity used, period of use);

- Cost of replacing equipment damaged beyond reasonable repair (type and age of equipment, by whom supplied, original purchase cost and circumstances of damage supported by photographs, video or other recording material);
- Consumable materials (description, by whom supplied, quantity, unit cost and where used);
- Any remaining value at the end of the operations of equipment and materials purchased specifically for use in the incident in question;
- Age of equipment not purchased specifically for use in the incident in question, but used in the incident;
- Transport costs (number and types of vehicles, vessels or aircraft used, number of hours or days operated, rate of hire or operating cost, method of calculating rates claimed); and
- Cost of temporary storage (if applicable) and of final disposal of recovered oil and oily material" including quantities, unit cost and method of calculating the claimed rate.

Claims for the costs of treatment of oiled wildlife should essentially follow a similar pattern to that set out above for clean-up costs. Details of the number of animals treated and the number successfully released back into the wild should be provided. If the specialist groups undertaking the work mounted campaigns to raise public funds for the purpose of maintaining field operations for a specific incident, details should be provided, including the costs of the campaigns, the amounts raised and how the money was used.

Claims Arising from Pollution from non-Tankers

I22. Much of the above guidance is relevant to claims for compensation arising from types of marine pollution other than persistent oil carried in a tanker. However, as the liability and compensation arrangements in such cases are different, time limits, requirements for evidence and claims procedures are likely to vary. Claimants should therefore seek early guidance from the polluter or the relevant insurer, as well as from their own legal advisers.

Financial Security

I23. When an incident occurs, notice of the accident, reporting all details available, is given promptly to the insurers and owners of the casualty. From experience, this is generally achieved verbally by telephone from the scene of an incident. ZMA's Director of Finance, Human Resource and Administration will inform the insurer at this early stage that it is ZMA's intention is to make a claim and requests financial security for the money that ZMA is committing.

I24. This financial security can take several forms but in most cases is a Protection and Indemnity (P&I) insurer's Letter of Undertaking (LOU). The wording of this Letter needs to be amended according to the type of charter/ ownership of the vessel and legal advice should be sought if necessary. This document makes ZMA's position clear to the insurers and Ship owner. If ZMA are not provided with financial security during the incident further legal action is taken to underwrite the financial exposure by arrest of the casualty or freezing of the hull assets, but these actions are a last resort.

I25. Both a Letter of Undertaking and a Bank Draft require an amount of money to be included in the document. ZMA's Director of Finance, Human Resource and Administration estimates a figure based on experienced gained in previous incidents, estimated length of response and a figure for refurbishment and return of the equipment to the appropriate storage site. Generally, at this stage uplift is included in the level of financial security requested from the P&I for unforeseen costs. Most P&I representatives are experienced personnel and are well aware that the estimation of costs at this stage is not an exact science but it helps later negotiations on the claim if the figure given here is as close as possible to the quantum of the final claim.

I26. This procedure is followed as a matter of routine for ZMA personnel for incidents not involving oil tankers. ZMA is only prepared to accept this type of security from P&I insurers that are members of the International Group. For smaller, not so well known organizations, the preferred form of security would be a bank draft.

I27. The LOU also clarifies the legal jurisdiction for any subsequent legal action to recover costs, and ZMA's preference for any such action would be in Tanzania.

I28. When the Logistics and Finance Team return to ZMA headquarters it is necessary, to back up the financial security provided, by forwarding a letter to the owners of the casualty, with a copy to the P&I, informing them that a claim under the Maritime Transport Act.5, 2006 will follow in due course.