

Concept Paper

Partnership dialogue 1: Addressing marine pollution

Concept paper for the Partnership dialogue1, prepared in response to the General Assembly resolution 70/303 on addressing marine pollution, covers target 14.1. The concept paper for this partnership dialogue is based on inputs received from Member States, the United Nations system, and other stakeholders. Given the word limit for the concept paper, not all inputs have been included in their entirety, but they can be accessed under: https://oceanconference.un.org/documents.

I. Introduction

Pollution from human activities can be found at all points across the ocean's vast expanse, whether in the deep, at the surface, or in the organisms that live in it. Rivers carry waste, solid and liquid, and a wide range of other substances into the ocean. Discharges, spills and waste from shipping are another source of pollution. Pollutants discharged into the air are deposited into the ocean. Although considerable progress has been achieved in limiting some forms of pollution, others persist. New challenges, whether relating to particular pollutants, such as micro-plastics, or broader trends, like the rapid growth of coastal cities, will require sustained action encompassing scientific research, knowledge-sharing, and strengthened governance arrangements.

II. Status and trends

Pollution of the marine environment is defined as the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities¹.

Land-based sources account for approximately 80 per cent of marine pollution globally. This pollution emanates from a range of sources, including agricultural run-off, untreated sewage and wastewater, oils, nutrients, sediments, and marine debris. Agricultural practices, coastal tourism, port and harbour developments, damming of rivers, urban development and construction, mining, fisheries, aquaculture, and manufacturing, among others, are all sources of marine pollution threatening coastal and marine habitats as well as human health and wellbeing.

¹ United Nations Convention on the Law of the Sea, art. 1(4).

² UNESCO, Facts and figures on marine pollution (2016); UNEP GPA (2016) http://unep.org/gpa/About/about.asp

Nutrient over-enrichment from agricultural, municipal and industrial sources is also considered to be the main cause of so-called "dead zones", hypoxic regions that exhibit oxygen levels that are too low to support many aquatic organisms, including commercially desirable species, and resulting in the collapse of some ecosystems. The extent and duration of dead zones is increasing worldwide³ and there are now close to 500 dead zones covering more than 245,000 km² globally, with the number doubling every ten years since the 1960s. The economic costs to fisheries, tourism and other coastal livelihoods are already exacting a heavy toll. While rivers are the conduit for organic nitrogen entering the ocean, atmospheric deposition is the primary mechanism by which land-based nitrogen reaches the open ocean. Expanded observation is necessary to properly characterize the magnitude and effects of these outflows.

Currently at least 2 billion people do not have access to regular waste collection, and a large portion of the uncollected waste ends up in waterways and the ocean, becoming marine debris in the process. Marine litter impacts economies, ecosystems, animal welfare and human health worldwide. The majority (~80%) of marine litter, also known as marine debris, originates from land-based sources, the remaining 20 per cent comes from sea-based sources such as maritime transport, fishing and industrial exploration. Plastics are by far the most prevalent debris item recorded, contributing to an estimated 60 to 80 per cent of all marine debris. Research suggests that by 2050 almost 99 per cent of seabirds will have ingested plastics.⁵

The impacts of marine debris include entanglement of and ingestion by marine animals, and it has been identified as a global problem. Plastics typically constitute the most important part of marine litter, sometimes accounting for up to 100 per cent of floating litter. Plastic debris causes the deaths large numbers of seabirds, as well as marine mammals. Plastic materials and other litter can become concentrated in certain areas called gyres, as a result of marine pollution gathered by oceanic currents.

Estimation is that abandoned, lost or otherwise discarded fishing gear (ALDFG) or "ghost fishing gear" accounts for up to 10 per cent of marine debris. Ghost fishing gear has impact on marine wildlife through entanglement, while also representing a source of marine microplastics. ALDFG and related marine debris has been addressed through international fisheries-related instruments, for example the FAO Code of Conduct for Responsible Fisheries and the Fish Stocks Agreement. In particular, the Agreement requires States to minimize pollution and catch by lost or abandoned gear, through measures including, to the extent practicable, the development and use of selective, environmentally safe and cost effective fishing gear and techniques.

Micro-plastics are a form of marine litter, which has been shown to be widespread in the marine environment. Generally defined as plastic fragments with a size between 1 nanometre

³ United Nations (2016), *The First Global Integrated Marine Assessment: World Ocean Assessment I*, by the Group of Experts of the Regular Process, New York; Rabotyagov, S.S., Kling, C.L., Gassman, P.W., Rabalais, N.N. and Turner, R.E., 2014. The economics of dead zones: Causes, impacts, policy challenges, and a model of the Gulf of Mexico hypoxic zone. Review of Environmental Economics and Policy, 8(1) 58-79.

⁴ UNDP (2013) Ocean Hypoxia Issue Brief.

⁵ Wilcox et al. Threat of plastic pollution to seabirds is global, pervasive, and increasing 112 38 PNAS (2015) 11899-11904.

⁶ The First Global Integrated Marine Assessment: World Ocean Assessment I; A/71/74.

⁷ Galgani et al. (2015). Global distribution, composition and abundance of marine litter. In *Marine anthropogenic litter* (pp. 29-56). Springer International Publishing.

(billionth of a metre) and 5 millimetres micro-plastics originate from a wide range of sources. For instance, they are produced as ingredients in personal care and cosmetics products, or created over time through the process of weathering and fragmentation of larger plastic objects in the ocean. There are significant knowledge gaps, but concern has been expressed about the impact of micro-plastics on marine ecosystems⁸. With respect to human health, a UN Environment study stated that micro-plastics in seafood do not currently represent a human health risk, although many uncertainties remain.⁹ However, the same study adds that there remains great uncertainty about the possible effects of nano-sized plastic particles, which are capable of crossing cell walls.

Sound chemical management is important to preventing marine pollution and protecting ecosystems and conserving biodiversity. In some parts of the world, the efforts of the past 40 years have been successful to reduce or where possible eliminate impact of heave metals and hazardous substances, and their concentrations in the ocean are now diminishing, for example in the North-East Atlantic, even though problems persist in some local areas. New technologies and processes have also been widely developed that have the ability to avoid those problems, but there are gaps in the capacities to apply those newer processes, often because of the costs involved.

Pollution from ships takes the form of both catastrophic events (shipwrecks, collisions and groundings) and chronic pollution from regular operational discharges; good progress has been made over the past 40 years in reducing both. Global environmental rules and standards have been developed to regulate most of the ship-related sources of pollution. Steps are now being taken to further strengthen the uniform enforcement of these rules and standards around the globe. The global regulatory framework includes international conventions addressing the entire life cycle of ships, "from cradle to grave", including design, building, operation and ship recycling, as well as the certification and training of seafarers.

Shipping transfers around 10 billion tonnes of ballast water each year. Ballast is absolutely essential to the safe and efficient operation of ships, providing balance and stability when empty of cargo. However, the exchange of ballast water is a possible route for the introduction of invasive species. While the IMO Ballast Water Convention, which is intended to control and manage this problem, will soon enter into force, its implementation will influenced by more widespread ratification. The unintentional introduction of invasive alien species can also be caused by activities such as aquaculture, ocean research, tourism and sport fishing.

Human activities in the oceans are responsible for generating increasing levels of underwater noise, and there is growing concern regarding the potential threat to marine living resources posed by noise proliferation. Sources of anthropogenic ocean noise include commercial and non-commercial shipping, air guns used to carry out seismic surveys, military sonar, underwater detonations and construction, resource extraction and fishing activities. Among the suggested actions include: conducting research to address knowledge gaps; mitigating and managing anthropogenic underwater noise; and addressing noise pollution at the source, through improved ship design, which could also potentially yield efficiency gains. At its 12th meeting in 2014, the Conference of the Parties to the Convention on Biodiversity encouraged

⁸ Δ/71/204

⁹ UNEP report on Marine Plastic Debris and Microplastics: Global Lessons and Research to Inspire Action and Guide Action (2016).

Parties and other Governments, as well as indigenous and local communities and other relevant stakeholders, to take specific measures to avoid, minimize and mitigate the potential significant adverse impacts of anthropogenic underwater noise on marine and coastal biodiversity. The General Assembly has, inter alia, noted that ocean noise has potential significant adverse impacts on living marine resources, and affirmed the importance of sound scientific studies in addressing this matter. It has also decided that the United Nations Openended Informal Consultative Process on Oceans and the Law of the Sea will focus its discussions in 2018 on the theme "anthropogenic ocean noise" 11.

Pollution from oil has been the most significant type of marine pollution from ships. The number of spills exceeding 7 tons has dropped steadily, in spite of the growth in the quantity carried and the length of voyages, from over 100 spills in 1974 to under five in 2012. The total quantity of oil released in those spills has also been reduced by an even greater factor. Progress has also been made in improving response capabilities, though much remains to be done, especially as coastal States have to bear the capital cost of acquiring the necessary equipment. In the wake of a number of severe incidents related to off-shore platforms in recent years, international attention has also focused on the need to prevent pollution of the marine environment from offshore oil and gas exploration and development. The International Seabed Authority has been developing rules, regulations and procedures concerning the prospecting, exploration and exploitation of marine minerals in the Area which, inter alia, aim at ensuring an environmentally sustainable development of seabed mineral resources therein.

The dumping of waste at sea was the first activity capable of causing marine pollution to be brought under global regulation, in the form of the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter of 1972 (the London Convention), regulating the dumping of wastes and other matter at sea from ships, aircraft and man-made structures. Controls under that agreement have been progressively strengthened, particularly in the 1996 Protocol. As stated in the concept note for dialogue 7, limited participation has had an impact on the effectiveness of a number of international legal instruments, including the Convention. 13 Additionally, over half of the States party to the London Convention and the Protocol thereto do not submit reports on dumping under their control. 14 The Protocol to was amended in October 2013 to regulate ocean fertilization activities, as well as potentially other, future marine geoengineering activities within the scope of the Protocol. A working group has been established under the Joint Group of Experts on the Scientific Aspects of Marine Protection (GESAMP) to better understand the potential environmental (and social/economic) impacts of different marine geoengineering approaches on the marine environment, as well as provide advice to the Parties to the London Protocol on marine geoengineering activities.¹⁵

The discharge of garbage from ships is a serious element of the problem of marine debris. Steps are being taken to improve the implementation of new controls under the International Convention for the Prevention of Pollution from Ships (MARPOL). For example, the World Bank has helped several Caribbean States to set up port waste-reception facilities, which has

¹⁰ CBD COP decision XII/23

¹¹ A/RES/71/257

¹²The First Global Integrated Marine Assessment: World Ocean Assessment I; A/71/74.

¹³ Concept Note for Partnership Dialogue 7

¹⁴ Oceans assessment ES.

¹⁵ See also Concept Note for Partnership Dialogue 3

made it possible for the Wider Caribbean to be declared a special area under annex V of the Convention, under which stricter requirements apply. Other States (for example the Member States of the European Union) have introduced requirements for the delivery of waste ashore before a ship leaves port and have removed economic incentives to avoid doing so. It is, however, too early to judge how far those various developments have succeeded in reducing the problem as the major obstacle to the implementation of MARPOL has been the lack of, or insufficient, reception facilities in many ports worldwide. Compliance with the discharge requirements of MARPOL depends very much on the availability of adequate port reception facilities, especially within special areas established under Annex V. Additionally, regulations introduced under MARPOL are designed to limit air pollution from ships, in particular sulphur oxide and nitrous oxide emissions, as well as particulates. There is also scope extension to extend emission control areas, which are areas in which stricter controls are established to minimize emissions.

Some of the Regional Seas Programmes, e.g. the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) and Action Plan for the Protection, Management and Development of the Marine and Coastal Environment of the Northwest Pacific Region (NOWPAP) have developed action plans that include monitoring and management of marine debris and other forms of pollution from shipping and fisheries activities. Systems used to prevent sea life, such as algae and molluscs, from attaching to the hull and thereby slowing vessels can adversely affect marine biodiversity. A new international agreement addresses the use of chemicals used in such systems.

There is a broad legal framework for the protection and preservation of the marine environment from all forms of marine pollution centred around the United Nations Convention on the Law of the Sea (UNCLOS), as complemented by a broad range of binding and non-binding instruments related to specific types or sources of pollution. ¹⁶ Pursuant to this framework, States have a general obligation to take, individually or jointly as appropriate, all measures consistent with UNCLOS that are necessary to prevent, reduce and control pollution of the marine environment from any source, using for this purpose the best practicable means at their disposal and in accordance with their capabilities, and shall endeavour to harmonize their policies in this connection. States also have a broad range of specific legal obligations, contained in Part XII of UNCLOS and numerous other instruments to which they may be Parties, to address marine pollution. Indeed, UNCLOS provides for internationally accepted rules, standards and recommended practices and procedures to be applied as minimum standards in the formulation and enforcement of national laws, regulations and measures for pollution from seabed activities, dumping and vessels. Such internationally accepted rules and standards must also be taken into account in the development of laws and regulations relating to pollution from land-based activities and pollution from or through the atmosphere. However, there remain important gaps in, and challenges to, implementation at the global, regional and national levels that need to be addressed.

III. Challenges and opportunities

Through its annual consideration of developments in oceans and the law of the sea, the General Assembly has, in its resolution on oceans and the law of the sea, identified a number of challenges in relation to the protection and preservation of the marine environment, as well as some actions which can be taken to address these challenges. These include: increasing

¹⁶ See also Concept Note for Partnership Dialogue 7.

participation in global and regional instruments addressing the protection and preservation of the marine environment; the further development and application, as appropriate and consistent with international law, including UNCLOS, of environmental impact assessment processes covering planned activities under their jurisdiction or control that may cause substantial pollution of or significant and harmful changes to the marine environment; jointly developing and promoting contingency plans for responding to pollution incidents, as well as other incidents that are likely to have significant adverse effects on the marine environment and biodiversity; integrating the issue of marine debris into national and, as appropriate, regional strategies dealing with waste management, especially in the coastal zone, ports and maritime industries, including recycling, reuse, reduction and disposal; addressing consumption and production patterns, including through awareness-raising campaigns; and improving flag State implementation and port State control measures. The General Assembly also reaffirmed the importance of applying an ecosystems approach to oceans.¹⁷

Wastewater and nutrient load pollution is still a major threat to the ocean. The Global Programme of Action (GPA) for the Protection of the Marine Environment from Land-based Activities of 1995 is intended to deal with land-based impacts on the marine environment, specifically those resulting from sewage, persistent organic pollutants, radioactive substances, heavy metals, oils (hydrocarbons), nutrients, sediment mobilization, litter, and physical alteration and destruction of habitat. Under the GPA framework almost 100 countries have prepared National Plans of Action and/or relevant national plans/strategies to address land-based pollution. The Convention on Biodiversity's programme of work on marine and coastal biodiversity promotes steps for the effective application of the GPA, as well as other appropriate instruments, including proper coastal land-use, watershed planning, and the integration of integrated marine and coastal zone management into key sectors. Although much has been done to implement national plans adopted under the Programme, particularly in South America, the lack of sewage systems and wastewater treatment plants is still a major threat to the ocean. This is particularly the case for very large urban settlements.

New wastewater treatment technologies and processes developed may have the ability to minimize problems, but there can be gaps in the capacity to apply these newer processes, often because of the costs involved. This is particularly true in developing countries. Information is lacking on the fate of heavy metals and other hazardous substances that are sometimes mixed in with wastewater discharges. There are gaps in the educating farmers, and industry and other stakeholders on more sustainable practices that reduce the waste discharges and nutrients to the environment. In many parts of the world there is absence of any form of regular, systematic assessment of the impact of land-based inputs. Where assessments do occur they tend to be 'one-off', and not in forms which enable them to be assembled into a wider, continuous assessments. Many of the Regional Seas programmes have adopted protocols for land-based sources of pollution and related action plans however the level of implementation of these protocols is not well-known in many regions.

Data and knowledge gaps exist in respect of all aspects of the life cycle of marine debris, plastics and micro-plastics (MDPMs). There is also a gap in information for evaluating the impacts of marine debris on coastal and marine species, habitats, economic well-being, human health and safety, and social values. Research and development is also required to encourage the reuse and recycling of plastics, and to create commercially viable options for converting plastic waste into other materials or energy. Marine debris is not only an

.

¹⁷ A/RES/71/257.

environmental issue but also a socioeconomic one. Preventive awareness-raising and incentives for changing individual behaviour and industry practices are suggested as an essential first step.

With regards to impacts of pollution on marine and coastal biodiversity, the Conference of the Parties (COP) to the Convention on Biological Diversity adopted, in 2010, Aichi Biodiversity Target 8. This target calls for, by 2020, bringing pollution, including from excess nutrients, to levels that are not detrimental to ecosystem function and biodiversity. Efforts have been taken under the CBD to facilitate Parties and relevant organizations in achieving this target. As well, voluntary practical guidance on means to prevent and mitigate impacts of marine debris on marine and coastal biodiversity and habitats has been developed under the CBD. ¹⁸

As regards pollution from ships, inadequate port reception facilities are a particularly acute problem especially for small island developing States, whose ports are frequently visited by cruise ships of a capacity larger than their facilities can handle. Where adequate port waste reception facilities exist, high costs, complicated procedures, delays in ports, unnecessary paperwork, excessively stringent sanitary and customs regulations and other factors have sometimes acted as a deterrent to the effective use of port facilities. ¹⁹ In certain regions, there is a need to address the risks posed by wrecks and explosive ordinances from war relics, with due regard to cultural heritage and touristic value.

There are clear links between management of the oceans and food security, health, employment, and cities. The lack of adequate sewage treatment in many large coastal conurbations, especially in developing countries, and other excessive inputs of nutrients (especially nitrogen) are producing direct adverse impacts on human health through microbial diseases as well as eutrophication problems. In many cases, they are creating harmful algal blooms, which are not only disrupting ecosystems, but also, as a consequence, damaging fisheries, especially small-scale fisheries and the related livelihoods and, in some cases, poisoning humans through algal toxins. ²⁰

Population density in coastal zones is greatly higher than non-coastal areas and urbanization trend combined with world population increase will accelerate the ongoing population migration to coastal areas. This trend has already had significant environmental impact on sea and oceans and one of the main causes of this is the lack of environmentally sound waste management in coastal cities. At the same time, lack of environmentally sound waste management in new coastal urban areas is hardly inevitable; in fact, the economies of scale and critical mass that cities generally provide are a basic prerequisite for most waste management infrastructure. When cities plan in advance - and are supported by adequate legislation and financing - they are able to provide much better waste management than non-urban coastal areas. There is a need provide support for integrated watershed and coastal zone management, especially in SIDS.

The issue of pollution has direct linkages to several of the other areas covered in the SDGs, including management of freshwater resources, as rivers act as a conduit for pollutants into the marine environment. Sustainable consumption and production is highly relevant to

¹⁸ CBD COP decision XIII/10. See also Concept Note for partnership dialogue 2, "Managing, protecting, conserving and restoring marine and coastal ecosystems."

²⁰ Oceans Assessment ES

incorporation of circular economy principles and practices that touch on higher resource use efficiency, recycling and minimization of harmful discharges to the environment.

The increase in the accidental introduction of alien species, both from shipping through ballast water and from escaped farmed species, has implications for food security and human health. In favourable conditions, alien species may become invasive and out-compete local marine species and result in biodiversity loss, thereby impacting local marine ecology, complex food webs, food security and human health.

The General Assembly has recognized the importance of capacity-building for developing States, in particular the least developed countries, landlocked developing countries and small island developing States, as well as coastal African States, for the protection of the marine environment and the conservation and sustainable use of marine resources. It also recognized the need to build the capacity of developing States to raise awareness of and support the implementation of improved waste management practices, noting the particular vulnerability of small island developing States to the impact of marine pollution of all kinds, in particular from land-based activities and marine debris and nutrient pollution.

Cross-sectoral and interagency cooperation and coordination at the global, regional and national levels is critical to address all forms of pollution, in particular from land-based sources. Strengthening such cooperation and coordination can facilitate the consideration of all costs and impacts of activities, including in relation to pollution of the marine environment. In this regard, the mainstreaming of considerations regarding the protection and preservation of the marine environment into national development programmes and strategies could be beneficial.

IV. Existing partnerships

There are a range of partnerships addressing marine pollution. A well-established example is the Global Programme of Action for the Protection of the Marine Environment from Landbased Activities (GPA), which was adopted in 1995. Since 2012, the programme focuses on marine pollution in relation to three source categories; nutrient, litter, and waste water. All three partnerships, the Global Partnership on Nutrient Management (GPNM), the Global Partnership on Marine Litter (GPML), and the Global Wastewater Initiative (GW2I) have advisory capacity and engage in science-policy interface activities. The partnerships under the GPA are now all fairly well established with defined governance structures and recognized as providing a forum for exchange of knowledge and best practices. A key success factor is the composition of the partnerships, which span broad stakeholder representation.

The resourcing of implementation actions has been identified as a gap, as has the building of national capacity for effective waste management. A challenge facing enhanced cooperation remains the predominance of the sectoral approach. Although this is understandable, in that a sectoral approach is based on thematic expertise of each organization, there has been a shift towards a holistic vision in recent years, as reflected in SDG 14. In relation to the GPA, it has been noted that there has been limited translation of the work of the partnerships into influential areas of government policy. There is some level of knowledge and best practice transfer in both technical and policy arenas, but it could be substantially strengthened. This is partly due to the fact that there is insufficient representation by governmental entities on the partnerships. Resource and capacity limitations within the GPA have limited the ability to fully support the partnerships at the national level. The private sector has seen limited

engagement in using the partnerships for transmitting knowledge and incorporating best practices.

The Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) aims to provide authoritative, independent, interdisciplinary scientific advice to the United Nations (UN) system and other organizations to support the protection and sustainable use of the marine environment. At present, UN organizations with responsibilities relating to the marine environment (IMO, FAO, IOC-UNESCO, UNIDO, UNEP, IAEA, UNDP, UN and WMO) sponsor GESAMP activities, including a number of Working Groups that provide advice on a number of marine pollution issues.

The Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects, is the global mechanism for reviewing the state of the marine environment, including socio-economic aspects, on a continual and systematic basis by providing regular assessments at the global and supraregional levels and an integrated view of environmental, economic and social aspects. Such assessments support informed decision-making.²¹

On the regional level, there any other long-standing partnerships with key international and regional organizations, which could be further built on, such as partnership between UN Environment/MAP and IMO, IAEA and EEA, which all have specific objectives in relation to pollution management.

V. Possible areas for new partnerships

Areas that have been identified as for further research and policy development are emerging pollutants, such as micro-plastics, endocrine-disrupting compounds, and harmful algal blooms. Proposals for new partnerships, drawn from the submissions for this dialogue, are outlined below.

- Public awareness-raising on plastic pollution and its negative impacts is essential, as well as demonstrating the social, environmental and economic benefits of recycling. There is scope for public-private partnerships that raise awareness among manufacturers, distributors, consumers and others, in order to promote the development of better alternatives, change consumer behaviour, and promote recycling.
- Partnerships on improved and quieter ship design, bringing together naval architects and designers, ship-builders, and shipping companies, could help to find a long-term way to address noise pollution from shipping.
- There is scope for partnerships to improve the sustainability of ports on a number of fronts, for instance relating to waste management and reception facilities.
- Partnerships for the sound management of chemicals, including capacity development for the development of national legislation and management systems.
- Partnerships that promote sustainable marine transport in relation to reducing shipping emissions and new regional recycling and waste collection centres.
- Proposed new partnership between UNEP and SPREP to cooperate in the delivery of the Global Partnership on Marine Litter (GPML) in the Pacific, to implement the Cleaner Pacific 2025 Strategy.

_

²¹ See Concept Note for Partnership Dialogue 6.

- Engage additional sectoral interests, for instance private sector entities with regional or global reach, in the GPA partnerships.
- New partnerships operating at the land-sea interface could contribute to assessing and mitigating the entry of micro-plastics into the marine environment, possibly building on UNESCO's Initiative on Water Quality.
- Building on existing partnerships, such as the Regional Cooperation Platform on Marine Litter in the Mediterranean between intergovernmental organizations, national authorities, targeted stakeholders including business, should be further encouraged and strengthened.
- Additional attention could also be given to strengthening implementation of the legal regime for the protection and preservation of the marine environment through activities and partnerships providing training and technical assistance on the development of national legislation and policy, as well as developing the scientific and technical capacity to monitor, assess and address marine pollution.

VI. Guiding questions for the dialogue

- What are ways to improve linkages between collective arrangements at the regional and global levels?
- What can be done to strengthen waste management practices, in order to reduce marine debris and pollution? What are sustainable financial mechanisms for the development and maintenance of sound waste management practices and infrastructure?
- What are the key sectors that have potential for making major contributions to controlling oceans pollution and what steps can be taken to deepen engagement in existing and new partnerships?
- How can partnerships promote compliance with existing agreements, for example UNCLOS and the MARPOL Convention?