REGIONAL OIL SPILL PREPAREDNESS IN EASTERN AFRICA AND THE WESTERN INDIAN OCEAN

Background Document



Prepared for the International Maritime Organization and the Nairobi Covnetnion Copyright 2020 United Nations Environment Programme / Nairobi Convention and the International Maritime Organization.

The contents of this report are those of the author only and do not necessarily reflect the views or policies of UNEP, the Nairobi Convention, International Maritime Organization, or contributory organizations. The designations employed and the presentations of material do not imply the expressions of any opinion whatsoever on the part of UNEP, IMO, or contributory organisations concerning the legal status of any country, territory, city area or its authorities, or concerning the delimitation of its frontiers or boundaries or the designation of its name, frontiers or boundaries. The mention of a commercial entity or product in this publication does not imply endorsement by UNEP, IMO, the Nairobi Convention Secretariat, or any of the Contracting Parties to the Nairobi Convention.

This publication may be reproduced in whole or in part and in any form for educational or nonprofit purposes without special permission from the copyright holder provided acknowledgement of the source is made. UNEP and IMO would appreciate receiving a copy of any publication that uses this publication as a source.

No use of this publication may be made for resale or for any other commercial purpose without prior permission in writing from the United Nations Environment Programme.

The SAPPHIRE project and Nairobi Convention Secretariat would also like to recognize the many partners and stakeholders who have contributed to this publication, particularly the International Maritime Organization, Nairobi Convention Contracting Parties, the United Nations Environment Programme, the United Nations Development Programme (www.undp.org) and the Global Environment Facility (www.thegef.org) for their support and financial contribution to this project.

IMO and UNEP/Nairobi Convention would also like to thank Mr. Peter Taylor, the consultant who prepared this report.

EXECUTIVE SUMMARY

This report supports the preparatory work for a regional workshop on cooperation in preparedness and response to marine spills in Eastern Africa and the Western Indian Ocean, held from 3 to 5 March 2020 in the Republic of Tanzania.

The context of current oil spill preparedness in the region is that significant work has been undertaken, primarily under the aegis of international projects and donor agency programmes. This has created a framework of national and regional contingency planning, which requires finalization and implementation in order to demonstrate robust and sustainable preparedness and response capability.

This report summarises previous oil spill preparedness work and provides a reference for future discussions. The regional workshop in March addressed the issue of the establishment of a regional centre or mechanism for spill preparedness and response, an issue which continues to be raised by Member States as a priority need for the region. In this connection, the workshop sought clarification and agreement on both the remit or mandate, as well as the likelihood of a sustained funding mechanism for the future establishment of such a centre or mechanism.

At the workshop in March, in order to ensure that previous work is referenced and not duplicated, it was recommended that discussions focus on:

- 1. The current status and signatories to the Agreement on the Regional Contingency Plan for Preparedness for and Response to major Marine Pollution Incidents in the Western Indian Ocean.
- 2. The current status of the Regional Coordination Centre (RCC) proposal originally developed in detail by SAMSA under the WIOMH project, including whether the documentation (Host Country Agreement, Terms of Reference, Work Programme and Budget) is still relevant.
- 3. Do the existing models for regional centres from other locations provide a viable option for the Western Indian Ocean?
- 4. What levels of financing are required and what sources of funding are feasible to support an RCC?
- 5. The potential for existing regional maritime security coordination centres, e.g. RCOC Seychelles, to integrate regional coordination activities for marine pollution.
- 6. Has national information relating to oil spill preparedness and response been provided to SEAIGNEP for inclusion in their regional master plan and can it be made available? Is there scope for regional initiatives such as SEAIGNEP to assume the role of enhancing cooperation for regional pollution preparedness and response.

Table of Contents

1		Introduction	4
1.1		Purpose	4
1.2		Structure	4
1.3		Coverage	5
2		Regional capability	5
3		Preparedness Framework and Capacity Building Projects	6
3.1		International framework	6
	3.1.1	OPRC Convention, 1990	7
	3.1.2	OPRC-HNS Protocol, 2000	7
	3.1.3	Oil spill compensation conventions	7
3.2		Regional framework and activities	7 7 8 8
	3.2.1	Nairobi Convention	8
	3.2.2	Western Indian Ocean Islands oil spill contingency planning (OSCP) project	9
	3.2.3	Western Indian Ocean Marine Highway project (2008-2012)	9
	3.2.4	WIO LME SAPPHIRE project (2017-2022)	12
	3.2.5	SEAIGNEP	13
	3.2.6	Norway's Oil for Development programme	13
	3.2.7	United States AFRICOM oil spill missions	14
4	353033	Regional Coordination	15
4.1		Regional oil spill contingency planning	15
	4.7.1	WIOMH project	15
	4.1.2	Regional Coordination Operational Centre (RCOC) Seychelles	16
4.2		Discussions concerning a regional centre / mechanism	16
	4.2.1	Western Indian Ocean Islands oil spill contingency planning project	16
	4.2.2	WIOMH Project	17
4.3		Functions of a Regional Centre	19
	4.3.1	Objective and functions of a regional centre	19
	4.3.2	Funding	19
5		Conclusions and Recommendations	20
		Appendix A	22
		Appendix B	24
		Appendix C	28
		Appendix D	29

Abbreviations

AFRICOM	U.S. Africa Command
CLC	Civil Liability Convention
CSWR	Centre for Sea Watch and Response (SAMSA)
CWRP	Country Wildlife Response Profile
EU	European Union
GEF	Global Environment Facility
GI WACAF	GI for Western, Central and Southern Africa
HCA	Host Country Agreement
IMO	International Maritime Organization
IOC	Indian Ocean Commission
IOPC	International Oil Pollution Compensation Fund
IPIECA	The global oil and gas industry association for
	advancing environmental and social performance
ITCP	Integrated Technical Co-operation Programme (IMO)
MASE	Promote Regional Maritime Security
NOSCP	National Oil Spill Contingency Plan
OfD	Oil for Development programme (Norway)
OPRC	International Convention on Oil Pollution Preparedness, Response and Cooperation
OPRC-HNS	Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances
OSCP	Oil Spill Contingency Planning
RAC	Regional Activity Centre
RCC	Regional Coordination Centre
RCU	Regional Coordination Unit (UN Environment Programme)
RCOC	Regional Coordination Operational Centre (Seychelles)
RMIF	Regional Maritime Information Fusion Centre (Madagascar)
ROSCP	Regional Oil Spill Contingency Plan
SAMSA	South African Maritime Safety Authority
SEAIGNEP	Southern and East African and Islands Regional Group for Safety of Navigation and Marine Environment Protection
SOPEP	Shipboard Oil Pollution Emergency Plan
UNEP	UN Environment Programme
WIOMH	Western Indian Ocean Marine Highway development and coastal and marine contamination prevention project

1.INTRODUCTION

1.1 Purpose

This report supports the preparatory work for a regional workshop on cooperation in preparedness and response to marine spills in East Africa and the Western Indian Ocean, held from 3 to 5 March 2020 in the Republic of Tanzania.

The three-day workshop brought together International Maritime Organization (IMO) and Nairobi Convention focal points responsible for oil spill preparedness and response issues in the East Africa and the Western Indian Ocean region to promote the implementation of the OPRC Convention and OPRC-HNS Protocol by strengthening regional cooperation in response to marine pollution incidents.

The workshop aimed to build on the progress previously made in the region with the implementation of a number of capacity building initiatives including two World Bank funded projects implemented by the Indian Ocean Commission (IOC) which aided the conclusion of a regional mutual assistance agreement for cooperation and response during a spill incident and the development of a draft regional plan to implement this agreement, coordinated by the countries party to the Nairobi Convention.

The workshop further planned to address the issue of the establishment of a regional centre or mechanism for spill preparedness and response, an issue which continues to be raised by Member States as a priority need for the region. In this connection, the workshop sought clarification and agreement on both the remit or mandate, as well as the likelihood of a sustained funding mechanism for the future establishment of such a centre or mechanism.

The workshop also examined the mandate and function of existing regional centres established within the framework of the Regional Maritime Security programme and to find potential synergies and or collaboration to address marine pollution from oil spill, if desired.

This report provided the focal points who attended the workshop with background documentation to assist in focusing the discussion, building on progress already made, avoiding repetition or duplication of effort, observing lessons learned and achieving a tangible outcome.

1.2 Structure

This report is structured to provide:

- A summary of the progress achieved through the previous capacity building projects and activities undertaken in the region including the 'Western Indian Ocean Marine Highway Development and Coastal and Marine Contamination Prevention Project (WIOMH)' and in this connection a historical background on decisions by the Nairobi Convention meetings of the Conference of Parties (COP) concerning regional cooperation in spill preparedness and response;
- A detailed overview of the process previously engaged for the establishment of a regional coordination centre/mechanism and the responses received from the interested countries in addition to the challenges encountered which thwarted the realisation and operationalization of a centre/mechanism such as legal implications and host country agreements;
- A review of the previously agreed functions of the regional cooperation centre/mechanism, and whether these
 are still viable taking into account developments in the region since the conclusion of the World Bank projects;
 and



Figure 1 Geographic coverage of this report

2. REGIONAL CAPABILITY

This report covers the Contracting Parties to the Nairobi Convention, as shown in Figure 1.

The capability needed to respond to a major marine pollution incident, exceeding national capacity or involving transboundary movement of pollution, depends on various inter-related factors:

- Scale and nature of the pollution;
- · Environmental and socio-economic resources threatened or affected;
- Efficiency of alert, notification and surveillance capabilities;
- National incident management and coordination systems;
- Logistical capacity to mobilize and deploy available pollution combatting equipment;
- Extent to which personnel are trained and exercised in their response and management roles; and
- Ability to facilitate external equipment or technical support from within the region or wider international community.

The absence of a functional marine pollution regional coordination centre means that there is limited regional capability to address several the above factors. An affected country could request international organizations to facilitate requests for assistance in an ad hoc manner, for example:

- IMO has a role to provide technical assistance and advice upon request, under Article 12(1)(d)(ii) of the OPRC Convention.
- UN Environment Programme, as Secretariat to the Nairobi Convention, may be able to facilitate assistance with Operational Measures as described in Article 7 and coordination through Institutional Arrangements as described in Article 9 of the Emergency Protocol.
- In the case of shipping-related incidents, the ship owner or their insurer are likely to mobilize technical expertise from ITOPF to the incident's site. ITOPF's technical advisors may be able to provide knowledge of and access to additional international support.
- Global experience has shown that organizations both governmental and private sector may offer assistance in the cases of major marine pollution. Some of these offers may be technically useful whilst others may not be relevant. The handling and coordination of unsolicited offers can become challenging and overwhelm a national administration that may already be stretched in dealing with the incident.

1.3 Coverage

This report covers the Contracting Parties to the Nairobi Convention, as shown in Figure 1.

3.1 International Frameworks

The ten countries covered by this study are members of the International Maritime Organization (IMO). There are various IMO conventions that deal directly with oil spill preparedness and response. The key conventions are described in the following sub-sections and their signing status is illustrated in Table 2.

Country	OPRC ³	OPRC- HNS ⁴	CPC 1992 ⁵	Fund 1992 ⁶	Bunker ⁷
Comoros	1	×	4	1	4
Kenya	1	×	×	1	~
France (Réunion)	4	1	4	1	1
Madagascar	×	1	1	1	1
Mauritius	4	4	×	1	~
Mozambique	1	×	1	1	×
Seychelles	~	×	× .	× -	1
Somalia	×	×	×	×	×
South Africa	~	×	1	1	×
Tanzania	1	×	1	1	×

Table 2: Status of key IMO Conventions (check = signed, x = not signed)

Signing IMO Conventions is an important step in building a national framework for marine pollution preparedness and response. However, the ratification or adoption of the Conventions within the national legal system, followed by implementing and sustaining the obligations contained within the Conventions, is critical to achieving the aims of each instrument.

3.1.1 OPRC Convention, 1990

The International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (OPRC Convention) is highly relevant when considering the establishment of national, sub-regional and/or regional oil spill preparedness. Parties to the OPRC Convention are required to establish a national system for dealing with oil pollution incidents, which shall include:

- The designation of competent national authority or authorities, national operational contact points for reporting and an authority entitled to request or render assistance.
- A national contingency plan for preparedness and response.

^[1] International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990

^[2] Protocol on Preparedness, Response and Co-operation to pollution Incidents by Hazardous and Noxious Substances, 2000

^[3] International Convention on Civil Liability for Oil Pollution Damage, 1992

^[4] International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1992

^[5] International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001

The national system is the bedrock upon which cooperation arrangements with other Parties are built. The Convention has explicit reference to co-operation through:

- The establishment of, either individually or through bilateral or multilateral cooperation:
 - a minimum level of pre-positioned oil spill combating equipment, commensurate with the risks, and
 - a programme of training and oil spill combating exercises and the development of detailed plans for dealing with pollution incidents.
- Provision of technical support and equipment, subject to capabilities, when requested by other Parties in the event of a pollution emergency; provision is made for the reimbursement of any assistance provided.
- Promotion of bilateral or multilateral cooperation agreements for oil pollution preparedness and response.

Under the Convention, ships are required to carry a shipboard oil pollution emergency plan (SOPEP), based on IMO recommended format. Operators of ports, oil handling facilities and offshore units under the jurisdiction of Parties are also required to have oil pollution emergency plans or similar arrangements, which must be coordinated with national systems for responding promptly and effectively to oil pollution incidents. The co-operation of the oil and shipping industries, port authorities and other relevant entities is called for in developing national capability.

3.1.2 OPRC-HNS Protocol, 2000

The Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances, 2000 (OPRC-HNS Protocol) follows the principles of the OPRC Convention. The OPRC-HNS Protocol is open to those countries that have acceded to the OPRC Convention. It ensures that Parties develop preparedness and response regimes, like those already in existence for oil, for incidents involving hazardous and noxious substances.

3.1.3 Oil spill compensation conventions

Tankers: Three international instruments exist to provide compensation in the event of oil spills from tankers:

- 1992 Protocol to the International Convention on Civil Liability for Oil Pollution Damage (CLC 1992)
- 1992 Protocol to the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (Fund 1992)
- 2003 International Oil Pollution Compensation Supplementary Fund (Supplementary Fund)

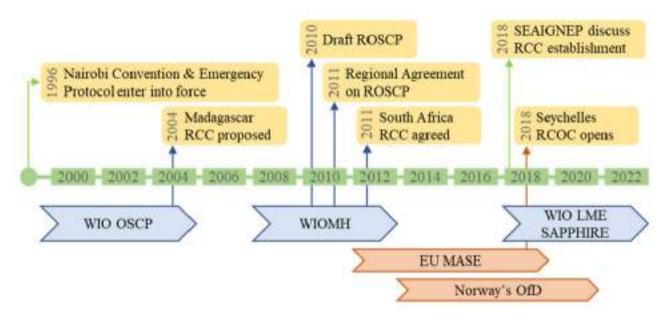
This international compensation regime for oil tankers has proved highly successful and when ratified by a State, the conventions provide a tiered system of compensation. The owner of the tanker that causes the spill is legally liable for the payment of compensation under the first tier (CLC 1992); oil receivers in Fund-Member States contribute to the second tier once the tanker owner's limit of liability has been exceeded.

General shipping: The International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001 (Bunker 2001) was formulated to ensure that adequate, prompt, and effective compensation is available to persons who suffer damage caused by spills of oil, when carried as fuel in ships' bunkers.



3.2 Regional framework and activities

There have been various activities and outcomes with bearing on the development of a regional framework for preparedness and response. Key projects and outcomes are described in this section and summarized on a timeline in Figure 2.





3.2.1 Nairobi Convention

The Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean was signed in 1985 and came into force in 1996 (see Appendix E). The Convention was amended in April 2010. The Contracting Parties are Comoros, France (Réunion), Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia, Tanzania and the Republic of South Africa, as shown in Figure 1.

The Convention was developed under the UN Environment Programme (UNEP)'s Regional Seas Programme and UNEP provides the Convention's Secretariat function. It provides a mechanism for regional cooperation, coordination and collaborative actions, aimed towards solving interlinked problems of the coastal and marine environment including critical national and trans-boundary issues. The Convention offers a regional legal framework and coordinates the efforts of the member States to plan and develop programmes that strengthen their capacity to protect, manage and develop their coastal and marine environment sustainably.

Article 12 of the amended Convention requires that Parties shall co-operate to combat pollution in cases of emergency. It calls for the development of contingency plans and notification procedures. Further to this Article, a Protocol Concerning Co-operation in Combating Marine Pollution in Cases of Emergency in the Eastern African Region (see appendix E) to the Convention entered into force in 1996.

This Emergency Protocol largely reflects and is complementary to the OPRC Convention, with further detail on cooperation in case of marine pollution incidents and the establishment of contingency plans and procedures conducive to effective response within the region, based on mutual support from national systems.

Implementation of the Emergency Protocol is not complete. Regional projects under the Global Environment Facility (GEF) have contributed to assisting the countries meet the Protocol's requirements, as described in following sub-sections.

Conference of Parties Decisions

The Contracting Parties meet periodically and agree decisions relating to the Convention and its Protocols. There have been nine meetings (Conference of Parties – COPs) to date. Two decisions make specific reference to oil spills:

COP 4 (July 2004)

<u>Preamble</u>: Further noting the Ministerial decision of the member countries of the Indian Ocean Commission (IOC) of their meeting in October 2003 in the Comoros to set up a Regional Oil Spills Coordination Centre in Madagascar

<u>CP 4/6:</u> Agree to support the Regional Oil Spills Coordination Centre in Madagascar

COP 9 (August 2018)

<u>CP 9/8:</u> This relates to environmental management for oil and gas development and requests Contracting Parties to support the regional oil and gas capacity-building programme and to request the secretariat, in collaboration with partners, to implement the this programme, with specific reference to resource and data management, environmental and social safeguards and management, safety management, revenue management, and technology development and research; Part of the stated justification for this programme is that there is inadequate technical capacity to effectively handle disasters and risk associated with oil spills.

3.2.2 Western Indian Ocean Islands oil spill contingency planning (OSCP) project

The GEF provided financing for the development of national and regional oil spill contingency planning activities in Comoros, Madagascar, Mauritius and Seychelles during 1999-2004. This project was implemented through the Indian Ocean Commission (IOC) with support from other organizations, including IMO, IPIECA and the governments of South Africa and France (Réunion). This project's design was utilized in the subsequent GEF Western Indian Ocean Marine Highway project (see following). The Parties to the Nairobi Convention viewed both these projects as a means to realising their obligations under the Emergency Protocol.

The initial establishment of the regional centre in Madagascar under this project is discussed in Section 4.2.1.

3.2.3 Western Indian Ocean Marine Highway project (2008-2012)

The Western Indian Ocean Marine Highway (WIOMH) development and coastal and marine contamination prevention project was a US\$ multi-million project financed through the GEF and covered the Parties to the Nairobi Convention excluding Somalia and France (Réunion), see Figure 3.

The building of national and regional oil spill response capacity under this project (named 'Component C') was implemented through the Indian Ocean Commission (IOC). The targeted key outputs of Component C were:

- Implementation of full, tested and operational National Oil Spill Contingency Plans (NOSCPs).
- Implementation of a regional oil spill contingency plan.
- Capacity building through training courses.

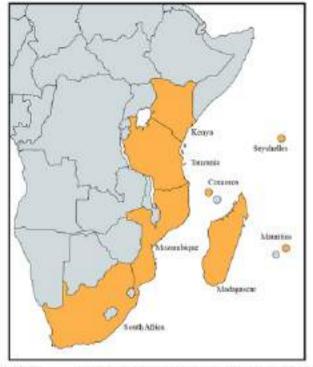


Figure 3 Recipient countries within the WIOMH project

This Emergency Protocol largely reflects and is complementary to the OPRC Convention, with further detail on cooperation in case of marine pollution incidents and the establishment of contingency plans and procedures conducive to effective response within the region, based on mutual support from national systems.

Implementation of the Emergency Protocol is not complete. Regional projects under the Global Environment Facility (GEF) have contributed to assisting the countries meet the Protocol's requirements, as described in following sub-sections.

The status of regional oil spill contingency planning and establishment of a Regional Coordination Centre is discussed in Section 4.

The project's Post Completion Report (December 2012) covering the oil spill preparedness components presents

key recommendations and proposed actions. These are based on the progress made under the project, the gaps remaining and need for sustainability. They are summarised in Appendix A; the specific recommendations relating to regional cooperation were:

RCC structure and management

- The sustainability of the results of the project should be ensured by regularly organizing meetings of the competent national authorities of the countries concerned, at least once every two years, possibly back-to-back with the meetings of UNEP/ Nairobi Convention Regional Coordination Unit (RCU).
- The RCC budget allocation by the countries and work planning shall be revised and adopted regionally to sustain the efforts engaged in the project and keep the dynamic developed.
- Adapted manpower and revision of missions shall be adopted regionally to address regional key issues regarding supporting national NOSCP revisions and trainings.

Regional activities on oil spill and countries' support

- Since the adoption of the Regional Contingency Plan, there have not been any opportunities to test it in a real spill situation that would require joint intervention by two or more countries concerned. The possibility of organizing a large scale spill simulation exercise somewhere in the region, and the possibility of ensuring required financial resources for such an exercise, should be explored with the World Bank / GEF.
- Periodic updating through national and regional workshops should ease data updating in the weakest countries on ESA maps and improve harmonization of ESA maps.
- Integrate the various recommendations of other components on activities that could be taken in charge by the RCC.

The WIOMH project was a significant effort to develop oil spill preparedness and response within the region. The project's final report presents a review of the success and challenges during implementation. Key areas of concern highlighted, include the following (italicized text quoted from WIOMH Implementation Completion and Results Report, June 2013). This included specific comments on regional cooperation.

Awareness and ownership: "The involvement of the eight countries in the preparation phase of this regional project was uneven. Some technical agencies and focal points complained that they were not aware of the project until after its effectiveness, reflecting in part the long gestation and the change in responsible personnel over that period, and that were not given any means to influence its scope. The project was often endorsed at the government level, without in some cases adequate consultation at a technical level. These points led to a deviation between the project and needs in some cases, also undermining ownership and sustainability, and causing delay."

Engagement: "Institutional responsibilities do not appear to have been fully considered in designing the implementation arrangements. The delineation of responsibilities for project activities between the maritime and environmental authorities in the participating countries does not appear to have been given sufficient attention during the preparation of the project. Initially, the defined implementation arrangements required the nomination of a unique focal point per country, generally in the maritime sector, under the transport administration. Unfortunately, this led to a downgrading of focus on the environmental activities in the project, and in some cases, engendered tension between the respective line Ministries. This prompted the designation of an additional focal point during implementation, most often in the Ministry of the Environment, to advance the environmental activities and resolve communication issues."

Sustainability: "Despite the concrete achievements in creating and/or updating the NOSCPs, these plans are not static and sustaining their usefulness requires the appropriate resources to be maintained in a state of readiness, which involves regular training, including simulations of risk events with all stakeholders and ideally once per year, and adequate resources. Currently, there is concern that the current response capacity will be sustained in all the participating countries, particularly where ownership and commitment was found to be lagging during implementation. Some countries took the opportunity to update parts of their maritime law or to launch a national effort on disaster preparedness, but others struggled to affirm the capacity of the national competent authority to take the necessary lead in the response. The development of ESA maps is constrained by the fact that several stakeholders are waiting for compensation for spending time on the activity or sharing the geographic data."

Regional cooperation: "At the end of the project, most stakeholders were explicit in the need to organize a regional response capacity to combat major oil spills; at the same time they expressed concern that the agreements are, for the moment, mainly theoretical and should be put into practice. Unfortunately, there has been no opportunity to test the ROSCP and the evidence from the only event that occurred during the project major enough to require regional cooperation was inconclusive. Furthermore, the issue of compatibility between oil spill equipment of the countries of the region was not addressed in the project; with existing incompatibilities forming a technical barrier to cooperation during major spills.

The participating countries have not been consistently responsive during the implementation of the regional cooperation which led to delay. In this context and based on the experience of a similar regional centre in the Mediterranean, SAMSA decided not to ask for financial contributions from the other countries to operate the RCC. This decision is both pragmatic, but also reflects the commitment of South Africa and SAMSA in particular towards the RCC.

It should be noted that this is the second attempt to establish a regional centre on oil spill: the previous GEF project established such a centre in Madagascar, which is no longer functioning. Whether the lessons from the previous experience were reflected in the design of the new is unclear, but the commitment of South Africa and SAMSA will undoubtedly ensure sustainability in some form."

3.2.4 SAPPHIRE Project (2017-2023)

The GEF-funded Western Indian Ocean Large Marine Ecosystems Strategic Action Programme Policy Harmonisation and Institutional Reforms (WIO LME SAPPHIRE) builds on the previous work completed under the UNDP-supported, GEF-financed Agulhas and Somali Current Large Marine Ecosystems (ASCLME) Project in close collaboration with a number of partners. The ASCLME Project delivered the intended regional Transboundary Diagnostic Analysis (TDA) and ministerially endorsed Strategic Action Programme (SAP) for the western Indian Ocean LMEs as well as individual Marine Ecosystem Diagnostic Analyses (MEDAs) for each participating country.

Financed by the GEF and implemented by the United Nations Development Programme (UNDP), the project partners are nine of the ten members States of the Nairobi Convention (France is not included) The project is executed by the Nairobi Convention Secretariat which is hosted by the UN Environment Programme (UNEP).

Deliverable 3.1.5 under 'Component 3: Stress Reduction through Private Sector/Industry Commitment to transformations in their operations and management practices' states:

Address the potential impacts of the growing oil and gas development in the region through... (B.) Negotiate the identification and implementation of a Regional Response Centre, which can effectively and swiftly coordinate regional responses to emergencies, with a focus on shipping (Search and Rescue) and response to oil and gas and other marine pollution incidents likely to show effects at transboundary scale. National plans support this regional activity.

Proposed activities under this Deliverable include:

- SAPPHIRE to provide support and assistance to countries, and to collaborate with other regional partners (e.g. WWF, Nairobi Convention, etc.) on undertaking a regional SEA to be conducted for the entire oil and gas development region (strong focus on the northern Mozambique Channel). This would help to guide sensitivity mapping to support any necessary emergency response programmes. Countries may also require assistance in the development and implementation of related supportive national legislation.
- Identify a mechanism or forum that can facilitate inter-country dialogue and decision making with respect to
 impacts from the oil and gas industry in the region. This could be a function of specialised working groups
 under the Scientific and Technical Advisory Panel and/or Regional Policy Steering Committee. This process
 will be closely linked to the partnership with the World Ocean Council.
- Negotiate a partnership between appropriate hazardous spill contingency planning and response organisations (e.g. IPIECA, ITOPF, etc.), regional and international agencies engaged in the management of conventions and legislation (e.g. IMO, Nairobi Convention, etc.) and the SAP implementing countries.
- Regional Response Centre (RRC) negotiated and established through appropriate partnerships with existing mandated institutions and agencies with access to sufficient equipment (including ships and aircraft) and chemical stores to respond to threats in time. Due consideration to be given here to previous initiatives and their success and long-term durability in light of concerns over the sustainability of such response measures.

The reference to a regional response centre in the final bullet above, in contrast to a regional coordination centre, is noteworthy. Existing regional centres around the world typically do not directly own or provide response capability or equipment for pollution combatting activities.

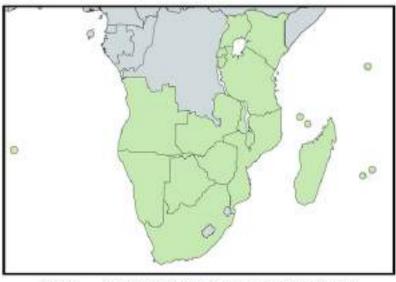
3.2.5 SEAIGNEP

The Southern and East African and Islands Regional Group for Safety of Navigation and Marine Environment Protection (SEAIGNEP) is a voluntary membership group working under a Memorandum of Agreement (MoA). The geographic area covered by SEAIGNEP includes nine of the ten Nairobi Convention member States (Somalia is not included). It extends to the west and incorporates non-maritime countries, as shown in Figure 4.

SEAIGNEP's MoA identifies the following functions:

- Discussion forum on matters of mutual interest related to safety of navigation and marine environment protection.
- Act as a communication facilitator between the member states of the Group and International Organisations.
- Exert regional influence to improve Safety of Navigation and Marine Environment Protection, which also includes coordinated capacity-building measures.
- Exert influence on behalf of member states on International and National Funding Organisations to promote and improve Safety of Navigation and Marine Environment Protection and for a state to co-operate in Regional efforts.
- Facilitate co-ordination and sharing of aids to navigation assets and services. To ensure co-operation in improving the provision and operation of aids to navigation, pooling of resources and sharing of expertise.
- Encourage the exchange of information and technical support.
- Encourage and organise co-operation in training and the attainment of the required standards [of competence], to include skills development and research.
- Promote awareness of the need to establish internationally agreed aids to navigation and maritime safety information services
- Following on the objectives of the WIOMH Project, prepare and participate in sustaining development of national and regional plans for the improvement of Safety of Navigation and Marine Environment Protection in the region.

At its fifth meeting held in February 2018, SEAIGNEP members discussed the establishment of the Regional Coordination Centre and the finalisation of the Regional Oil Spill Contingency Plan. In early January 2020, SAMSA (in its role of SEAIGNEP Secretariat) circulated a request to members for completion of details contained in the SEAIGNEP 'regional master plan', with a deadline for replies given as 16 March 2020. This plan included a new section on oil pollution preparedness and response, based on the decision at the fifth meeting relating to regional cooperation in case of oil spills.



The section in the master plan addresses detailed information concerning national preparedness and capability. This information would be highly relevant to regional cooperation and is reproduced as Appendix B.

3.2.6 Norway's Oil for Development programme The Oil for Development (OfD) programme was initiated by the Norwegian Government in 2005. The aim of the OfD programme is to reduce poverty by promoting economically, environmentally and socially responsible management of petroleum resources.

Figure 4 SEAIGNEP's geographic area (green shaded countries)

The OfD Secretariat resides in Norad (the Norwegian Agency for Development Cooperation). The main approach in the OfD programme is capacity development through institutional collaboration. Norwegian public institutions enter into long-term agreements with public institutions in a partner country. The key implementing parties are the Norwegian Petroleum Directorate, Norwegian Environment Agency, Petroleum Safety Authority Norway, the Norwegian Oil Taxation Office and the Norwegian Coastal Administration.

A Regional Seminar for East Africa "Sharing Experiences – Safety and Oil Spill Preparedness and Response" was organized under OfD during 9-12 September 2013 in Bagamoyo, Tanzania. A further Regional Workshop on Managing Emergency Preparedness and Response in the Oil and Gas Sector was co-organized with the Nairobi Convention Secretariat and UNEP and held during 17-20 October 2017 in Zanzibar, Tanzania. This latter workshop resulted in a series of conclusions, which are reproduced in full in Appendix C. Specific conclusions relating to strengthening regional cooperation were:

- Need to strengthen and solidify national oil spill contingency plans first, and incorporate regional cooperation in national oil spill contingency plans
- Harmonize the national oil spill contingency plans with existing regional contingency plans;
- national plan to provide the basis for regional cooperation (not vice-versa)
- Review existing regional coordination centres and learn from their lessons and identify how to leverage on their work
- Establish framework for regional cooperation on oil spill emergency preparedness/response, e.g. consolidating available data; trainings; protocols for communication, reporting and requesting for assistance; responding to Tier 2 and Tier 3 emergencies
- Reactivate the regional coordination centre in South Africa need for dialogue
- Operationalize the Protocol for Marine Pollution of Nairobi Convention
- IOC Disaster Risk Reduction Platform leverage this platform and incorporate oil and gas issues.

Norwegian Coastal Administration, as a part of the OfD programme, have together with UNEP facilitated four workshops in the East African region during 2018 and 2019. Two more workshops are planned in 2020. These activities are all under the topic of Oil Spill Preparedness and Response.

3.2.7 United States AFRICOM oil spill missions

The U. S. African Command (AFRICOM), part of the United States Department of Defense, has assisted in developing environmental response and awareness programmes for maritime oil spills since 2008. This programme is delivered through national missions, primarily comprising multi-day oil spill response courses attended by an assortment of environmental ministries, tourism ministries, military officials, health ministries, local officials from the host venue, as well as industry representatives. The missions have been delivered using a multi-disciplinary team of the AFRICOM, U.S. Coast Guard, National Oceanic and Atmospheric Administration, U.S. Navy and other personnel.

Reported missions in East Africa have included Kenya (2012), Mozambique (2008 and 2015) and Tanzania (2012).



4.1 Regional oil spill contingency planning

4.1.1 WIOMH project

The WIOMH project committed significant effort to the issue of regional co-operation; this formed one of the key pillars of the targeted outcomes. It is reported that the following outputs and actions were completed:

- Draft Regional Contingency Plan for Preparedness for and Response to Major Marine Pollution Incidents in the Western Indian Ocean (the 'ROSCP').
- Host Country Agreement (HCA) for the establishment and operation of the Regional Coordination Centre (RCC) for preparedness and response to oil and hazardous and noxious substances pollution in the Western Indian Ocean region, including a Terms of Reference.
- Detailed description of human and materials resources, operational plan and budget for an RCC.

Various workshops and meetings were held throughout the project, including the involvement of IMO, IOC, UNEP and the World Bank. This culminated in the signing, by seven of the eight WIOMH project recipient countries, of the Regional Agreement on Co-operation on the Regional Oil Spill Contingency Plan, which entered into force in November 2011. This regional agreement is linked to the Nairobi Convention and its Emergency Protocol; it is reproduced in Appendix D. The agreement's purpose is to provide a strengthened basis for the ROSCP. Particular emphasis is placed on alignment to the OPRC Convention.

A draft ROSCP (version 3, dated 26 July 2010) is based on the content and format promoted by IMO and used in several other regions. The draft is available in Appendix E. The document sets out its general objective as follows: "to organize a prompt and effective response to accidental marine pollution affecting or likely to affect the area of responsibility and/or the area of interest of one or more of the countries concerned and to facilitate the co-operation in the field of marine pollution preparedness and response."

The ROSCP identifies a series of specific objectives relating to:

- the implementation of operational procedures for cooperation;
- areas of responsibility;
- principles of command and control;
- types of assistance which might be provided; and
- financial conditions and administrative modalities related to cooperative actions.

Through its implementation, the ROSCP intends the following actions to be taken:

- developing appropriate preparedness measures and effective systems for detecting and reporting pollution incidents;
- developing and implementing a programme of training courses and practical exercises for different levels of personnel; and
- developing procedures to increase regional co-operation.

As with all regional cooperation mechanisms around the world, the Parties agree that response operations in case of a marine pollution incident, which occurs within the area of responsibility of one of the Parties, will be conducted in accordance with provisions of the National Contingency Plan of the Party concerned.

The body of the ROSCP contains the framework, terminology and recommended procedures to meet the stated objectives. There are ten appendices to the Plan which supporting the implementation, either through provision of technical information or through information concerning national arrangements, to be provided by each country. It is reported that the ROSCP was adopted in October 2010, but information was still being sought to populate the technical appendices with country-level data.

4.1.2 Regional Coordination Operational Centre (RCOC) Seychelles

RCOC Seychelles is a component of the European Union financed and coordinated programme to Promote Regional Maritime Security (MASE) in Eastern and Southern Africa and Indian Ocean Region. Two centres under the lead of the Indian Ocean Commission (IOC); the Regional Maritime Information Fusion Centre (RMIF) Madagascar and RCOC Seychelles came into being following the signing of two regional agreements by five countries (Djibouti, Comoros, Madagascar, Mauritius and Seychelles) in April 2018.

During 2019, the countries participated in a pilot exercise to respond to a possible case of maritime pollution. This was the first example of regional cooperation under the MASE agreements and helped to understand also the variety that can be included into the maritime threats. There appears to be potential for the RCOC Seychelles to develop a role in coordination of pollution preparedness and response in the wider regional context.

4.2 Discussions concerning a regional centre / mechanism

The Emergency Protocol to the Nairobi Convention Article 9 (Institutional Arrangements) designates the Organization (UN Environment Programme, being the host of the Convention Secretariat), in cooperation with IMO, to carry out various functions (see Appendix E). Several of these functions are typically undertaken by a regional centre or mechanism.

The previously mentioned projects in the region have proposed a regional coordination centre, effectively addressing most of the coordination functions described in Article 9 of the Emergency Protocol. The draft ROSCP described in Section 4.1.1 above includes a Section (2.8) on a Regional Coordination Centre, which states:

"The Regional Coordination Centre, established by the Decision of the Parties in [......] shall perform the role of the Secretariat of the Plan.

The Centre shall be responsible inter alia for maintaining the Plan, keeping it up to date at all times, and revising it as necessary"

Furthermore, the Agreement on the Regional Contingency Plan for Preparedness for and Response to major Marine Pollution Incidents in the Western Indian Ocean (see Appendix D) states in its preamble:

"Acknowledging the positive role that a Regional Coordination Centre (hereinafter referred to as RCC) shall play in promoting regional co-operation in preparedness for and response to marine pollution incidents in the Western Indian Ocean region..."

4.2.1 Western Indian Ocean Islands oil spill contingency planning project

'Component 5, Regional institutional strengthening' is addressed in the project's Implementation Completion Report as follows:

"Outputs of this component are satisfactory. A regional plan to coordinate countries' response to an oil spill has been prepared and by the time the project closed had been tested twice through joint exercises. The regional plan has been significantly strengthened by drawing on the expertise of the industry and government of South Africa in responding to oil spills for its preparation. Some details of the cooperative agreements have still to be fully articulated, such as the arrangements for clearing equipment through customs. The withdrawal of Seychelles offer to host the regional coordination centre on the grounds that its distant location from the other islands would make coordination of regional activities difficult led to a delay of nearly two years in establishing the centre. The centre was finally established in Madagascar in early 2004. Staff have been appointed, and equipment to operate the centre has been procured. However, at the time the project closed a suitable office for the centre was being identified. French Cooperation has agreed to finance the initial start-up costs of the centre and operational costs for its first years of operation.

The rationale for choosing Madagascar to host the regional coordination centre is not clear. Some stakeholders have expressed concern that Madagascar does not have sufficient capacity to effectively coordinate countries' response to an oil spill and believe that either Mauritius or Réunion would be more suitable locations for the centre. Some observers argue that the regional coordination centre with a full-time staff is not necessary. Instead the responsibilities of a regional coordinator could be added to those of a national coordinator."

It is presumed that in the context of the project, the regional response centre referred to Island States only i.e. not the East African mainland countries. The WIOMH project reported that the Madagascar centre was no longer functioning by 2010.

4.2.2 WIOMH Project

As reported in the project's Post-Completion report in 2012, a 'Regional Workshop on the Regional Oil Spill Contingency Plan and the setting up of a Regional Coordination Centre (RCC)', held in Ebene, Mauritius, 26-28 October 2010 achieved the following:

- Approval of a "road map" for the completion of the remaining activities envisaged under the Component 2 of the project; and in particular for the selection of the host country for the Regional Coordination Centre and for the subsequent setting up of the Centre.
- Kenya, Madagascar and Mozambique expressed their interest in hosting the RCC.
- Preparation (November 2010) of the following additional documents requested at the Workshop by the representatives of the countries concerned:
 - Revised Terms of Reference
 - (ToR) for the RCC, reflecting discussions at the Workshop;
 - Detailed description of human and material resources considered necessary for the RCC;
 - A proposal of the work plan of the RCC for biennium 2011-2012;
 - A budget estimate for 2011 for the RCC; and
 - An estimate of financial contributions of the Western Indian Ocean countries required for the functioning of the RCC and for the implementation of the proposed work plan.

At the Project Steering Committee (PSC) meeting held in Johannesburg, South Africa, in July 2011, Kenya and South Africa announced their intention to offer to host the RCC. The PSC Meeting also decided to modify the originally planned procedure for the selection of the host country, namely that the RCC Evaluation Committee will be chaired by IOC and comprise IMO, REMPEC (Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea), UNEP/RCU and The World Bank. The Meeting also approved a set of the evaluation criteria to be used by the evaluators.

By the end of July 2011. France (Réunion), Kenya, Madagascar and South Africa officially informed IOC of their offers to host the RCC and submitted all required documentation. Offers were evaluated by the Evaluation Committee (August 2011) and South Africa selected to host the RCC. IOC subsequently informed all parties of this decision and received no complaints concerning the selected host country.

South African Maritime Safety Authority (SAMSA) undertook (autumn 2011) all necessary works at its Centre for Sea Watch and Response (CSWR) as the proposed host of the RCC, in order to make the operation of RCC possible by the beginning of 2012.

A Special PSC Meeting was convened in Cape Town, South Africa on 13-14 December 2011 and, during the same mission, technical assistance was provided to the Centre for Sea Watch and Response (CSWR) of SAMSA. The relevant results of the Meeting were:

- Adoption of the programme of activities, budget, estimated countries' annual contributions and the operational plan of RCC;
- Adoption of the text of the "Host Country Agreement for the establishment and operation of the Regional Coordination Centre for Preparedness and Response to Oil, Hazardous and Noxious Substances Pollution in the Western Indian Ocean region ("the Centre")", to be hosted by SAMSA in South Africa;
- Signing by heads of all national delegations of the official Conclusions of the Meeting, inter alia confirming their willingness to establish the RCC in Cape Town and pledging to sign the Host Country Agreement as soon as South Africa does so; and
- Including into the budget of the Project the costs of activities envisaged in the work programme of RCC for 2012.

Prior to and after the Special PSC Meeting, the WIOMH Consultant visited the premises allocated to the RCC (CSWR/SAMSA), had several meetings with the Management of CSWR/SAMSA and verified that CSWR complied with all requirements regarding personnel, office space and equipment, communications equipment and information technology necessary for the proper functioning of the RCC, and that the major part of activities included in the work plan for 2012/13 could be carried out by the CSWR personnel designated to work at RCC. The WIOMH Implementation Completion and Results report stated that "SAMSA decided not to ask for financial contributions from the other countries to operate the RCC. This decision is both pragmatic, but also reflects the commitment of South Africa and SAMSA in particular towards the RCC."

Appendix E includes various key RCC documentation that was presented and approved at the Special PSC Meeting held in December 2011. The following provides a summary:

Host Country Agreement : The HCA contains 10 Article and three Annexes. The main Articles are relatively brief and address the key aspects of how the RCC would be established, located, managed and financed. SAMSA is explicitly identified as the host organization. A Steering Committee is created to provide RCC's direction and guidance.

Terms of Reference (ToR): The ToR are Annex I to the HCA and form part of it. They clarify the establishment and management of the RCC and describe a detailed set of objectives and functions. The preamble acknowledges Article 9 of the Nairobi convention's Emergency Protocol and its listing of functions relating to administrative arrangements – thereby linking these to proposed functions of the RCC. For the RCC, there are 8 general functions, 17 functions concerning preparedness and response and 3 functions concerning prevention. Prevention functions would only be commenced when deemed appropriate by the Signatories. The ToR also covers administration and finance, personnel and reporting.

RCC operational plan: The operational plan proposes a series of activities for 2012 and 2013, predicated on the acceptance of a related budget for the RCC. The activities are divided into four broad groups:

- 1. Information
- 2. Training (regional and national)
- 3. Cooperation and mutual assistance in case of emergency
- 4. Assistance on developing national and regional systems

The plan outlines the objective, output, resources needed, budget and timetable for each activity.

4.3 Functions of a regional centre

4.3.1 Objectives and functions of a regional centre

A regional centre can be defined as a financially sustainable institution that has been designated by the Contracting Parties to a Regional Seas Convention, or Member Governments Parties to a non-UNEP regional Convention or a regional agreement, to carry out specific functions and activities. This is typically in support to a Protocol to a Convention or the regional agreement addressing emergencies resulting in oil pollution.

The objectives of a centre can be summarized as follows:

- To develop co-operation in the region in the field of preparedness and response to pollution incidents which require emergency actions or other immediate response.
- To assist the countries of the region, which so request, in the development of their own national capabilities for response to pollution incidents and to facilitate information exchange, technical co-operation and training.
- To assist in establishing regional systems and to promote dialogue aimed at conducting co-ordinated actions at national, regional and global levels for the implementation of the sub-regional/regional contingency plans.

The functions of a centre can be summarized as follows:

- To collect and disseminate relevant information.
- To initiate, design and assist in the running of national and regional training courses and exercises.
- To assist the countries in ensuring the sustainability and revision of their national plans and of the subregional/regional contingency plan.
- To facilitate and co-ordinate international assistance in case of emergency.
- To have a role of secretariat as regards the regional agreement and the regional contingency plan, including the organizing of regular meetings.

These functions may reach different levels of development depending on available resources. Regional centres do not directly own or provide response capability or equipment for pollution combatting activities.

4.3.2 Funding

Centres must be financially sustainable. In general terms, the funding requirement of a centre can be split into two main categories:

- Operational costs, including office space, staffing, material and equipment and initial and recurring operational costs needed for the work of the centre; and
- Funding of the centre's programme of activities, including related running costs.

5. CONCLUSIONS AND RECOMMENDATIONS

The OPRC Convention is signed by nine of the ten countries covered by this report - Somalia has not yet signed it. This demonstrates a high-level intention within the region to address marine pollution preparedness, response and cooperation. Furthermore, the Nairobi Convention and its Emergency Protocol provide a regional framework aligned fully to the aims of the OPRC Convention.

The context of current oil spill preparedness is one where significant work has been undertaken throughout the region to address the obligations of the OPRC Convention and the Emergency Protocol, primarily under the aegis of international projects and donor agency programmes. This includes the development of national preparedness and response systems, and efforts to promote regional cooperation and coordination.

The main projects and their key outcomes relating to regional preparedness are summarised in Table 3.

Project	Key outcomes	
WIO OSCP	 An initial regional contingency plan developed, covering Island States Madagascar regional coordination centre established in 2004 but not functional by 2010 	
WIOMH	 An Agreement on the ROSCP developed and in force Revised ROSCP drafted Host Country Agreement for Regional Coordination Centre in South Africa agreed in 2011, supported by: Terms of reference Work programme Budget 	
Norway's OfD	 Regional workshop in 2017 identified the need to reactivate the regional coordination centre in South Africa 	
SEAIGNEP	 In 2018, discussed the establishment of the Regional Co-ordination Centre and the finalisation of the Regional Oil Spill Contingency Plan and the need to implement WIOMH outcomes. In January 2020, the Secretariat circulated a request for details concerning oil spill preparedness, contained in the 'regional master plan' 	
MASE	 There appears to be potential for the RCOC Seychelles to develop a role in coordination of pollution preparedness and response in the wider regional context 	
WIO LME SAPPHIRE	 Proposed activity that a Regional Response Centre (RRC) negotiated and established through appropriate partnerships with existing mandated institutions and agencies, considering previous initiatives 	

Table 3Summary of key projects and regional preparedness outcomes

This has created a framework of national and regional contingency planning, which requires finalization and implementation in order to demonstrate robust and sustainable preparedness and response capability.

This report summarises previous oil spill preparedness work and provides a reference for future discussions. It describes the current status of national and regional preparedness, particularly in the context of the previous capacity building projects and activities.

The regional workshop in March plans to consider the establishment of a regional centre or mechanism for spill preparedness and response, an issue which continues to be raised by Member States as a priority need for the region. To ensure that previous work is referenced and not duplicated it is recommended that discussions focus on:

- 1. Current status and signatories to the Agreement on the Regional Contingency Plan for Preparedness for and Response to major Marine Pollution Incidents in the Western Indian Ocean.
- 2. The current status of the Regional Coordination Centre (RCC) proposal originally developed in detail by SAMSA under the WIOMH project, including whether the documentation (Host Country Agreement, Terms of Reference, Work Programme and Budget) is still relevant?
- 3.Do the existing models for regional centres from other locations provide a viable option for the Western Indian Ocean?
- 4. What levels of financing are required and what sources of funding are feasible to support an RCC?
- 5. The potential for existing regional maritime security coordination centres, e.g. RCOC Seychelles, to integrate regional coordination activities for marine pollution.
- 6. Has national information relating to oil spill preparedness and response been provided to SEAIGNEP for inclusion in their regional master plan and can it be made available? Is there scope for regional initiatives such as SEAIGNEP to assume the role of enhancing cooperation for regional pollution preparedness and response.

Appendix A

WIOMH Project Recommendations and Proposed Activities

The Western Indian Ocean Marine Highway (WIOMH) development and coastal and marine contamination prevention project's Post Completion Report (December 2012) covering the oil spill preparedness components presents key recommendations and proposed actions. These are based on the progress made under the project, the gaps remaining and need for sustainability. They are summarised in the following:

Regional website (recommendation to RCC when established)

- Establish a hosting contract
- Improve the knowledge of national stakeholders by:
 - Regularly updating the "News and Events" section according to the activities realised and upcoming by the RCC,
 - Keeping informed the countries of the international events (conference, incident) related to the oil spill preparedness and response (using the news and Events section)
 - Regularly updating the home page (section latest news and events) according to the information defined into the website
 - Updating the Document section with updated and relevant documents and websites
- Facilitate the sharing the national resources information by:
 - Training the national focal point to update their Country profile from the website or at least to send the Country Profile template information sheet filled
 - Control the information inputted, especially for the response resources, emergency contact and Trans boundary arrangement procedures

NOSCP, personnel and preparedness

- To ensure all relevant international conventions from IMO regarding preparedness and response to oil spill and HNS marine pollution are ratified and that the national legal framework is updated accordingly, especially regarding the conventions related to compensation.
- To ensure that the National Competent Authority for oil spill and HNS marine pollution preparedness and response is empowered, recognized by all national stakeholders and known by all international organizations.
- To finalize the update of the NOSCP, the coastal sensitivity maps and the national dispersant policy and approve the NOSCP, including the official designation of the key personnel, e.g.
 - National Incident Commander,
 - Leaders of the main sections of the national team (Planning, Operations, Logistics, Finance).
- To identify the key personnel to follow regular and specific trainings and attend to realistic exercises, including Port Authorities and the private sector.

Response, command and resources

- To assess the needed improvements at the National Incident Command Post or Centre (organization, running procedures, support documents, etc.);
- To audit the existing oil spill response equipment, identify the key missing equipment and renew and/ or improve accordingly the stockpile of national oil spill response equipment (for on shore and at sea response);
- To improve the equipment and logistical support for operations at sea and on the shore, including Health & Safety equipment (e.g. PPE's) and support documents and tools for the command Post.
- To improve the Decision, Command, Control and Coordination procedure at the Command Post and on the field.

Implementation and support

- National coordinator for oil spill preparedness officially designated in each country with the competence, authority and resources
- The high level in country support (e.g. Ministry)
- Adequate funding for the preparedness activities and improvement of resources and equipment
- External expertise when needed (mobilized through the relevant organizations IOC, IMO, IOPC, ITOPF, oil spill consultancy companies etc.).

RCC structure and management

- The sustainability of the results of the project should be ensured by regularly
 organizing meetings of the competent national authorities of the countries
 concerned, at least once every two years, possibly back-to-back with the meetings of
 UNEP/ Nairobi Convention RCU.
- The RCC budget allocation by the countries and work planning shall be revised and adopted regionally to sustain the efforts engaged in the project and keep the dynamic developed.
- Adapted manpower and revision of missions shall be adopted regionally to address
 regional key issues regarding supporting national NOSCP revisions and trainings

Regional activities on oil spill and countries' support

- Since the adoption of the Regional Contingency Plan there were no opportunities to test it in a real spill situation that would require joint intervention by two or more countries concerned. The possibility of organizing a <u>large scale</u> spill simulation exercise somewhere in the region, and the possibility of ensuring required financial resources for such an exercise, should be explored with the World Bank / GEF.
- Periodic updating national and regional workshop should ease data updating on the weakest countries on ESA maps and improving harmonization of ESA maps.
- Integrate the various recommendations of other components on activities that could be taken in charge by the RCC.

National maps and updates

- Ensure the organizations in charge of carrying out the mapping work in each country has sufficient competencies and resources.
- Ensure that personnel with oil spill response expertise are involved into the identification of high priority sites and the development of site-specific operational maps.
- Ensure additional efforts in prioritization of sensitive sites, relation with regional authorities and expertise (especially in large countries) and ensure that following actions are carried out in each country to produce site specific operational maps.
- Improve the interest of transparency and sharing information between offices and actors especially on data bases and maps.
- Having similar mapping methodology between countries. This is already the case due to the training and methodology diffused during the project. A recall on logos and colour harmonization for securing common use could be done during a regional workshop session to finalize the harmonization. Presence of key GIS and data base administrator of each countries would be required. Updating national officers on regional methodology could be of interest but could be done through regional workshops related with RCC meetings.
- Building and sharing the main maps and data base at a regional level (e.g. types of coast, most sensitive sites).

Appendix B

7.	Oil Pollution Preparedness and Response	
7.1.	Competent National Authority(jes) with responsibility to preparedness and response	for oil pollution
	At sea response	
(a)	Name of the responsible organisation	
(b)	Contact point in charge of at sea response	
(b.1)	Surname/Family name	
(b.2)	Name	
(b.3)	Title: Prof. / Dr. / Capt. / Mr. / Mrs. / Ms. / Other	
(b.4)	Position/designation	
(b.5)	Contact detail	1
(b.5.1)	Tel no. (Mobile no.)	+
(b.5.2)	Tel no. (Landline no.)	+
(b.5.3)	E-mail address	1.5.0
(b.5.4)	Based where	
10.0.17	Shoreline response	hi
(c)	Name of the responsible organisation	
(d)	Contact point in charge of at sea response	
(d.1)	Title: Prof. / Dr. / Capt. / Mr. / Mrs. / Ms. / Other	
(d.2)	Name	
(d.3)	Surname/Family name	
(d.4)	Position/designation	
(d.5)	Contact detail	
(d.5.1)	Tel no. (Mobile no.)	+
(d.5.2)	Tel no. (Landline no.)	+
(d.5.3)	E-mail address	2.
	Based where	
(d.5.4)	45, 49, 57, 54, 59, 58, 50 million	
7.2.	Contacts	
	International Maritime Organization (IMO) Focal Point	
(a)	Name of the organisation	
(b)	IMO Focal point	
(b.1)	Surname/Family name	
(b.2)	Name	
(b.3)	Title: Prof. / Dr. / Capt. / Mr. / Mrs. / Ms. / Other	
(b.4)	Position/designation	
(b.5)	Contact detail	
(b.6.1)	Tel no. (Mobile no.)	+
(b.6.2)	Tel no. (Landline no.)	+
(b.6.3)	E-mail address	
(b.6.4)	Based where	
	National Oil Spill Contingency Plan (NOSCP) Contingency planning	
(a)	Full title of the NOSCP	
(b)	Status of the NOSCP	
(c)	Administrative decree of approval - Number and date	
(d)	Date of latest approved update	
7.4.	NOSCP Parts	
	Dispersant use policy	
(a)	Status of the dispersant use policy	
(b)	Is the dispersant use policy included in the plan as a response option?	
(c)	If yes, Administrative decree of approval – Number and date	

24

(d)	Is there a list of approved dispersants? Is this public information?	
(e)	Stockpile of dispersant available?	
(f)	If yes, location of storage site	
(g)	Name of storage site	
(h)	Owner of storage site	
(i)	Volume of dispersant	
	Sensitivity mapping	
(a)	Status of sensitivity maps	
(b)	Working group / committee	
(c)	Are sensitivity maps included in the NOSCP?	
(d)	Date of latest approved update	
(e)	Are the maps covering the entire coastline?	
(f)	Are the sensitivity maps public?	
(g)	Are they available in hard copy or electronically?	
137	Shoreline Clean-up and Assessment Technique (SCAT) and shoreline response	
(a)	Status of shoreline response strategy	
(b)	Which authority is in charge of shoreline response?	
(c)	Date of latest approved update	
(d)	Is the shoreline response strategy included in the NOSCP?	
(e)	Is the SCAT included within the shoreline response strategy?	
(f)	Are volunteers allowed to be involved in the shoreline clean-up operations? If yes, is "management of volunteers" covered in the NOSCP?	
	Waste management plan	
(a)	Status of the waste management plan	
(b)	Working group / committee	
(c)	Validation date and last update	
(d)	Is the Waste management plan included in the National Oil Spill Contingency Plan?	
(e)	Does the Waste management plan include transport, temporary storage of waste and final disposal?	
(f)	Is oiled waste considered hazardous waste under the national legislation?	
(g)	What legislative framework regulates waste management at the national level?	
	Wildlife response plan	
(a)	Status of the Wildlife response plan	
(b)	Working Group / Committee in charge	
(c)	Validation date and last update	
(d)	Is the Wildlife response plan part of the NOSCP?	
(e)	Are there national bodies/entities working on the wildlife issue? If yes, which ones?	
(f)	Are there co-operation agreements in place with specialised structures abroad?	
	In-situ burning policy	
(a)	Status of In-situ Burning Policy	
(b)	Working Group / Committee in charge	
(c)	Validation date and last update	

(d)	Does the NOSCP include an in-situ burning policy?		
(e)	Is the in situ burning policy part of the NOSCP?		
(f)	What is the authorisation procedure in the case of an incident?		
7,5.	Incident Management System (IMS)		
(a)	Is Incident Management System (IMS) used in the NOSCP?		
(b)	Is each defined role associated with a person / function?		
(c)	Are contact details of the identified persons annexed to the NOSCP?		
(d)	Organisation chart	organisation	ttach the n chart as the NOSCP
7.6.	Trans-boundary aspects		
	Trans-boundary co-operation		
(a)	What are the co-operation mechanisms at bilateral and / or sub-regional level that are integrated into the NOSCP?		
(b)	Are transboundary exercises organised on a regular basis? If yes, how often?		
(c)	Indicate the date of the last transboundary exercise		
(d)	Is your country engaged in co-operation with projects / institutions aimed at improving preparedness and response capacity? If yes, which ones?		
220	Trans-boundary movement of expertise and equipment		
(a)	Is there any specific customs and immigration procedure in place to facilitate the import of equipment and / or expertise during an incident?		
(b)	If so, what is the procedure to follow?		
7.7.	Other elements of the National Oil Spill Contingency Pl	an	
	What is the procedure for updating the NOSCP? Is an administrative act (e.g. decree, decree) necessary before the updated plan is adopted?		
	Is the Net Environmental Benefit Analysis (NEBA) incorporated into the NOSCP?		
	Does the NOSCP take into account the Tiered Preparedness and Response good practice (Tiers 1, 2,3)?		
	Does the NOSCP take into account aerial surveillance in the event of an incident (e.g. with radar, satellite, aircraft, helicopter.)?		
	Does the NOSCP cover preparedness for, and response to, spills of Hazardous and Noxious Substances (HNS)?		
	Are local plans (industry, port, terminal, etc.) referenced and integrated into the NOSCP?		
	Can the NOSCP be activated in the event of an oil spill from a source other than a ship (e.g. offshore platform, pipeline, etc.)?		
7.8.	Conventions	-	
	IMO Member State?	Yes	No
7.9.	Bilateral / Sub-Regional agreements	Yes	No
	Name	Ratificatio n	Transposit ion into the national legislation
NOVER 11	Abidjan Convention		10

(b)	Protocol Concerning Co-operation in Combating Pollution in Cases of Emergency	
(c)	Guinea Current Large Marine Ecosystem Program (GCLME) Regional Oil Spill Contingency Plan	
(d)	Benguela Current LME	
(e)	Barnako Convention (on the ban on the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa)	
(f)	Nairobi Convention	
7.10	Training	
	Is internal training regarding the execution of the NOSCP and/or exercise undertaken at least once a year?	
7.11	Oil Spill Expertise and Resources	
	Government	
	Private	
7.12	Equipment	
	Is the national oil spill response capacity sufficient to carry out the oil spill response operations (TIER1)?	
	Is the national oil spill response capacity sufficient to carry out the oil spill response operations (TIER2)?	
	Is the national oil spill response capacity sufficient to carry out the oil spill response operations (TIER3)?	
7,13	Industry	
	Which Oil & Gas industry partners are present and operating in your country?	
	Is there a national level Working Group / Platform which brings together government and industry stakeholders to discuss issues related to preparedness and response? If yes, what is its name?	
	Is there a pooling of human and equipment resources between industry and government?	
	Please specify any other relevant aspect of co- operation between industry and your government in terms of oil pollution preparedness and response	

Regional Workshop on Managing Emergency Preparedness and Response in the Oil and Gas Sector held during 17-20 October 2017 on Zanzibar, Tanzania

Countries represented: Comoros, Kenya, Madagascar, Mozambique, Seychelles, Somalia, South Africa, Tanzania and Uganda.

Main Conclusions

- Countries in the region have initiated or finalized development of their National Contingency Plans for Oil Spills and Acute Pollution (e.g. may include chemical spills).
- There are ongoing Regional Programmes to support emergency preparedness and response in countries and at the regional level, for instance through the Nairobi Convention, Indian Ocean Commission and East Africa Community.
- Key challenges to advancing contingency plans in countries include: Need for strong political support to give priority to disaster risk management/emergency preparedness and response - Regulatory frameworks need to be put in place - Institutional coordination lacking - Limited technical expertise - lack of sustainable trainings to
- 4. Way forward:
 - Awareness-raising / sensitizing workshops for high level policymakers to enhance political support.
 - Ensure national regulatory frameworks are in place e.g. incorporate oil spills and environmental emergencies in environmental protection acts/regulations; waste management regulations; need to enact OPRC Convention at national level.
 - Strengthen national coordination on emergency preparedness and response assign clear responsibilities; pool resources, sharing/pooling of available data.
 - Provide sustainable models for building national capacities for emergency
 preparedness and response to oil spills/acute pollution e.g. Training of Trainers,
 online trainings, working with academia/national universities and oil/gas
 companies.
 - Operationalize/test the National Oil Spill Contingency Plans conducting exercises; use private-public partnerships to pool resources/equipment.
 - Strengthening Regional Cooperation:
 - Need to strengthen and solidify national oil spill contingency plans first, and incorporate regional cooperation in national oil spill contingency plans
 - Harmonize the national oil spill contingency plans with existing regional contingency plans; national plan to provide the basis for regional cooperation (not vice-versa)
 - Review existing regional coordination centres and learn from their lessons and identify how to leverage on their work
 - Establish framework for regional cooperation on oil spill emergency preparedness/response e.g. consolidating available data; trainings; protocols for communication, reporting and requesting for assistance; responding to Tier 2 and Tier 3 emergencies
 - Reactivate the regional coordination centre in South Africa need for dialogue
 - Operationalize the Protocol for Marine Pollution of Nairobi Convention
 - IOC Disaster Risk Reduction Platform leverage this platform and incorporate oil and gas issues.

Appendix D

Agreement on the Regional Contingency Plan for Preparedness for and Response to major Marine Pollution Incidents in the Western Indian Ocean

The Government of the Union of the Comoros, The Government of the French Republic, The Government of the Republic of Kenya, The Government of the Republic of Madagascar, The Government of the Republic of Mauritius, The Government of the Republic of Mozambique, The Government of the Republic of Seychelles, The Government of the Republic of South Africa, The Government of the United Republic of Tanzania

hereinafter referred to as Signatories:

- Being Parties to the international Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (hereinafter referred to as OPRC 90 Convention)
- Being also Parties to the Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region adopted in Nairobi in 1985 (hereinafter referred to as the Nairobi Convention) and to its Protocol concerning Cooperation in Combating Marine Pollution in Cases of Emergency in the Eastern African Region (hereinafter referred to as the Emergency Protocol);
- Taking note of the Memorandum of Understanding for the implementation of the GEF-Western Indian Ocean Marine Highway Development and Marine Contamination Prevention Project, signed in 2006 by Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, South Africa and Tanzania;
- Recognizing that the Indian Ocean in general, and its western part in particular, is a major route for transporting oil and that there is a high risk of oil pollution,
- Noting the obligations under the OPRC 90 and the Nairobi Convention to organize and prepare response to major marine pollution incidents, and make permanent efforts at national, sub-regional and regional levels in this regard;
- Being aware that in the event of an oil pollution incident, prompt and effective action is essential in order to minimise the damage which may result from such an incident;
- Bearing in mind the relevant provisions of OPRC 90 Convention related to the promotion of bilateral or multilateral agreements for preparedness for and response to pollution incidents:
- Bearing also in mind other relevant international conventions concerning prevention of pollution from ships and liability and compensation for pollution damage, as referred to in Annex 1.
- Considering that regional agreements, specifying in advance operational arrangements, administrative modalities and financial conditions related to cooperation in cases of emergency, are necessary for a prompt and efficient response to marine pollution incidents at regional level;
- Noting that the existence of national capabilities for responding to marine pollution incidents, including
 pollution response equipment and trained personnel, is an indispensable prerequisite for the efficient
 regional co-operation and mutual assistance;
- Mindful of the importance of mutual assistance and international co-operation through the exchange of information on matters such as national contingency plans, available national resources, reports on significant incidents and relevant research and development;
- Acknowledging the positive role that a Regional Coordination Centre (hereinafter referred to as RCC) shall play in promoting regional co-operation in preparedness for and response to marine pollution incidents in the Western Indian Ocean region;

HAVE AGREED as follows:

- 1. To adopt, within the framework of the OPRC 90 Convention and of the Nairobi Convention and its Emergency Protocol, a REGIONAL CONTINGENCY PLAN FOR PREPAREDNESS FOR AND RESPONSE TO MAJOR MARINE POLLUTION INCIDENTS IN THE WESTERN INDIAN OCEAN (hereinafter referred to as "the Plan", a copy of which is attached to this Agreement) for preparedness for and response to major marine oil pollution incidents affecting or likely to affect their respective marine and coastal environment and related interests. The Plan may be amended as and when required by the Signatories.
- 2. To use, in accordance with the OPRC 90 Convention and with their respective national laws, and subject to their capabilities and availability of resources, the Plan as a basis for regional co-operation in preparedness for and response to major marine all pollution emergencies and to promote its implementation.
- 3. To use their best endeavours to render assistance to any Signatory of this Agreement which might request assistance in case of emergency, bearing in mind that nothing in the Plan precludes the right of a Signatory, whose marine and coastal environment and related Interests are likely to be affected, to request assistance from other States or Organizations;
- 4. To designate, in accordance with Article 6 of the OPRC 90 Convention: (i) the competent national authority or authorities with responsibility for oil pollution preparedness and response, as their respective national authorities responsible for the implementation of the Plan, its amendment and revision, as well as for ensuring compatibility of the Plan with their respective National Contingency Plans; (ii) the national operational contact point or points, which shall be responsible for the receipt and transmission of oil pollution reports; and (iii) an authority which shall be entitled to act on behalf of the State to request assistance or to decide to render the assistance when so requested. These national authorities and contact points shall be listed in Appendix 1 of the Plan.
- 5. That other coastal States in the Western Indian Ocean region, Parties to the OPRC 90 Convention as well as to Nairobi Convention and its Emergency Protocol, may join this Agreement subject to the consent of the Signatories of the Agreement;
- 6. The present Agreement and the Plan shall enter into force after being signed by at least 6 of the States concerned, and for each of the other Signatories, thirty days after the signing of this Agreement.
- 7. The present Agreement is without prejudice to rights and obligations of the Signatories under any other International instrument.
- 8. The present Agreement may be amended by mutual consent of the Signatories, at any time, upon the request of any of the Signatories.
- 9. Any disagreement resulting from the interpretation or application of the present Agreement shall be resolved by negotiations amongst the Signatories.
- 10. The Agreement may be denounced by any Signatory at any time after the expiry of four years from the date on which the Agreement enters into force for that Signatory. Denunciation shall be effected by notification in writing to the Depository (the Government of the Republic of Kenya being the depository of the Nairobi Convention).