

2020 United Nations – Nippon Foundation Alumni Virtual Training Series

Marine pollution, with a focus on marine plastics,
including in the context of COVID-19



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Photo: [UN World Oceans Day Photo Competition](#)

DIVISION FOR OCEAN AFFAIRS AND THE LAW OF THE SEA
UNITED NATIONS



Welcome and opening

Programme

Welcome and opening

9:00-9:10 am

Ms. Valentina Germani, Senior Legal Officer (Programme Advisor),
DOALOS

Marine pollution, with a focus on marine plastics

9:10-9:25 am

– sources, impacts and legal frameworks in the context of COVID-19

Mr. Michele Ameri, Legal Officer, DOALOS

Overview of UN System initiatives and activities

9:25-9:40 am

addressing marine litter, in particular plastics and microplastics

Ms. Patrycja Enet, Expert Consultant UN Secretariat of the Environment
Management Group, United Nations EMG - Marine Litter and Microplastics

Q&A session

9:40-9:55 am

Moderated by Ms. Jessica Howley, Associate Legal Officer, DOALOS

Roundtable discussion

9:55-10:25 am

Case studies by UNNF Alumni (Training Certificate Participants)

Moderated by Ms. Patrycja Enet

Closing

10:25-10:30 am

Ms. Valentina Germani, Senior Legal Officer (Programme Advisor), DOALOS



UN Photo/Martine Perret

DIVISION FOR OCEAN AFFAIRS AND THE LAW OF THE SEA

UNITED NATIONS



Marine pollution, with a focus on marine plastics

Sources, impacts and legal frameworks in the context of COVID-19

*Michele Ameri, Legal Officer
Division for Ocean Affairs and the Law of the Sea
Office of Legal Affairs
August 2020*



DIVISION FOR OCEAN AFFAIRS AND THE LAW OF THE SEA
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An underwater photograph showing a large amount of plastic waste in the ocean. A clear plastic bottle is partially visible at the top left. In the center, a large, crumpled white plastic bag is tangled with other debris. A brown crab is trapped inside a clear plastic container, which is part of the larger plastic mass. The water is a deep blue-green color, and the scene is lit from above, creating highlights on the plastic surfaces.

Marine pollution and marine plastics

Marine pollution

General

- Marine debris, including plastics and microplastics
- Nutrient run-off/eutrophication
- Sewage and wastewater
- Hazardous and other waste
- Persistent organic pollutants
- Pollution from or through the atmosphere
- ... and more

Marine pollution

Marine plastics

- No official definition
- Types of marine plastics
 - **Macro-plastics** (over 5mm)
 - **Micro-plastics** (less than 5 mm)
 - Primary: produced as such, e.g. in cosmetics and cleaning products
 - Secondary: resulting from fragmentation of larger plastics
 - **Nano-plastics** (less than 100 nanometer)

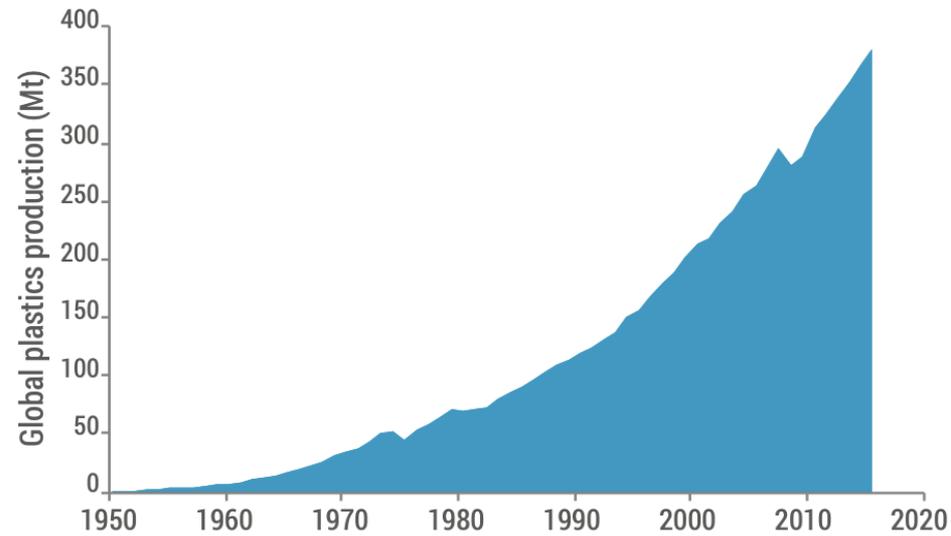
Sources



Sources

Plastics in general

- Ca. **9%** annual increase in production since 1950s
- Today ca. **300 million tons** plastic waste produced each year
- Only **9%** of all plastics ever produced has been recycled



Sources

Marine plastics

- An estimated **13 million tons** of plastic ends up in the world's oceans every year
- **Rivers and extreme events**, including tsunamis, storm surges and hurricanes, can carry plastic waste from deep inland to the sea
- Plastics in the ocean may outweigh fish **by 2050**

Sources

Marine plastics

- **Land-based sources**, including
 - Mismanaged or lack of solid waste facilities
 - Agriculture and industry
 - Tourism and general litter
- **Sea-based sources**, including
 - Shipping and boating, including ship coatings
 - Fishing, including abandoned, lost or discarded fishing gear (ALDFG)
 - Offshore installation and aquaculture sites
- **Pollution from or through the atmosphere**

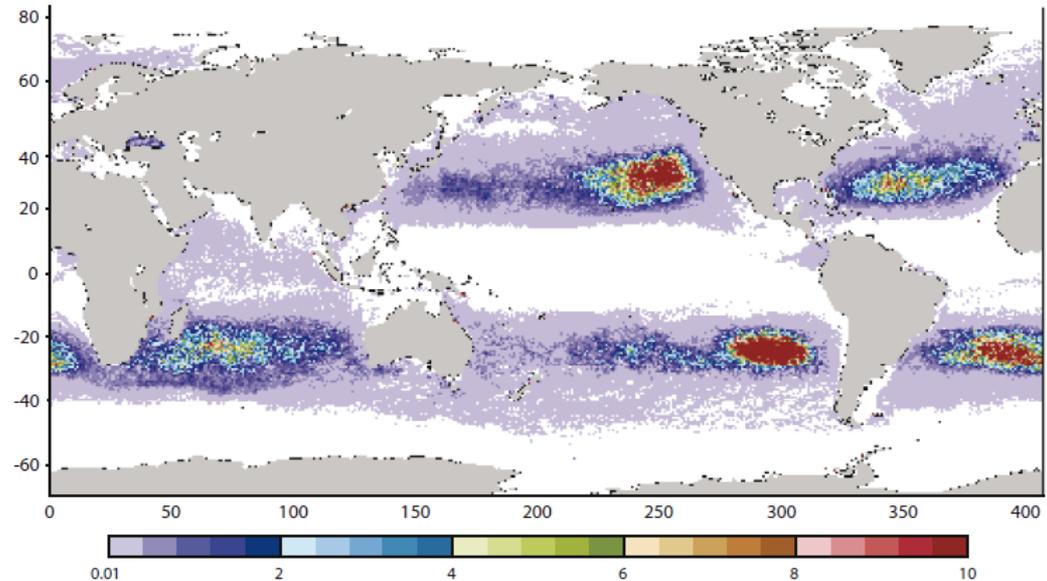
Impacts



Impacts

Where?

- Throughout the ocean
- Beaches and coasts
- Convergence zones/
Gyres
- Sediments
- Marine organisms
- Human beings



Impacts

What?

- **Environmental**
 - Entanglement of or ingestion by marine organisms
 - Introduction and spread of invasive alien species
 - Smothering and habitat destruction
 - Accumulation of toxic chemical substances
- **Social and economic**



Impacts

What?

- Environmental
- **Social and economic**
 - Human health and safety
 - Food security and secondary ingestion
 - Livelihoods and incomes
 - Cultural
 - Special case of SIDS

Impacts

What?

- Environmental
- **Social and Economic**
 - Navigation / shipping
 - Fisheries / aquaculture
 - Tourism/Leisure
 - Agriculture



Impacts

COVID-19

- + **Reduction** in shipping and tourism may lead to a temporary reduction of plastic waste from these sectors
- **Increase** in use of single-use plastics across the world
 - Personal protective equipment (PPE)
 - Sanitation and cleaning products
 - Suspension/postponement of single-use plastics bans



An underwater photograph showing two divers in blue wetsuits and masks. They are surrounded by a large amount of marine debris, including ropes, plastic, and other trash. The water is clear blue, and the scene is lit from above, creating a bright, somewhat overexposed area around the divers. The text "International legal and policy frameworks" is overlaid in white, bold font in the center of the image.

International legal and policy frameworks

International legal and policy frameworks

United Nations Convention on the Law of the Sea

United Nations Convention on the Law of the Sea, Part XII

- General obligation to **protect and preserve** the marine environment
- Take all measures necessary to **prevent, reduce and control** “pollution of the marine environment” from any source
- **Cooperate** on a global and regional basis in establishing international rules, standards and practices and procedures for the protection and preservation of the marine environment, taking into regional features

International legal and policy frameworks

United Nations Convention on the Law of the Sea

United Nations Convention on the Law of the Sea, Part XII

- Addresses pollution from:
 - land-based sources (art. 207)
 - Sea-bed activities subject to national jurisdiction (art. 208)
 - Activities in the Area (art. 209)
 - Dumping (art. 210)
 - Vessels (art. 211)
 - Through or from the atmosphere (art. 212)
- Covers but does not specifically address marine plastics pollution

International legal and policy frameworks

Other legal instruments

- IMO conventions
 - 1973/78 MARPOL, Annex V
 - 1972 London Convention and 1996 Protocol
- Basel Convention
 - 2019 Plastic waste amendments
- Convention on Biological Diversity
- Stockholm Convention on Persistent Organic Pollutants
- Regional instruments

International legal and policy frameworks

Policy instruments

- General Assembly resolutions
- 2030 Agenda for Sustainable Development
 - Sustainable Development Goal 14.1
- United Nations Environment Assembly resolutions
- Global Programme of Action for the Protection of the Marine Environment from Land-based Activities
- Regional programmes and action plans

International legal and policy frameworks

Policy instruments addressing ALDFG

- United Nations Fish Stocks Agreement
- 1995 FAO Code of Conduct for Responsible Fisheries
 - 2019 FAO Voluntary Guidelines on the Marking of Fishing Gear
- Regional programmes and action plans

Conclusion



Conclusion

- Marine plastics and microplastics are a threat to the ocean, but are not only an ocean problem.
- Effective efforts to reduce marine plastic pollution must address the life cycle of plastics on land as well as plastic accumulation in the ocean.
- An international legal and policy framework to deal with marine plastic pollution is in place but must be operationalized in an efficient and effective manner.

A sea turtle is swimming through a large, dense mass of marine plastic pollution in the ocean. The pollution includes a large woven basket, various pieces of plastic, and tangled fishing nets. The turtle is positioned in the center of the mass, appearing to be surrounded by the debris. The background shows clear blue water with sunlight filtering through the surface, creating a shimmering effect. Several small fish are visible swimming around the pollution.

Thank you

UN Environment Management Group (EMG)



Overview of UN System initiatives and activities addressing marine litter, in particular plastics and microplastics

Patrycja Enet

Event: 2020 United Nations – Nippon Foundation Alumni Network Virtual Training Series

Marine pollution, with a focus on marine plastics, including in the context of COVID-19

26 August 2020

Mandate



United Nations Task Team on Marine Litter and Microplastics

Terms of Reference

*“In March 2019, through its resolution UNEP/EA.4/Res.6 (Annex I), emphasizing the importance of strengthened coordination and multi-stakeholder cooperation for achieving long-term elimination of plastic discharge into the oceans, **the fourth session of the UN Environment Assembly invited the Environment Management Group (EMG) to engage in and contribute to the Ad Hoc Open-ended Expert group on Marine Litter and Microplastics by providing inter alia a mapping of all relevant United Nations agencies, programmes, initiatives and expertise with relevance to marine litter including plastic litter and microplastics.**”*

*“In response to this call, following the midterm meeting of its technical segment held in May 2019, **the EMG Senior Officials decided to establish an interagency Task Team** to prepare the requested system-wide contribution.*

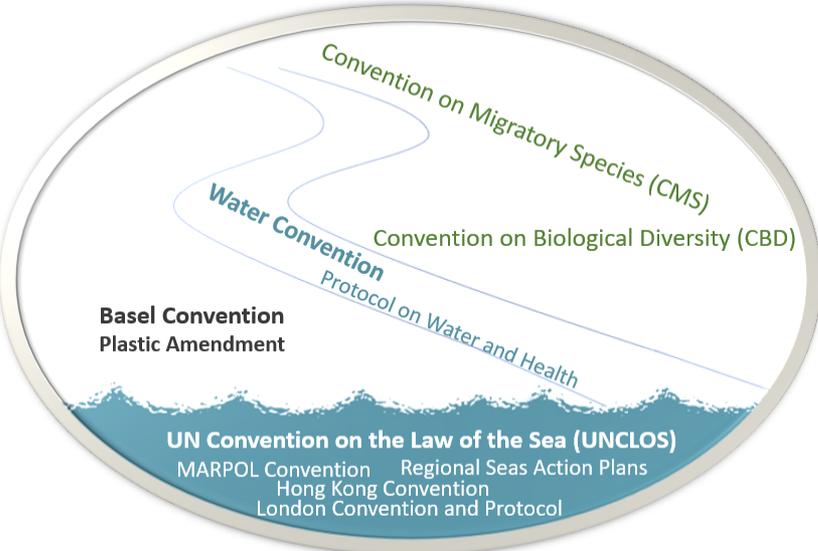
***The purpose of the Task Team is to expand UN system involvement and strengthen the coordination of UN-system support to Member States in addressing the global challenge posed by marine plastic debris and microplastics.**”*

*“The Task Team shall apply a **life-cycle approach to discharges of litter and microplastics into the oceans.** Relevant interventions may cover various parts of the lifecycle of e.g. plastics production.”*

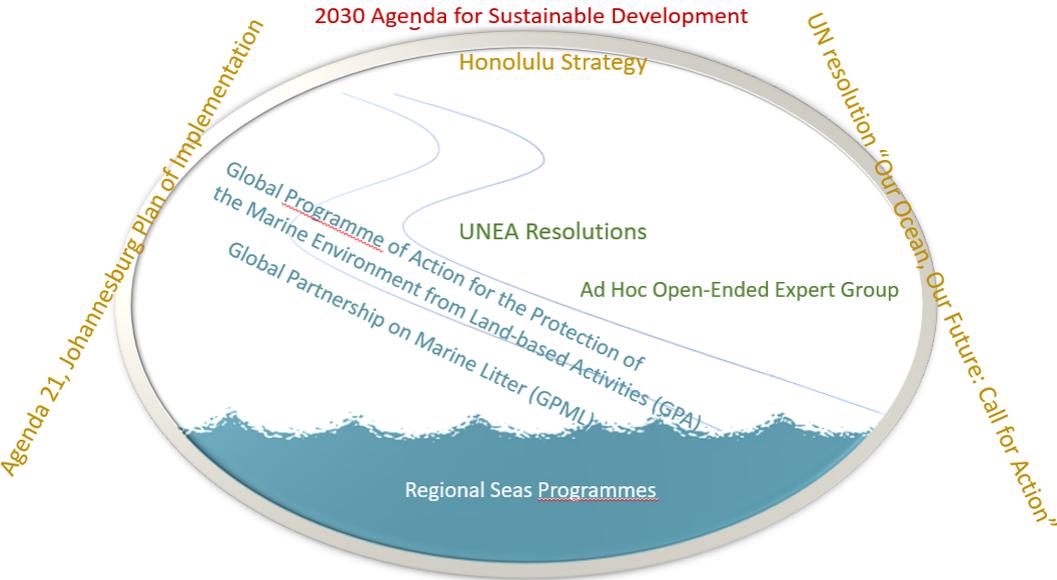


Marine litter governance

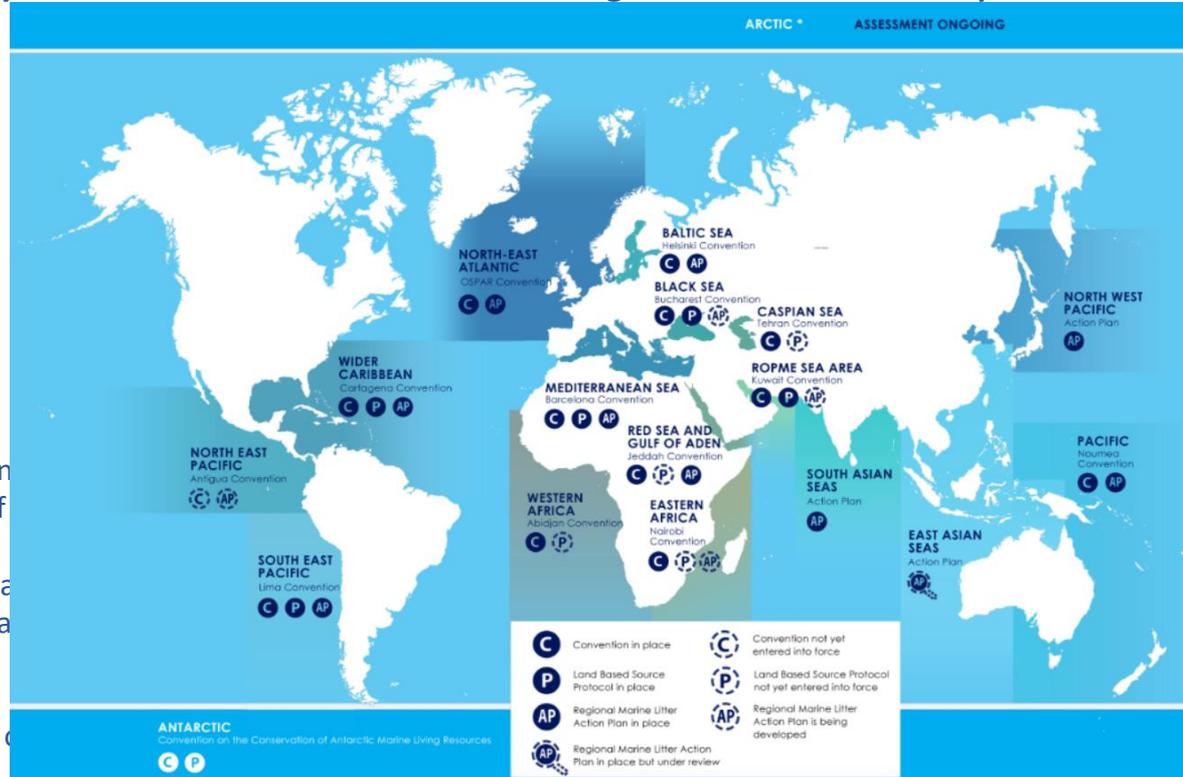
Binding



Non-binding



DOWNSTREAM / Sea-side: UN System initiatives and activities addressing marine litter and microplastics

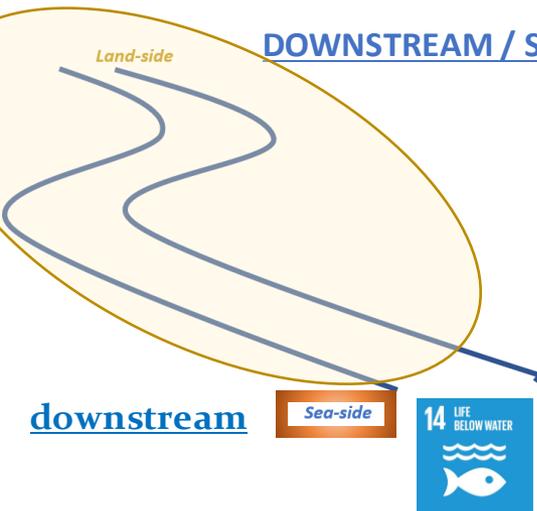


- UNCLOS - Part XII on the Protection and Preservation of the Marine Environment
- Global Program of Action (GPA) for the Protection of the Marine Environment from Land-based Activities
- Global Partnership on Marine Litter (GPML) - UNEP
- UN Environment Assembly (UNEA) resolutions on marine litter
- Ad Hoc Open-Ended Expert Group on Marine Litter and Microplastics
- Clean Seas Campaign - UNEP
- Code of Conduct for Responsible Fisheries - FAO
- The Joint Group of Experts on the Scientific Aspects of Marine Pollution (JGESAMP)
- The GloLitter Partnerships (GLP) - IMO-FAO
- Regional Seas Programmes: Conventions and Regional Marine Litter Action Plans with various initiatives and projects
- Caribbean Regional Node for Marine Litter - UNEP/CEP Cartagena Convention Secretariat
- Pacific Ocean Litter Project by the Secretariat of the Pacific Regional Environment Programme (SPREP)
- Ocean Innovation Challenge - UNDP
- ProBlue Programme – the World Bank, etc.
- Project on Marine Plastics, Tackling the Challenge using Nuclear Applications - IAEA

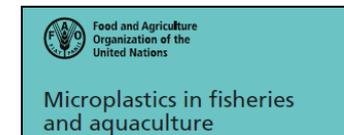
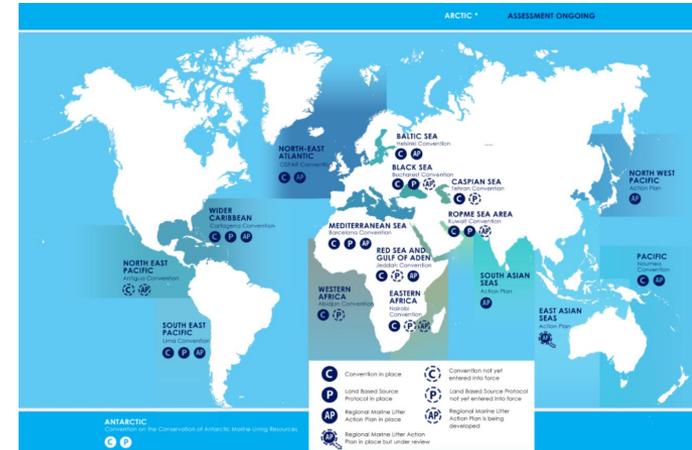


PROBLUE
HEALTHY OCEANS • HEALTHY ECONOMIES • HEALTHY COMMUNITIES

DOWNSTREAM / Sea-side: UN System initiatives and activities addressing marine litter and microplastics

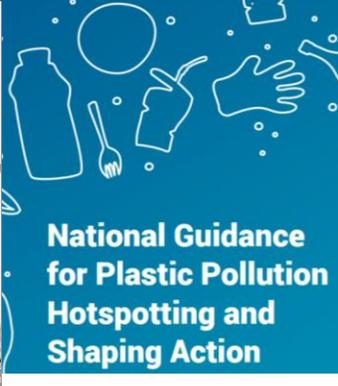
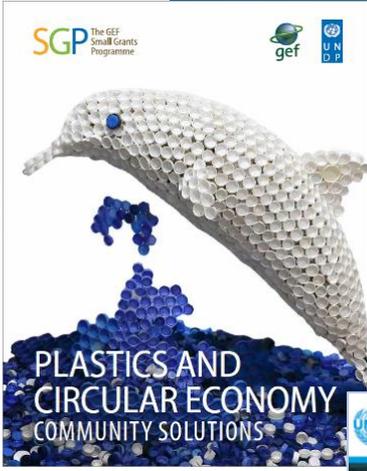


**Sustainable
Ocean Business
Action Platform**



- UNCLOS - Part XII on the Protection and Preservation of the Marine Environment
- Global Program of Action (GPA) for the Protection of the Marine Environment from Land-Based Activities - UNEP
- Global Partnership on Marine Litter (GPML) - UNEP
- UN Environment Assembly (UNEA) resolutions on marine litter and microplastics (4)
- Ad Hoc Open-Ended Expert Group on Marine Litter and Microplastics (AHEG)
- Clean Seas Campaign - UNEP
- Code of Conduct for Responsible Fisheries - FAO
- The Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP)
- The GloLitter Partnerships (GLP) - IMO-FAO
- Regional Seas Programmes: Conventions and Regional Marine Litter Action Plans with various initiatives and projects
- Caribbean Regional Node for Marine Litter - UNEP/CEP Cartagena Convention Secretariat
- Pacific Ocean Litter Project by the Secretariat of the Pacific Regional Environment Programme (SPREP)
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- ProBlue Programme – the World Bank, etc.
- Project on Marine Plastics, Tackling the Challenge using Nuclear Applications - IAEA

UPSTREAM / Land-side: UN System initiatives and activities addressing marine litter and microplastics



- The Basel Convention Plastic Waste Partnership - BRS
- One Planet Network – UNEP / including the Global Tourism Plastics initiative - UNWTO
- New Plastics Economy Global Commitment - UNEP-the Ellen MacArthur Foundation
- Addressing Marine Plastics- A Systemic Approach - UNEP, GEF, GRID Arendal
- Waste Wise Cities Programme - UN-Habitat
- Regional Commissions: Closing the Loop – ESCAP; SDG12 – ESCWA, ECA, ECLAC; SDG 2 and 6 - ECE
- National guidance for plastic pollution hotspotting - UNEP-IUCN

UN entities projects, programmes, e.g. UNEP/SCP, UNDP, GEF, WB, BRS:

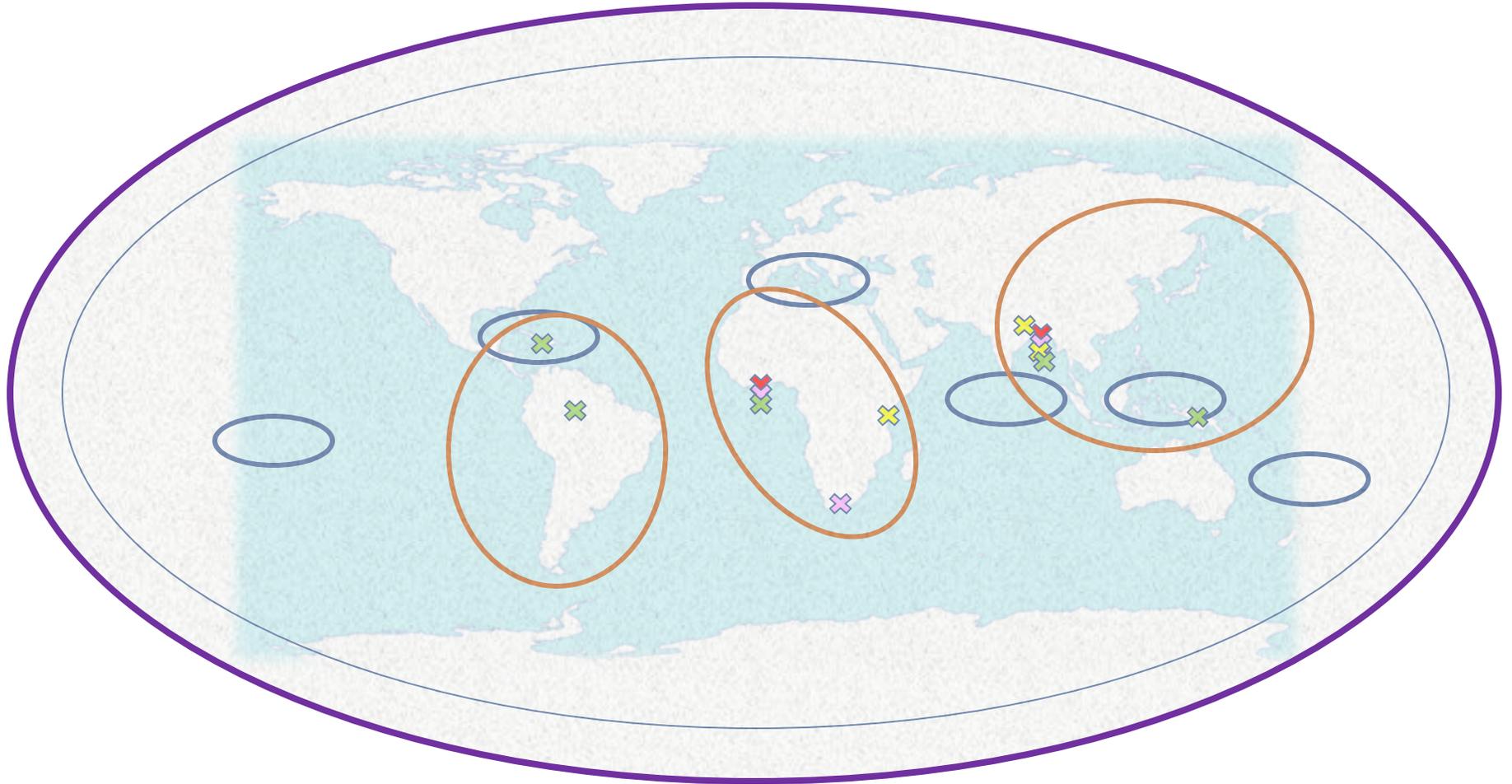
- BRS-Norad-1 project 'Marine litter and microplastics: promoting the environmentally sound management of plastic waste and achieving the prevention and minimization of the generation of plastic waste' - BRS
- BRS-Norad-2 project 'Further actions to address plastic waste under the Basel Convention' - BRS
- Projects on life cycle sustainability, a circular economy framework, plastic value chain - UNIDO
- Programme Sustainable Manufacturing and Environmental Pollution (SMEP) - UNCTAD
- Various projects by GEF (6, 7)

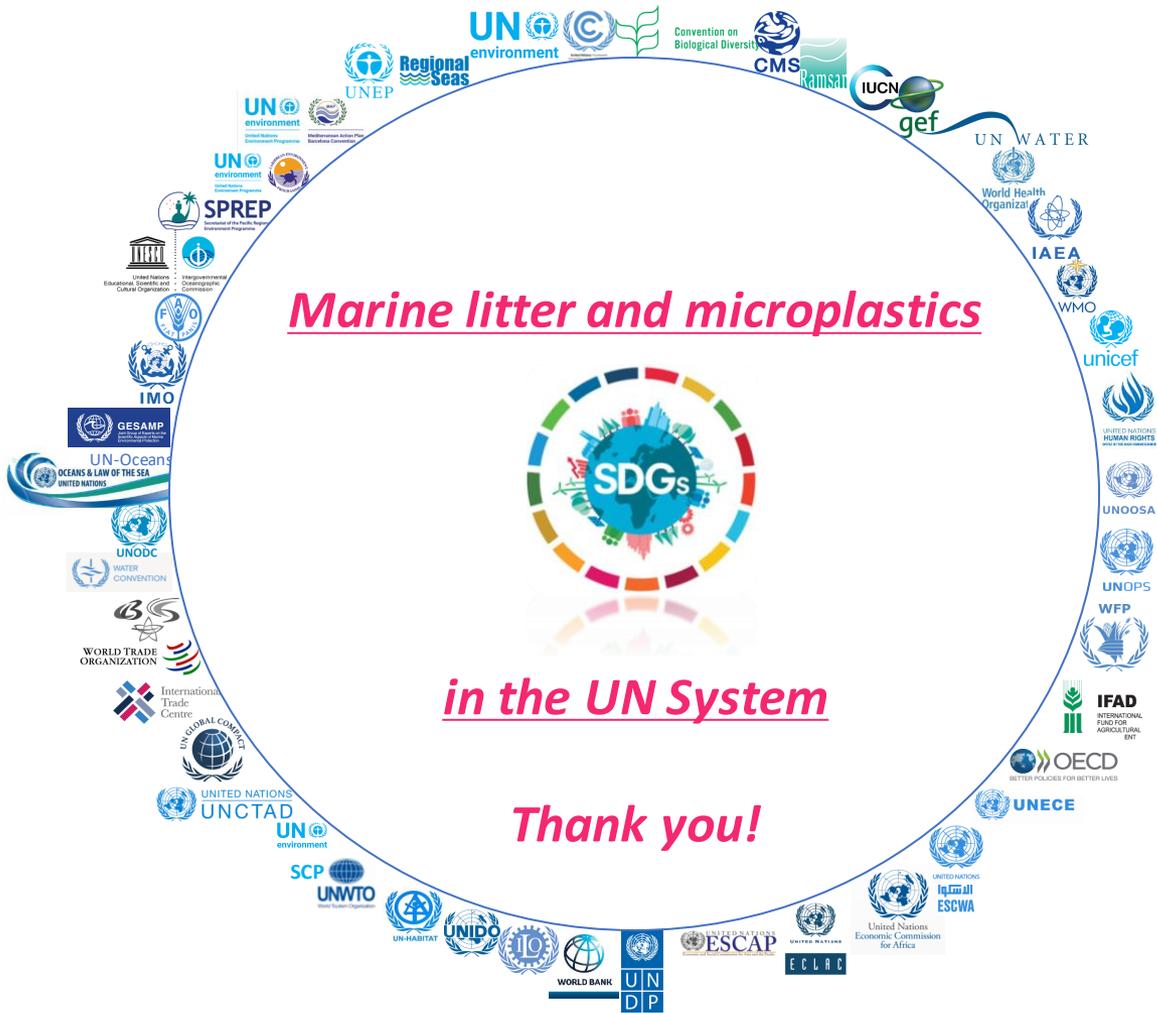
Food, Health, Sanitation



- Programme Responsible Fishing Operations - FAO
- Report on human health implications of microplastics in the environment (2020) - WHO
- Space4Health - UNOOSA
- The human right to a healthy environment - OHCHR
- The Special Rapporteur on human rights and environment and the Special Rapporteur on human rights and toxics - OHCHR
- Awareness raising - UNICEF, UNESCO-IOC, etc.

A summary overview of the UN efforts on marine litter and microplastics





Marine litter and microplastics



in the UN System

Thank you!

Q&A session



Photo: [UN World Oceans Day Photo Competition](#)

Moderated by Ms. Jessica Howley, Associate
Legal Officer, DOALOS



DIVISION FOR OCEAN AFFAIRS AND THE LAW OF THE SEA
UNITED NATIONS

Roundtable Discussion



Photo: [UN World Oceans Day Photo Competition](#)

Moderated by Ms. Patrycja Enet



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The European experiences

Marine Plastic Pollution in the EU

Patrycja Enet

EU MSP focal point North Sea



The European Commission's assistance mechanism for the implementation of Maritime Spatial Planning (MSP) Directive in the European Union (funded by the EU Commission DG-MARE – EASME)

msp-platform.eu

EU policies and legislation

- **An Integrated Maritime Policy for the European Union (IMP, 2007)**
- **The Marine Strategy Framework Directive (MSFD, 2008)**
- **The Maritime Spatial Planning Directive (MSP, 2014)**
- **The Port Reception Facilities Directive (2019)**
- **The Water Framework Directive (2000)**
- **The amended Waste Framework Directive (2008, 2018)**
- **Plastic Bags Directive (2015)**
- **A European Strategy for Plastics in a Circular Economy (2018)**
- **The Directive on the reduction of the impact of certain plastic products on the environment (2019)**
including Single Use Plastics and fishing gear
- **The European Green Deal (2020)**

EU projects and initiatives



- TOPIOS: Tracking Of Plastic In Our Seas
- GoJelly – a gelatinous solution to plastic pollution
- CLAIM: Cleaning litter by developing and applying innovative methods in EU seas
- The Sea Change project
- ResponSeable
- Plastic Busters MPAs: preserving biodiversity from plastics in Mediterranean MPAs
- ACT4LITTER to facilitate efforts for tackling marine litter in Mediterranean MPAs
- BLASTIC: Tackling plastic litter in the Baltic Sea
- FanPLESStic-sea to prevent and decrease the pollution of microplastics in water and the Baltic Sea
- EMBLAS supports monitoring programmes, including for marine litter, throughout the Black Sea
- etc.

*Marine Litter Projects
Funded under FP7 and Horizon 2020*



Marine pollution and Covid-19 impact in Europe



Marine pollution and Covid-19 impact in your country / region

Roundtable discussion

1. What are the most significant impacts of marine pollution, and particularly marine plastics, on the marine environment in your country or region? Has there been any observed increase in these impacts as a result of the COVID-19 pandemic?
2. What is a specific action that either has been, or you consider could feasibly be, taken in your country or region to reduce marine pollution, particularly marine plastics?

Closing



UN Photo/Mark Garten

Ms. Valentina Germani, Senior Legal Officer
(Programme Advisor) DOALOS