PROJECT INFORMATION DOCUMENT (PID) APPRAISAL STAGE

Report No.: AB1426

	Western Indian Ocean Marine Highway Development and Coastal			
Project Name	Contamination Prevention Project			
r reject Hame				
Region	Africa			
Sector	Ports, waterways and shipping (60%); information technology			
	(20%); central government administration (20%)			
Project ID	P078643			
GEF Focal Area	International Waters			
Borrower(s)	Comoros, Kenya, Madagascar, Mauritius, Mozambique,			
	Seychelles, South Africa, Tanzania			
Implementing Agency	South African Maritime Authority and the Indian Ocean			
	Commission			
Environment Category	[] A [] B [X] C [] FI [] TBD (to be determined)			
Date PID Prepared	June 30, 2005			
Date of Appraisal				
Authorization				
Date of Board Approval	August 2, 2005			

1. Country and Sector Background

The growing population and expanding urbanization and economic activity in the coastal zones coupled with virtually nonexistent management are increasingly placing marine and coastal resources under threat. The shipping lanes along the East African coast are among the busiest in the world, carrying over 30 percent of the world's crude oil supplies. At any given time, hundreds of oil tankers, manyof them very large crude carriers, transport crude oil from the oilfields of the Persian Gulf and Indonesia to Europe and the Americas. Over 5,000 tanker voyages per year take place in the sensitive coastal waters of Comoros and Madagascar and along the coast of East Africa, passing in close proximity to the World Heritage site of Aldabra Atoll (Seychelles). Oil and gas exploration programs operating in the region add to the risks. A large oil spill could also severely harm the economies of Mozambique, South Africa, Tanzania, Kenya, and the small island developing states by damaging fishing grounds, beaches, and diving and deep-sea fishing areas; disrupting shipping; and shutting down activities that depend on seawater intake.

Moreover, destruction of coral reefs and illegal fishing are major problems off the shores of the countries of the region. The western Indian Ocean region is one of the last areas in the world where fishing activities are largely unregulated. Vessels from Europe and eastern Asia heavily exploit tuna cape hake, blackhand sole, and other species within the exclusive economic zones, but land the catch outside the region, without reporting the catch to the national authorities. Improvements in fishing methods have led to greater numbers, larger sizes, and increased variety of fish being caught. As a consequence fish stocks are shrinking and several species face potential extinction.

Although most of the countries in the region are party to the UN Convention on the Law of the Sea, have declared a 200-mile exclusive economic zone, and are in the process of establishing claims to the continental shelf, they lack the institutional and financial capacity to effectively monitor activities of vessels and to enforce their control over activities taking place within their jurisdictions and responsibilities. The lack of enforcement is contributing to the destruction of the coral reefs, to unsustainable exploitation of fisheries, and to significant damage to nontarget species, such as sea tortoises, porpoises, dolphins, and whales.

Countries of the region recognize that they cannot protect their shared marine and coastal resources working alone. Rather they need to work together to improve the safety of navigation through regional waters and to enforce regulations intended to protect fishing and other marine resources from excessive exploitation. They also need assistance to pilot new technologies that have the potential of significantly improving the safety of navigation at reasonable cost, such as a marine highway. The project will help governments achieve their objectives by supporting creation of a mechanism of regional cooperation and by piloting a marine highway.

Eligibility for GEF financing

Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, South Africa, and Tanzania are eligible for Global Environmental Facility (GEF) financing for international waters projects. All have signed the key international maritime conventions aimed at limiting contamination and increasing the safety of navigation (International Convention on Civil Liability for Oil Pollution Damage (CLC92)), the International Convention for the Safety of Life at Sea (SOLAS), and the International Fund for Compensation of Oil Pollution Damage (FUND92). All except for Mozambique, South Africa, and Tanzania have ratified and the International Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC90). All except for Madagascar and Tanzania have ratified the Convention on the International Regulations for Preventing Collisions at Sea (COLREG). Comoros, Kenya, Mauritius, Seychelles, and South Africa in addition have ratified the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78).

2. Objectives

The project's development objective is to increase the safety and efficiency of navigation. This will be achieved by establishing a demonstration marine highway to guide ships around environmentally sensitive areas and through selected busy sea lanes and by supporting development of capacity for port state control.

Key performance indicators include:

¹ A marine highway is a physically-defined navigation route, providing a safe and secure navigation channel supported by continuously updated nautical charts, in accordance with the provisions of SOLAS (in paper or electronic format), maritime safety information, real-time navigation aids, and other information systems (weather updates, traffic management, access to ports, and the like). It allows ships to optimize operational safety and sailing efficiency. A marine highway will be supported by modern data management and information techniques such as global positioning systems, shore-based vessel traffic management systems with adequate on-board equipment, and electronic nautical charts, to the extent these are available.

- Number of ships traveling through the region using the marine highway for navigation.
- Number of ship inspections carried out at major ports in the region.

The project's medium to long-term global environmental goal is to reduce the risk of ship-based environmental contamination (such as oil spills from groundings and illegal discharges of ballast and bilge waters) and to strengthen the capacity of countries to respond to oil or chemical spill emergencies in the region.

The project has three specific global environmental objectives. The first is to ascertain the economic, technical, and institutional feasibility of introducing precision navigation systems in the region, such as an electronically supported marine highway, to guide ships through sensitive areas and to monitor the movements and activities of fishing and other vessels operating within countries' territorial waters. The second objective is to support widening the existing regional agreement (June 5, 1998) on port state control and implementation of its provisions. The third objective, focusing on Kenya, Mozambique, and Tanzania, is to reduce risks of environmental damage to beaches, fishing grounds, and other domestic resources from spills of oil and chemicals. This will be achieved by supporting efforts of Kenya, Tanzania, and Mozambique to become part of a regional oil spill response plan, by completing the identification and mapping of environmentally sensitive areas along coasts and sea lanes, and by widening the regional collaboration that has been built under the GEF-supported West Indian Ocean Islands Oil Spill Contingency Planning Project.

Key performance indicators include:

- Precision navigation system installed and its feasibility for the region assessed with the full involvement of industry groups. Should the concept prove feasible, a plan for further development is put into place.
- Authorities responsible for monitoring and controlling the activities of large fishing vessels use the tools of the marine highway for monitoring and contribute fully to the assessment of its feasibility.
- Access to information and tools needed to effectively manage marine and coastal resources improved, especially in Kenya, Tanzania, and Mozambique.
- Kenya, Tanzania, and Mozambique ratify relevant IMO conventions and join the regional oil spill contingency plan.
- Proportion of ships that do not comply with international standards arriving at ports in the region declines compared with a baseline.
- Government entities and industries are satisfied with the performance of the regional institute responsible for coordination.
- Coordination and collaboration among related GEF-supported initiatives improves.

The proposed project is in line with the country assistance strategies (CASs) of the participating countries. The Kenya CAS (2004) names the proposed project as important not only to protect coastal and marine resources, but also to promote regional integration. The Mozambique CAS (2003) emphasizes the importance of protecting coastal and marine resources to promote

sustainable development of tourism, a major source of growth in the country. The Madagascar CAS (2003) places environmental protection at the center of its strategy, noting the strong linkages between environmental degradation and high levels of poverty. CASs for Mauritius (2002), Comoros (2000), and Tanzania (2000) all discuss environmental protection as a key element in their strategies. No recent CASs have been produced for Seychelles or for South Africa. Both countries, however, have taken strong action to protect their coastal and marine resources in recognition of the importance of the tourism and fishing industries to their economies.

The project's global objectives are also in line with the objectives of the Nairobi convention, which are to encourage regional initiatives and cooperation among the states for the protection, management, and development of marine and coastal resources of the eastern African region. They are also consistent with those of the CLC92, OPRC90, FUND92, MARPOL 73/78, SOLAS, COLREG and other conventions of the International Maritime Organization. Collectively, these conventions require signatories to take coordinated action to protect marine and coastal resources and ensure the safety of navigation.

The project will contribute to the goals of GEF operational program 10 in several ways, and its strategic priority 3 (undertake innovative demonstration projects for reducing contaminants). It is expected to demonstrate ways to overcome barriers to adoption of best practices that limit contamination of the international waters environment by developing a marine electronic highway to aid the navigation of ships through particularly hazardous seaways. The project will also leverage significant private sector support to demonstrate the value of using modern technology to help ships avoid collisions in busy marine corridors. The modern technology will also permit countries to monitor and control fishing in their territorial waters.

The proposed project also satisfies the criteria for the operational strategy for international waters—to assist groups of countries to better understand the environmental concerns of their international waters and work collaboratively to address them—through its support for analytical work and establishment of information systems, for ratifying conventions and translating their provisions into law, and for building institutional capacity to more comprehensively address transboundary water-related environmental concerns.

3. Rationale for Bank Involvement

The proposed project will help to catalyze and coordinate support to protect the globallysignificant marine and coastal resources of the western Indian Ocean region, a role that the GEF has been uniquely designed to fill. Without such support from the GEF, the countries are not likely to come together to undertake activities that will demand local resources, but that provide regional and global benefits.

The Bank/GEF has considerable experience in supporting countries' efforts to work cooperatively in reduce transboundary pollution and increase the safety of navigation. Through its growing portfolio of regional seas and international waters projects, it has developed the skills and knowledge to help countries build national and regional capacity to manage programs that cut across countries. Through its management of the recently completed Western Indian Ocean Oil Spill Contingency Project it has developed insight into the environmental, social, and institutional issues facing the countries of the region and will draw on this knowledge in designing and managing the proposed project. Through this experience the Bank/GEF has also forged positive working relationships with many of the governments and partners that will be involved in the proposed project. Bank/GEF involvement will also help in mobilizing resources and expertise from other partners, including multilateral organizations and industry groups representing both the shipping and oil industries, and thereby improve project design, implementation, effectiveness, and sustainability.

The International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA), the International Hydrographic Organization (IHO), the International Maritime Organization (IMO), the United Kingdom Hydrographic Office (UKHO), the Service Hydrographique et Océanographique de la Marine of France (SHOM) will be close partners in preventing marine contamination. The United Nations Environment Program (UNEP) through its Regional Seas Program will be a partner in protecting critical habitats and biodiversity. The oil industry through the International Petroleum Industry Environmental Conservation Association (IPIECA) and the shipping industry (the International Tanker Owners Pollution Federation Limited (ITOPF) will bring knowledge of best practices in preventing contamination from ships. France has expressed interest in participating as a partner through La Réunion island.

4. Description

The project will include Kenya, Mozambique, South Africa, Tanzania, Madagascar, Comoros, Mauritius and Seychelles, and as a partner La Réunion (France), covering a combined coastline of 13,300 kilometers. By adapting the model developed for the Straits of Malacca and Singapore, the development of the western Indian Ocean marine highway will be implemented in phases. The first phase (the project) will establish as a pilot an electronically supported marine highway for some of the region's major shipping routes, will assess the feasibility of the concept, and, should the concept prove viable, will finance preparation of a follow-up project agreed upon by the countries. The second phase (or a follow-up project) will build on the experience of the first phase and establish a full marine highway covering all major shipping routes of the western Indian Ocean region.

Components include:

Component A: Development of a regional marine highway. This component will support the establishment of a network of electronic navigational charts incorporating information environmental assets (reefs, nurseries, migration areas, and the like) in conjunction with the differential global positioning system and other maritime technologies, which will form the backbone of a marine highway extending from South Africa to the Mozambican port of Nacala (west of Comoros) to Aldabra (Seychelles). Vessels will voluntarily use the electronically supported segments of the marine highway in South Africa, again at Inharrime (Mozambique), and again at Nacala, and then again at Aldabra until leaving the marine highway. As the area between these points is in deep water and is far from the coasts, the area will be surveyed and electronic charts will be provided to vessels. In addition, the route north from the Seychelles will

be surveyed to provide mariners with up-to-date information on how to navigate the route safely after they leave the marine highway.

The component includes six subcomponents: (1) production of nautical charts and publications incorporating information on environmental assets; (2) maintenance of these charts and publications; (3) survey and rehabilitation of the main aids to navigation on the route of the marine highway; (4) establishment of an automatic information service and ship reporting scheme; (5) search and rescue activities; and finally (6) the evaluation of the demonstration phase and preparation of the second phase if the demonstration phase proves to be feasible and sufficiently beneficial to justify costs.

It is expected that the large vessels transporting oil and chemicals will choose to sail under the control of the marine highway, rather than outside its boundaries, because doing so will reduce their risks of groundings and collisions and increase their efficiency of navigation. The technology of the marine highway may also be useful for monitoring, control, and surveillance of large fishing vessels. All countries of the region either already require or are planning to require fishing vessels that operate in their territorial waters to install and operate an automated satellitelinked vessel monitoring system on their ships. Vessel monitoring systems provide information to the fishing authorities on the location of a vessel, speed, and course of a vessel. They allow the authorities to check a whether the vessel operates where fishing is not allowed, holds the necessary licenses and quotas to fish in the area, or has sailed to a port without declaring its landings. The proposed project will collaborate with the national fishing authorities to ensure that the technology of the marine highway is as useful as possible to monitor and control fishing activities. Where fishing boats are not already using a vessel monitoring system, mechanisms to hasten their adoption—such as requiring them to install the necessary equipment on their boats (provided at no cost by the project) in exchange for a license—will be explored with the fishing authorities. The evaluation of the demonstration project will include an in-depth study of the costs and benefits to large fishing vessels of using a marine highway, and will specify a range of regulatory and other measures that would encourage such vessels to use it.

Component B: Capacity building for prevention of coastal and marine contamination. This component contains four subcomponents. The first will support seminars and workshops on environmental sensitivity mapping, issues related to implementation of conventions, marine navigation safety, prevention of marine and coastal pollution, risk assessment and development of appropriate response strategies, enforcement of fisheries regulations, and related matters. The second subcomponent will support the creation of site-specific pollution prevention and contingency management plans for coastal and marine hotspots. The third subcomponent will support the development of a methodology to identify and assign values to the key environmental resources in the region. The fourth will support the development of a regional database and a geographic information system on the marine environment, marine and coastal resources, ship movements, ship waste, and sea-based activities.

Component C: Widening capacity for regional oil spill response. This component will assist Kenya, Mozambique, and Tanzania (1) to develop national oil and chemical spill contingency plans, (2) to identify and overcome obstacles to ratifying IMO conventions intended to protect the marine and coastal environments and to improve the safety of navigation, (3) to support the

preparation of a regional marine pollution contingency plan that covers all participating countries, and (4) to strengthen a regional center to coordinate national actions and to monitor regionwide environmental conditions and causes of degradation and damage. GEF financing will in particular assist countries to ratify conventions and to enact the enabling legislation. The IMO, IPIECA, the EC, and France are expected to support, contribute to, or cofinance the preparation of the national oil spill contingency plans.

Component D: Port state control, regional institutional strengthening, and project management. Port state control allows countries to require that ships entering their ports meet the requirements of the major conventions of the IMO on the safety of navigation and the prevention of pollution from ships regardless of whether or not the flag state is party to the conventions. A regional port state control arrangement provides an effective tool to ensure that ships using international navigation routes and calling on major ports in a region comply with the rules and standards set out in the applicable IMO conventions. A memorandum of understanding for port state control in the Indian Ocean was signed on June 5, 1998, by Australia, Bangladesh, Djibouti, Eritrea, India, Iran, Kenya, Maldives, Mauritius, Mozambique, Myanmar, Seychelles, South Africa, Sri Lanka, Sudan, Tanzania and Yemen. This component will support the widening of this regional agreement to include Madagascar and Comoros. This component will also support its implementation in countries participating in the project, covering issues such as procedures for surveillance, inspection, and detention of ships, and arrangements for exchanging information. It will support capacity building, including training of inspectors to international standards in port state control. Finally, it will support several regional workshops aimed at developing consensus among countries on priority actions, administrative arrangements, and coordination mechanisms to be used in promoting regional marine environmental management.

Assistance will be needed at the regional, subregional, and national levels to manage the project and coordinate the various activities. This component will finance equipment, staff, and logistical support required by the regional body, a subregional entity, and national institutions to ensure that the project is implemented efficiently and to build sustainable capacity of the participating entities to manage the development of the marine highway and to coordinate activities after the project is completed. It will also strengthen the technical capabilities and the institutional and coordinating arrangements among the concerned states to collectively prevent, manage, and respond to transboundary marine pollution. This component will support technical assistance and studies as needed during project implementation. It will support creation of capacity for monitoring key performance indicators and for evaluating project implementation progress and impact. This component will also support the establishment of mechanisms for sustainable financing of the development of the marine highway and other infrastructure and capacity created through the project.

A key element of the project is its commitment to coordinate and collaborate with other projects in the region that are working to protect the marine and coastal environment. This component will support activities to facilitate such coordination and collaboration, such as establishing and maintaining a list-serve for people interested in the issues, providing updates on project progress to the International Waters-Learn website, hosting regional workshops, and the like. GEF funds will complement technical assistance provided through the other partners in the program, and will finance only activities that contribute to global environmental benefits and that others cannot finance. Specifically, GEF funds will finance activities designed to prevent marine and coastal contamination activities and activities that support surveillance and enforcement of laws and regulation governing the shipping and fisheries industries. This includes development and installation of a pilot marine highway, support for widening and implementing the regional agreement on port state control, and activities to promote coordination and collaboration among relevant projects. The oil spill contingency planning activities are largely baseline activities, and the GEF will allocate limited funding for these, focusing on the activities designed to widen the regional plan and strengthen regional collaboration.

5. Financing		
Source:		(\$m.)
Borrowers/Recipients		0.8
Global Environment Facility		11.0
Others		13.5
	Total	25.4

6. Implementation

The project will be implemented in partnership with multilateral organizations, with industry groups representing both the shipping and oil industries, and with donors. Specialized international organizations—including IALA, the IHO, the IMO, the UKHO, and SHOM—will be close partners in preventing marine contamination and in developing the national and the regional oil spill response contingency plans. UNEP through its Regional Seas Program will be a partner in protecting critical habitats and biodiversity. UNDP will be a partner in assessing risks to the ecosystem of the western Indian Ocean. The oil industry (IPIECA) and the shipping industry (INTERTANKO and ITOPF) are likely to provide expert advice and technical support to the project. France has expressed interest in participating as a partner through La Réunion island. Both the EC and the Danish International Development Agency (DANIDA) have expressed interest in providing support for project activities.

Project implementation period. The project will be implemented during fiscal 2006–10, completed by June 30, 2009 and closed by December 31, 2009.

Executing agencies. Given the technical nature of some aspects of the project and the large number of countries involved, several options are being considered for project management. One is to appoint a regional project management unit (RPMU) headed by a regional coordinator to be responsible for implementing component A (development of a regional marine highway), component D (port state control and regional institutional strengthening), and for overall coordination of project implementation. The RPMU will also be accountable for ensuring that financial reporting and auditing requirements are met and that procurement, disbursement, and financial management policies and procedures are complied with. The South African Maritime Safety Authority (SAMSA) is being considered as a suitable organization to serve as the RPMU. Establishing a subregional project management unit (SRPMU) at the Indian Ocean Commission (IOC) is also being considered to implement project components B (capacity building for

prevention of marine and coastal contamination) and C (widening oil and chemical spill response capacity). Project implementation coordinators from the ministry of transport of each country will coordinate implementation of the national-level activities and all beneficiary agencies. The project will help build the capacity of the RPMU, the SRPMU, and the PICs for project management and project monitoring.

Project oversight. A steering committee—proposed to be headed by the minister of transport of South Africa, and comprised of senior officials responsible for transport or the environment or both of each of the beneficiary countries, the Chief Executive Officer of SAMSA and the Secretary General of the IOC—will be responsible for the overall monitoring of project implementation.

Procurement. Works, consultants and equipment to be financed under the GEF grant will be procured according to World Bank procurement guidelines dated May 2004.

Accounting, financial reporting and auditing arrangements. The RPMU and the SRPMU will establish before September 30, 2005 project accounting systems tracking the cost of the various goods and services provided under the project, according to the most recent World Bank Financial Management Guidelines published by the World Bank. They will keep separate project accounts together with their statutory financial statements. Terms of reference for annual audits of project accounts and semiannual audits of the statement of expenditures will be agreed upon at negotiations. Auditing will be carried out by independent auditors acceptable to the Bank, and the reports of such audits will be submitted to the Bank no later than six months after the end of the fiscal years of the RPMU and SRPMU for the project accounts and no later than three months after the end of each calendar semester for the statements of expenditure.

Supervision. The Bank will devote some 100 staff weeks to supervise progress under the GEF grant through fiscal 2010. Supervision will focus on progress in achieving specific objectives, such as establishing the marine highway, ratification of conventions, development of the national and regional contingency plans, development of capacity for port state control, procurement, financial management, and overall project implementation. During supervision and project reviews, particular attention will be paid to implementation of the mechanisms designed to promote institutional and financial sustainability.

7. Sustainability

Sustainability. Participating governments are required to commit at negotiations to establishing mechanisms to sustain the marine highway, the environmental information systems, and the national and regional contingency plans and other project investments to ensure that the benefits of the project are sustained. The PDF Block B grant is financing a study of options for institutional and financial sustainability. The oil and shipping industries are expected to contribute significantly to the costs, because they will benefit from the increased efficiency and safety of navigation and from the reduced risk of catastrophic damage in the event of an accidental oil or chemical spill. Similar mechanisms were established successfully under the West Indian Ocean Islands Oil Spill Contingency Planning Project, following the recommendations of an institutional and financial sustainability study. In addition, it is expected

that countries will generate some income by selling the updated nautical charts and publications to the shipping industry.

Replicability. The proposed project will create a pilot marine highway, which if successful, is expected to be a model for replication in the southwest Indian Ocean region and in other sea lanes of the world. Two proposed GEF-supported projects-the Malacca Straits Marine Electronic Highway Demonstration Project and the Yemen Coastal and Marine Management Project (that will informally extend the marine highway through the Gulf of Aden)—will in particular benefit from the lessons learned from the western Indian Ocean project. As with the Western Indian Ocean Islands Oil Spill Contingency Planning Project, the PMUs will actively disseminate project lessons through a variety of means. These will include maintaining websites with up-to-date information on project experiences, producing films for broadcast on television or distribution through DVD, publishing newsletters for distribution to the public, inviting government ministers and other officials to key project events and inviting the press to cover such events, hosting study visits of policymakers and others interested in learning more, and contributing to relevant international conferences. The PMUs will also create information packets targeted to specific stakeholders, such as policy makers, local fishers, ship operators, port and oil industry decisionmakers, and the like. Knowledge of new techniques to prevent and deal with oil spills will be continuously updated and shared among the participating countries through the regional institution that has been established for this purpose under the earlier project. Similarly best practices regarding the safety of navigation, monitoring of the state of fisheries, coral reefs, and ecosystem health and the means of managing and protecting resources will be shared through workshops and national and regional forums. Monitoring and evaluation reports will be regularly distributed to participating government agencies. Should the marine highway prove to be feasible, government officials and other interested parties from other regions will be invited to visit the project area and learn about the project first hand through discussions with SAMSA, with government officials, and with ship operators who are using the navigational aids.

8. Lessons Learned from Past Operations in the Country/Sector

To safeguard the marine and coastal ecosystems of the western Indian Ocean islands from the risks and consequences of oil spills, the GEF in 1998 financed the West Indian Ocean Islands Oil Spill Contingency Planning Project, which closed June 30, 2004. The project achieved its development objectives. A GEF Secretariat-managed project review completed in August 2002 rated as satisfactory the project approach, the project's country ownership, stakeholder participation, and sustainability. The review also rated as high the project's cost effectiveness and replicability. Importantly, the review noted that benefits are likely to be sustained once the project is complete. Lessons learned from this project and others include:

• Obtaining government commitment during project preparation to specific arrangements for institutional and financial sustainability helps to ensure that project investments will be sustained after the project closes. The proposed project includes a subcomponent focused on developing mechanisms for the sustainable financing of the marine highway, the oil and chemical spill response capacity, and other project investments to ensure that the benefits of the project are sustained. The private shipping industry is expected to contribute

significantly to the costs, because it will benefit from the increased efficiency and safety of navigation.

- The choice of implementing agency and of project coordinator is key to the successful implementation of a complex project involving several countries and partners. Implementing a complex project, involving many countries and partners, requires deep understanding of the issues facing the participating countries and the region as a whole and the backing of a regional organization. The Indian Ocean Commission (IOC), an established regional body based in Mauritius, was able to successfully coordinate the regional activities of the West Indian Ocean Islands Oil Spill Contingency Planning Project because of its long experience coordinating activities of its member states. A body with experience in and capacity for coordinating regional processes will be selected to implement the proposed project.
- Building effective partnerships with relevant organizations, industry, and governments of non-beneficiary countries can help significantly improve project design and implementation. The West Indian Ocean Islands Oil Spill Contingency Planning Project involved the IMO, the oil and shipping industries (both local companies and IPIECA), and France (Réunion) as partners in designing and implementing the project, which contributed to its success. Similarly, the IMO, oil and shipping industries (IPIECA, INTERTANKO, ITOPF), and France (Réunion) have been participating in designing the proposed project, offering insights of experience and expertise. The involvement of these entities in design is also leading to definition of their roles and responsibilities during project implementation.
- *Pairing weaker countries with stronger ones in a regional project can help to quickly build the capacity of the weaker ones.* Mauritius, Seychelles, and South Africa have much greater capacity than the other participating states. Their involvement will help Comoros, Kenya, Madagascar, and Mozambique to catch up. Being part of a regional plan will provide a strong incentive for all states to build and maintain capacity, even during periods of political uncertainty.
- Coordinating closely with other GEF-supported activities is critical to success. The proposed project is designed as an integral part of the overall ecosystem approach to better manage the living resources and habitat of the Agulhas and Somali large marine ecosystems. It complements the UNEP's Addressing Land-based Activities in the Western Indian Ocean Program (WIO-LaB), which aims to reduce land-based sources of pollution, by seeking to limit ship-based sources of contamination. The WIO-LaB program, established under the Nairobi Convention and now under implementation, includes the same countries as the proposed project. The proposed project links to UNDP's assessment of the large marine ecosystems of the region by supporting complementary data collection and research activities. It also complements the GEF-supported Southwest Indian Ocean Fisheries Project by providing a potentially valuable tool for monitoring the activities of large fishing vessels and enforcing regulations of the fisheries, coral reefs, and other marine and coastal resources. The project will collaborate with the Southwest Indian Ocean Fisheries Project to identify the most effective ways of introducing the technology to both the authorities and the ship owners, to test the technology, and to report back on its benefits

and drawbacks. The proposed project will coordinate closely with these three projects to ensure that resources are used in the best possible way towards the common goal of improving the management of the marine and coastal resources of the region. The approach of the proposed western Indian Ocean project is also expected to be useful in the efforts to improve the management of the large marine ecosystems of the western African coast, such as the Benguela current which runs up the west coast of South Africa. The project will coordinate with the IMO/GEF/UNDP Global Ballast Water Management Program, which seeks to assist developing countries to implement effective measures to control the introduction of foreign marine species.² Finally, the project will potentially benefit from the knowledge generated through the GEF-supported Targeted Research Project on Coral Reefs on effective measures to restore coral reefs that damaged by spills of oil or chemicals. Thus, the proposed project can help to complement and increase costeffectiveness of other projects implemented under the programmatic umbrella for better managing the living resources and habitat of shared marine ecosystems. In order to avoid duplication of studies and analytical work, the proposed project will build on activities and results as they become available from other projects under the programmatic umbrella and will limit studies, mapping and information collecting to specific needs of the project.

9.	Safeguard	policies	(including	public	consultation)
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Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP/GP 4.01)	[]	[X]
Natural Habitats (<u>OP/BP</u> 4.04)	[]	[X]
Pest Management (<u>OP 4.09</u>)	[]	[X]
Cultural Property (OPN 11.03, being revised as OP 4.11)	[]	[X]
Involuntary Resettlement (<u>OP/BP</u> 4.12)	[]	[X]
Indigenous Peoples (OD 4.20, being revised as OP 4.10)	[]	[X]
Forests (<u>OP/BP</u> 4.36)	[]	[X]
Safety of Dams (<u>OP/BP</u> 4.37)	[]	[X]
Projects in Disputed Areas (<u>OP/BP/GP</u> 7.60) [*]	[]	[X]
Projects on International Waterways (<u>OP/BP/GP</u> 7.50)	[]	[X]

No safeguard policies are triggered by this project.

The safeguard screening category is S2 (no safeguard issues).

The environmental screening category is C (no adverse environmental impact).

10. List of factual technical documents

Project Concept, November 10, 2003.

² The full title of the project is Removal of Barriers to the Effective Implementation of Ballast Water Control and Management Measures in Developing Countries.

^{*} By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas

Aide memoires.

Consultant reports

"Capacity Building and Training Needs Report," January 2005, by the Rotterdam Maritime Group.

"Widening the Oil Spill Contingency Capacity in the Western Indian Ocean Region (Kenya, Mozambique, and Tanzania), January 2005, by the Rotterdam Maritime Group.

"Western Indian Ocean Pollution Risk Assessment," January 2005, by the Rotterdam Maritime Group.

"Regional Marine Highway Development Pre-Feasibility Report," January 2005, by the Rotterdam Maritime Group.

"Regional Institutional Strengthening and Project Management," January 2005, by the Rotterdam Maritime Group.

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