















# FOR UNITED REPUBLIC OF TANZANIA



REGIONAL WORKSHOP ON COOPERATION IN PREPAREDNESS AND RESPONSE TO MARINE POLLUTION INCIDENTS

3<sup>rd</sup> – 5<sup>th</sup> MARCH 2020

HOTEL VERDE, ZANZIBAR, TANZANIA

# THE NATIONAL MARINE OIL SPILL RESPONSE CONTINGENCY PLAN







REVOLUTIONARY GOVERNMENT OF ZANZIBAR
MINISTRY OF INFRASTRUCTURE, COMMUNICATIONS AND
TRANSPORTATION



ZANZIBAR MARINE OIL SPILL RESPONSE CONTINGENCY PLAN (ZMOSRCP)

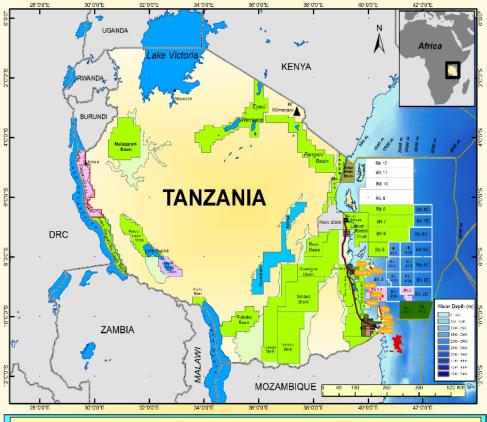
FOR THE IMPLEMENTATION OF IMO INSTRUMENTS



## UNITED REPUBLIC OF TANZANIA







# TANZANIA PETROLEUM DEVELOPMENT CORPORATION LICENSE STATUS - SEPTEMBER, 2017



# **KEY AUTHORITIES**

Who is/are the National Competent Authority or authorities?

**Tanzania Shipping Agency Corporation (TASAC) For Tanzania Zanzibar : Zanzibar Maritime Authority (ZMA)** 

• Who is the **Operational Authority** (if different) i.e. 24 hour contact for reporting/liaison?

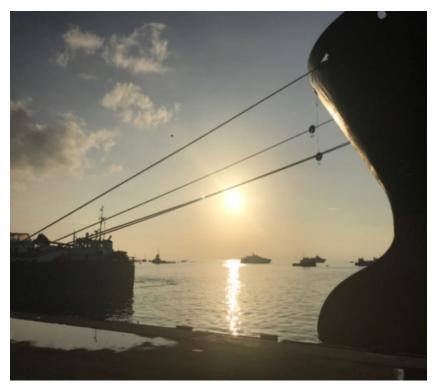
**Tanzania Shipping Agency Corporation (TASAC) For Tanzania Zanzibar : Zanzibar Maritime Authority (ZMA)** 

 Who is the authority which can request or render assistance from other countries?

Ministry of Foreign Affairs and East African Cooperation on behalf of the United Republic of Tanzania.

# NATIONAL OIL SPILL CONTINGENCY PLAN

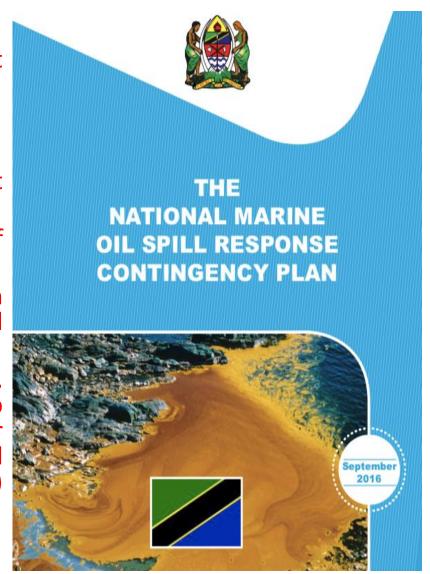
- Current status: Is it drafted / finalised / approved?
  - National Marine Oil Spill Response Contingency Plan (NMOSRCP) Approved in 2016. Currently under Revision.
  - Zanzibar Marine Oil Spill Response Contingency Plan (Operational Amendments to NMOSRCP) – (Draft).





# **Legislations and Instruments**

- The Petroleum Act (2015).
- Environmental Management Act (2004).
- Disaster Management Act (2015).
- Merchant Shipping Act (2003).
- Tanzanian Shipping Agencies Act No.14 (2017).
- Merchant Shipping (Prevention of Oil Pollution) Regulations, 2012.
- Merchant Shipping (Oil Pollution Preparedness, Response and Cooperation) Regulations, 2012.
- Merchant Shipping (Small Ships, Local Cargo Ship Safety, Small Ship Safety, Surveys and Inspections for vessels engaged in Local and Coastal Voyages, Inland Waters) Amendments Regulations, 2012



# Legislations (Tanzania Zanzibar)

- Maritime Transport Act (2006)
- Maritime Authority Act (2009) – Zanzibar.
- Oil and Gas (Upstream) Act (2016)
- Environmental Management Act (2015)
- Disaster Risk Reduction & Management Act (2015)



REVOLUTIONARY GOVERNMENT OF ZANZIBAR
MINISTRY OF INFRASTRUCTURE, COMMUNICATIONS AND TRANSPORTATION



#### OPERATIONAL AMENDMENT

TO ZANZIBAR MARINE OIL SPILL RESPONSE CONTINGENCY PLAN (ZMOSRCP)



#### Tanzania Shipping Agencies Corporation TASAC



TASAC has prepared...

Stakeholder Worksho...

The celebration of A...

TASAC has fully part...

STAKEHOLDERS MEETING ON TASAC TARIFFS.

WORLD MARITIME DAY 2019.

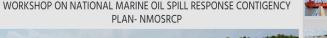
m 20/11/2019

**Events** 



**Latest News** News

Posted On: # 16/09/2019





TASAC successfully held a Stakeholder Workshop on the National Marine Oil Spill Contingency Plan (NMOSRCP). The training took place at Harbor Hall from 10-12 September 2019. TASAC has been responsible for preventing pollution caused by oil spills due to Oil and Water Pollution. The Agency in conjunction with other Government Institutions developed this Plan in line with the requirements of the International Charter which Tanzania ratified. The aim of the Workshop is to teach stakeholders to prepare for the fight against oil spill in the sea or lake when this situation arises. The workshop was also opened by the Guest of the Tanga Regional Executive Secretary, Zena Said, and attended by the Director General and TASAC staff. The training was conducted theoretically through presentation of a variety of topics and in a practical way.

## **Zanzibar Environmental Management Authority**



ZEMA





#### Welcome from the Director General!

Sheha Mjaja Juma, Director General of the Zanzibar Environment Management Authority



#### ZEMA and EIA processing

Read more about your options for having an environmental certificate for your planning



#### Waste handling in Zanzibar

Waste handling in Zanzibar is important. Read more about the Plastic Bags Banning Regulations of 2011 and more here.

# Zanzibar Maritime Authority Safe, Secure and Effective Maritime Transport For National Development



The Zanzibar Maritime Authority (ZMA), Monitors, Regulates and Coordinates activities in the Maritime Industry in Zanzibar



linister of State in the Vice President's Office -Union and Environment Hon. Mussa Zungu s, during the stakeholders meeting for the production, importation, distribution and

selling of tubing and non-woven products, held at LAPF-Millenium Tower - Makumbusho in Dar es-Salaam Region, 20/2/2020



Director General

Message



#### The United Republic of Tanzania

ZPRA V Updates V Resource Centre V Service Provider





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Welcome to the Petroleum Upstream Regulatory Authority





CONTACTS

## The United Republic of Tanzania

#### PRIME MINISTER'S OFFICE

**TENDERS** 

HOME ABOUT PMO NEWS SPEECHES BLOG **PUBLICATIONS** STATEMENTS do Comité dos Ministros de Tutela da Gestão de Riscos de Desastres

Makatibu Wakuu wenye dhamana ya maafa katika ukanda wa nchi wanachama wa Jumuiya ya Maendeleo Kusini mwa Afrika (SADC,wakiwa katika picha ya pamoja mara baada ya ufunguzi wa mkutano huo, leo tarehe 18, 2020, ambapo kauli mbiu ya mkutano huo ni "Ushiriki wa kisekta kwenye Kupunguza madhara ya maafa ni njia bora ya kujenga Uhimili katika ukanda wa nchi wanachama wa Jumuiya ya Maendeleo Kusini mwa Afrika (SADC)"

# IS THERE A NATIONAL INCIDENT RESPONSE ORGANIZATION AND MANAGEMENT SYSTEM?

- 2.5 The National 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 NMOSRCP are met in a timely and efficient manner.
- National Disaster Management Authority (Prime Minister's Office; Second Vice President's Office)
- Marine Oil Spill Response Coordinating Committee (NMOSCC)
- Maritime Rescue Coordination Center – TASAC.
- Levels of Responses (e.g Tiered, At Sea, Port, operational, tactical, strategic)
- Assessment, Monitoring, Media, Finance, Salvage, Disposal.



Figure 1. National Marine Pollution Control organizational set up.

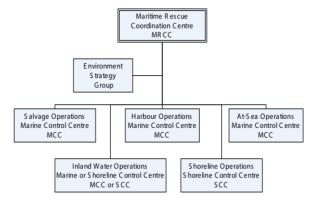
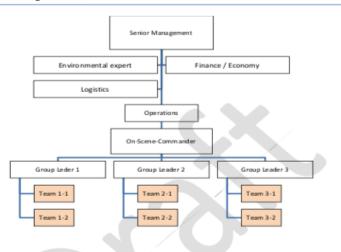


Figure 2. Response Centres

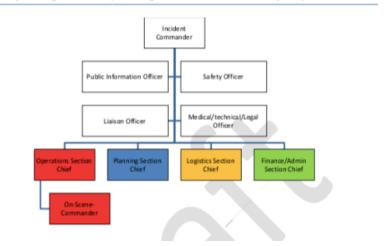
# LOCAL LEVEL RESPONSE CONFIGURATIONS

#### Response Organization #1





#### Response organization #2 (according to ICS - Incident Command System)



#### The Oil for Development programme in Tanzania

The programme agreement for phase II (2017-2020) was signed in July 2018.



. A regional training conducted by the Norwegian Coastal Administration in

conducting a Strategic Environmental Assessment (SEA) of the Pemba-Zanzibar

#### **Key facts**

Tanzarian implementing institutions: Ministry of Energy, Petroleum Upstream Regulatory Authority, Prime Minister's Office (Labour and Employment), Occupational Safety and Health Agency, Vice President's Office - Environmental Division, National Environment Management Council, Surface and Marine Transport Regulatory Authority, Ministry of Lands, Housing, Water and Energy (Zanzibar), Zanzibar Petroleum Regulatory Authority, Zanzibar Department of Environmental and Occupational Health, Zanzibar Environmental Management Authority, and Zanzibar Marilime Authority

# MARINE SPILL RISKS

- Is there recent information on maritime risks?
  - Shipping (tankers and general shipping)
  - Offshore exploration / production

## No recent marine spill incidents

- Has environmental sensitivity mapping been carried out?
  - Yes: TANSEA & ZANSEA SENSITIVITY ATLASES WERE DEVELOPED.
- Is there any identification/prioritization of vulnerable areas in the National Plan?
- TANSEA and ZANSEA Atlases have identified Environmentally Sensitive Areas to be prioritized in case of an oil spill incident.
- Also in the Draft Operational Amendments there are some identified sites specific for response measures (Norway OfD Program)

## Tanzania Sensitivity Atlas (TanSEA)

This is the first version of the GIS Based Sensitivity Mapping of the Tanzania Coastal zone - SAMAKI Consultants/IMS/ OBSCOM and is hosted by the University of Dar es Salaam. Institute of Marine Sciences which is the Tanzania National Oceanographic Data Centre (TzNODC))

#### **Objective**

The long term goals of the Tanzania Sensitivity Atlas (TanSEA) project are to establish a comprehensive and accurate coastal GIS data system for Tanzania, for oil spill contingency planning and research. It may also be used for education, as promotional material and for use by other institutions in Tanzania that require detailed geo-referenced data on the coastal zone. Exploration drilling for oil and gas along the Tanzania coast is occurring in waters between 300-3,000 m deep, 10-100 km offshore. Tanzania authorities require oil and gas exploration companies to have an oil spill contingency plan whilst conducting drilling offshore. Geographic Information System ("GIS") maps showing sensitivity of the coastline are a vital component in the development of oil spill contingency planning and management.

#### **Project Sponsors**







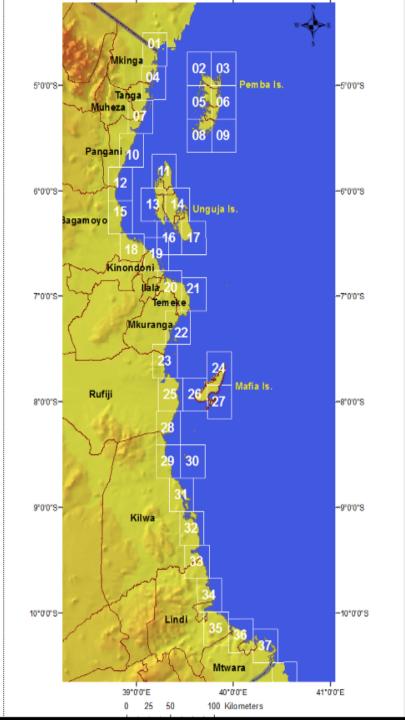
STATOIL **PETROBRAS** 

#### **Project By**









#### Map Index

- Moa, Tanga
- 2. Msuka, NW Pemba Island
- 3. Ras Kiuyu, NE Pemba Island
- 4. Tanga City
- 5. Misali Island, W Pemba Island
- Kojani Island and Chake Chake, E Pemba Island
- 7. Tongani to Pangani Bay
- 8. Mkoani, SW Pemba Island
- 9. Chambani, SE Pemba Island
- 10. Maziwe Island to Kipumbwi
- 11. Nungwi to Mkokotoni, N Unguja Island
- 12. Saadani
- Zanzibar Stone Town
- 14. Chwaka Bay, Unguja Island
- 15. Wami River to Ruvu Estuary
- 16. Uzi Island and Menai Bay, Unguja Island
- 17. Jambiani to Makunduchi, SE Unguja Island
- 18. Bagamoyo to Lazy Lagoon
- Ras Kiromoni and Dar es Salaam Marine Reserve.
- 20. Dar es Salaam and Sinda Island Marine Reserve
- 21. Ras Dege to Buyuni
- 22. Ras Pembamnazi to Kisiju
- 23. Koma Island to Simba Uranga
- 24. Northern Mafia Island
- 25. Nyamisati to Kiechuru
- Kilindoni and SW Mafia Island
- 27. Kilindoni and SE Mafia Island
- 28. Jaja to Somanga
- 29. Somanga Funga to Matandu River
- 30. Songo Songo and Fanjove Islands
- 31. Kilwa Kivinje to Kilwa Kisiwani
- 32. Songo Mnara to Roango Bay
- 33. Kiswere to Kuvu Bay
- 34. Machinga Bay to Lindi
- 35. Lindi to Mtoka River Estuary
- 36. Sudi Bay to Mtwara Port
- 37. Mtwara Harbour and Mnazi Bay

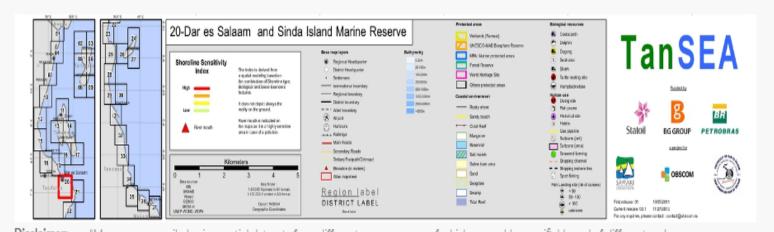
HOME

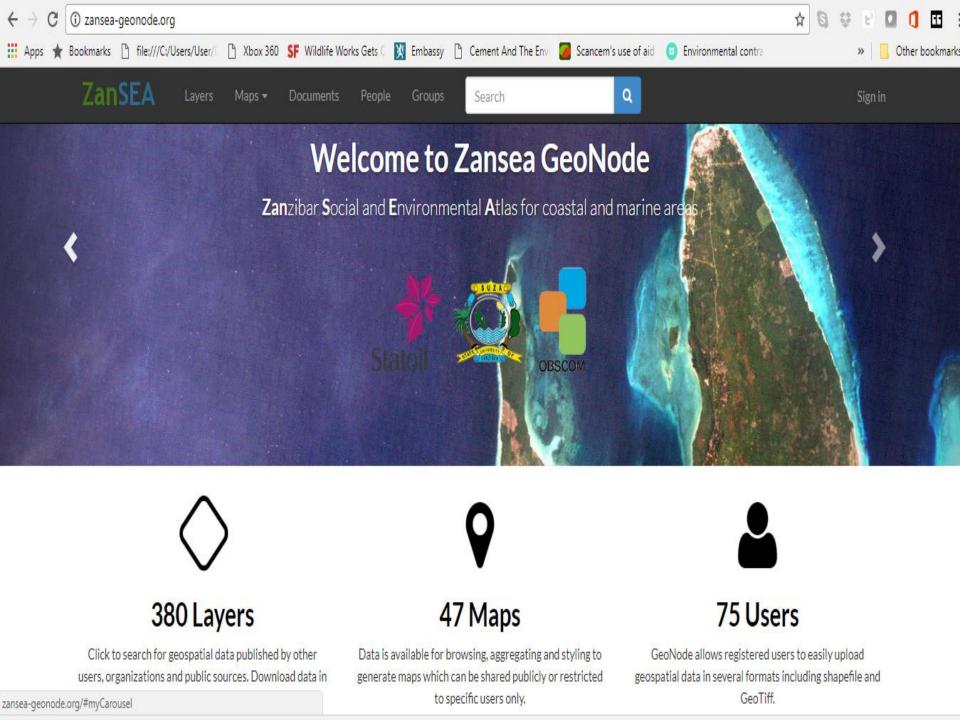
# THE ATLAS



Maps with about 50 layers of data, which contain:

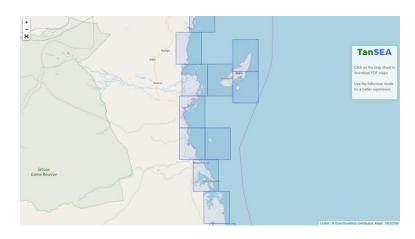
- Essential baseline information: administrative layers, hydrological information (rivers, ponds), roads, railway, populated places, land elevation
- · Oceanic information available: bathymetry
- · Oil and gas information: wells, pipelines
- Coastal resources: coastal types, biological and human-use resources
- · The Coastline Sensitivity Index Line
- · A master map sheet of the GIS layer to locate maps easily.





# ATLAS OF SENSITIVITY MAPS (TANSEA AND ZANSEA)









## **RESPONSE POLICY / STRATEGY**

- Are response strategies identified?
  - Are there in-situ burning or dispersant product approval and authorization for use regulations/policies?
  - NMOSRCP has "Counter Pollution Operation at Sea"
     Chapter Appendix E which authorizes <u>use of dispersants</u>.
  - Dispersants use is contained in Draft ZMOSRCP.
  - There is a need of having specific regulations/policies.
  - Is Shoreline Clean-up and Assessment Technique (SCAT) adopted?
  - Yes. E.g. Mafia Island Marine Park (OSRL, UK). Process of mainstreaming "SCAT" across Tanzania is ongoing. Training by OSRL and also by NCA.



# THE UNITED REPUBLIC OF TANZANIA MINISTRY OF WORKS, TRANSPORT AND COMMUNICATION TANZANIA SHIPPING AGENCIES CORPORATION TASAC



# SUMMARY OF SOME OF EXERCISES/TRAININGS/MEETINGS DONE UNDER NMOSRCP

<b>+</b>	UNDER NMOSRCP	
DATE	ACTIVITY	FACILITAT ORS/COORI NATORS
3 to 5March 2020	Regional Workshop on Cooperation in Preparedness and Response To Marine Spills In Zanzibar	IMO, Nairobi Convention and Indian Ocean Commission
04 -06 Dec. 2019	Training on Oil Pollution Preparedness, Response and Cooperation IMO Model Course - Level 3 (Strategic) Nairobi –Kenya	UNEP, and Norway's Oil for Development (OfD) and NovuMare
6- 9/11/201 8	Regional full-scale exercise on oil pollution shoreline assessment for eastern Africa Countries (Mainland Tanzania, Zanzibar, Kenya, Uganda, Somalia, Madagascar, Mauritius, Madagascar, Seychelles, and south Africa.	UN environment, Oil for development Program (OFD), International Tanker Owners Pollution Federation (ITOPF), NEMC and TASAC
12- 13/12/20 17	Table top on oil spill response and contingency planning held at Slip way hotel. Tanzania stakeholders attended	Coast Agency (NCA) under OFD programme, NEMC and SUMATRA
21- 23/11/20 17	Full Scale exercise in Zanzibar invited stakeholders from mainland Tanzania and Zanzibar attended	Norwegian Coast Agency (NCA) under

		OFD
		programme and ZMA
14-	Table top, Full Scale exercise, done at new Africa	Norwegian
16/10/20	hotel in Dar es salaam. invited stakeholders from	Coast Agency
15	mainland Tanzania and Zanzibar attended.	(NCA) under
	Nomination of focal persons on oil spill from various	OFD
	institutions done	programme,
		NEMC and
04-	Martine of Tourseis stababaldess on involvementation	SUMATRA
05/03/20	Meeting of Tanzania stakeholders on implementation	Norwegian
15	of National Marine Oil Spill Contingency Plan was conducted at Kilimanjaro Hotel	(NCA) under
15	conducted at Kinmanjaro Hoter	OFD under
		programme,
		NEMC and
		SUMATRA
27/10/20	Table top on oil spill response and contingency	Norwegian
14	planning held at Giraffe Ocean View way hotel.	Coast Agency
	Tanzania stakeholders attended	(NCA) under
		OFD
		programme,
	± ±	NEMC and
		SUMATRA
20-	Full Scale exercise was done at Dar port invited	
23/11/20	stakeholders from mainland Tanzania and Zanzibar	Commission
12	attended	and
10	T-11	SUMATRA
18-	Table top on oil spill response and contingency	Indian Ocean
20/7/201	planning held at port control tower board room.  Tanzania stakeholders attended	Commission
2	i anzania stakenoiders attended	and
		SUMATRA

# NATIONAL WASTE MANAGEMENT PLAN

Is there a national waste management plan?
 Not specific to Marine Oil Spill Response Plan.

The current OfD support activities for 2020 focus on development of petroleum related hazardous waste management.

# WILDLIFE RESPONSE PLAN

Is there a wildlife response plan?

There are resources related to Wildlife Response Plan, but there isn't a nationwide-adopted WRP.

There is a need to develop and adopt a nation-wide WRP to be implemented under NEMC and ZEMA regulations.

# RESPONSE RESOURCES

- What information is available on equipment?
  - Stockpile locations / ownership / availability
     Dar es Salaam Port/TASAC/ limted resources & time constraints
  - Types e.g. specialized (booms, skimmers, dispersant...)
     Limited resources & availability; Bay oriented and not open ocean oriented.
  - versus non-specialized (vacuum trucks, civil plant, hand tools...)
     Limited availability not dedicated to Oil Spill Response.
  - Supporting logistics / airports / ports

Available airports/port – limited resources

- What information is held on personnel?
  - Training records (TABLE TOP, FULL SCALE)
  - Workshops national, regional (UNEP, IMO, NCS, OfD, Sweden, etc.)









# TRANS-BOUNDARY ASPECTS

- National perspective on regional cooperation in preparedness and response to marine pollution incidents:
  - is it required? YES (Marine Pollution is transboundary)
  - in what ways would it be beneficial?
  - Sharing limited resources/experts/logistics
  - Enhance operationalization system within the WIO Region.
  - Promote a range of updated response and contingency systems.
  - Share knowledge, know-how, exchange, between varied levels of areas of expertise in the region.
  - Feed into SDG14 targets and Regional Ocean Governance priorities
- Are there specific customs and immigration procedures for facilitating trans-boundary support?

General customs and immigration procedures

# TRANS-BOUNDARY ASPECTS

- Do you have any bilateral agreements?
  - It is documented in NMOSRCP but not yet implemented.
- What is the envisaged mechanism for implementing the Agreement on the Regional Contingency Plan for Preparedness for and Response to major Marine Pollution Incidents in the Western Indian Ocean
- a pathway towards establishment and operationalization of a regional oil spill response center
- revitalize a draft regional plan to combat marine oil pollution.
- Funding mechanism on combating marine oil pollution in the WIO region

#### WHY HAS ENHANCED WIO REGIONAL COOPERATION NOT PROGRESSED?

- Sustainability in Financing an OSCRP Center
   It is proposed to have a center in South Africa and Madagascar. <u>But who will fund the Regional OSRCP Center</u>?
- Ship-based Oil Spill Preparedness.
   Existing oil spill preparedness at the national level is often left to shipping companies under existing MARPOL obligations.
- Monitoring mechanism (Maritime Domain Awareness)

Who commits to a region-wide monitoring mechanism? How will the monitoring be achieved under separate national priorities and protocols? Resources?

Prioritizing Maritime Security vs Marine Spill Preparedness

# WHAT ARE THE CHALLENGES WITHIN YOUR COUNTRY?

- Putting in place an integrated, inter-sectoral, multi-disciplinary approaches in response and management system.
- Ensuring availability of adequate human, physical, technological, infrastructure, financial and knowledge resources to establish multi-response levels to operationalize an OSCRP.
- Fast-Tracking Communications, Assessment, Monitoring, Observation, Data infrastructure, and surveillance capacities in our ocean.
- Putting in place an effective OSCP System with continuous M&E Data
- Oil Spill related Hazardous Wastes Management and Disposal Framework
- Inadequate Equipment at Tier 1; We need equipment for Tier 2; and to present at each substantive port.
- Due to limited equipment, full scale exercises are limited, therefore we have not prepared response team at each port.

# HOW MIGHT THESE CHALLENGES BE OVERCOME?

- Fast tracking operationalization of the WIO instrument.
- Mainstream Indian Ocean Maritime Safety and Security support and expertise (COI).
- Enhance inter-linkages between NCS and RECs on Disaster Preparedness Plans and Strategic Systems.
- Strengthen periodic Audit systems between IMO & partners and the WIO countries.
- Continue to collaborate with Norway OfD under bilateral and regional platform to enhance national and regional capacity.
- Assistance in acquiring equipment at each substantive port



# **THANK YOU**