

Implementation Plan for Reducing Sea-based Sources of Marine Plastic Debris in the Indian Ocean (2024-30)

Strategic Goal	Activities	Performance Indicator	Timeframe	Potential Partners
1. Reduce plastic debris from maritime ships and yachts	1.1. Collaborate with owners of existing databases to establish a mechanism to declare regional losses of containers at sea and to track number of losses.	Major ports to require registered vessels to declare their container losses, pursuant to SOLAS Chap V, prior to port entry and to integrate data with other databases, such as the Digital Platform of the Global Partnership on Plastic Pollution and Marine Litter (GPML), to compile a regional inventory of losses.	2 years	IOMDC, IMO, lead country, nodal national agencies.
	1.2. Review regional implementation of London Protocol on dumping of plastic waste.	Publish plastic dumping report including assessment of regional legislation and recommendations	1 year	IOMDC, IMO, lead country, nodal national agencies.
	1.3. Review regional implementation of MARPOL Annex V on garbage regarding disposal of plastic waste by comparing estimated vessel output of, and onboard storage capacity for, plastic waste.	Publish plastic garbage report including assessment of regional legislation and recommendations, and integrate with GPML Digital Platform.	2 years	IOMDC, IMO, APEC plastics, lead country, nodal national agencies.
	1.4. Introduce economic incentive schemes for reporting plastic debris disposed of or lost at sea.	Issue crew/passenger rewards for reporting with proof of Indian Ocean disposals or losses.	1 year	IOMDC, lead country, nodal national agencies.
	1.5. Identify further actions to reduce marine plastic debris at source, and in the environment.	Investigate incentives to store plastic waste onboard and to collect, shred and bale plastic waste in port reception facilities.	3 years	IOMDC, APEC plastics, SACEP, ASEAN, lead country, nodal national agencies.
	1.6. Undertake remedial activities to remove existing plastic debris from the marine environment.	(a) Tag major regional marine plastic debris concentrations with GPS trackers. (b) Publish locations in a regional inventory or within the GPML Digital Platform.	2 years	IOMDC, SACEP, ASEAN, lead country, nodal national agencies.

Strategic Goal	Activities	Performance Indicator	Timeframe	Potential Partners
2.	2.1. Gather data on marking options suitable to scales of fishing, artisanal or industrial, etc. Where feasible, promote marking of plastic fishing gear with the vessel ID number, in accordance with FAO Voluntary Guidelines on the Marking of Fishing Gear.	(a) Inspection rates of vessels over 24m for compliant gear markings. (b) Promote compliance with marking within fishing licence conditions. (c) Production of research report(s).	3 years	IOMDC, FAO, RFMOs, lead country, nodal national agencies, SACEP, ASEAN
Reduce plastic debris from sea-going fishing vessels and aquaculture	2.2. Identify actions to be adopted within revisions of this implementation plan, in cooperation with Regional Fisheries management Organisations (RFMOs) and others, to reduce plastic debris arising from fisheries, based upon information as to prevalent regional sources of abandoned, lost or discarded fishing gear (ALDFG).	(a) Assessment of sources of regional ALDFG, such as gear conflicts, poor quality nets, lack of onboard storage, costs of disposal, strapping waste, through questionnaires (such as developed by FAO) and through interviews, in partnership with RFMOs. (b) Assessment of response options, such as reduction of gear conflicts, plastic strapping ban, biodegradable escape hatches, rental of nets, or tax incentives for net repairs. (c) Additional actions defined for adoption by the Indian Ocean Marine Debris Commission.	(a) 4 years (b) 5 years (c) 6 years	IOMDC, APEC plastics, FAO, RFMOs, SACEP, ASEAN, lead country, nodal national agencies.

Strategic Goal	Activities	Performance Indicator	Timeframe	Potential Partners
	2.3. Remove existing plastic debris from the sea by facilitating retrieval of lost gear, disposal at port/shore facilities, and adequate and sound end-of-life treatment. Assess collected amount of ALDFG and rates of various end-of-life treatment.	(a) Introduce Fishing-for-Litter schemes where feasible, including by removing legal barriers, and prioritizing sensitive habitats. (b) Publicise incentive schemes for fishermen to collect plastic debris found at sea and deposit it onshore in reception facilities, such as extended producer responsibility schemes, deposits/bonds or rewards for returning damaged gear, where feasible. (c) Introduce net design criteria to improve durability and ease of disassembly and recycling. (d) Develop a methodology, in collaboration with other agencies, to assess impacts of marine plastic debris cleanup from the Indian Ocean. (e) Develop a regional inventory and publish report on plastic debris collected and treated in collaboration with the GPML and others, on volume of debris retrieved from the Indian Ocean.	(a) 3 years (b) 4 years (c) 3 years (d) 2 years (e) Report triennially (2x)	IOMDC, FAO, RFMOs, SACEP, ASEAN, lead country, nodal national agencies.
3. Enhance port reception facilities for disposal of plastic waste from sea-going cargo, fishing tourism and other vessels	3.1. Identify current deficiencies in reception facilities in major ports within the Indian Ocean region.	Assemble data on key regional deficient reception facilities and publish report, drawing upon existing data held by the International Maritime Organisation, GloLitter and national agencies.	2 years	IOMDC, IMO.
	3.2. Examine feasibility of requiring major regional ports to provide separate reception facilities for collection for plastic waste from ships, including fishing gear, to facilitate recycling, and taking into account biosecurity risk mitigation.	Inventory and assessment of major ports with facilities for waste plastic reception, including main types of plastics from fishing gear and feasibility for recycling, treatment or disposal and integrate data into IMO Global Integrated Shipping Information System.	3 years	IOMDC, IMO, FAO, lead country, nodal national agencies.
	3.3. Create viable plan, produced with port authorities as partners, to augment regional port reception facilities in a prioritised manner.	(a) Publish plan. (b) Multiple port reception facilities improvements are funded.	(a) 2 years (b) 5 years	IOMDC, IMO, FAO, SACEP, ASEAN, lead country, nodal national agencies.

Strategic Goal	Activities	Performance Indicator	Timeframe	Potential Partners
	3.4. Plan for port area plastic debris cleanup activities and for maritime disasters waste cleanup by linking port reception facilities management with suitable waste treatment and disposal sites.	(a) Assess major regional port capacities to manage local area cleanup and to manage and dispose of collected plastic waste off-site. (b) Publish assessment report.	(a) 2 years (b) 2 years	IOMDC, IMO, FAO, SACEP, ASEAN, lead country, nodal national agencies.
	3.5. Conduct periodic review of effectiveness of measures to enhance port reception facilities.	Reports of reviews of port reception facilities published.	Triennially (2x)	IOMDC, lead country, nodal national agencies.
4. Identify and empower stakeholders	4.1. Establish an Indian Ocean Marine Debris Commission (IOMDC) to coordinate activities under the auspices of the Indian Ocean Rim Association (IORA).	(a) MOU establishing IOMDC signed by IORA member countries. (b) Communication links established with other agencies, including GESAMP, IMO, FAO, OSPAR, BRS, and Indian Ocean regional bodies. (c) Convene Indian Ocean workshop to build relevant communication links across regional bodies, including WIO, SACEP, BOBP, SEAFDEC, ASEAN, IOTC, etc.	(a) 1 year (b) 1 year (c) 2 years	Lead country, nodal national agencies.
	4.2. Establish an IOMDC secretariat under the auspices of IORA, including a Task Force for wider Indo-Pacific coordination, and coordinate its activities with global and regional agencies.	(a) Secretariat multiyear funding committed and adequate staff appointed. (b) Public annual reporting on coordination activities.	(a) 1 year (b) 2 years	Lead country, nodal national agencies, international funding agencies.
	4.3. Identify national and regional focal points of contact for marine plastic debris management.	Register is completed and linked to DGPML.	1 year	IOMDC, lead country, nodal national agencies.
	4.4. Identify shortfalls and opportunities in national legislative frameworks for improved management of marine plastic debris, such as in Fishing-for-Litter programs.	Consolidated record of needs and opportunities is published in consultation with GloLitter and linked to the GPML.	2 years	IOMDC, IMO, FAO, RFMOs, SACEP, ASEAN, lead country, nodal national agencies.

Strategic Goal	Activities	Performance Indicator	Timeframe	Potential Partners
	4.5. Map relevant current regional programs and activities being undertaken by international agencies (e.g. IMO, FAO, World Bank, SEAFDEC, ASEAN).	Mapping exercise is completed and report on international agency activities is published.	1 year	IOMDC, SACEP, ASEAN, APEC plastics, lead country.
5. Conduct research to establish baselines, and to support monitoring and mitigating activities	5.1. Conduct a mapping exercise of existing research efforts to characterise and quantify marine plastic debris in the Indian Ocean, and create a research plan that includes nature of research activities, outcomes, resourcing plan, and key stakeholders.	(a) Mapping exercise that includes small island state maritime zones is conducted. (b) Research plan fit for purpose is published.	(a) 1 year (b) 2 years	IOMDC, SACEP, ASEAN, APEC plastics, lead country, nodal national agencies
	5.2. Develop a database for sea-based sources, pathways, amounts and hotspots in the Indian Ocean sub-region.	Marine debris database is published by IOMDC in coordination with GPML Digital Platform and other databases, such as produced by Tangaroa Blue and the Global Ghost Gear Initiative.	3 years	IOMDC, APEC plastics, lead country, nodal national agencies
	5.3. Conduct research to identify top sea-borne contributors to marine plastic debris in the sub-region to feed into targeted reduction strategies.	Baseline volumes and pathways map of major plastic debris sources is published.	Triennially (2x)	IOMDC APEC plastics, SACEP, asean, lead country, nodal national agencies
	5.4. Identify cost-effective and feasible mitigation methods most suitable to specific sources and pathways	Suitable mitigation methods, such as banning plastic strapping, are published with national examples from around the world, where adopted.	3 years	IOMDC
	5.5. Develop linkages with shipping and fishing industry and administrative agencies for specialist research assistance.	Specialist research skills within private industry and national agencies identified and listed.	Biennially (3x)	IOMDC, lead country, nodal national agencies
6. Monitor marine	6.1. Measure varieties of marine plastic debris in the subregion at intervals.	Update regional database of marine plastic debris. Draw upon and integrate data into the GPML Digital Platform and other existing databases. Include microplastics and seabed debris, to the extent feasible.	Biennially (3x)	IOMDC, APEC plastics, lead country, nodal national agencies

Strategic Goal	Activities	Performance Indicator	Timeframe	Potential Partners
plastic debris levels	6.2. Analyse longitudinal trends in marine plastic debris across a six-year period across the subregion.	(a) Existing software is shared to identify trendlines showing changes in sub-regional indicators. (b) Trendlines are published in an inventory.	6 years	IOMDC, APEC plastics, lead country, nodal national agencies
	563. Foster citizen science programmes to contribute to gathering of data on marine plastic debris.	(a) Government support for citizen science program such as shoreline monitoring, is obtained. (b) Citizen science programs generate data that is linked to filters and methodologies reviewed by regional university centres.	(a) 3 years (b) 3 years	IOMDC, lead country, nodal national agencies.
	6.4. Review the efficacy of subregional mitigation measures, including collection and clean up, at end of period of this implementation plan.	(a) Update and publish best practices and lessons learnt. (b) Review implementation plan.	(a) 6 years (b) 6 years	IOMDC
7. Educate stakeholders to promote sustainable and positive behavioural changes	7.1. Identify education needs for various Indian Ocean stakeholders (community, industry, seafarers, tourism sector, fisherfolk, shipping companies).	(a) Awareness plans adopted targeted to each sector in region. (b) Collaborative best practice guidelines distributed through digital platforms, such as the GPML Digital Platform.	(a) 2 years (b) 3 years	IOMDC, FAO, IMO, SACEP, lead country, nodal national agencies
	7.2. Review training of regional shipping and fishing vessel personnel and familiarize seafarers to ensure awareness of the impact of marine plastic debris and obligations under national law.	(a) Publish report on mariner and fisherfolk training needs. (b) Establish awards to celebrate vessels and ports achieving best practice	(a) 2 years (b) 3 years	IOMDC, FAO, ASEAN, SACEP, lead country, nodal national agencies
	7.3 Develop Indian Ocean information campaign for high-generating marine plastic debris sectors.	(a) Engage stakeholders to disseminate plan to governments and international agencies throughout region. (b) Engage industry to sponsor and brand training activities and awards, e.g. shipping companies/ fishing gear importers.	(a) 3 years (b) 3 years	IOMDC, lead country, nodal national agencies
	7.4. Carry out educational activities across shipping and fishing sectors, as per plan.	Publish record of educational activities and feedback.	6 years	IOMDC, lead country, nodal national agencies

Strategic Goal	Activities	Performance Indicator	Timeframe	Potential Partners
	7.5. Sensitize fishing communities to the need for nets and FADS to be tracked and sustainably designed, repaired, reused, returned or disposed of.	Deliver information concerning ghost gear and GPS trackers data and conduct regional educational activities.	2 years	IOMDC, lead country, nodal national agencies
	7.6. Encourage general community participation in management of marine plastic debris.	(a) Produce public posters and conduct information campaigns. (b) Measure community engagement over time with cleanups.	3 years	Lead country, nodal national agencies

Key:

APEC – Asia Pacific Economic Cooperation,

ASEAN – Association of Southeast Asian Nations,

BRS – Basel Rotterdam and Stockholm Conventions Secretariat

DGPML – Digital Platform of the Global Partnership on Plastic Pollution and Marine Litter

FAO – UN Food and Agriculture Organisation,

GESAMP - Group of Experts on Scientific Aspects of Marine Pollution (working group 43),

IMO – International Maritime Organisation,

IOMDC - Indian Ocean Marine Debris Commission (to be established),

IORA - Indian ocean Rim Association,

OSPAR– Commission for the Protection of the Marine Environment of the North-East Atlantic,

RFMOs - Regional Fisheries Management Organisations,

SACEP - South Asian Cooperative Environment Programme,

WIO – Nairobi Convention Western Indian Ocean Plan on Marine Litter and Microplastics.