

PERSGA

The PERSGA Marine Emergency
Mutual Aid Centre (PERSGA/MEMAC)

IMO Headquarter, London

May 2006

Ziad Abu Ghararah, S.G., PERSGA

Contents

- *PERSGA region and need for establishing a PERSGA/MEMAC :*
 - Ecological importance*
 - Maritime activities*
 - Status of National Systems for Oil Spill Preparedness and Response*
 - Aim and Function of PERSGA/MEMAC*
- *Legal Framework*
- *Advantages (strengths) vs. challenges*
- *Future Action Plan*
- *Official opening*

PERSGA

The Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden is:

An intergovernmental Organization Dedicated to the Conservation of the Coastal and Marine Environment in the Region

Member States: Djibouti, Egypt, Jordan, Saudi Arabia, Somalia, Sudan, Yemen.

INSTITUTIONAL SETTING

Headquarter is
located in Jeddah,
Saudi Arabia



PERSGA Mission

- Conservation of Coastal and marine environment and control of various pollution sources.
- Sustainable use of living and none living coastal and marine resources.
- Enhance Regional Capabilities in marine emergency planning and response.
- Facilitate the implementation of conventions and protocols relevant to marine environment

Ecological Importance of the Region

- The Red Sea and Gulf of Aden is **one of the most important repositories of marine biodiversity** on a global scale and features a range of important coastal habitats.
- The diversity of corals is greater than anywhere else, and the number of species that are confined to the Red Sea and found nowhere else is extremely high.
- The Gulf of Aden, one of the biologically least known branches of the Indian Ocean, **holds fishery resources of international importance.**

The Red Sea and Gulf of Aden Region

- An important repository of Biodiversity
- Rich and diverse ecosystems



The Red Sea and Gulf of Aden Region



The Red Sea: Biodiversity



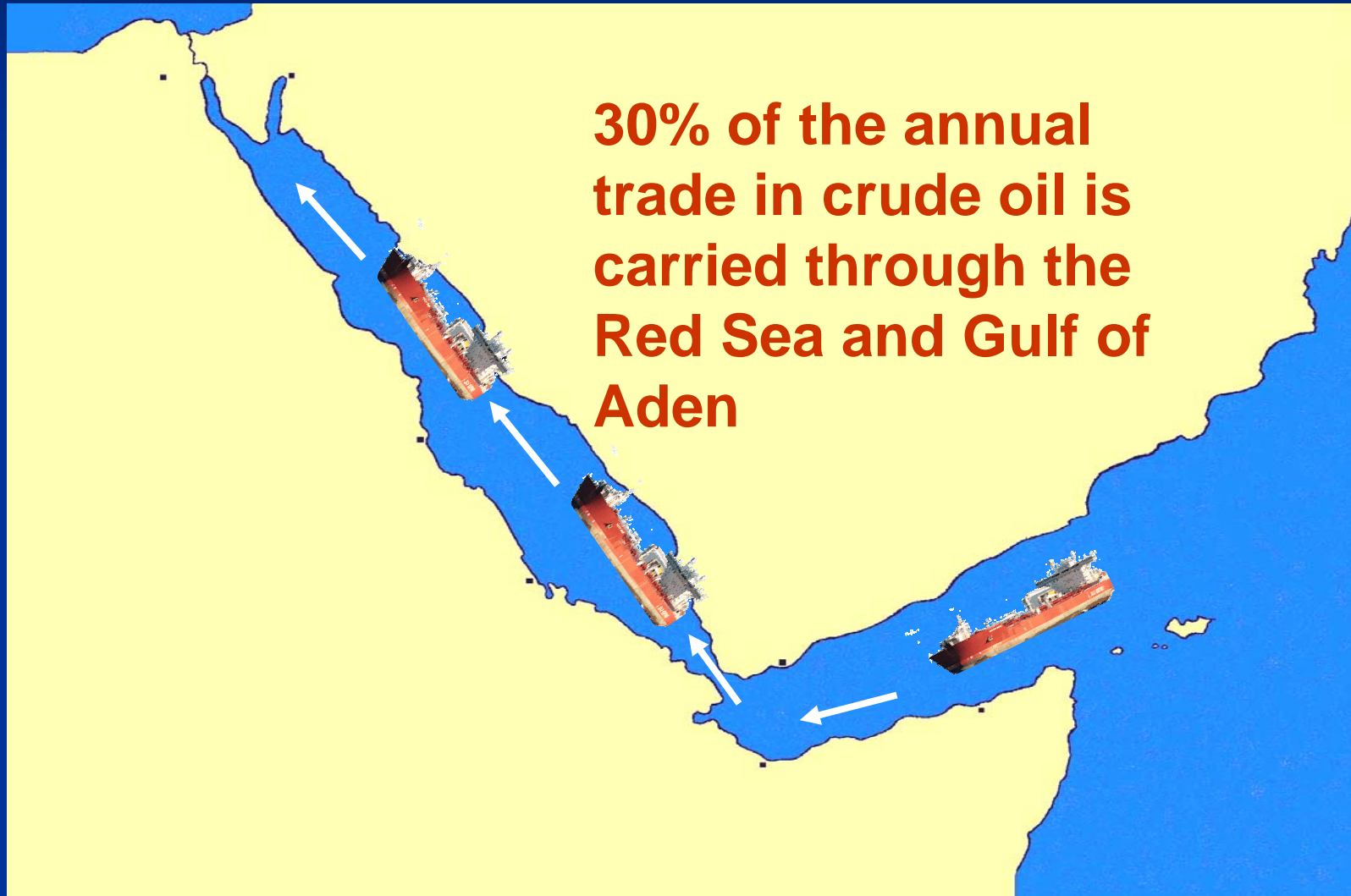
The Red Sea and Gulf of Aden Region

The Gulf of Aden: Fishery Resources

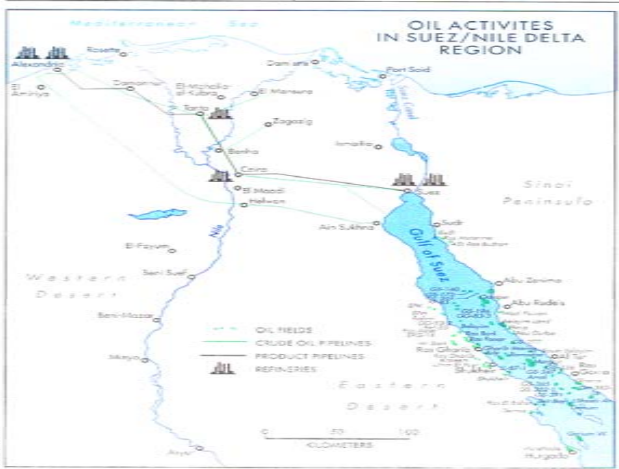
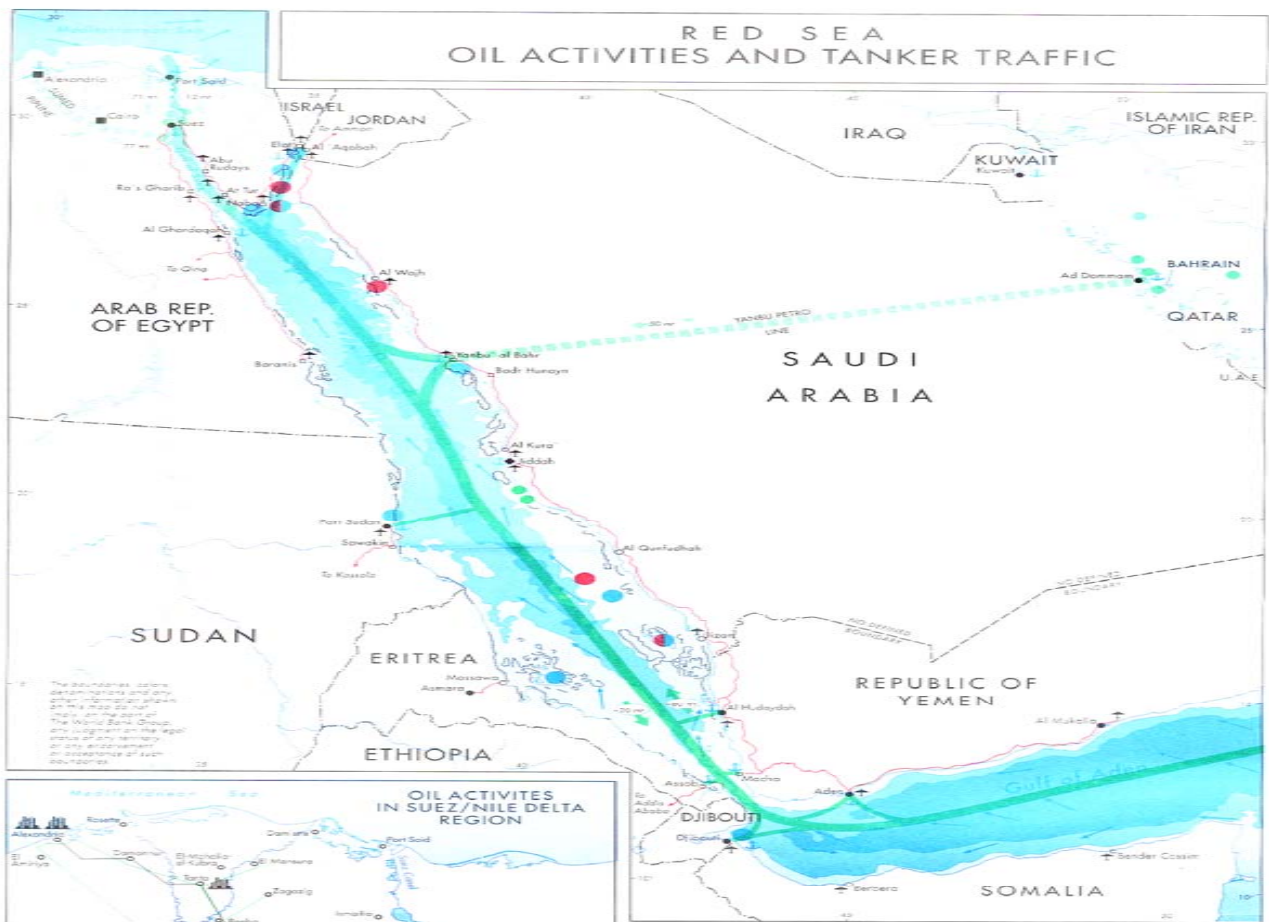


- Although the Red Sea is still one of the least ecologically disturbed seas relative to other enclosed water bodies, it is in increasing jeopardy. There is a growing risk of marine pollution, and of environmental degradation from rapidly expanding maritime activities.

**30% of the annual
trade in crude oil is
carried through the
Red Sea and Gulf of
Aden**



RED SEA OIL ACTIVITIES AND TANKER TRAFFIC



	TANKER ROUTES WITH TONNAGE OF CARGO CARRIED		2 MILLION AND OVER
	OIL PIPELINE WITH TONNAGE OF CARGO CARRIED		500,000 TO 1 MILLION
	OIL SPOIL SITES		100,000 TO 500,000
	MARINE PROTECTED AREAS (MPAs)		25,000 TO 100,000
	PRIORITY AREAS FOR CONSERVATION MANAGEMENT OF GLOBAL MARINE BIODIVERSITY		UNDER 25,000
	MPAs WITH HIGH PRIORITY FOR CONSERVATION MANAGEMENT		SELECTED AIRFIELDS
	SURFACE CURRENTS		PORTS
	BATHYMETRY: >1000 METERS		SELECTED HARD SURFACED ROADS
	200-1000 METERS		INTERNATIONAL BOUNDARIES
	0-200 METERS		0 100 200 KILOMETERS
	CORAL REEFS		

SELECTED CITIES:
 2 MILLION AND OVER
 500,000 TO 1 MILLION
 100,000 TO 500,000
 25,000 TO 100,000
 UNDER 25,000
 SELECTED AIRFIELDS
 PORTS
 SELECTED HARD SURFACED ROADS
 INTERNATIONAL BOUNDARIES

BASED ON BEST INFORMATION AVAILABLE FROM THE INTERNATIONAL TANKER OWNERS POLLUTION FEDERATION LIMITED.

0411/07M

0417/07M

Oil spill incidents in the PERSGA region



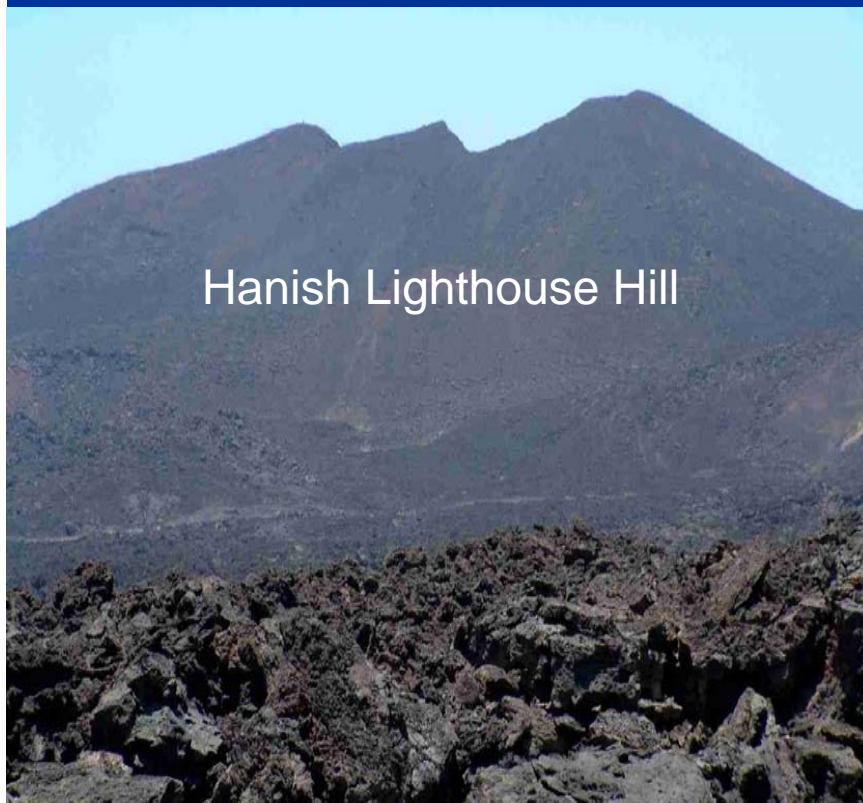
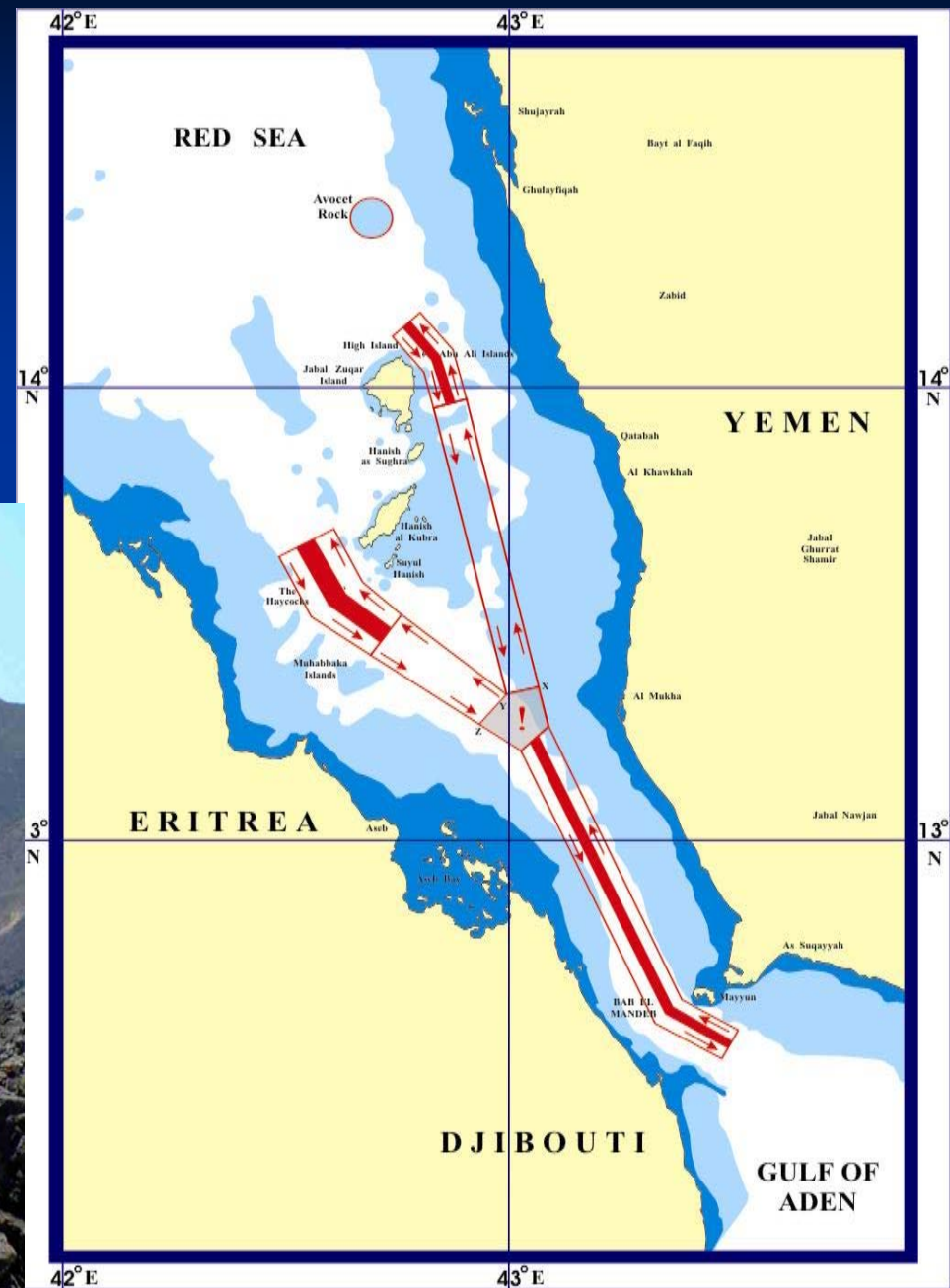
Year	Ship	Flag	Type	Location	Incident	Results
1981	Mobil Falcon	Liberia	ULCC (272,626 dwt),Loading	Port of Yanbu	Equipment failure during Loading	Arabian Light Crude Leaked into the Bassin of Port of Yanu
1988	Happy Kari	Norway	ULCC (290,761 dwt),Loading	Entran ce to port of Jeddah	Grounding	1,000 tons of Crude oil spilled
1989	Kan- Chenjunga	India	ULCC (279,394 dwt) ,Loaded	Entrance to port of Jeddah	Grounding	4,000 tons of Basrah Crude spilled

Year	Ship	Flag	Type	Location	Incident	Results
1991	C Eregli	Turkish	Bulk Carrier, Loaded 16,000 tons iron ore	30 nm east of TSS in Bab el Mandeb	Collision with tanker "Mendana Spirit" loaded with 80,000 tons of crude oil for Aden Refinery	C Eregli sank, Mendana Spirit proceeded to Aden. Most of the 352 tons of bunker fuel leaked into the Gulf of Aden
1996	Not reported	Not Reported	ULCC In ballast	Off port of Djibouti	Blackout, threatened grounding on coral reefs	No Damage, vessel held off reefs by harbor tug
1995	Liverpool Bay	British	Container vessel (P&O Containers)	Entrance to Jeddah harbor	Grounding on Coral reefs while under pilotage	Minor damage, vessel refloated without oil spillage

Year	Ship	Flag	Type	Location	Incident	Results
1996	Royal Viking Sun	British	Passenger cruise liner	Strait of Tiran in TSS	Grounding on Coral reefs	Minor ship damage, Damage to coral reefs in strait of Tiran, minimal oil spillage
1997	Not known	Chinese	Bulk Carrier	West of Hanish Island	Grounding on the rock	Vessel damaged, docked for repair, Refloated without oil spillage. Greater Hanish island light not working when ship grounded

New traffic Separation Scheme – Southern Red Sea

ROUTING MEASURES – SOUTHERN RED SEA GENERAL LAYOUT OF MEASURES



Hanish Lighthouse Hill

Combating Pollution by Oil and other Harmful Substances : Legal Framework

- In 1982 member countries adopted the “Regional Convention for the Conservation of the Red Sea and Gulf of Aden Environment” known as the Jeddah Convention.
- *A Protocol Concerning Regional Co-operation in Combating Pollution by Oil and other Harmful Substances in Cases of Emergency was adopted in the same year.*
- *Accordingly the contracting Parties, in article III of the Protocol agreed to establish the Marine Emergency Mutual Aid Centre (MEMAC).*

Overview of Ratification of Marine Pollution Conventions

Country	Prevention & Safety					Oil Spill Response		Compensation					
	MARPOL Annexes					OPRC		CLC			IOPC Fund ¹¹		
	73/78	III	IV	V	VI	'90	2000	'69	'76	'92	'71	'76	'92
DJIBOUTI	✓					✓		✓ ¹		✓ ²	✓ ¹		✓ ²
EGYPT	✓	✓	✓	✓		✓		✓	✓	✓			
ERITREA													
JORDAN						✓		✓					
SAUDI ARABIA	✓	✓	✓	✓	✓	proc		✓	✓	✓			
SOMALIA													
SUDAN													
YEMEN	✓	✓	✓	✓				✓	✓				

**Summary of Status of National
Systems for Oil Spill Preparedness &
Response:**

Country	National Conting. Plan	Designated Competent Authority	National legal f. Work	National/industry equipment stockpile
DJIBOUTI	POLMER Plan prepared in 1990 since revised, needs updating and implementing.	Maritime Affairs Authority	?	International (IMO) stockpile requires upgrading and logistical support to become operational. Some industry equipment available.
EGYPT	Yes	Egyptian Environmental Affairs Agency (EEAA)	Framework law in place: regulations in draft	Government centre at Sharm El Sheikh plus extensive private sector equipment
ERITREA	In draft: needs updating and completion.	Department of Maritime Transport	No	None

Country	National Conting. Plan	Designated Competent Authority	National legal f. Work	National/industry equipment stockpile
JORDAN	Yes	Aqaba Ports Corporation with Aqaba Special Economic Zone Authority (ASEZA)	Under the National Environmental Law	Government centre at Aqaba (200t spill)
SAUDI ARABIA	Yes	Presidency of Meterology & Environment (PME)	Under the National Environmental Law	Saudi Aramco oil company has major stockpiles plus PME stocks in Dhahran and Jeddah
SOMALIA	No	No	No	None

Source: PERSGA/SAP 2002

Country	National Conting. Plan	Designated Competent Authority	National legal f. Work	National/industry equipment stockpile
SUDAN	Yes, needs to be fully implemented	Ministry of Environment	New maritime law has been drafted but further work is required	Tier 1 capacity only, at Bashayer Oil Export Terminal and at Port Sudan. Tier 2 capability planned by Bashayer and Port Sudan jointly.
YEMEN	No	Maritime Affairs Authority	No	Two MAA-operated pollution combating craft. Equipment stocks operated by oil companies at a Red Sea export terminal and a Gulf of Aden export terminal.

Objectives of the PERSGA/MEMAC

- *To strengthen the capacities of the Contracting Parties and to facilitate co-operation among them in order to combat pollution by oil and other harmful substances in cases of marine emergencies;*
- *To assist Contracting Parties, which so request, in the development of their own national capabilities to combat pollution oil and other harmful substances and to co-ordinate and facilitate information exchange, technological co-operation and training;*
- *Insure adequate mobilization of resources, equipment and personnel among and outside the region in cases of emergencies.*

PERSGA/MEMAC Function

- To collect and disseminate to the Contracting Parties information concerning matters covered by this Protocol
- To assist the Contracting Parties, as requested
 - In the preparation of laws and regulations concerning matters covered by this Protocol and in the establishment of appropriate authorities;
 - In the preparation of marine emergency contingency plans
 - In the establishment of procedures under which personnel, equipment and materials involved in marine emergency responses may be easily and efficiently transported

PERSGA/ MEMAC Function cont...

- To co-ordinate training programmes for combating pollution and prepare comprehensive anti-pollution manuals
- To develop and maintain a communication/ information system appropriate to the needs of the Contracting Parties
- To prepare inventories of the available personnel, materials, vessels, aircraft, and other specialized equipment for marine emergency responses

PERSGA/MEMAC Function cont...

- To establish and maintain liaison with competent regional and international organizations, particularly the International Maritime Organization, for the purposes of obtaining and exchanging scientific and technological information and data, particularly with regard to any new technology which may assist the Centre in the performance of its functions;
- To prepare periodic reports on marine emergencies for submission to the Council; and
- To perform any other functions assigned to it either by this Protocol or by the Council.

Advantages of establishing the PERSGA/MEMAC

- Experience gained by PERSGA in implementing the SAP project financed by GEF (1999 – 2004).
- Availability of most of the environmental data of the Red Sea and Gulf of Aden, especially biologically sensitive areas.
- Availability of Integrated Information Management System (IIMS) containing the GIS Component which includes all the geographic data collected during the Strategic Action Programme that reflects the echo system of the Region.
- Finalization of the PERSGA Regional Action Plan for the development of National Systems and Regional Mechanisms for Preparedness and Response to Major Marine Oil Spills, with the full support of IMO aiming at:

Challenges

- Diversity in level of development and technical capabilities among member countries.
- Disparities in the establishment of national frameworks, adoption of National Contingency Plans etc., which is matched by similar disparities in the availability of equipment for combating pollution incidents in the different parts of the PERSGA region.

Challenges Continue...

- Absence of a Regional Contingency Plan for Preparedness and Response.
- Lack of highly trained human resources for the implementation of National and Regional Contingency Plan in the PERSGA region.
- Absence of adequate communication system between member states.

Future Action Plan

To strengthen both national capabilities and regional co operation by

- Developing national system for oil spill preparedness and response.
- The enhancement of the co-operation between neighboring states through the development of a regional contingency plan
- Capacity building in the region
- Effective and efficient exchange of information among member states
- MOU to insure easy mobilization of personal and equipment across borders of member states during emergency cases.

Objective 1: Development of National Systems
for Oil Spill Preparedness and Response

Output	Activity	Participating Countries	Month	Inputs
Training	High Level Seminars for Government Administrators and Senior Managers (National Activity) x 5	Priority countries ¹ (one seminar / country)	2-6	<ol style="list-style-type: none"> 1. External trainers 2. Travel & DSA for trainers 3. Travel & DSA for participants (20 x 5)
	Regional Workshop on Contingency Planning (Regional Activity)	All PERSGA countries & Eritrea	2	<ol style="list-style-type: none"> 1. External trainers 2. Travel & DSA for participants (24) 3. Travel & DSA for external trainers 1. Venue to be determined³
	National Training Courses for Managers/On Scene Commanders (IMO level 2) x 5	Priority countries (one course in each country)	4-8	<ol style="list-style-type: none"> 1. External trainers (including trainers from AASTMT) 2. Travel/DSA for trainers 3. Accommodation for participants (24 x 5) 4. Venues provided by recipient countries

Output	Activity	Participating Countries etc.	Month	Inputs
National systems for oil spill response	Development (revision or completion) of National Contingency Plans	Priority countries plus Jordan	5-20	<ol style="list-style-type: none"> 1. National Contingency Planning Committees 2. National focal points 3. External expert on contingency planning 4. Travel & DSA
	Equipment needs assessment missions	Priority countries	6-9	<ol style="list-style-type: none"> 1. National focal points 2. External expert on oil spill combating equipment 3. Travel & DSA
	Preparation of national legal frameworks	Priority countries plus Jordan	10-18	<ol style="list-style-type: none"> 1. National legal experts 2. External legal expert 3. Travel & DSA for external expert
Implementation of relevant international conventions	Assistance (capacity building) to national governments	Priority countries and other States which request assistance	9-17	<ol style="list-style-type: none"> 1. External expert in international conventions 2. National counterparts in each participating country⁴

Objective 2: Enhancement of co-operation
between neighbouring States

Output	Activity	Participating countries	Months	Inputs
Support for Eritrea from the Action Plan	Communications between PERSGA and the Government of Eritrea	PERSGA and Eritrea	1-3	<ol style="list-style-type: none"> 1. PERSGA Secretariat 2. Eritrea: Appropriate Ministries and Department of Maritime Transport
Regional Contingency Plan (RCP)	Development of a RCP for the Red Sea and Gulf of Aden, four Workshops, decisions on four sets of sub-regional boundaries for exercises, conduct of 4 Workshops for RCP development	All PERSGA countries & Eritrea	19-33	<ol style="list-style-type: none"> 1. Three representatives from each country at each of four Workshops 2. IMO + consultant for each Workshop 3. Travel & DSA for all participants 4. Host country or (to be determined)
Exercises	Communications exercises (x4)	For each sub-region within the Red Sea and Gulf of Aden	27-28	<ol style="list-style-type: none"> 1. MEMAC to organize the exercises 2. External expert to assist 3. Emergency response centre staff in each country
	Equipment deployment exercises (x 4)	For each sub-region within RSGA	28-32	<ol style="list-style-type: none"> 1. MEMAC to organize the exercises 2. External expert to assist 3. Responders / country

Output	Activity	Participating countries etc.	M.	Inputs
Regional training programme	High Level Seminar for Government Administrators and Senior Managers (Regional Activity)	All PERSGA countries & Eritrea	1	<ol style="list-style-type: none"> 1. External trainers 2. Travel & DSA for trainers 3. Travel & DSA for participants (3 from each country) 4. Host country (to be determined)
	Regional Training Workshop for On Scene Commanders	All PERSGA countries & Eritrea	10	<ol style="list-style-type: none"> 1. Three representatives of each country 2. IMO + consultant 3. Travel & DSA for all participants 4. Host country (to be determined)
	“Train the Trainers” course	All PERSGA States plus Eritrea	12	<ol style="list-style-type: none"> 1. Venue to be determined 2. External trainers 3. Travel & DSA for participants (24) 4. Travel & DSA for external trainers

Output	Activity	Participating countries	Mon.s	Inputs
Regional training programme	Regional Workshop on the use of dispersants	All PERSGA States plus Eritrea	17	<ol style="list-style-type: none"> 1. Venue to be determined 2. External trainers 3. Travel & DSA for participants (24) 4. Travel & DSA for external trainers
	Regional Workshop on sensitivity mapping	All PERSGA States plus Eritrea	22	<ol style="list-style-type: none"> 1. Venue to be determined 2. External trainers 3. Travel & DSA for participants (24) 4. Travel & DSA for external trainers

Output	Activity	Participating countries etc.	Mon.s	Inputs
Regional training programme	Regional Workshop on risk assessment analysis	All PERSGA States plus Eritrea	27	<ol style="list-style-type: none"> 1. Venue to be determined 2. External trainers 3. Travel & DSA for participants (24) 4. Travel & DSA for external trainers
	Regional Workshop on oil spill modelling	All PERSGA States plus Eritrea	32	<ol style="list-style-type: none"> 1. Venue to be determined 2. External trainers 3. Travel & DSA for participants (24) 4. Travel & DSA for external trainers

Objective 3: Support for the Marine Emergency
Mutual Aid Centre (MEMAC)

Output	Activity	Participating countries	Mons	Inputs
MEMAC operating	Completion of any outstanding work on the EEAA Regional Centre and MEMAC Accommodation	Egypt	1-2	Government of Egypt
	Appointment of full complement of staff including support staff	All PERSGA States	1-3	PERSGA Secretariat to co-ordinate recruitment and selection procedures
	Procurement of additional equipment for MEMAC (radio communications equipment etc.)	MEMAC	2-4	1. Procurement budget for additional equipment approved and provided through PERSGA 2. Equipment to be selected and purchased by PERSGA

Output	Activity	Participatin countries	Mon.s	Inputs
MEMAC operating	Maintenance and updating of MEMAC database	All PERSGA States plus Eritrea	6-36 ongoing	<ol style="list-style-type: none"> 1. Data to be provided by all States 2. Information to be compiled by MEMAC
	Participation in regional training programme	All PERSGA States & Eritrea plus MEMEC staff	10 12 17 22 27 32	Attendance (2 staff members) at Courses: <ul style="list-style-type: none"> ▪ On-Scene Commanders ▪ “train the trainers” ▪ the use of dispersants ▪ sensitivity mapping ▪ risk assessment analysis ▪ oil spill modelling

Output	Activity	Participating countries etc.	Months	Inputs
MEMAC operating	Participation in development of Regional Contingency Plan	All PERSGA States & Eritrea plus MEMEC staff	19-33	Attendance at Workshops to develop the RCP and to determine boundaries for the purposes of exercises for areas in: <ul style="list-style-type: none"> ▪the northern Red Sea ▪the central Red Sea ▪the southern Red Sea ▪the Gulf of Aden
	Organisation of 4 communications exercises	For each sub-region within the Red Sea and Gulf of Aden	27-29	1. MEMAC staff to organize 2. External expert to assist 3. Emergency response centre staff in each country
	Organisation of 4 equipment deployment exercises	For each sub-region within the Red Sea and Gulf of Aden	28-32	1. MEMAC staff to organize 2. External expert to assist 3. Responders and equipment providers in each country

Official opening of PERSGA/MEMAC

- In 2005, PERSGA with the support of GEF/SAP project has equipped the PERSGA/MEMAC to a high standard, and will provide additional equipment as the center is further developed.
- A director, Deputy Director and other technical and admin staff have been appointed to initiate work at the center.

- PERSGA is planning to organize the official opening of the MEMAC in Hurgada Egypt on the 20th of May 2006.
- PERSGA is also planning, in cooperation with IMO, to associate the opening ceremony with a workshop on “Contingency Planning and Role of the PERSGA/MEMAC”







Thank you All