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Implementation of the Global Programme of Action  
for the Protection of the Marine Environment  
from Land-based Activities  
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**Implementation of the Global Programme of Action for the Protection of  
the Marine Environment from Land-based Activities through the Regional  
Seas Conventions and Action Plans**

**Note by the Secretariat**

The document has been presented as received and has not been formally edited.

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## **Implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities through the Regional Seas Conventions and Action Plans**

### **I. Background**

The Regional Seas Programme was launched in 1974 in the wake of the 1972 United Nations Conference on the Human Environment held in Stockholm, Sweden. Today, 35 years after its launch, the Regional Seas Conventions and Action Plans<sup>1</sup> are one of the most comprehensive global initiatives for the protection of marine and coastal environments, covering 18 regions of the world's oceans, through the participation of more than 143 countries.

The Regional Seas Programme aims to address the accelerating degradation of the world's oceans and coastal areas through the sustainable management and use of the marine and coastal environment, by engaging neighbouring countries in comprehensive and specific actions to protect their shared marine environment. It has accomplished this by stimulating the creation of Regional Seas Conventions and Action Plans prescriptions for sound environmental management to be coordinated and implemented by countries sharing a common body of water.

The Regional Seas Conventions and Action Plans are regional multilateral environmental agreements that function through an Action Plan. In most cases the Action Plan is underpinned with a strong legal framework in the form of a regional Convention and associated Protocols on specific problems.

As Member States driven Conventions and Action Plans, the Regional Seas provide a forum for equitable participation by Member States in the sustainable management processes of the major seas of the world. It has promoted the idea of a "shared sea," and has helped place marine and coastal management issues on the political agenda and supported the adoption of environmental laws and regulations. It has a strong focus on providing technical assistance for capacity building and technology transfer for marine and coastal management.

All programmes reflect a similar approach, yet each has been tailored by its own member states and institutions to suit their particular regional environmental challenges.

### **Objectives of the Regional Seas Conventions and Action Plans**

- Promoting the integrated and sustainable development of marine and coastal areas and associated river basins and their living aquatic resources;

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<sup>1</sup> Mediterranean (Barcelona Convention), Caribbean (Cartagena Convention), Coordination Body for the Seas of East Asia (COBSEA), Northwest Pacific Action Plan (NOWPAP), East Africa (Nairobi Convention) and Western and Southern Africa (Abidjan Convention), Black sea (Bucharest Convention), ROPME Sea Area (Kuwait Convention), North-East Pacific (La Antigua Convention), Red Sea and Gulf of Aden (Jeddah Convention), South Asia Seas Action Plan(SAS), Pacific (Noumea Convention), South-East Pacific (Lima Convention), Antarctic (Commission for the Conservation of Antarctic Marine Living Resources), Arctic (Arctic Council Working Group on the Protection of the Arctic Marine Environment), Baltic (Helsinki Commission), Caspian Sea (Tehran Convention) and North-East Atlantic (OSPAR Commission). Six of these programmes, are directly administered by UNEP.

- Promoting the implementation of appropriate technical, institutional, administrative and legal measures for the improved protection and sustainable management of the coastal and marine environments;
- Facilitating monitoring and assessments of the coastal and marine environments, including their conditions and trends, thus providing science-based information for informed policy and decision making;
- Promoting integrated and ecosystem-based management, protection and sustainable development of marine and coastal areas and associated river basins and their living aquatic resources.

## **Timelines**

1974: UNEP Governing Council decides to set up the Regional Seas Programme (RSP) and at first to concentrate on four regions: the Mediterranean, the Kuwait region (also known as the ROPME Sea Area), West and Central Africa and the Caribbean.

1999: 20<sup>th</sup> Session of the UNEP Governing Council stressed the need for UNEP to strengthen the Regional Seas Programmes as its central mechanism for implementation of its activities relevant to chapter 17 (Oceans and Coasts) of Agenda 21.

2001: 21<sup>th</sup> Session of the UNEP Governing Council, requests UNEP to give priority to the revitalization of the Regional Seas Conventions and Action Plans (RSCAPs) as its central mechanism for implementation of its activities relevant to chapter 17 of Agenda 21 and urged to support the preparation of a strategic approach to financing Regional Seas Programmes and to assist them in the mobilization of resources. It further requested UNEP to support cooperative initiatives aimed at the harmonization of work plans of the Regional Seas Conventions and Action Plans and Multilateral Environment Agreements (MEAs) including the Biodiversity Conventions (CBD, CMS, CITES).

2002: The World Summit on Sustainable Development (WSSD) draws particular attention to pressures on marine and coastal ecosystems from fisheries, biodiversity loss, and pollution. Moreover, it specifically calls for strengthening regional cooperation and coordination between relevant regional organizations and programmes, including the Regional Seas Conventions and Action Plan.

2003: 22<sup>th</sup> Session of the UNEP Governing Council set out the elements of a new global strategy for the Regional Seas based on the central idea of the Regional Seas Conventions and Action Plans as an instrument for sustainable development and that the Regional Seas Conventions and Action Plans should serve as platforms for the regional implementation of MEAs and global programmes related to the marine and coastal environment. It requested UNEP to encourage and support the Regional Seas Conventions and Action Plans to incorporate new strategic elements in their programmes of work, bringing those elements to the attention of their respective member States through the governing bodies and other relevant forums.

Global Meetings of the Regional Seas Conventions and Action Plans are held every year since 1998. In June 1998 all the secretariats and coordinating units of the

Regional Seas Conventions and Action Plans met for the first time at The Hague, Netherlands and since then 13 Global Meetings have been held, with the last one, the 13th Global Meeting held in Busan Republic of Korea in October 2011.

## **II. Regional Implementation Mechanisms**

The Regional Seas Conventions and Action Plans provide an important platform for implementing the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA).

Most of the programmes have adopted legally-binding Conventions that express the commitment and political will of governments to tackle their common environmental issues through jointly coordinated activities. Specifically on addressing land-based sources and activities of marine pollution, some Conventions have added protocols such as the Land-based Sources and Activities (LBSA) Protocol and the Integrated Coastal Zone Management (ICZM) Protocol.

Currently there are 7 LBSA Protocols (Black Sea, Mediterranean Sea, ROPME Sea Area, South-East Pacific, Wider Caribbean, Red Sea and Gulf of Aden, East and South Africa), and an additional two are under development in the Caspian Sea, and West, Central and South Africa region.

Similarly there are currently 2 ICZM Protocols, in the Mediterranean Seas and in the East and South Africa region.

Other Regional Seas Conventions and Action Plans, despite not having a LBSA or ICZM Protocol, continue to support the implementation of the GPA through regional projects targeting one or various pollutant source categories<sup>2</sup>.

Below is a summary of the implementation of the GPA through the Regional Seas Conventions and Action Plans.

### **Baltic Sea Helsinki Convention**

HELCOM has been implementing an ecosystem approach to management of human activities impacting upon the marine environment of the Baltic Sea since 2007, through its Baltic Sea Action Plan (BSAP) which aims to drastically reduce pollution and restore the good ecological status of the Baltic by 2021. It identifies actions at the national and regional levels to achieve agreed targets within a given timeframe in relation to eutrophication, pollution by hazardous substances, maritime safety and accidents response capacity, and decline of biodiversity and need for enhanced nature conservation. The pioneering BSAP and corresponding National Implementation Programmes serve as an example of a regionally coordinated implementation of the Global Programme of Actions.

The innovative approach of the HELCOM Baltic Sea Action Plan is that the plan is based on a clear set of 'Ecological Objectives' defined to reflect a jointly agreed

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<sup>2</sup> Sewage, Marine Litter, Nutrients, Physical Alteration and Destruction of Habitats (PADH), Persistent Organic Pollutants (POP), Sediments, Radioactive Materials, Oil and Heavy Metals.

vision of ‘a healthy marine environment, with diverse biological components functioning in balance, resulting in a good ecological status and supporting a wide range of sustainable human activities’. Example objectives include clear water, an end to excessive algal blooms, and viable populations of species. Targets for ‘good ecological status’ are based on the best available scientific knowledge. With the application of the ecosystem approach, the protection of the marine environment is no longer seen as an event-driven pollution reduction approach to be taken sector-by-sector. Instead, the starting point is the ecosystem itself, and a shared concept of a healthy sea with a good ecological status.

On the basis of this, the Baltic Sea Action Plan was drawn up and includes measures needed to achieve the environmental objectives within a given timeframe; and an assessment of their environmental, social and economic costs and benefits.

The HELCOM Ministerial Meeting held in Moscow in 2010, laid the ground for the evaluation of the implementation of the HELCOM Baltic Sea Action Plan. Amongst other products the Ministerial Meeting adopted the Initial Holistic Assessment of the Ecosystem Health of the Baltic Sea 2003-2007, which assesses the entire Baltic Sea Area, including the status, pressures and impacts to the environment and associated costs and benefits to society. Specific assessment tools have been designed for indicator-based evaluation of the integrated status of the ecosystem, as well different thematic areas of the environment (eutrophication, biodiversity, hazardous substances and maritime activities), and for estimating the intensity and spatial distribution of environmental pressures from human activities and their potential impacts on the marine environment.

This was followed up in March 2011, with a HELCOM session of high-level representatives considering, against the background of nine National Implementation Programmes, the progress in the national implementation of the HELCOM Baltic Sea Action Plan. Acknowledging several areas with good progress or even accomplished results, the meeting also focused on slow-progress areas, especially with the intent of sharing good experience and practises and place more focus on these in the future.

The next review of the BSAP implementation is scheduled for 2013 when HELCOM will meet at ministerial level and, against the environmental status of the Baltic Sea and the status of implementation by the Contracting States, assess the need for additional measures

The 2013 Ministerial meeting will also assess the effectiveness of the implementation and the need for prolongation of the HELCOM Hot Spot programme, Baltic Sea Joint Comprehensive Environmental Action Programme (JCP), drawn up in 1992. As of today, a total of 68 hotspots and sub-hotspots remain on the list, following the deletion of 94 of the identified 162 hotspots/sub-hotspots. Investment and remediation projects carried out at pollution hotspots around the Baltic Sea have contributed substantially towards overall pollution load reductions in the Baltic Sea catchment area.

The Contracting Parties consider the work of HELCOM as a facilitator for their implementation of also global and European legislative and policy frameworks, as can be seen e.g. from the numerous joint submissions to the International Maritime

Organization and by the establishment of HELCOM as the coordination platform for the regional implementation of the EU Marine Strategy Framework Directive in the Baltic (applicable to EU Member States).

### **Black Sea Bucharest Convention**

LBS/A Protocol: The revision of the LBS Protocol is being undertaken in the context of the GEF Project, Control of Eutrophication, hazardous substances and related measures for rehabilitating the Black Sea Ecosystem: Phase 1 (BSERP). At the end of 2003, UNEP, through the GPA Coordination Office and the Regional Office for Europe (ROE), in consultation with the GEF BSERP-Project Implementation Unit (PIU) and the Black Sea Commission (BSC), undertook the process to draft this revised LBS/A Protocol and the Work Programme to enhance its implementation taking into consideration the GPA objectives. The draft document was adopted in September 2003 by the BSC, for national consultations in the Black Sea coastal states. The process includes consultations with the BSC, its Advisory Groups, international organizations and stakeholders.

Integrated Coastal Zone Management (ICZM): A draft Black Sea Strategy was prepared by the ICZM Activity Centre on Development of the Common Methodologies for Integrated Coastal Zone Management in the Framework of the EuroAid TACIS Project. A number of meetings of the Advisory Group on Development of the Common Methodologies for ICZM, and other relevant joint meetings, have been devoted to this issue. National consultations are being carried out. In addition to the Strategy, the Methodology for Spatial Planning was prepared and tested in a Pilot ICZM Project for the City of Gelendzhik, Russian Federation. This methodology will be tested in another pilot project through the GEF/UNDP BSERP. Financed by BSERP a feasibility study on the development of the Black Sea ICZM Protocol will be carried out. The Advisory Group on Development of ICZM has initiated the development of ICZM indicators for the Black Sea coast. Various activities are being implemented at the national level, i.e., Georgian Coastal Management Project (World Bank); preparation of national ICZM Strategy (MATRA projects) in Romania; development of coastal law in Ukraine, transposition of EU ICZM related legislation and recommendations in Bulgaria, Romania and, in initial stage in Turkey.

Marine Litter: The Black Sea is participating in the process of developing a regional activity on the sustainable management of Marine Litter in the Black Sea within the framework of the Strategic Action Plan on Rehabilitation and Protection of the Black Sea (BS SAP). A draft amendment to the BS SAP is underway to include this Regional Activity on Marine Litter and will be submitted for approval to the Contracting Parties to the Bucharest Convention.

The Commission on the Protection of the Black Sea Against Pollution has initiated the updating of the Strategic Action Plan for Rehabilitation and Protection of the Black Sea on the basis of State of the Black Sea Environment Report, Report on Implementation of the BS SAP and Updated Black Sea Transboundary Diagnostic Analysis. The implementation of these major activities is being supported by the European Commission and the GEF/UNDP Ecosystem Recovery Project.

Priority Pollution Sources: Assisted by GEF/BSERP and coordinated by the Permanent Secretariat of the Commission on the Protection of the BS Against Pollution, the Advisory Group on Control of Pollution from Land Based Sources initiated elaboration of criteria and revision of the BS priority pollution sources and list of “Black Sea Hotspots”. Investment programmes for municipal sector are tackled through the Danube-Black Sea (DABLAS) process.

### **East Asian Seas Action Plan**

#### **COBSEA –Coordinating Body on the Seas of East Asia**

LBS Hotspots: The project “Identification of Regional Hotspots on Land-based Pollution, their Characteristics and Impacts” ran from 2005 to 2009 in COBSEA with the technical assistance of academic and research institutions in Thailand. The project supported the collection data from selected river catchments in member countries and modelling the impacts of major pollution sources, mainly nutrients, on the marine environment using a Geographic Information System (GIS) database.

Marine Litter: Through a Memorandum of Understanding (MoU) between COBSEA Secretariat, the GPA Coordination Office and UNEP Regional Seas Programme in 2006, various activities aimed at addressing marine litter were launched. The activities included the preparation of a review document on marine litter in the East Asian Seas (EAS) region, the preparation of a framework document for a Regional Plan of Action on Marine Litter and the organization of a regional meeting of national authorities and experts on marine litter.

Three small grants were provided as support to three COBSEA member countries (Cambodia, Indonesia and Vietnam) during 2008 for pilot activities to increase awareness and strengthen capacities on marine litter at national level.

Various regional awareness-raising campaigns on marine litter under the theme of “Clean Up the East Asian Seas” were supported, including large scale cleanups of beaches. The Second COBSEA Marine Litter Workshop was held in Pattaya, Thailand in September 2008 and included another beach cleanup campaign.

UNEP GEF South China Sea Project: “Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand”:

In 1996, COBSEA requested assistance from UNEP to prepare a proposal for a GEF project to address marine and coastal environmental problems in the EAS region. This was followed by a four years project preparation phase under which each of the seven participating countries (Cambodia, China, Indonesia, Malaysia, Thailand, Philippines and Vietnam) established national bodies and nominated experts and authorities to run various aspects of the project in their respective countries. Technical and scientific workshops were convened and technical national and regional reports were produced. These formed the basis for the compilation of a Transboundary Diagnostic Analysis (TDA) and a draft Strategic Action Programme (SAP). The TDA included a prioritisation of identified issues and problems in the region and the SAP outlined the priority actions required over the subsequent five-year period, to address these issues.

On the basis of this draft SAP, the project was endorsed by the 15<sup>th</sup> Inter-Governmental Meeting of COBSEA in September 2000 and it became operational in January 2002.

The overall goals of the project were: to enhance regional collaboration and partnerships to address environmental problems of the South China Sea, and to enhance the capacity of the participating governments to integrate environmental considerations into national development planning.

The project consisted of four main components: Habitat degradation and loss (mangroves, coral reefs, seagrass and coastal wetlands); Over exploitation of fish stocks; Land-based pollution and Regional coordination.

During the project, National Action Plans (NAP) for Land-based Pollution (LBS) were finalized and adopted by some Governments for integration into sustainable development planning. A Regional Task Force on Economic Valuation developed frameworks and procedures for valuing the impacts of Land-based Pollution on coastal habitats. A model for the carrying capacity of the South China Sea basin with respect to nutrient loading was also developed.

As of 2002 most of the COBSEA activities related to LBA were carried out by the GEF South China Sea project.

Within the Land-based Sources (LBS) of Pollution component of the project agreement was reached regarding the standards for water quality and of biological and sediment contamination that would be used in the regional comparison of pollution hotspots in the region. The Regional Working Group on Land-based Pollution agreed that “hotspots” in the context of the South China Sea Project would be taken to refer to concentrations of impacts rather than sources.

Intervention and two pilot activities were initiated; one in Batam, Indonesia on sewage disposal in an isolated, insular village and the second in the Lin Ding Yang catchment of the Pearl Delta in China on the use of engineered wetlands in sewage treatment. A third project, addressing the prevention of pollution from fishing piers in the South of Thailand was executed using government funds.

The outputs of the LBS component of the GEF SCS project included:

- 1 7 national reports on land-based pollution in the participating countries;
- 2 6 National Action Plans for addressing the issues of Land-based Pollution;
- 3 An overview of land-based pollution problems in the South China Sea;
- 4 A model for riverine inputs of nutrients to the South China Sea that can be used in management decision making; and,
- 5 The identification of areas sensitive to inputs of nutrients from rivers bordering the South china Sea

The UNEP/GEF South China Sea Project<sup>3</sup> came to an end in January 2009 and UNEP is currently in the process of developing a PIF for its second phase, the ‘SAP Implementation Project’ which will be submitted under GEF V during 2012.

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<sup>3</sup> For more details please see: [www.unepscs.org](http://www.unepscs.org).

COBSEA is currently implementing a three-year (2010-2013) USD 1.1M project on “Spatial Planning in the Coastal Zone – Disaster Prevention and Sustainable Development” which was developed by the COBSEA Secretariat as a post-tsunami project during 2006. The overall goal of the project is to reduce and prevent the impacts of natural disasters, climate change and sea level rise and to promote sustainable development of the coastal areas in COBSEA member countries through the integration of new management concepts such as integrated coastal zone management (ICZM) and Ecosystem Based Management (EBM) into spatial planning. The project presents the importance of spatial planning to local planning and development, and the need to use spatial planning as a management tool that will be used alongside other management tools, with emphasis on both the land and sea components of coastal areas. A major output of this project is the *Regional Resource Document on Spatial Planning in the Coastal Zone of the EAS Region: Integrating Emerging Issues and Modern Management Approaches*.

COBSEA will soon start implementing the Yeosu Project: Addressing the Challenge of Sea-Level Rise and Coastal Erosion in the EAS – Initial implementation of the COBSEA Regional Strategy on Coastal Erosion. This two-year, USD 400,000 project which was developed through the support of the Government of the Republic of Korea intends to implement the initial stages of the COBSEA Regional Programme on Coastal Erosion in six developing countries - Cambodia, China, Indonesia, Philippines, Thailand and Viet Nam - where erosion is causing serious physical alternation and degradation of habitats (PADH) and growing impacts to their coastal ecosystems, infrastructure, people, economies and livelihoods. The main objective of the project is to build national capacity in order to strengthen the sustainability, resilience and wise management of threatened coastal resources and associated ecosystems.

### **Eastern Africa Nairobi Convention**

The Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region and the Protocol concerning Protected Areas and Wild Fauna and Flora in the Eastern African Region, the Protocol concerning Co-operation in Combating Marine Pollution in Cases of Emergency (Emergency Protocol) in the Eastern African Region ( enacted in Nairobi on 21 June 1985) and the Protocol for the Protection of the Western Indian Ocean Marine Environment from Land-Based Sources and Activities (LBSA Protocol) enacted in 2010, constitute the current regional legal framework for the protection and conservation of the marine and coastal environment of the Western Indian Ocean region.

The marine and coastal environment in the Western Indian Ocean (WIO) is recognized for its high ecological and economic value. The region is considered a distinct division of the tropical Indo-West Pacific - the world’s largest marine biogeographic province (Sheppard, 1987; 2000). The WIO region also has high levels of endemism.

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In order to address the growing environmental threats from land-based sources and activities, and challenges of the degradation of the coastal and marine environment, the WIO Countries through the Nairobi Convention developed a project Addressing land-based activities in the Western Indian Ocean (WIO-LAB). The Project was designed to serve as a demonstration project of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA), UNEP.

The WIO-LAB Project - the broad goal of the project was to contribute to the environmentally sustainable management and development of the Western Indian Ocean region (WIO) by addressing the land-based sources of pollution that have adverse impacts on rivers, estuaries and coastal waters, as well as their biological resources. The WIO-LaB project had three main objectives, namely:

- Reduce stress to the ecosystem by improving water and sediment quality.
- Strengthen regional legal basis for preventing land-based sources of pollution, including implementation of GPA.
- Develop regional capacity and strengthen institutions in the Western Indian Ocean Region for sustainable, less polluting development including the implementation of the Nairobi Convention

In order to achieve the project objectives, a number of demonstration activities were implemented in Mainland States of Kenya, Tanzania, Mozambique and Island States of Seychelles, Comoros, Madagascar and Mauritius. These included;

- a) Wastewater Management, Mombasa, Kenya and solid waste management at Port Louis harbour, Mauritius: reducing marine litter through improved land-based waste management.
- b) Potential use of Vetiver Grass in constructed wetland and erosion protection activities in Msimbazi Creek, Dar es Salaam; the use of native species of vegetation to control soil erosion within the Black River Gorges National Park, Mauritius.
- c) Stormwater/Wastewater Drainage in Chake-Chake, Pemba, Zanzibar.
- d) Mangrove management in Lumbo, Mozambique through reduction of anthropogenic pressure on the ecosystem.

Adoption of the Land based sources and activities (LBSA) Protocol – The LBSA Protocol was adopted in April 2010. Most of the pollution load introduced into the Ocean in the WIO Region emanates from land based sources and activities (UNEP, 2009b). The recent adoption of the Land based sources and activities (LBSA) Protocol underlines the determination of the Contracting Parties to implement the Amended Nairobi Convention by elaborating detailed provisions concerning various aspects of LBSA in the WIO Region. The LBSA Protocol applies to:

- a) Activities within the territories of the Contracting Parties that may directly or indirectly affect the marine or coastal environment of the Protocol Area including developments which cause physical alteration of the natural state of the coastline or otherwise result in physical alteration or destruction of habitats;

- b) Discharges, releases or outflows originating from land-based point and diffuse sources and activities within the territories of the Contracting Parties that may directly or indirectly affect the marine or coastal environment of the Protocol Area; and
- c) Inputs of polluting substances transported through the atmosphere into marine and coastal environment of the Protocol Area from land-based sources and activities within or originating from the territory of any of the Contracting Parties (LBSA Protocol, Article 3)

ICZM Protocol - In decision CP 6/3 made during the Sixth Conference of Parties (COP6), the contracting parties emphasised the role of the Convention on the protection of ecosystems and endangered species, and called for the development of a new legal instrument for an Integrated Coastal Zone Management in the Western Indian Ocean region.

The Secretariat in partnership with relevant regional and international organizations and programmes has developed a draft protocol through a consultative process in readiness for the 2012 conference of parties meeting to be held in Maputo Mozambique.

Development and implementation of integrated Ecosystem Based Management of marine and coastal resources - In contribution to the development of adaptive EBM frameworks, incorporating the fisheries element into the convention's work plan the Nairobi Convention designed activities with emphasis on ecosystem-based approaches to address interactive and cumulative human impacts on marine ecosystems including transboundary regional impacts.

The programme under Ecosystem Based Management aims at building national and regional capacities for the integrated management of the coastal and marine environment using ecosystems-based management approaches, especially in the context of the connections between land based activities, river basins and the marine environment while building on South to South cooperation and the outcomes of past regional training workshops. Some training activities were undertaken in 2011 to strengthen the capacity of senior experts, researchers, managers and integrated coastal management practitioners particularly those involved in the development of the Nairobi Convention's protocol concerning Integrated Coastal Zone Management, and its subsequent implementation,

### **Mediterranean Barcelona Convention**

LBS Protocol: The amended LBS Protocol was adopted on 1996 and entered into force on 2008. The Protocol provides a regional framework for the protection of the marine environment from land based pollution sources. The amended Protocol takes into account the objectives laid down in the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities (GPA), adopted in Washington on 3 November 1995 by a UNEP Intergovernmental Conference. In accordance with Article 15 of the Protocol 3 Regional Plans have already been adopted by the Parties (emission limit values for BOD from urban sources, phasing out of POPs and phasing out of DDT - 2009) and 3 additional Regional Plans

(emission values for BOD from the food sector, reduction of mercury and phasing out of nine additional POPs) are under consideration for adoption in the 17<sup>th</sup> Meeting of the Conference of Parties to the Barcelona Convention (January 2012).

Strategic Action Programme to address pollution from land-based activities (SAP MED): In the framework of the LBS Protocol, the Contracting Parties to the Barcelona Convention adopted the SAP MED in 1997, addressing the identification of problems, possible solutions, costs, targets and deadlines for achieving them. A report on the pollution hotspots was prepared on the basis of country reports and a wide assessment on the major pollution issues was finalized. The documents highlighted priorities, gaps and needs and indicated where legal, technical and institutional efforts had to be made to facilitate the implementation of the pollution reduction process in the countries. During the period 2001-2005 with the financial assistance of GEF and partners, all the efforts were concentrated on capacity building aimed at filling the gaps and establishing a solid platform in the region and the countries to ensure a concrete and sustainable launch of the expected pollution reduction interventions. Pre-investment studies were prepared in Albania, Algeria, Bosnia Herzegovina, Croatia, Egypt, Lebanon, Libya, Morocco, then Serbia and Montenegro, Syria, Tunisia, Turkey and the Palestinian Authority, many of which covered domestic pollution hotspots aiming at paving the way for the construction of treatment plants. In addition, guidelines were published on sewage treatment and disposal, as well as on impacts, costs, alternative treatment facilities and other issues. Also, emphasis was given to wastewater use by preparing guidelines and a number of documents on water reuse.

With regard to the assessment, the state of sanitation including sewage network and treatment plants was assessed in 2004 and 2010 and as a result, up-to-date inventories of the sewage treatment plants in Mediterranean coastal cities with populations over 2,000 inhabitants are regularly published.

Regional training courses and national and sub-regional training courses on management and operation of wastewater treatment plants took place, with the aim to form future trainers. Regional training courses for trainers on water reclamation and reuse were also held and will be followed by national courses.

National Action Plans (NAPs): All 21 countries of the region prepared their NAPs through a large participatory process. The NAPs contain a list of actions, including an investment portfolio that countries are committed to make in line with the municipal and industrial pollution reductions targets of the SAP MED. The Meeting of the Contracting Parties in November 2005 endorsed them and recommended their inclusion in the existing national development plans. As part of the process of preparation of NAPs, all countries prepared National Diagnostic Analyses where national pollution priorities were identified together with the related intervention plans. In addition, all countries compiled baseline budgets of pollution releases and emissions as a reference point to track the pollution reductions foreseen in the NAPs. Already, sewerage networks and wastewater treatment plants are under construction in many coastal cities, with national and international financing (World Bank, European Investment Bank, KfW, etc.) in the framework of the implementation of the National Action Plans of the countries, which were adopted in the framework of the Strategic Action Programme of the LBS Protocol (Barcelona Convention).

Important efforts are being made to ensure financial sustainability to the long-term implementation of NAPs. In addition to a successful activity carried out in 2001-2005 with the assistance of GEF to review and test in a number of countries the application of innovative economic instruments to support environmental interventions, additional partnerships and opportunities are being sought. As a result, a new GEF Mediterranean Partnership has been launched in the region with the participation of the World Bank and other partners from and outside the UN system. The new Partnership, that includes a regional capacity building component managed by UNEP and the creation of an Investment Fund managed by the World Bank directly addresses the implementation of NAPs and contains several activities related to ensuring their sustainable financing. Project activities are being carried out in 12 GEF-eligible countries: Albania, Algeria, Bosnia and Herzegovina, Croatia, Egypt, Lebanon, Libya, Montenegro, Morocco, Syria, Tunisia and Turkey. The Palestinian Authority is also participating. The Strategic Partnership consists of two individual but complementary components that assist countries in a collaborative manner: The Regional Component: Implementation of agreed actions for the protection of the environmental resources of the Mediterranean Sea and its coastal areas, including the interventions listed in the SAP (a US\$ 13 million GEF grant, to be implemented by UNEP/MAP and partners); and the Investment Fund for the Mediterranean Sea Large Marine Ecosystem Partnership (a US\$ 85 million GEF grant, implemented by the World Bank).

Another opportunity for the successful implementation of the NAPs is the launch by the Euro-Mediterranean Partnership of the Horizon 2020 Initiative (to de-pollute the Mediterranean by the year 2020) also directly addressing municipal and industrial pollution reduction in the Mediterranean as well as solid waste management. Synergy is being sought as the SAP MED and the Horizon 2020 have very similar and comparable objectives. The Mediterranean Hot Spot Investment Programme (MeHSIP) was launched in the framework of the Horizon 2020 and one of the planned actions called on the European Investment Bank and the World Bank to work with donor countries to identify the projects that are having the greatest impact on Mediterranean pollution levels, both upstream and downstream, throughout the Mediterranean region. The identification of priority hot spot investments was undertaken by the European Investment Bank (EIB) in cooperation with MAP. The activities of the MeHSIP focus primarily on providing support for the Horizon 2020 initiative and partner countries for the implementation of priority pollution reduction investment projects. A total of 44 potential projects have been identified in seven Mediterranean countries: Egypt, Israel, Jordan, Morocco, Palestinian Authority, Syrian Arab Republic and Tunisia.

**Integrated Coastal Zone Management:** Within the framework of the Mediterranean Action Plan, the member States of the Barcelona Convention have adopted an Integrated Coastal Zone Management Protocol on 21<sup>st</sup> January 2008 through a Conference of the Plenipotentiaries. The Protocol has entered into force on 24 March 2011 and an Action Plan will be submitted for adoption in the next meeting of the contracting Parties to the Barcelona Convention (January 2011). The Protocol is comprehensive and forward-looking. It articulates the definition of the coastal zone and the coastal setback; makes provision for development of coastal strategies and strategic environmental assessment and reporting on the implementation of the Protocol.

Marine Litter: UNEP/MAP-MED POL has prepared an assessment of the status of marine litter in the Mediterranean (2011) and a Strategic Framework for the management of marine litter in the Mediterranean, which will be adopted in the upcoming Meeting of the CoP to the Barcelona Convention on February 2012. MAP is also developing Ecological Objectives, Operational Objectives with appropriate indicators and targets for litter, as well as a relative monitoring programme, in the framework of the gradual application of the Ecosystem Approach for the management of human activities in the Mediterranean.

### **North East Atlantic OSPAR Convention**

The OSPAR Commission has been working on issues related to pollution from land-based sources since the signing of the 1974 Paris Convention on the Prevention of Marine Pollution from Land-Based Sources. In 1992, when the Paris Convention was updated and unified with the 1972 Oslo Convention on the Prevention of Marine Pollution by Dumping from Ships and Aircraft, the opportunity was taken to introduce the possibility of extending the Convention to cover threats to the marine environment from human activities other than pollution. This possibility was exercised in 1998, when the Contracting Parties adopted a new annex to the Convention (on the Biological Diversity and Ecosystems of the Maritime Area). This authorised the OSPAR Commission to adopt programmes and measures to protect the marine environment relating to all human activities that may adversely affect it (but subject to a prohibition of programmes and measures relating to questions of fisheries management and to a preference for action at the global level on maritime transport). The new Annex came into force on 30 August 2000 for the first seven Contracting Parties. All OSPAR Contracting Parties have now ratified it. The OSPAR Commission also provides the regional platform for coordinating implementation of the EU Marine Strategy Framework Directive with the aim of achieving Good Environmental Status by 2020.

OSPAR has organised its work against pollution from land-based sources under thematic strategies, adopted in 1998, revised in 2003 and further consolidated within an overarching Ecosystem Approach in 2010. Progress against the strategies is evaluated in comprehensive holistic Quality Status Reports (QSR 2000 and QSR 2010) underpinned by assessments and periodic evaluations:

Eutrophication (including sewage): The objective of the OSPAR Eutrophication Strategy is focused on combating eutrophication in order to achieve and maintain a healthy marine environment where eutrophication does not occur. A major part of OSPAR's recent work in this field has been the application of the agreed Common Procedure to identify eutrophication problem areas. This resulted in categorisation of the whole of the maritime area in 2003 and 2008 into problem areas, potential problem areas and non-problem areas.

Eutrophication problem areas are addressed partly by OSPAR instruments which require 50% reductions (from 1985) of the nutrient loads of inputs affecting, directly or indirectly, problem areas and measures to prevent any worsening of potential problem areas, and partly by the EC Urban Waste Water Directive and the EC Nitrates Directive. The latter requires measures to reduce inputs of nutrients from

agriculture into problem areas, while the former requires both the installation of sewerage systems in population centres of 10,000 and more and the treatment of the sewage collected to reduce nutrients. Except for exceptional cases, all the requirements had to be implemented by 31 December 2005. The sewage treatment requirements are supplemented by other, older EC Directives on bathing waters, and shellfish waters, which require high levels of microbiological sewage treatment.

In 2010 nutrient discharges to eutrophication problem areas had substantially reduced compared to 1985 for phosphorus (up to 85%), but less so for nitrogen (up to 50% lower). Large area of the North Sea coast and some estuaries and bays in the Celtic Seas, Northern Brittany and bay of Biscay remain problem areas. Farming contributes almost two-thirds of waterborne nitrogen reaching problem areas and nitrogen inputs from the atmosphere remain high.

**Radioactive substances:** The OSPAR Radioactive Substances Strategy sets the objective of preventing pollution of the maritime area from ionising radiation through progressive and substantial reductions of discharges, emissions and losses of radioactive substances, with the ultimate aim of concentrations in the environment near background values for naturally occurring radioactive substances and close to zero for artificial radioactive substances. In achieving this objective, the following issues should, inter alia, be taken into account: legitimate uses of the sea, technical feasibility, and radiological impacts on man and biota. As its timeframe, the Radioactive Substances Strategy further declares that by the year 2020 the Commission will ensure that discharges, emissions and losses of radioactive substances are reduced to levels where the additional concentrations in the marine environment above historic levels, resulting from such discharges, emissions and losses, are close to zero.

The Radioactive Substances Strategy is being pursued through National Plans for the reduction of radioactive discharges, adopted by each of the Contracting Parties to show how they will deliver their commitments. These plans cover both the nuclear and the non-nuclear sectors. By 2010 discharges of radionuclides from nuclear installations had fallen, and radiation doses to humans and marine life from this pollution are low in all OSPAR Regions. On average Beta-activity discharges from nuclear installations are down by 38% since 1995. Releases of technetium-99 from the Sellafield reprocessing plant (UK) have been drastically reduced.

**Hazardous substances (including persistent organic pollutants, oil and heavy metals):** the OSPAR Strategy objective for hazardous substances is to move towards the cessation of discharges, emissions and losses of hazardous substances by 2020, with the ultimate aim to achieve concentrations of hazardous substances in the marine environment near background values for naturally occurring substances and close to zero for man-made substances. A third of OSPAR's 26 priority groups of chemicals are expected to be phased out in the OSPAR area by 2020 if current efforts continue. In 2010 concentrations of some substances had decreased but problems remain in many coastal areas. Levels of cadmium, mercury, lead, polycyclic aromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs) are unacceptable in fish, shellfish and sediment in many coastal areas. Persistent organic pollutants (POPs), such as brominated flame retardants, are widespread and accumulating in marine life, partly as a result of atmospheric transport.

Marine litter and physical degradation: Work on human impacts including non-polluting impacts on the marine environment is organised under the OSPAR Biodiversity Strategy, also adopted in 1998 and revised in 2003. This provides for the analysis of all the main human activities that can have a physical impact on the marine environment: sand and gravel extraction; dredging for navigation; exploration for oil, gas and solid minerals; constructions in the sea (especially offshore wind-farms); cables and pipelines; introduction of alien species; land reclamation; and tourism and recreational activities. The effectiveness of national measures that have been adopted to control these activities are being examined. Where additional international measures are needed, OSPAR has taken the necessary initiatives. For example, guidance on wind-farms was agreed in 2003 and 2005. Many activities increase the amounts of noise, litter and non-indigenous species affecting the marine environment. A better understanding is needed of the combined pressures from all these activities.

## **Northwest Pacific**

### **Northwest Pacific Action Plan**

The Northwest Pacific Action Plan (NOWPAP) was established in 1994 by four member states, People's Republic of China, Japan, Republic of Korea and Russian Federation. From the very beginning, prevention of marine pollution from land-based sources, integrated management of coastal zone, and assessment of marine environmental conditions were among priority activities for NOWPAP, both at regional and national level.

Eutrophication, nutrients and sewage: An excessive nutrient input to the marine environment is of a major concern to the NOWPAP member states. NOWPAP Regional Activity Centers (RACs) implement activities related to the assessment of eutrophication and of nutrient inputs through different pathways (e.g., direct discharge, river input, atmospheric deposition). In 2011, these two NOWPAP RACs have published regional overviews of river and direct inputs of contaminants to the marine environment in the NOWPAP region and of eutrophication status (with the focus on selected case study areas) which will directly contribute to the GPA implementation in the Northwest Pacific. Recommendations developed through these activities will be presented to decision makers to control the land-based sources of pollution in the NOWPAP region.

In the Russian Far East, in the past huge amounts of waste waters were discharged into the coastal zone from Vladivostok, mostly without treatment. Currently waste water treatment facilities are being constructed and expected to be operational in 2012 (before APEC summit in Vladivostok).

Integrated Coastal Zone Management (ICZM): NOWPAP POMRAC (Pollution Monitoring Regional Activity Center) has been implementing activities related to the assessment of the state of marine environment and integrated coastal and river basin management (ICARM) since 2007. In 2009, the regional overview on ICARM in the NOWPAP region was published. In 2011, POMRAC experts from

NOWPAP member states have compiled national reports on ecosystem-based management, ecosystem valuation and marine spatial planning, looking for the best practices available in their countries.

Physical alteration and destruction of habitat (PADH): Two of NOWPAP member states, China and Korea, have been participating in the UNDP/GEF Yellow Sea Large Marine Ecosystem (YSLME) project. Both countries have signed the YSLME Strategic Action Program where they agreed to invest in restoring/rehabilitating degraded habitats through pilot projects and in the future halt (or significantly decrease) land reclamation which negatively affects coastal habitats.

Marine litter: As one of the outcomes of the NOWPAP MALITA (Marine Litter Activity), successfully completed in 2007, the Regional Action Plan on Marine Litter (RAP MALI) has been developed and implemented since 2008 with work plan and budget for every biennium approved by member states. With the focus on national activities, NOWPAP RAP MALI covers three major areas: a) prevention; b) monitoring; and c) removal of marine litter. At a regional level, among other activities, annual NOWPAP beach cleanup campaigns and associated workshops are being held in one of the member states, which contribute to the global International Coastal Cleanup (ICC) campaign as well as NOWPAP RAP MALI implementation. These annual events help to raise public awareness on marine litter problem; generate data on marine litter quantities, distribution and possible sources; and help to engage civil society. For example, close partnerships with local environmental NGOs, such as Japan Environmental Action Network (JEAN) and “Our Sea of East Asia Network” (OSEAN) in Korea, have been developed during the implementation of NOWPAP RAP MALI.

Beach cleanup campaigns have been actively implemented in all NOWPAP member states at least annually (more frequently in Japan and Korea; recently also in China and Russia). Japan has joined the International Coastal Cleanup (ICC) campaign since 1990; Korea since 2001; and China and Russia since 2007.

Within NOWPAP MALITA and RAP MALI, several guidelines and reports were developed which might contribute to the development of policies addressing marine litter:

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- Guidelines for monitoring marine litter on the beaches and shorelines of the Northwest Pacific region (2007);
  - Guidelines for monitoring marine litter on the seabed of the Northwest Pacific region (2007);
  - Guidelines for providing and improving port reception facilities and services for ship-generated marine litter in the Northwest Pacific region (2007);
  - Marine litter guidelines for tourists and tour operators (2007);
  - Recycling of plastic marine litter (2007);
  - Guidelines on marine litter management for commercial shipping (2007);
  - Guidelines on marine litter management for fishing sector (2007);
  - Guidelines on marine litter management for passenger ships (2007);
  - Guidelines on marine litter management for recreational activities (2007);

- Marine litter management: the approach of Incheon city, Republic of Korea (2008);
- Regional report on sea-based marine litter in the NOWPAP region (2009);
- Port reception facilities in the NOWPAP region (2009);
- Report on the technologies and research outcomes on prevention, collection and treatment of marine litter in the NOWPAP region (2010).

## **Pacific Noumea Convention**

Secretariat of the Pacific Regional Environment Programme (SPREP) - The SPREP Strategic Plan (2011-15) identifies climate change, biodiversity and ecosystem management, waste management and pollution control, and environmental monitoring and governance critical regional environmental priorities and these are directly reflected in the new organizational structure, approved by SPREP member countries in 2011, which will be implemented in 2012.

Regional Conventions - Implementation of convention related GPA-related activities is carried out by SPREP under two regional conventions; the Convention for the Protection of the Natural Resources and Environment of the South Pacific Region and its Protocols (the Noumea Convention); and the Convention to Ban the Importation into Forum Island Countries of Hazardous and Radioactive Wastes and to Control the Transboundary Movement and Management of Hazardous Wastes within the South Pacific Region (the Waigani Convention). The Noumea Convention obliges Parties to endeavour to take all appropriate measures to prevent, reduce and control pollution from any source and to ensure sound environmental management and development of natural resources, using the best practicable means at their disposal and in accordance with their capabilities. Ten Pacific countries are Party to the Noumea Convention. There are currently thirteen Pacific Region countries who are signatories to the Waigani Convention. As a Party to the Waigani Convention, these countries are obliged to ban the importation of hazardous and radioactive wastes from outside the convention area; prohibit shipment to and from non-Parties, unless there is a special agreement; take measures to reduce the generation of hazardous wastes at source taking into account social, technological, and economic needs; develop adequate treatment and disposal facilities for hazardous wastes; and follow established procedures for the trans-boundary movement of hazardous waste to other Parties for environmentally sound disposal.

SPREP's work under the Noumea Convention Protocols – *Protocol Concerning Cooperation in Combating Pollution Emergencies in the South Pacific Region 1986 (Emergencies Protocol)* and *the Protocol for the Prevention of Pollution of the South Pacific Region by Dumping (Dumping Protocol)* has been implemented under the Pacific Oceans Pollution Prevention Programme (PACPOL) Strategy framework focused shipping related pollution with four main focal areas – Marine Spills, Ships' waste, port management and invasive marine species.

Waste Management - SPREP Member countries adopted a Regional Solid Waste Management Strategy and Action Plan to prioritise implementation in 2009. The Strategy has a vision of "A healthy and a socially, economically and environmentally

sustainable Pacific for future generations” through the adoption of cost-effective and self-sustaining solid waste management systems by Pacific Island Countries and Territories. The original strategy was formulated in 2005 and revised in 2009 to focus on integrated waste management (refuse, reduce, reuse, and recycling) with an emphasis on appropriate waste collection and disposal to achieve this goal. The strategy has also been simplified to include nine key priority areas for solid waste management in the Pacific which include sustainable financing; adoption of integrated solid waste management including recycling; improved legislation; awareness, communication and education; capacity building; environmental monitoring; and improved medical waste management. The solid waste management strategy has been recently complimented by the development of regional strategies and action plans to address regional asbestos wastes and E-waste, and a regional medical waste strategy is currently under development.

Clean Pacific Campaign - The Year of Action Against Waste was held in 2005. This regional campaign encouraged new and existing national and community initiatives, and showcased regional best practices to support governments in their planning process for solid waste management. This campaign is being followed by the Clean Pacific Campaign in 2012 which will contribute to improvements in waste management practices and pollution prevention by enhancing awareness of, and supporting actions for good waste management & pollution prevention policies and practices. It will also support grassroots actions for waste reduction and management, pollution prevention and/or hazardous chemicals management.

Marine litter - SPREP has been involved in advising on plastic bag reduction such as the ban on non-biodegradable bags in Samoa. This will be followed by complementary approaches using taxation or outright bans in some other atoll-based countries over the next two years. SPREP has also initiated a partnership with the ANZ Bank (a commercial bank that operates within the region) and other private companies to sponsor re-usable shopping bags using the Year of the Sea Turtle as a motivator for social change. This is complemented by an extensive media and retailer, shopper and school-focused education campaign.

Sustainable use of Oceans - In 2002, the Pacific Islands Forum (the regional umbrella coordinating organisation) endorsed the Pacific Islands Regional Oceans Policy (PIROP) and Framework for Integrated Strategic Action (PIROF-ISA). PIROP ensures the sustainable use of oceans and their resources by Pacific Islands' communities and partners. The PIROF-ISA, which implements the PIROP, serves as a guide for governments and non-state actors, provides a framework for regional consensus on priorities, regional action and a focus for regional and international institutional collaboration. The key themes for action are: improving governance of coasts and oceans, improving the understanding of the ocean; sustainably developing and managing the use of ocean resources; maintaining the health of the ocean; promoting the peaceful use of the ocean and creating partnerships and promoting cooperation. Many of SPREP's activities are aligned to the objectives of PIROF-ISA activities and are also relevant to the UNEP GPA objectives. In 2009, the Pacific Oceanscape vision was proposed and developed into the Pacific Oceanscape Framework, endorsed by Pacific Island Leaders in 2010. The CROP agency Marine Sector Working Group, including SPREP, was tasked by leaders to initiate implementation of the Oceanscape Framework. In 2011, the position of Ocean

Commissioner was established, which is an essential first step towards full implementation of this mechanism to assist in the development of policy and a regional vision for increased integrated management of marine resources in the Pacific.

Integration of land and sea management - Early in 2012 SPREP will commence a new GEF funded project - Implementing the Island Biodiversity Programme of Work by integrating the conservation management of island biodiversity. This project has been designed to build on a number of ongoing initiatives and will work with a range of partners engaged in similar work and to apply lessons learned from past interventions. The project will provide an opportunity to research methodologies for developing conservation areas in marine and terrestrial habitats and to advise on information management systems. An important part of this process will involve establishing linkages to the Micronesian Challenge (MC) as both the GEF project and the MC have, as their primary focus, efforts for increasing marine and terrestrial ecosystems under some form of effective conservation. The Micronesia Challenge (MC) is a commitment by the Chief Executives of Palau, FSM, RMI and the territories of Guam and the CNMI to “effectively conserve at least 30% of the near-shore marine and 20% of the terrestrial resources across Micronesia by the year 2020”. The GEF project will focus on a number of specific species conservation priorities in the Cook Islands, Nauru, Tonga and Tuvalu. All four of these countries are working on the creation of conservation areas in terrestrial and marine habitats. Expected global benefits include contributions to reducing the rate of extinction of global biodiversity, reducing the rate of degradation of natural ecosystems and restoring them. The approach will emphasize ways for integrating traditional communities that are living off the land and the sea in a sustainable manner do so without compromising natural assets (land and marine) and where appropriate protecting endangered assets such as threatened species.

Input to Marine Planning - In 2011, SPREP supported the CBD as a regional host in identifying Ecologically or Biologically Significant Marine Areas (EBSA's) for the western south Pacific. Technical assistance was provided by CSIRO and the effort was supported by the other CROP agencies as well as regional partners. This is expected to be a continuing effort, to identify and document significant areas greater than 100m depth, that can be used for both national and regional planning and decision making.

### **Red Sea and Gulf of Aden Jeddah Convention**

LBA Protocol: A Regional Protocol to the Jeddah Convention (1982), concerning the Protection of the Marine Environment from Land-Based Activities in the Red Sea and Gulf of Aden was drafted in 1999, redrafted in 2004 and adopted by the Meeting of Plenipotentiaries in September 2005. It consists of 25 Articles dealing with issues such as wastewater treatment, solid wastes management, inspection systems and environmental impact assessment. The Protocol, in both English and Arabic, is the legal framework for the development and implementation of projects on the protection of the coastal and marine environment of the PERSGA region from land-based activities.

NPAs: Yemen has produced its NPA document in 2006, Jordan has produced its NPA document in 2009. Djibouti, Egypt and Sudan have produced their NPA documents in 2010. Saudi Arabia has prepared its final draft NPA document, and the final document is under review to be produced in 2011.

Regional Programme of Action (RPA): In close coordination and with financial support provided from the GPA, the Regional Organization for the Conservation of the Red Sea and Gulf of Aden (PERSGA) has taken the initiative to develop the “Preparatory and Fund Raising Phase” of the RPA for the Protection of the Red Sea and Gulf of Aden Marine Environment from Land Based Activities. It is presented in two documents: Part I portrays the “Road Map” of the Preparatory and Fund Raising Phase, and Part II details the “Portfolio of Project Proposals”. The Implementation phase will be designed on the basis of the results of the Preparatory and Fund Raising phase. It is planned to include other source categories of the GPA and other activities necessary for the full implementation of the RPA. Activities in Part I and currently in process include: Capacity Building Activities; Establishing Baseline Information on Sustainable Financing; and Development of National Programmes of Action (NPAs) for the Protection of the Marine Environment from Land-Based Activities. Part II projects include: Identification and setup of a Management Regional Plan for the collection, treatment and disposal of Municipal Wastewater in the coastal cities of the PERSGA region with a population of over 50,000 inhabitants; Identification and assessment of impacts of pollution hotspots and sensitive areas in the coastal region of PERSGA; Proposing a regional management plan for Marine Litter in the PERSGA Region; Assessment of Quality of Bathing Waters (and developing a regional programme proposing criteria for its safe use) and Beaches; and Management of the Hazardous Waste in the Coastal Region of PERSGA.

Financing: A joint publication with UNEP Regional Seas and the GPA, “Financing for the Environmental Conservation of the Red Sea and Gulf of Aden”, January 2006, was produced. This publication provides available options for increasing sustainable financing for the implementation of PERSGA activities at all levels. UNEP and PERSGA have supported development of NPA in Jordan. PERSGA has provided funds to support development of NPAs in Djibouti, Egypt, Saudi Arabia and Sudan during 2009-2011.

Wastewater management: PERSGA addressed wastewater management through two other training workshops during 2007 and 2010. A regional network and working group has been recently established by PERSGA in 2011 to undertake assessment of nutrients load from wastewater effluents and establish monitoring.

### **ROPME Sea Area Kuwait Convention**

LBA activities - Regional Workshop for Legal/Technical Experts on Land-Based Protocol was conducted in Manama, Bahrain during 19-21 October 2008. The Workshop reviewed the requirements for the effective implementation of the Protocol. Member States were urged to revisit their Action Plans to ensure appropriate institutional arrangements. Workshop also urged these Member States,

which have not done so, to incorporate the provisions of the Protocol into their National Legislation. A questionnaire to assist the Member States in completing the Survey of Major LBAs was also devised and distributed.

ROPME Integrated Information System (RIIS) - RIIS, incorporating major Regional databases on coastal contaminant survey, remote sensing data and oceanographic cruise results has been established. Besides the three said databases, RIIS also has a dedicated module for country level data representing both raster and vector formats. As such, a Regional template is available in RIIS for the Member States to present exchangeable information on LBAs and their impacts.

Integrated Coastal Area Management (ICAM) - A Regional Workshop for Modelling and Monitoring of Coastal Marine Processes (MAMCOMP) was conducted during 17-21 February 2007 in Tehran, I.R. Iran in cooperation with UNESCO-IOC. MAMCOMP dealt at length with the ICAM principles and drew upon successful ICAM examples from around the world to promote ICAM applications in the Region. Following the popularity and success of this Workshop, MAMCOMP Regional Workshop was again conducted during 3-5 March 2009 in Abu Dhabi, UAE. The 2009 MAMCOMP was conducted completely with Regional resource persons and examples, thereby demonstrating the ICAM progress achieved since the conduct of the 2007 Workshop.

State of the Marine Environment Report (SOMER) - SOMER is a periodic statement of the state of the marine environment, articulated through credible data, information, examples and case studies from the Region. Adopting the Integrated Environmental Assessment Methodology of UNEP, the recent edition of SOMER has reached the draft stage. SOMER describes in details the DPSIR aspects of ROPME Sea Area and many GPA related issues are explained. Recent edition of SOMER is likely to see print during the year 2012.

### **South Asian Seas South Asian Seas Action Plan**

Protection of the Marine Environment from Land-Based Activities is one of the 4 priority areas of the South Asian Seas Action Plan, while the other 3 priority areas, namely Integrated Coastal Zone Management, Development of Regional Oil Spill Contingency Plan and Strengthening Regional Centres of Excellence in the region, have direct bearing on LBA Activities. At all the Inter-Governmental Meeting of Ministers of the South Asian Seas Programme (SASP) several recommendations to implement GPA activities were endorsed. South Asia Co-operative Environment Programme (SACEP) acts as the Secretariat for SASP.

A Regional Overview and Regional Programme of Action for the Implementation of the GPA in South Asian Seas region was developed in 2000. Several Regional and National stakeholder meetings including a Regional Consultation workshop in 2003 were held where an Action Plan for 2003-2006 was prepared.

National Programme of Action (NPA): Governments of Bangladesh, Pakistan and Sri Lanka have prepared National Programmes of Action, while all five countries have

identified the importance of addressing the issue in their various policies and strategies for environmental, coastal and marine resources management. The development of a Pilot NPA for the Protection of the Marine Environment from Land-Based Activities for Sri Lanka was successfully completed in June 2004. As an outcome of the Sri Lanka NPA, a project entitled “Strategic Planning and Developing Market Based Instruments for the Medium to Long Term Strategic Planning of the Implementation of the Sri Lanka National Programme of Action” was done. The aim of the follow-up project to the Sri Lanka NPA is to assist the Government of Sri Lanka to facilitate fully resourced, transparent and politically endorsed national programmes that incorporate appropriate public spending programmes, pollution command and control regimes, market and/or fiscal incentives for pollution prevention and capacity building initiatives.

Integrated Coastal Areas and River Basin Management (ICARM): The “Conceptual Framework and Planning Guidelines for ICARM” were applied through a Regional Workshop on Integrated Coastal Area and River Basin Management in the South Asian Seas Region (Chennai, 2003). The workshop involved training various potential and actual middle level managers of river basins and coastal areas in SAS countries in the concepts, tools and processes of integrated river basin and coastal area management.

GEF Bay of Bengal Large Marine Ecosystem (BOBLME) Project: SASP/SACEP has been identified as a likely partner in the GEF 2nd Phase of the Bay of Bengal LME Programme once the project is operational. The project will address coastal/marine natural resources management and sustainable use, improved understanding and predictability of the BOBLME in which large-scale processes and dynamics affecting the BOBLME and establishment of a geo-referenced database will be the main component. It will also include the maintenance of ecosystem health and management of pollution aiming at tackling coastal pollution loading and water quality criteria and strategies and measures to improve regional collaboration with the help of SACEP.

Cairo Principles – Guiding Principles for Post-Tsunami Rehabilitation and Reconstruction: In collaboration with the GPA and member countries, national activities are being undertaken in implementing the Cairo Principles in the Tsunami affected countries, namely India, Maldives and Sri Lanka.

Marine Litter: SAS is participating in the process of preparing and implementing a Regional Plan of Action on the Sustainable Management of Marine Litter within the framework of the SAS Action Plan and in the context and objectives of the GPA/LBA. This involves a review on marine litter in SAS, preparation of a framework document for a regional plan of action and the organisation of a regional meeting of national authorities and experts on marine litter

Persistent Toxic Substances: UNEP is also supporting the development of a Work Programme and a PDF-A Proposal on Persistent Toxic Substances in SAS region.

National environmental quality criterion for seawater: With the assistance of the Norwegian Institute for Water Research (NIVA), SAS will develop a harmonised national environmental quality criterion for seawater as a management tool for

promoting sustainable development and for ensuring adequate quality for important economic activities and other uses of seawater resources in the region.

### **West and Central Africa Abidjan Convention**

The Abidjan Convention offers a regional platform for promoting synergies and coordinated implementation of global and regional initiatives for the protection of the marine and coastal environment.

LBS Protocol: The Abidjan Convention has been working on the drafting and adoption of an LBS Protocol for the region. The 9<sup>th</sup> Conference of Parties agreed on Decision CP.9/13: Revised Text of the Abidjan Convention and Adoption of the draft Protocol on Land-based Sources and Activities (LBSA)

- 1) To request the Secretariat to continue the revision work of the text of the Convention building on the relevant first draft and analysis, to incorporate into the text of the Convention emerging issues and the most recent developments in the field of the protection and conservation of the marine and coastal environment, as well as the relevant provisions from modern Multilateral Environmental Agreements, in consultation with the Contracting Parties. Extensive consultation should take place during the drafting exercise, first through electronic means and consequently, as necessary, in workshops and negotiation meetings to be organized by the Secretariat, involving Contracting Parties and other stakeholders, to improve and incorporate in the draft the various comments and proposals.
- 2) To further request the Secretariat to include in the revised text the possibility of regional economic integration organizations to accede to the Convention and its protocols.
- 3) To agree to reflect in the text of the revised Abidjan Convention the final agreed linkages between the Large Marine Ecosystems (LMEs) in the Convention area, and the Convention.
- 4) To agree to reflect in the revised text of the Convention the proposed linkages, roles and responsibilities envisaged between the Convention and the institutions and/or programmes of the Large Marine Ecosystems in the Convention Area, and other relevant bodies and entities operating in the region.
- 5) To request the Secretariat in accordance with Article 19 of the Convention, to communicate the final agreed negotiated text of the Draft Revised Convention, to the Contracting Parties six months before its submission to the next ordinary Meeting of the Contracting Parties for examination.
- 6) To agree to submit for internal process of review in each of our countries - according to national legislation- the final agreed text of the Draft Protocol concerning Cooperation in the Protection and Development of the Marine and Coastal Environment from Land-based Sources and Activities (LBSA) in the Western, Central and Southern African Region with a view to receive the internal necessary approvals to enable its adoption at a conference of plenipotentiaries to be organized by the Secretariat as requested in article 18 of the Convention,

- 7) To request the LME institutions and/or programmes to support the revision of the Convention.

### **Wider Caribbean Cartagena Convention**

The Caribbean Action Plan of 1981 led to the 1983 adoption of the Cartagena Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region. The Cartagena Convention is supplemented by three protocols – Oil Spills Protocol, Specially Protected Areas and Wildlife (SPAW) Protocol and the Protocol Concerning Pollution from Land-Based Sources and Activities (LBS).

**LBS Protocol:** The Protocol Concerning Pollution from Land-Based Sources and activities in the Wider Caribbean Region was adopted on 6th October 1999 and entered into force on 13th August 2010. Work in support of the implementation of the LBS and Oil Spills Protocols is facilitated through the Assessment and Management of Environmental Pollution (AMEP) sub-programme. This is one of the three sub-programmes of the Caribbean Environment Programme (CEP) with the main objective being to control, reduce and prevent pollution of the marine environment of the Wider Caribbean from land and marine based sources and activities. It also supports countries in their ratification and implementation of the LBS and Oil Spills Protocols. Several national and regional LBS promotional workshops have taken place e.g. national workshops were convened in Grenada, Suriname and Dominica in 2009 and 2010. The main objectives of these workshops were to create national awareness, strengthen the capacity of countries to implement the LBS Protocol, and facilitate accession by selected Governments. Two of the four Regional Activity Centres (RACs) of the Wider Caribbean Region (WCR) operate under the framework of the LBS Protocol; one is hosted in Trinidad & Tobago and the other in Cuba. These RACs are mandated to facilitate the implementation of the LBS Protocol and most recently facilitated the update of CEP's Technical Report No.33 published in 1994. This provides a more recent inventory of pollutant loadings into the Caribbean Sea and forms a new baseline for future monitoring and assessment work in the Wider Caribbean.

**National Programmes of Action (NPAs):** NPAs were completed in Jamaica, Trinidad & Tobago, Belize and Guyana; the equivalent of NPAs was also done through Coastal Zone Management Strategies and Action Plans in Columbia, Barbados and Saint Lucia. A Local NPA was also done for Mexico. NPA pilot projects were implemented in Suriname and Belize in 2011 with the focus being on wastewater management. New projects for NPA implementation in Saint Lucia, Dominican Republic and Suriname will commence in the last quarter of 2011. Training workshops were conducted to enhance regional capacity-building and facilitate dissemination of best practices and lessons learnt. In 2008, a regional NPA mainstreaming workshop was held in Jamaica with support from UNEP GPA. A National Promotional Workshop in support of NPA development was held in Suriname in 2009. The NPAs continue to be showcased as a tool for implementing the LBS Protocol and other related MEAs.

Wastewater management: CEP has been engaged in various projects in relation to wastewater management. The GEF funded Caribbean Regional Fund for Waste Management (GEF-CReW) Project is now in its inception phase for select countries in the Wider Caribbean Region. The project is co-implemented by UNEP and IDB and UNEP CEP will be the regional executing agency. A Sewage Needs Assessment Pilot Project for Caye Caulker in Belize and a Ministry of Health Wastewater Assessment Project in Jamaica are further examples of capacity building activities to assist countries of the Wider Caribbean Region to improve the management of domestic wastewater.

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Marine Litter: The basis for continued work by CEP in Marine Litter is through the “Regional Action Plan on the Sustainable Management of Marine Litter in the Wider Caribbean” (RAPMaLi) which was endorsed at the 2008 IGM. Several pilot projects have been undertaken in Barbados, Guyana Saint Lucia, and Jamaica and the Secretariat played an active role in the development of the Honolulu Strategy: a framework for the prevention and management of marine debris.

Eutrophication: The GEF funded Contaminated Bays Project commenced in 2002 and was successfully completed in 2009. This project was designed to address one of the priority issues for the region that of eutrophication resulting from excess inputs of nutrients to the coastal zone and adjacent international waters. Multiple workshops were convened through the project to facilitate regional cooperation and information sharing on national/and or regional approaches for managing contaminated bays.

The GEF IWCAM Project commenced in 2005 and will end in July 2012. The project recognises the highly integrated and closely interlinked nature of watershed and coastal areas in small islands and supported national demonstration activities on Integrating Watershed & Coastal Area Management to address priority issues with the potential for replication across the region. The overall objective was to strengthen the commitment and capacity of the participating countries to implement an integrated approach to the management of watersheds and coastal area, while enhancing the capacity of the countries and the region. The project is being implemented in 13 Caribbean SIDS.

The GEF REPCar Project commenced in 2006 and will end in December 2011. The project looked at improving pesticide management in Columbia, Costa Rica and Nicaragua to ultimately reduce pesticide run-off to the Caribbean Sea. The project implements Annex IV of the LBS Protocol on agricultural non-point sources of marine pollution.

The Secretariat is working to develop follow up projects to both GEF IWCAM and GEF REPCar to continue to support countries in the region in their efforts to reduce pollution of the marine environment.

Physical Alteration and Destruction of Habitats (PADH): CEP participates with other UN agencies in the implementation of the GEF UNDP IOC/UNESCO Caribbean Large Marine Ecosystem Project which aims to assist Caribbean countries in improving the management of their shared living marine resources through an ecosystem level approach. Additional marine biodiversity activities include national

recovery plans for species such as sea turtles, a regional conservation plan for marine mammals, and management initiatives for economically important species such as lobster and conch. CEP supports Sustainable Tourism, in promoting increased capacity at the local level on best practices and approaches for sustainable tourism, among others the implementation of the Caribbean Blue Flag Initiative.

### **III. Annex**

#### **Regional Seas Conventions and Action Plans Secretariats Statement to the Inter-Governmental Review of the Global Programme of Action for the Protection of the Marine Environment from Land-based Pollution**

We the Secretariats of the Regional Seas Conventions and Action Plans (RSCAPs), *Having* met in Busan, Republic of Korea from 3 to 5 October 2011 at the 13th Global Meeting of the Regional Seas Conventions and Action Plans, to discuss the implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-based Pollution (GPA) 2007-2011,

*Recalling* the Declaration of the United Nations Conference on the Human Environment, adopted in Stockholm on 16 June 1972, the Rio Declaration of 14 June 1992, the UN Millennium Declaration 2000, the Plan of Implementation of the World Summit on Sustainable Development 2002 and the Beijing Declaration 2006,

*Recognizing* the socio-economic value of marine and coastal resources as the main source and reserve for food security, poverty reduction, economic well-being and health for a significant number of people in the world,

*Emphasizing* the key role of the RSCAPs in facilitating the implementation of relevant current and future global conventions, strategies, declarations, resolutions, initiatives, and action programmes addressing coastal and marine environment protection and conservation,

*Underscoring* the importance of the RSCAPs in the implementation of the GPA at the regional and national level,

*Recognizing* the key role of the RSCAPs in the implementation of the GPA, as evident in the development and implementation of National Programmes of Action (NPAs) and addressing specific sources of pollution,

*Noting* the continued support by member states, resulting in the modernization of RSCAPs to integrate the ecosystem approach, Integrated Coastal Zone Management (ICZM) and adaptation to climate change,

*Aware* of the importance of contributions from the 3<sup>rd</sup> Inter-Governmental Review (IGR-3) of the GPA towards the United Nations Conference on Sustainable Development (Rio +20), to be held in Rio de Janeiro, Brasil, in June 2012,

*Invite delegates of the IGR-3 to:*

1. Strengthen the role of the RSCAPs in the implementation of the GPA through the land based sources of pollution (LBS) protocols, NPAs, ICZM, Strategic Action Programmes, implementation of projects, amongst others.
2. Continue to implement the GPA in the 2012-2016 timeframe through the RSCAPs using regional appropriate mechanisms and taking into account regional settings and priorities.
3. Utilise the GPA, as a global coordination mechanism, to set priorities and directions at the global level on addressing land-based sources of pollution.
4. Recognize different regional priorities, related to land-based pollution, within the context of the RSCAPs that need to be addressed.
5. Encourage the member states of RSCAPS to incorporate (as appropriate) the outcomes of the IGR-3 into the programme of work of the RSCAPs and to request the Secretariats of the RSCAPs to implement the outcomes of IGR-3.
6. To consider integrating the outcomes (as appropriate) of the IGR-3 into national policies, development plans and legislative frameworks.
7. Request the GPA Secretariat to develop guidance for partnerships<sup>4</sup> and other modalities to address global issues.
8. Initiate and strengthen partnerships at the national, regional, and international levels, with emphasis on promoting sustainable regional financing mechanisms that address land-based sources of pollution.
9. Assist the RSCAPs in the development and implementation of innovative and sustainable financial mechanisms to address land-based sources of pollution.
10. Support the Secretariats of GPA and RSCAPs in sharing and implementing best management practices, build capacities, as well as, facilitate technology transfer.
11. Advocate innovative approaches taken by the RSCAPs, in addressing wastewater, nutrients and solid waste as a resource.
12. Explore and utilize the Green Economy approach and Institutional Framework for Sustainable Development in the implementation of the GPA at the global, regional and national level.

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<sup>4</sup> Partnerships as proposed to the IGR-3 on nutrients, wastewater management and marine litter.