



The Implications of the Ocean Governance Framework established by the United Nations for the Implementation of the EU MSP Directive

Background Technical Study



EUROPEAN COMMISSION

European Climate, Infrastructure and Environment Executive Agency
Unit D.3 – Sustainable Blue Economy

E-mail: CINEA-EMFAF-CONTRACTS@ec.europa.eu

European Commission
B-1049 Brussels

**The Implications of
the Ocean Governance Framework
established by the United Nations
for the Implementation
of the EU MSP Directive**

Background Technical Study



STRATÉGIES
MER ET LITTORAL



Eau de Web 

Produced by the European MSP Platform under the Assistance Mechanism for the Implementation of Maritime Spatial Planning

Authored by **Patrycja Enet** (MSP Assistance Mechanism North Sea Focal Point)
Edited by **Dr Stephen Jay** (University of Liverpool) and **Chris McDougall** (MSP Assistance Mechanism Project Leader)

***EUROPE DIRECT is a service to help you find answers
to your questions about the European Union***

Freephone number (*):
00 800 6 7 8 9 10 11

(*) The information given is free, as are most calls (though some operators, phone boxes or hotels may charge you)

LEGAL NOTICE

This document has been prepared for the European Commission however it reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

More information on the European Union is available on the Internet (<https://ec.europa.eu>).

Luxembourg: Publications Office of the European Union, 2022

PDF

ISBN 978-92-95225-50-3

doi: 10.2926/135072

HZ-06-22-215-EN-N

© European Union, 2022

Reproduction is authorised provided the source is acknowledged.

Table of Contents

LIST OF FIGURES, TABLES & BOXES	6
ACRONYMS	7
EXECUTIVE SUMMARY	9
1. INTRODUCTION	10
2. OCEANS IN THE UNITED NATIONS CONTEXT	11
2.1. The United Nations Convention on the Law of the Sea (UNCLOS)	11
2.2. The United Nations General Assembly resolutions and other UN Agreements	13
2.2.1. Sustainable Development.....	14
2.2.2. Conservation and Biodiversity	15
2.2.3. Climate Change	16
2.2.4. Marine Pollution.....	17
2.2.5. Disaster Risk Reduction (related to climate change and natural hazards).....	17
2.2.6. Land-sea interaction.....	18
3. UN OCEAN GOVERNANCE IN THE MSP CONTEXT	18
3.1. Shipping and navigation	18
3.2. Fisheries and aquaculture.....	19
3.3. Energy	20
3.4. Seabed mining	21
3.5. Trade and Labour	22
3.6. Marine Scientific Research	22
4. HIGHLIGHTS	23
5. REFERENCES	25
6. ANNEXES	27

LIST OF FIGURES, TABLES & BOXES

Figures

Figure 1: Maritime Zones as specified by UNCLOS

Figure 2: UNCLOS with implementing Agreements and UN institutions

Tables

Table 1: Spatial Planning Target in the current draft Post-2020 Framework

Table A1: Key EU instruments for the management of marine and coastal areas, and related sectoral policies

Table A2: An indicative list of global and regional treaties of relevance to MSP

Table A3: Examples of Sustainable Development Goals and targets that are of relevance to MSP

Boxes

Box 1: The Ecosystem-based Management Approach

Box 2: The EU and the international ocean governance framework

Box 3: The United Nations Convention on the Law of the Sea (UNCLOS)

Box 4: The Maritime Zones established by UNCLOS

Box 5: Conservation and biodiversity entailed in UNCLOS

Box 6: MSP entailed in CBD

Box 7: Climate change in the UN system

Box 8: Oceans in National Adaptation Plans (NAPs) and Nationally Determined Contributions (NDCs)

Box 9: Marine pollution entailed in UNCLOS

Box 10: Risks in the IPCC Special Report on the Ocean and Cryosphere in a Changing Climate

Box 11: Shipping and navigation

Box 12: Fisheries and aquaculture

Box 13: Offshore energy

Box 14: Seabed mining

Box 15: Trade and labour

Box 16: Marine scientific research

ACRONYMS

ABNJ	Areas beyond national jurisdiction
AHEG	Ad hoc open-ended expert group on marine litter and microplastics
ALDFG	Abandoned, lost or otherwise discarded fishing gear
BBNJ	Biodiversity of areas beyond national jurisdiction
BWMC	Ballast Water Management Convention
CBD	Convention on Biological Diversity
CCRF	Code of Conduct for Responsible Fisheries
CFP	Common Fisheries Policy
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CLC/FUND	Civil Liability Convention
CMS	Convention on the Conservation of Migratory Species of Wild Animals
COP	Conference of the parties
CORLEG	Convention on the International Regulations for Preventing Collisions at Sea
CTA	IMO Cape Town Agreement
CTE	World Trade Organisation's Committee on Trade and Environment
DOALOS	United Nations Division for Ocean Affairs and the Law of the Sea
EBSA	Ecologically or biologically significant areas
EEDI	IMO Energy Efficiency Design Index
EEAS	European External Action Service
EEZ	Exclusive economic zone
EIA	Environmental impact assessment
EP	European Parliament
ESPOO	Convention on Environmental Impact Assessment in a Transboundary Context
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GBF	Global Biodiversity Framework
GESAMP	Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection
GHG	Greenhouse gas
GPA	Global Program of Action for the Protection of the Marine Environment from Land-Based Activities
GRB	Garbage Record Book
HNS	Hazardous and noxious substances
ICP	Informal Consultative Process on Ocean and the Law of the Sea
ICZM	Integrated coastal zone management
ILO	International Labour Organization
IMSBC	International Maritime Solid Bulk Cargoes
IOC-UNESCO	Intergovernmental Oceanographic Commission of UNESCO
IOG Forum	International Ocean Governance Forum
IMO	International Maritime Organization
IMP	Integrated Maritime Policy
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
ISA	International Seabed Authority
IUU fishing	Illegal, unreported and unregulated fishing
IWC	International Whaling Commission
IWRM	Integrated Water Resources Management
MARPOL	International Convention for the Prevention of Pollution from Ships
MCL	Maritime Labour Convention
MEA	Multilateral Environmental Agreements
MPA	Marine Protected Area
MSFD	Marine Strategy Framework Directive
MSP	Marine/Maritime spatial planning
NAP	National Adaptation Plans
NDC	Nationally Determined Contributions
NGO	Non-governmental organisation

nm	Nautical mile
OECD	Organisation for Economic Co-operation and Development
OSPAR	Convention for the Protection of the Marine Environment of the North-East Atlantic
OPRC	IMO International Convention on Oil Pollution Preparedness, Response and Co-operation
POP	Persistent organic pollutants
PSMA	Agreement on Port State Measures
PSSA	IMO Particularly Sensitive Sea Area Guidelines
Ramsar	The Secretariat of the Ramsar Convention on Wetlands
RFMO	Regional Fisheries Management Organizations
RSC	Regional Sea Conventions
SBSTA	Subsidiary Body for Scientific and Technological Advice
SDG	Sustainable Development Goal
SFPA	Sustainable Fisheries Partnership Agreement
SOLAS	International Convention for the Safety of Life at Sea
SROCC	IPCC Special Report on the Ocean and Cryosphere in a Changing Climate
STCW	Standards of Training, Certification and Watchkeeping
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea
UNCED	United Nations Conference on Environment and Development
UNDRR	United Nations Office for Disaster Risk Reduction
UNEA	United Nations Environment Assembly
UNECE	United Nations Economic Commission for Europe
UNEMG	United Nations Environment Management Group
UNFSA	United Nations Fish Stocks Agreement
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNGA	United Nations General Assembly
UNEP	United Nations Environment Programme
WFD	Water Framework Directive
WHO	World Health Organization
WOA	World Ocean Assessment
WSSD	World Summit on Sustainable Development
WTO	World Trade Organization

EXECUTIVE SUMMARY

The economic benefits obtained from human use of marine ecosystems are often accompanied by degradation of the oceans and seas and their resources, particularly marine biodiversity. The development of the blue economy requires integrated ocean management to ensure long term environmental sustainability, in line with the objectives of the European Green Deal¹ and international commitments, particularly Sustainable Development Goal 14 (*Life below water*) of the United Nations 2030 Sustainable Development Agenda.² In Maritime Spatial Planning (MSP),³ which comprises a holistic perspective on marine use and management towards healthy, productive and resilient seas, it is vital to consider the relevant international measures as the foundation for long-term operational strategies for maritime uses.

International regulations, agreements and instruments on maritime uses and protecting the marine environment and ecosystems are extremely important and relevant to the implementation of MSP by EU Member States. These include, amongst others:

- The United Nations Convention on the Law of the Sea (UNCLOS) which provides the global legal framework for ocean governance⁴ within which all activities in the oceans and seas should be carried out,⁵ and which serves as the basis for national, regional and global action and cooperation in the marine realm;
- Global conventions and protocols of the International Maritime Organization (IMO);
- The Convention on Biological Diversity (CBD), along with its forthcoming Post-2020 Global Biodiversity Framework (GBF); and
- The Convention on Environmental Impact Assessment in a Transboundary Context (Espoo).

The obligation to protect and preserve the marine environment is a general one under international law and these various international agreements call upon States to ensure that the impact of human activities on the marine environment is limited; and to cooperate and provide support to countries to achieve sustainable development and environmental protection.

As an aid to Member States, as they implement the EU 'MSP Directive' (2014/89/EU),⁶ this study provides an overview of the relevant international instruments and other processes of direct and indirect relevance to the preparation of maritime spatial plans, together with an indication of the practical implications of these instruments and commitments in six thematic areas – *Sustainable Development; Conservation and Biodiversity; Climate Change; Marine Pollution; Disaster Risk reduction* and *Land-Sea Interaction*. As MSP aims to manage across sectors, the application of international instruments to key maritime sectors – Shipping and Navigation; Fisheries and Aquaculture; Energy; Seabed Mining; Trade and Labour; and Marine Scientific Research - is also outlined.

¹ https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

² <https://www.un.org/sustainabledevelopment/development-agenda/>

³ https://ec.europa.eu/oceans-and-fisheries/ocean/blue-economy/maritime-spatial-planning_en

⁴ United Nations 1982 https://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf

⁵ 2020 UN General Assembly on Oceans and the Law of the Sea A/RES/75/239

⁶ https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2014.257.01.0135.01.ENG%20

1. INTRODUCTION

The impact of pollution, overuse and climate change on marine ecosystems, along with the growth of the blue economy, have prompted growing calls for international regulation of the oceans. The United Nations Convention on the Law of the Sea (UNCLOS) is a framework convention that has developed to protect and preserve the marine environment, along with other international instruments such as the International Maritime Organization (IMO), the Convention on Biological Diversity (CBD) and the emerging Post-2020 Global Biodiversity Framework. An ecosystem-based management approach has also developed in parallel (Box 1). This ocean governance framework covers many activities in the oceans and seas and serves as the basis for national and international marine and maritime action and cooperation.

Box 1: The Ecosystem-based Management Approach

"Conscious that the problems of ocean space are closely interrelated and need to be considered as a whole" (Preamble to the United Nations Convention on the Law of the Sea, 1982)

Formulated at the 1992 United Nations Conference on Environment and Development (UNCED) and the 1992 United Nations Convention on Biological Diversity (CBD), the ecosystem-based management approach started to be considered globally as a strategy for the integrated management of land, water and living resources. The importance of integrated ecosystem-based approaches has been reaffirmed by Agenda 21 (UNCED, 1992) and Agenda 2030 for Sustainable Development including target 14.2: 'By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans' and indicator 14.2.1: 'Proportion of national exclusive economic zones managed using ecosystem-based approaches'.

The European Union (EU) has itself contributed to the development of the ocean governance framework (Box 2 and Annex 2). The EU has also developed its own policy and legislative framework for ecosystem-based management of its Member States' marine waters (Annex 1). This includes its Integrated Maritime Policy (2007), the Marine Strategy Framework Directive (2008) and the European Green Deal (2019). These provide the context for the Directive on Establishing a Framework for Maritime Spatial Planning (2014) (known as the 'MSP Directive'), and recent actions such as collaboration with the Intergovernmental Oceanographic Commission of UNESCO (IOC-UNESCO) in developing a Joint Roadmap to accelerate Maritime/Marine Spatial Planning processes worldwide (2017).⁷

The ocean governance framework is of great significance to maritime spatial planning (MSP), as it provides the international legal context within which MSP must operate. EU Member States' authorities implementing the MSP Directive must therefore have an understanding of the requirements stemming from these international instruments.

The purpose of this study is to outline key aspects of the framework that are relevant to the implementation of MSP. This is especially in relation to exclusive economic zones (EEZ) and the continental shelf that lie beyond the 12 nautical mile (nm) limit of territorial waters, as these are the areas of national marine waters that are of most relevance as far as the ocean governance framework is concerned. However, it should be recognised that some aspects of the framework are of relevance to all national marine waters for which MSP may be carried out.

These key aspects are presented in relation to six thematic areas covering the management and use of marine resources and the protection and preservation of the marine environment - *Sustainable Development; Conservation and Biodiversity; Marine Pollution; Disaster Risk reduction and Land-Sea Interaction*.

As MSP aims to manage across sectors, the application of international instruments to key maritime sectors – Shipping and Navigation; Fisheries and Aquaculture; Energy; Seabed Mining; Trade and Labour; and Marine Scientific Research - is also outlined.

Other aspects of the ocean governance framework, such as dispute settlement regarding the delimitation of maritime zones, rights of passage and navigation, peace and security and criminal jurisdiction, are not addressed by this study.

⁷ https://www.mspglobal2030.org/wp-content/uploads/2019/03/Joint_Roadmap_MSP_v5.pdf

This is therefore a scoping study of the international law, regulations, soft law, and processes of relevance to the implementation of MSP. The main focus is international instruments and processes, though reference is also made to bilateral and regional agreements.⁸ The study thus aims to provide practical guidance for the MSP competent authorities of EU Member States.

Box 2: The EU and the international ocean governance framework

EU maritime policy, aiming to ensure a high level of safety and environmental protection throughout the EU, is in compliance with international conventions, codes and resolutions. Establishment of clear rules regulating activities in waters beyond national jurisdiction, ensures joint action towards combatting marine environmental issues.

The EU is mandated to engage in shaping international ocean governance, in cooperation with third countries, the UN and other key international partners, with the purpose of strengthening the sustainable management of oceans, coastlines and ecosystems. The development of actions to shared environmental challenges and to shape the way that oceans are managed and used represent an important contribution from the EU at a global and regional level.

2. OCEANS IN THE UNITED NATIONS CONTEXT

A large number of international instruments may be of relevance to the implementation of MSP. These may be in the form of international treaties, regulations, multilateral agreements, resolutions and other policy instruments and commitments. These instruments can be of a legally binding or non-binding nature. Among the legally binding instruments of most relevance to MSP are the CBD, the IMO's conventions and the UNFCCC. Relevant non-binding instruments include, for example, the Rio Declaration, the 2030 Agenda for Sustainable Development, and the UN Environment Assembly (UNEA) resolutions.

General provisions, instruments and processes under UNGA and implementing Agreements for governance and the implementation of UNCLOS are described in Section 2.1, with provisions in relation to various sectors addressed in subsequent sections and Chapter 3.

2.1. The United Nations Convention on the Law of the Sea (UNCLOS)

The United Nations Convention on the Law of the Sea (UNCLOS)⁹ (1982) sets out the legal framework within which all activities in oceans and seas should be carried out. It is also of strategic importance as it is the basis for national, regional and global action and cooperation (A/RES/74/19, preamble). It establishes a general obligation on States for all activities in the ocean and seas and provides the foundation for international cooperation, including the conservation, protection and preservation of the marine environment and sustainable use of the

Box 3: The United Nations Convention on the Law of the Sea (UNCLOS)

UNCLOS comprises 320 articles and nine annexes, governing all aspects of ocean space. Key provisions of UNCLOS include: delineation of maritime zones and delimitation of maritime boundaries, right of passage and navigation, the freedoms of the high sea, environmental control, conservation and management of marine living resources, protection and preservation of the marine environment, peace and security of ocean and seas, economic and commercial activities, marine scientific research, transfer of technology, and the compulsory dispute (relating to ocean matters) settlement procedures. UNCLOS has two Implementing Agreements: the 1995 United Nations Fish Stocks Agreement, and the 1994 Agreement relating to the implementation of Part XI of UNCLOS (with regard to seabed mining in the Area). Four institutional bodies are established under UNCLOS: the Tribunal for the Law of the Sea, the International Seabed Authority, the Commission for the Limits of the Continental Shelf and the Meeting of States Parties.

⁸ In the preparation of this study, existing overviews have been drawn upon, such as ocean inventories by the UN e.g. the UN-Oceans (<http://www.unoceans.org>), the IOC-UNESCO 'Ocean governance and marine spatial planning: policy brief' (<https://unesdoc.unesco.org/ark:/48223/pf0000375723>); and academic publications, including "MSP-past, present, future" (<https://link.springer.com/content/pdf/10.1007%2F978-3-319-98696-8.pdf>)

⁹ United Nations, Treaty Series, vol. 1833, No. 31363.

https://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf

ocean and marine resources. It thus serves as an umbrella framework for MSP.¹⁰ UNCLOS entered into force in 1994 and now has 168 members (Box 3).

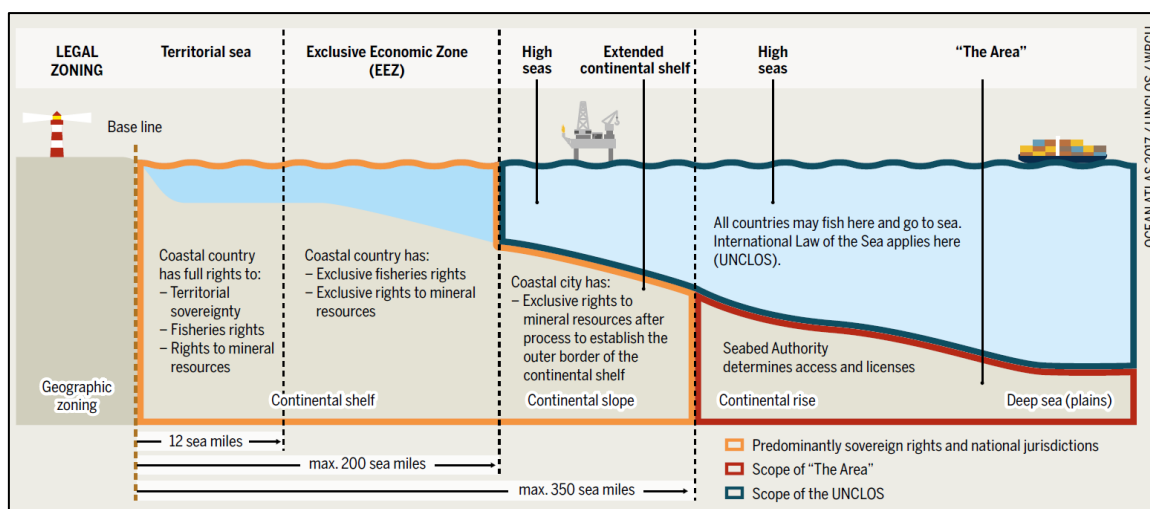
UNCLOS sets out the legal regime of maritime zones over which coastal States may exercise sovereignty (also described as sovereign rights or jurisdiction), and specifies their maximum breadth (Box 4). It defines the rights and duties of the coastal states in each of these zones, and is therefore the foundation for managing the activities on which MSP focuses. It also sets out the regimes (High Seas and the “Area”) for areas beyond national jurisdiction (ABNJ).

Box 4: The maritime zones established by UNCLOS

Coastal States exercise sovereignty over their internal waters and territorial sea, and they also have sovereign rights in their Exclusive Economic Zone with respect to natural resources and certain economic activities, and exercise jurisdiction over marine science research and environmental protection. In addition, coastal States have sovereign rights over the continental shelf (the national area of the seabed) for exploration and exploitation of resources (mineral and other non-living resources of the seabed as well as sedentary species), including in areas where the continental shelf extends beyond 200 nm.

UNCLOS sets out the following main rights and duties:

- UNCLOS divides the ocean and seas into jurisdictional zones, including internal waters, territorial seas, the contiguous zone, the (EEZ) and the continental shelf (Figure 1). MSP does not necessarily take place in every jurisdictional belt.
- UNCLOS defines the rights and obligations of the coastal States and third party States relating to these jurisdictional zones. These vary by zone, generally diminishing with distance from the coast, imposing limitations on the measures available to MSP.
- The coastal State has full sovereignty within the territorial sea,¹¹ apart from an obligation to provide the right of innocent passage to third party states.
- In the EEZ,¹² the coastal State’s rights are limited to the exploration, exploitation, conservation and management of living and non-living natural resources, as well as the rights to conduct activities for the purposes of economic exploitation and exploration, including the freedom to establish artificial islands, installations and structures, marine scientific research. It also has an obligation to protect the environment.
- Within the EEZ, third party States¹³ have rights related to navigation and overflying and the laying of submarine cables and pipelines.
- Important maritime activities may thus take place within the EEZ, including shipping, offshore energy (including renewable energy resources), infrastructure and pipelines, which may be the focus of MSP, but MSP measures cannot be as strong as in the territorial sea, and must respect the rights of third party States in the EEZ.



¹⁰ Ocean governance and marine spatial planning: policy brief (2021), Morf A., et al., MSPglobal publication, IOC/POL/2021/5 <https://unesdoc.unesco.org/ark:/48223/pf0000375723>

¹¹ UNCLOS Art 2

¹² UNCLOS Art 56

¹³ UNCLOS Art 58

Figure 1: Maritime zones as specified by UNCLOS (source: Ocean Atlas 2017/UNCLOS/WBGU)

2.2. The United Nations General Assembly resolutions and other UN Agreements

The United Nations General Assembly (UNGA) conducts an annual review of developments in ocean affairs and the law of the sea. It is facilitated in this by the Open-ended Informal Consultative Process on Ocean and the Law of the Sea (ICP). ICP has recognised MSP as an integrated approach to the management of ocean activities that limits the cumulative effects of human activities and helps maintain the health of the marine ecosystem, and the development of the Law of the Sea.¹⁴

A number of processes established by UNGA address ocean and marine management and are of relevance to MSP. These include fisheries, biodiversity of areas beyond national jurisdiction, the Regular Process for Global Reporting and Assessment of the State of the Marine Environment and UN Ocean Conferences to Support the Implementation of SDG 14.

A number of other bodies are identified as competent organisations under UNCLOS for the purpose of regulating specific activities in oceans and seas, including:

- International Maritime Organization (IMO) for international shipping;
- UN Food and Agriculture Organization (FAO) for living marine resources;
- Regional fisheries management organisations (RFMOs) for living marine resources;
- United Nations Environment Programme (UNEP), Regional Sea Conventions (RSCs) and Multilateral Environmental Agreements (MEAs) for conservation and sustainable use of the marine environment including CBD and the Convention on the Conservation of Migratory Species of Wild Animals (CMS);
- Intergovernmental Oceanographic Commission (IOC) of UNESCO for marine scientific research;
- International Whaling Commission (IWC).

The relationships between institutions and the frameworks supporting UNCLOS are represented in Figure 2. As a framework Convention, UNCLOS is also supplemented by a number of related global, regional and sectoral instruments, which have been negotiated to achieve specific objectives.

¹⁴ The ICP at its 16th Meeting addressed the environmental, social and economic dimensions of oceans and progress made in integrating the three dimensions. It was also noted that the successful implementation of MSP should be an inclusive and transparent process that involves the private sector and scientific area.

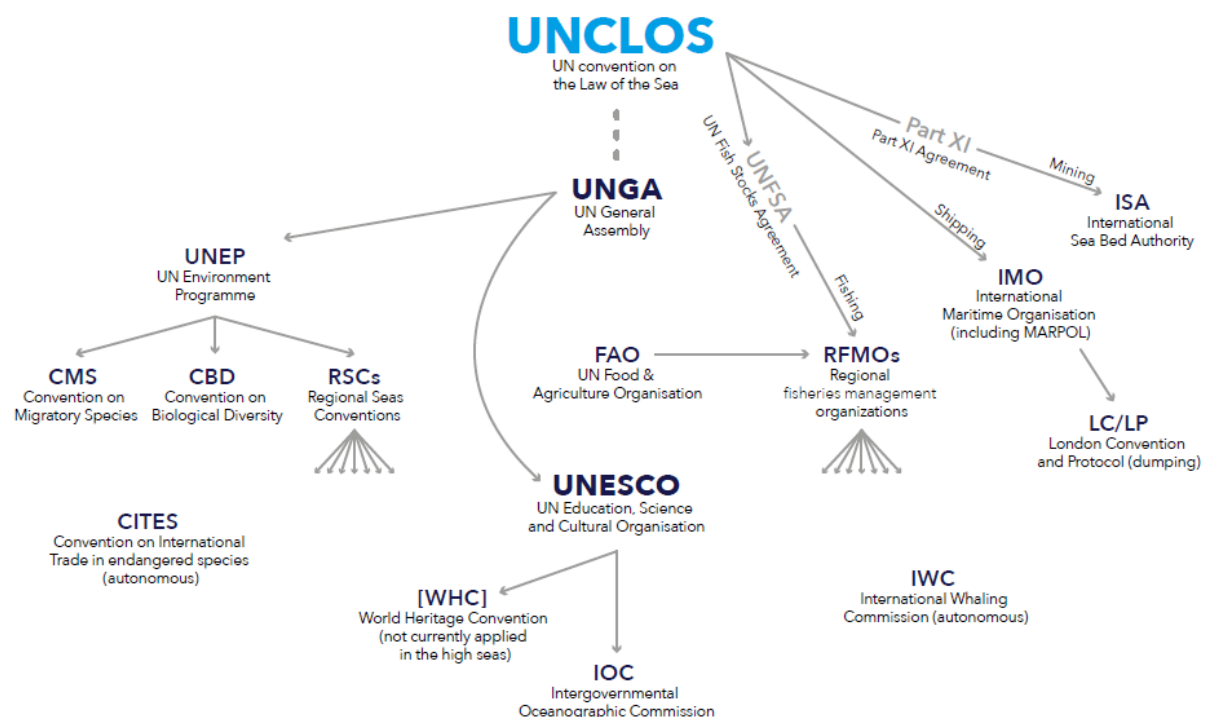


Figure 2: UNCLOS with implementing Agreements and UN institutions (source: Ardron et al. 2015)

UNCLOS states that the problems of ocean space are closely interrelated and need to be considered as a whole, recognising the need for a holistic approach towards integrated ocean governance. For this reason, UNCLOS refers to other instruments that complement it and are used to regulate activities undertaken in the marine environment. An indicative list of treaties based on a previous report by UNGA on issues relating to the conservation and sustainable use of marine biodiversity of areas beyond national jurisdiction (A/60/63/Add.1) is given in Annex 3.

The following sections set out the relevance of UNCLOS to five thematic areas – *Sustainable Development; Conservation and Biodiversity; Marine Pollution; Disaster Risk Reduction and Land-Sea Interaction.*

2.2.1. Sustainable Development

The Future We Want, the UN's 2012 declaration on sustainable development and a green economy, recognised the importance of UNCLOS in advancing sustainable development. Agenda 21¹⁵ contains Chapter 17 on oceans. The World Summit on Sustainable Development (WSSD) outcome on oceans is included in the Johannesburg Plan of Implementation amongst the sustainable development policy instruments.¹⁶

In 2015, the UNGA Resolution 70/1 established 17 Sustainable Development Goals (SDGs), a number of which relate to maritime activities, especially SDG 14 'Life below Water - Conserve and sustainably use the oceans, seas and marine resources for sustainable development'. This includes the target: 'By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans'. Targets of SDG 14, and others that are of relevance to MSP, are shown in Annex 4.

In 2022, the UN Environment Assembly concluded with 14 resolutions and a Ministerial declaration on strengthening actions to achieve the SDGs (UNEP/EA.5/HLS.1) for transformative and systemic changes, and for policies that address environmental, economic and social challenges.

¹⁵ <https://sustainabledevelopment.un.org/outcomedocuments/agenda21>

¹⁶ https://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/WSSD_PlanImpl.pdf

2.2.2. Conservation and Biodiversity

UNCLOS provides the legal framework for protection and preservation of the marine environment and the conservation and management of marine living resources. In addition, the main legal instrument for the conservation of marine biodiversity is the Convention on Biological Diversity (CBD) (Box 5).¹⁷ Also of possible relevance are the Convention on the Conservation of Migratory Species of Wild Animals (CMS),¹⁸ the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)¹⁹ and the Ramsar Convention on Wetlands of International Importance.²⁰

Box 5: Conservation and biodiversity entailed in UNCLOS

UNCLOS specifies that coastal States have the sovereign right to conserve and manage the living marine resources within their EEZs (Art 56), while on the high seas, States have a duty to collaborate on the conservation and management of marine living resources (Art 118). UNCLOS also obliges States to cooperate for the purpose of the protection and preservation of the marine environment (Art 197).

CBD principles support the integrity of ecosystems and the sustainable use of biodiversity. Under CBD, measures can be adopted such as the establishment of systems for protected areas, the rehabilitation of degraded ecosystems and the protection of natural habitats and species conservation in natural surroundings. These can be established through national strategies, plans and programmes, implicitly including MSP measures. The CBD Secretariat has also published Voluntary Guidelines on Biodiversity Inclusive Environmental Impact Assessment.

The Post-2020 Global Biodiversity Framework will potentially be a milestone in global environmental governance. with further integration of the ocean-climate-biodiversity nexus,²¹ in particular in Targets 1 (Spatial Planning), 2 (Ecosystem Restoration), 3 (Conservation), 5 (Wild Species) and 8 (Climate Change).²² These are relevant to MSP and preserving the integrity of marine ecosystems. In addition, ocean, climate and biodiversity interactions are reflected in Target 18 (Harmful incentives) and 19 (Financial resources).²² The current draft specifically refers to MSP, and includes a spatial planning target (Table 1 and Box 6).

Table 1: Spatial planning target in the current draft Post-2020 Framework (selected draft language as of March 2021)

<p>Target 1. By 2030, [50%] of land and sea areas globally are under spatial planning addressing land/sea use change, retaining most of the existing intact and wilderness areas, and allow to restore [X%] of degraded freshwater, marine and terrestrial natural ecosystems and connectivity among them.</p>	<p>1.0.1 Percentage of land covered by landscape scale land-use plans for terrestrial, freshwater and marine ecosystems*</p>	<p>1.1. Increase in area of terrestrial, freshwater and marine ecosystems under spatial planning 1.2. Prevention of reduction and fragmentation of natural habitats due to land/sea use change 1.3. Priority retention of intact/wilderness areas 1.4. Restoration of degraded ecosystems 1.5. Maintenance and restoration of connectivity of natural ecosystems</p>	<p>1.1.1. Sustainable forest management (SDG indicator 15.2.1) 1.1.2. Number of countries using ecosystem-based approaches to managing marine areas (SDG indicator 14.2.1) 1.1.3. Degree of integrated water resources management (SDG indicator 6.5.1) <i>Habitat extent, fragmentation and connectivity are captured in Goal A.</i></p>	<p>1.1.1.1. Number of countries using natural capital accounts in planning processes 1.1.1.2. Percentage of spatial plans utilising information on key biodiversity areas 1.1.1.3. Habitat patches located within marine protected areas or integrated coastal zone management (ICZM) 1.1.1.4. Other spatial management plans (not captured as ICZM or marine spatial planning in 14.2.1) 1.1.1.5. Number of countries using ocean accounts in planning processes 1.1.1.6. Proportion of transboundary basin area with an operational arrangement for water cooperation (SDG indicator 6.5.2) 1.1.1.7. Percent of total land area that is under cultivation</p>
---	--	--	---	---

Marine conservation and biodiversity are also supported by regional agreements, including the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR

¹⁷ <https://www.cbd.int/>

¹⁸ <https://www.cms.int/>

¹⁹ <https://cites.org/eng/disc/what.php>

²⁰ <https://www.ramsar.org/>

²¹ Schumm R., et al. (2021) Giving greater attention to the ocean in the development and implementation of the Post-2020 Global Biodiversity Framework

²² Lecerf M. (2022) Integrating further the ocean-climate-biodiversity nexus into the Post-2020 Global Biodiversity Framework. Ocean & Climate Platform, CNRS, OPRI

Convention).²³ Aspects related to environmental impact assessment in a transboundary context are addressed by the United Nations Economic Commission for Europe's (UNECE) Espoo (EIA) Convention.²⁴ This obliges Parties to assess the environmental impact of certain activities at an early stage of planning and to notify and consult each other on projects that are likely to have a

Box 6: MSP entailed in CBD

Conference of the Parties (CoP) decisions 11 and 12 recognise MSP as a useful tool for applying the ecosystem approach to marine and coastal management. At CoP 14 (2018), it was requested that methods and tools for MSP at national and regional levels should be enhanced.

significant adverse environmental impact across boundaries.

Further information on instruments of relevance to conservation and biodiversity is presented in Annex 5A.

2.2.3. Climate Change

The United Nations Framework Convention on Climate Change (UNFCCC)²⁵ leads global efforts to reduce the carbon dioxide level in the atmosphere and in the hydrosphere, and recognises the importance of oceans in climate mitigation and adaptation (Box 7).²⁶

Box 7: Climate change in the UN system

- *The UNGA, in its 2019 resolution on the global climate, 74/219, reaffirmed that climate change is one of the greatest challenges of our time. The UNGA reiterated its serious concern at the current and projected adverse effects of climate change and ocean acidification on the marine environment and marine biodiversity and emphasised the urgency of addressing these issues.*
 - *The IPCC Special Report on the Ocean and Cryosphere in a Changing Climate (SROCC 2019: <https://www.ipcc.ch/srocc/>) highlighted the need to urgently enhance climate ambition and to be more determined in protecting ocean health given climate change will continue to impact the ocean through a variety of channels.*
 - *The ocean was identified as a priority by the Presidency at the UNFCCC Conference COP 25 in 2019, and it forms an important part of the COP 25 outcome.*
 - *At the UNFCCC Conference COP 26 in 2021, the ocean was recognized with a call for all workstreams and constituted bodies to consider and report on ocean-based action, and for a recurring ocean dialogue with a report back to COP every year (Decision 1/CP.26 para 58-61). Also, the role of ecosystems in mitigation (1/CP.26 para 21) and in protecting, conserving and restoring ecosystems (1/CP.26 para 50-51) was recognized.*
 - *The UNGA stated in its 2019 resolution on the UN Decade on Ecosystem Restoration (2021–2030), 73/284, that sinks and reservoirs of greenhouse gases include ocean sand and acknowledged the additional contribution and importance of carbon sequestration resulting from the restoration of ecosystems.*
 - *The resulting changes to ocean processes and functioning have broad implications for the global economy that must be taken into account, both to inform adaptation efforts and motivate mitigation strategies.*
-

The ocean plays a direct and indirect role in the goals under the Paris Agreement. The need to develop strategic national roadmaps for a zero-carbon economy by 2050 (the Paris Climate Agreement target) highlights the potential role for MSP when planning marine activities, given that the ocean presents a wealth of solutions which can mitigate climate change, such as renewable energy production. MSP that supports sustainable blue growth may help in accelerating technological innovations, such as, the potential for large scale renewable energy installations at sea, including in deep water sites.

The Paris Agreement emphasises the role of MSP as an integrated, cross-sectoral approach for developing and implementing effective adaptation measures that enhance ocean and coastal resilience. Parties are encouraged to take an integrated approach to addressing the issues of protecting, conserving and restoring ecosystems in national and local policy and planning decisions (Decision 1/CP.26 para 51). MSP may also help to maximise the potential of ocean-based solutions for enhanced Nationally Determined Contributions (NDCs), while ensuring other

²³ <https://www.ospar.org/>

²⁴ <https://unece.org/fileadmin/DAM/env/eia/eia.htm>

²⁵ <https://unfccc.int/>

²⁶ Adaptation aims at reducing vulnerability to climate change impacts; mitigation involves efforts to reduce the magnitude of climate change impacts, mainly through reducing carbon emissions

policy priorities, such as sustainable food production and reversing biodiversity loss, are supported, so that tensions and synergies are addressed (Box 8).

Box 8: Oceans in National Adaptation Plans (NAPs) and Nationally Determined Contributions (NDCs)

The ocean is being progressively incorporated into NDCs and NAPs under the Paris Agreement. Measures include greenhouse gas (GHG) emission reduction targets for shipping and protecting blue carbon ecosystems. NAPs submitted to the UNFCCC include considerations for ocean and coastal zones, while over 70% of current NDCs mention ocean-related issues.

Further information on instruments of relevance to climate change is presented in Annex 5B.

2.2.4. Marine Pollution

Operations at sea related to shipping, fisheries, offshore energy infrastructure, and in coastal areas related to ports and tourism and other maritime sectors, result in the generation of waste and pollution. A variety of international instruments regulate sources of pollution from maritime industries and prohibit the disposal of waste at sea, including dumping at sea from ships and fixed or floating platforms. UNCLOS stipulates that all States are obliged to prevent, reduce and control the release of pollution to the marine environment. States must collaborate in this, and flag States are under special obligations to ensure that ships adhere to environmental regulations (Box 9). In 2022, at the UN Environment Assembly (UNEA-5), 175 nations endorsed a resolution to End Plastic Pollution and create an international legally binding agreement on plastic pollution, including in the marine environment, by 2024 (UNEP/EA.5/L.23/REV.1).²⁷ Sound management of chemicals and waste, and enhancing circular economy as a contribution to achieving sustainable consumption and production, were other resolutions adopted at UNEA-5 (UNEP/EA5/L13/REV.1 and UNEP/EA5/L17/REV.1, respectively) that are relevant to the topic of marine pollution.

Box 9: Marine pollution entailed in UNCLOS

Part XII of UNCLOS applies to pollution from all sources, such as abandoned, lost or otherwise discarded fishing gear (ALDFG), dumping, shipping vessels, land-based sources of pollution, including run-off from agriculture, underwater noise pollution, pollution from or through the atmosphere, etc. which are also regulated under other international law instruments. Part XII also bestows coastal, flag, and port States with broadened jurisdictional rights for enforcing international environmental regulation within their territory and on the high seas.

These instruments are of relevance to MSP given it aims to protect the marine environment and provide space for sustainable activities (e.g. fisheries and tourism) that can be affected by pollution. The majority of litter that ends up in the marine environment is generated on land but reaches the sea through watercourses and other pathways. Marine litter governance therefore encompasses instruments and processes related to activities on land, such as freshwater management, sustainable consumption and production, and integrated waste management. MSP and Integrated Coastal Zone Management (ICZM) can be combined with the management approaches, such as Integrated Water Resources Management (IWRM) and the Source-to-Sea framework for litter and plastic pollution prevention.

Further information on instruments of relevance to marine pollution is presented in the recent UN report "Addressing marine litter and microplastics: UN system-wide contributions" (2022)²⁸ and Annex 5C.

2.2.5. Disaster Risk Reduction (related to climate change and natural hazards)

UNGA has expressed its concern regarding an increase in the adverse climate impacts, such as extreme weather events, sea level rise, coastal erosion and ocean acidification.²⁹ Coastal and marine areas are exposed to risks and disasters related to climate change and natural hazards

²⁷ UN Environment Assembly 5 Resolution "End plastic pollution: Towards an international legally binding instrument" (2022) https://wedocs.unep.org/bitstream/handle/20.500.11822/38522/k2200647_unep-ea-5-l-23-rev-1_advance.pdf?sequence=1&isAllowed=y

²⁸ United Nations Environment Management Group (2022) "Addressing marine litter and microplastics: UN system-wide contributions - A Synthesis Report by the United Nations Environment Management Group" https://unemg.org/wp-content/uploads/2022/03/UNEP_EMG-REPORT_Marine-Litter-Microplastics-220317-05-Small-web.pdf

²⁹ UNGA Resolution 74/19 para. 1

that have effects and implications on various maritime sectors. As such, increased sea-levels and storm severity can have a direct effect on maritime infrastructure, e.g. ports, windfarms, shipping, pipelines and cables. Disaster risk reduction (DRR) considerations may therefore be important for MSP. For example, meteo-hydrological assessments are needed for the design of ports, coastal defences, location of pipelines and cables and offshore renewables.

In response to these projections, international policy goals are set that aim to support national risk management efforts in coastal and marine areas. Resilience features strongly in three global agendas: the Sendai Framework for Disaster Risk Reduction 2015–2030 (UNDRR),³⁰ the Paris Agreement and the 2030 Agenda for Sustainable Development. These global agendas facilitate increased adaptation actions and options, such as comprehensive risk management approaches (Box 10). The IPCC's second part of the Sixth Assessment Report, Climate Change 2022: Impacts, Adaptation and Vulnerability, the Working Group II, highlights the role of adaptation measures for protecting coastal areas against the cascading, compound and transboundary effects of climate change.³¹ Further information on instruments of relevance to disaster risk reduction is presented in Annex 5D.

Box 10: Risks in the IPCC Special Report on the Ocean and Cryosphere in a Changing Climate

The IPCC Special Report on the Ocean and Cryosphere in a Changing Climate (SROCC) notes that the global mean sea level has been rising at an accelerated rate in recent decades and extreme sea level events are projected to occur more frequently, exacerbated by increases in precipitation and storm surge intensity. SROCC emphasises the importance of an understanding of climate-related risks to coastal areas in order to derive an appropriate coastal risk management response. (<https://www.ipcc.ch/srocc/>)

2.2.6. Land-sea interaction

MSP is intrinsically linked with terrestrial planning and management. Land-sea interactions are part of the MSP and ICZM processes, especially in inshore waters, but possibly also in EEZs. For example, offshore wind farms can affect the coastal landscape, and also need connection to the grid on land, requiring terrestrial planning. Another example is marine litter, which may have an impact on the local economy due to impacts on tourism, recreation and long-term, unknown impacts upon the foodchain.

The UN Agenda 2030 recommends holistic ecosystem-based approaches to land-sea interaction. Governance approaches may include transboundary water instruments and regional governance, strengthening agreements such as the UNECE's Water Convention and UN Watercourses Convention,³² the UNEP Regional Seas Programme³³ and Regional Commissions.³⁴ MSP may be directly linked with ICZM, as in the Protocol on ICZM in the Mediterranean³⁵.

Further information on instruments of relevance to land-sea interaction is presented in Annex 5E.

3. UN OCEAN GOVERNANCE IN THE MSP CONTEXT

Maritime sectors have obligations and commitments under the international ocean governance framework established by the UN. Examples of international sectoral instruments of relevance to MSP are presented in this chapter for key maritime sectors: shipping and navigation, fisheries and aquaculture, energy, seabed mining, trade and labour, and marine scientific research. These are described in Sections 3.1-3.6 and Annex 4.

3.1. Shipping and navigation

MSP can help to establish maritime routes with regard to sensitive species whilst maintaining navigational safety and taking into consideration the needs of other uses. MSP can also propose changes to routes. UNCLOS establishes the rules for shipping in the different maritime zones under a coastal State's sovereignty and the rights of third countries within the waters of a coastal State. Part XII of UNCLOS includes measures to prevent pollution from vessels including the

³⁰ <https://www.undrr.org/publication/sendai-framework-disaster-risk-reduction-2015-2030>

³¹ <https://www.ipcc.ch/report/sixth-assessment-report-working-group-ii/>

³² <https://unece.org/environment-policy/water>

³³ <https://www.unenvironment.org/explore-topics/oceans-seas/what-we-do/working-regional-seas>

³⁴ <http://www.regionalcommissions.org/about-the-rccs/> ; <https://www.unsystem.org/agencies/regional-commissions>

³⁵ https://link.springer.com/chapter/10.1007/978-3-319-98696-8_12

enforcement of international rules and standards, with Section 6 containing vessel-related enforcement provisions.

Within this framework, the IMO oversees safety of navigation, shipping traffic and marine environmental protection. The IMO develops its own conventions with detailed requirements, which establish a global minimum standard for the shipping industry. The International Labour Organization (ILO) develops frameworks for national legislation so that Parties comply with the conventions. Enforcing these regulations is the duty of the flag state for ships flying its flag. Port states exercise controls based on domestic law (Box 11).

Box 11: Shipping and navigation

- *In accordance with UNCLOS, a coastal State has full discretion to establish sea lanes and traffic separation schemes in its territorial sea, taking into consideration IMO's recommendations.*
 - *In the case where governments wish to establish or amend an existing route, they should submit a proposal to the IMO for adoption. These procedures are prescribed by the International Convention for the Safety of Life at Sea (SOLAS).*
 - *The Convention on the International Regulations for Preventing Collisions at Sea (COLREG) prescribes the conduct of vessels when navigating through traffic separation schemes adopted by the IMO. These regulations are the foundation for routing measures to prevent collisions in the EEZ and on the high seas.*
 - *UNCLOS specifies the provisions on transit passage in straits used for international navigation (Part III, Art 34-45).*
 - *UNCLOS stipulates that States are obliged to prevent, reduce and control pollution in the marine environment, including the IMO's MARPOL Convention, London Convention, London Protocol, and Hong Kong Convention.*
 - *IMO provides Guidelines for the identification and designation of Particularly Sensitive Sea Areas (PSSA) that require special protection because of their ecological or socio-economic or scientific significance (resolution A.982(24)).*
-

The shipping sector is recognised as strategically important for global efforts in combating climate change.³⁶ IMO's Energy Efficiency Design Index (EEDI) aims to deliver environmental effectiveness by generating significant reductions in GHG emissions from ships. The shipping industry is currently taking action to decarbonise maritime transport with new technologies. Also, shipping can be used to transport green fuels from areas with abundant energy resources to areas where it is needed, which could become as important as LNG transport. It is recognised that the adoption of energy efficiency practices and renewable fuels in the shipping sector will require development of the land-based infrastructure needed to support this transition.

Further information on instruments of relevance to shipping and navigation is presented in Annex 6A.

3.2. Fisheries and aquaculture

National governments, or the EU under the Common Fisheries Policy (CFP), are primarily responsible for managing fisheries within their marine waters. Under MSP, fishing is generally permitted everywhere except in the vicinity of offshore infrastructure. Under UNCLOS, States are granted sovereign rights for the purpose of exploring and exploiting, conserving and managing living resources within their EEZs.³⁷ For straddling and highly migratory stocks, States must cooperate, including through appropriate regional and subregional organisations to ensure the conservation and sustainable use of such stocks.

³⁶ Currently shipping counts for 3% of global GHG emissions and emits around 15% of the world's major air pollutants. <https://wwwcdn.imo.org/localresources/en/OurWork/Environment/Documents/Fourth%20IMO%20GHG%20Study%202020-%20-%20Full%20report%20and%20annexes.pdf>

³⁷ Art 56 UNCLOS

The conservation and management of straddling and highly migratory fish stocks is regulated through the UN Fish Stocks Agreement (UNFSA),³⁸ the regional fisheries management organisations (RFMOs),³⁹ and the Code of Conduct for Responsible Fisheries (CCRF)⁴⁰ of the FAO. A regular review of the actions taken by States and Regional Fisheries Management Organizations/Arrangements (RFMO/As) takes place addressing the impacts of bottom fishing on Vulnerable Marine Ecosystems and the long-term sustainability of deep-sea fish stocks (Box 12).⁴¹

Box 12: Fisheries and aquaculture

UNCLOS provides a legal regime for marine living resources and seeks to reconcile the needs of extraction and conservation. The rights and obligations of States differ in each jurisdictional zone. All natural resources in the territorial sea and internal waters are under the sovereignty of the coastal State. In the EEZ, coastal States have sovereign rights for exploring, using, conserving and managing the marine living resources; and on the Continental shelf, coastal States have sovereign rights over sedentary species. With regard to the high seas, all States enjoy the freedom of fishing, although this is balanced by the duty to cooperate for the conservation and management of marine living resources with other States fishing in the same areas through appropriate regional and subregional organisations.

Marine fish species vary in that some remain within a State's jurisdiction, whereas others are shared stocks (extending across multiple jurisdictions), straddling stocks (moving between the EEZ and the high seas), or highly-migratory species (with vast ranges across multiple jurisdictions and the high seas), as specified in Annex II of UNCLOS. The Fish Stock Agreement elaborates further on these stocks.

Marine aquaculture is a stationary activity, operating in waters under national jurisdiction. Governance of aquaculture involves different regulatory bodies, such as those responsible for spatial planning, economic development, environmental issues and food safety. The regulatory frameworks and their implementation vary from country to country and the FAO publishes regular updates through fact sheets on aquaculture laws and regulations.

States can establish zones for sustainable fishing and for sustainable aquaculture. The UN Fish Stock Agreement highlights the need to assess the impacts of fishing, other human activities and environmental factors on target stocks. In light of diminishing fish stocks, MSP presents an opportunity to develop strategies to balance conservation and sustainable use of the ocean through spatial and temporal allocation of areas for fishing, while ensuring they retain their ecosystem services. It also allows the establishment of MPAs ensuring the conservation of marine species and habitats.

New technologies are developing to increase offshore aquaculture systems, such as marine net pens, multitrophic aquaculture installations, and systems to power aquaculture through renewable energy. Fisheries and aquaculture are of particular importance to some Member States, and in the context of climate change impacts, MSP could facilitate their development.

Further information on instruments of relevance to fisheries and aquaculture is presented in Annex 6B.

3.3. Energy

Under the Paris Climate Agreement, Member States are working towards energy transition, including the development of offshore renewable energy. In accordance with UNCLOS, coastal States exercise sovereign rights in the EEZ and beyond for the purpose of exploring and exploiting energy resources, namely oil and gas and offshore power generation, including from wind, waves and currents (Box 13).

³⁸ https://www.un.org/depts/los/convention_agreements/convention_overview_fish_stocks.htm

³⁹ https://ec.europa.eu/oceans-and-fisheries/fisheries/international-agreements/regional-fisheries-management-organisations-rfmos_en

⁴⁰ <http://www.fao.org/resilience/resources/resources-detail/en/c/273397/#:~:text=This%20Code%20sets%20out%20principles,for%20the%20ecosystem%20and%20biodiversity.>

⁴¹ The UN General Assembly has provided for further review of the actions taken by States and regional fisheries management organisations and arrangements in response to specific paragraphs (e.g. paragraphs 113, 117 and 119 to 124 of resolution 64/72, paragraphs 121, 126, 129, 130 and 132 to 134 of resolution 66/68 and paragraphs 156, 171, 175, 177 to 188 and 219 of resolution 71/123).

Estimates of the contributions required from offshore renewable energy suggest a need for large-scale wind installations.⁴² These are currently operating and being developed in several Member States, which have their own regulatory frameworks in place. The expansion and development of large-scale offshore renewable energy installations requires their full integration into MSP.⁴³

MSP may designate areas for wind arrays, sometimes excluding shipping traffic or fishing. These areas are likely to be expanded further, potentially conflicting with the growing demands of other sectors (e.g. food production, ecosystem conservation). This may lead to consideration of approaches for multi-use of sea space, such as wind arrays and aquaculture.

Box 13: Offshore energy

- *UNCLOS provides general principles for the exploitation of natural resources and the conduct of economic activities in the ocean and sea, including energy resources and their exploitation. According to UNCLOS, a coastal state has full sovereignty over its territorial sea, including the seabed and subsoil. In the EEZ, a coastal state has sovereign rights that enable the exploration, exploitation, conservation and management of natural resources as well as the economic exploitation and exploration of the zone; and in the continental shelf, a coastal state has sovereign rights for the exploration of natural resources, which include the mineral and other non-living resources in the seabed and its subsoil.*
 - *UNCLOS allows a coastal state to produce energy from water, currents and winds. Such activity may require the construction of artificial islands, installations and structures, which is permitted. UNCLOS sets a limit on these rights if such construction and practices interfere with recognised sea routes essential to international navigation. Such installations may have safety zones of up to 500 metres for secure construction and navigation.*
-

Further information on instruments of relevance to energy is presented in Annex 6C.

3.4. Seabed mining

Seabed mining is an emerging sector with environmental, economic and social issues, such as the environmental impacts associated with physical alteration to the benthic environment and any underwater cultural heritage that may be present. The environmental impacts associated with aggregate mining are potentially applicable to shallow water marine mining or aggregate extraction. Most marine mining so far occurs close to shore, leading to concerns regarding the potential impact of mining on archaeological sites, such as shipwrecks, airplane crash sites and submerged prehistoric sites.⁴⁴

The exploitation of marine mineral resources in the ABNJ is regulated by UNCLOS through the International Seabed Authority (ISA), established for this purpose. The regulatory framework for seabed mining activities in the Area is currently under development by ISA (Box 14).⁴⁵

Box 14: Seabed mining

UNCLOS provides coastal States with sovereign rights to resources on their continental shelf. The deep seabed beyond the continental shelf, "the Area", and the minerals contained in it, are considered the common heritage of mankind (as are all resources of the Area). UNCLOS Article 137(1) ensures that the Area will not be subject to national jurisdiction of any state. The regime is regulated by ISA, which administers seabed mining-related activities through an Assembly and Council, as advised by a Legal and Technical Commission.

Further information on instruments of relevance to seabed mining is presented in Annex 6D.

⁴² https://ec.europa.eu/energy/topics/renewable-energy/eu-strategy-offshore-renewable-energy_en

⁴³ United Nations Global Compact (2021) "Roadmap to Integrate Clean Offshore Renewable Energy into Climate-smart Marine Spatial Planning": <https://www.unglobalcompact.org/library/5977>
United Nations Global Compact (2021) "Blueprint for a Climate-Smart Ocean to Meet 1.5°C"
<https://unglobalcompact.org/library/5968>

⁴⁴ United Nations 2016 https://www.un.org/Depts/los/global_reporting/WOA_RPROC/Chapter_23.pdf

⁴⁵ A draft regulation for exploitation of minerals was issued in August 2017 and has been through a hearing for stakeholder submission.

3.5. Trade and Labour

Seaborne trade continues to expand, bringing benefits across the world. Due to the growing efficiency of shipping as a mode of transport, the prospects for further growth of the shipping industry continues to be strong.⁴⁶ UNCLOS establishes the international freedom of navigation and overflight. Marine considerations are incorporated into various economic workstreams of the UN, such as trade and work with businesses. These include the World Trade Organization's (WTOs) Committee on Trade and Environment,⁴⁷ the UN Conference on Trade and Development⁴⁸ and the UN Global Compact's Sustainable Ocean Business Action Platform.⁴⁹ Also, global trade in plastic waste is regulated by the Basel Convention (the Amendment on Global Trade in Plastic Waste),⁵⁰ which aims to limit marine litter and plastic pollution in the oceans and seas (Box 15).

Box 15: Trade and labour

- *By guaranteeing merchant vessels and aircraft the right to navigate on, over, and through international straits, archipelagic waters, and coastal zones, UNCLOS promotes international trade.*
 - *The rules of global trade are set up by the WTO and its central Agreements (<https://www.wto.org/index.htm>), signed by the majority of the world's trading nations. WTO provides a legal framework to help ensure that trade-related measures taken by Member States are consistent with their trade obligations and wider policy goals, and that trade can help countries to achieve sustainable development.*
 - *ILO develops frameworks for national legislation with regards to labour in maritime industries.*
-

As demand for global freight increases, maritime trade volumes are set to triple by 2050⁵¹ with maritime transport being essential to the world's economy. This will result in more intensive shipping, more transit lanes and higher density and frequency of passages. These are all of importance to MSP.

The transition to net zero brings opportunities for green jobs, requiring policies to retrain or upskill millions of maritime workers, with stakeholder engagement being central to this transition. ILO's Guidelines for a just transition towards environmentally sustainable economies and societies⁵² provide recommendations of relevance to MSP authorities and maritime industries, particularly those industries transitioning to new energy systems.

Further information on instruments of relevance to trade and labour is presented in Annex 6E.

3.6. Marine Scientific Research

UNCLOS establishes the legal regime for marine scientific research in Part XIII. It establishes the right of States to conduct marine scientific research, and that they are required to promote and facilitate research, including through collaboration. UNGA calls for the development of capacity-building activities, and recalls the importance of scientific assessments of the state of the oceans, such as those prepared under the Regular Process for Global Reporting and Assessment of the State of the Marine Environment and the World Ocean Assessment;⁵³ the Intergovernmental Panel

Box 16: Marine scientific research

The objective of the UN Decade of Ocean Science for Sustainable Development is to support efforts to reverse the cycle of decline in ocean health and create improved conditions for the sustainable development of the ocean, seas and coasts. The Decade will also contribute to the UN processes protecting the ocean and its resources, such as the Aichi Biodiversity Targets, the SAMOA Pathway, UNCLOS and the Sendai Framework for Disaster Risk Reduction and the UN Decade on Ecosystem Restoration.

⁴⁶ <https://www.ics-shipping.org/shipping-facts/shipping-and-world-trade>

⁴⁷ https://www.wto.org/english/tratop_e/envir_e/wrk_committee_e.htm

⁴⁸ UN Conference on Trade and Development's Forum for sustainable economic development <https://unctad.org/>

⁴⁹ <https://www.unglobalcompact.org/> ; <https://www.unglobalcompact.org/take-action/action-platforms/ocean>

⁵⁰ <http://www.basel.int/Implementation/Plasticwaste/Amendments/Overview/tabid/8426/Default.aspx>

⁵¹ <https://www.oecd.org/ocean/topics/ocean-shipping/>

⁵² https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/documents/publication/wcms_432859.pdf

⁵³ <https://www.un.org/regularprocess/woa2launch>

on Climate Change (IPCC);⁵⁴ and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) (Box 16).⁵⁵

Moreover, the UN has proclaimed a Decade of Ocean Science for Sustainable Development (2021-2030) in light of the over-use and degradation of seas, the rapid economic development of maritime sectors that might have further impacts on the state of the ocean⁵⁶ and the need to ensure long term conservation and sustainable use of oceans and marine resources.⁵⁷ The Decade of Ocean Science will address multi-stressors in the marine environment and marine technological advances. It will, for example, help strengthen the development and implementation of science-based solutions for fisheries management. More inclusive approaches to designing and conducting marine scientific research will also support a sustainable blue economy through management actions that encourage stewardship of ocean resources.

MSP-related examples include: new technologies for fisheries sector management; new technologies to power aquaculture with renewable energy; and the production and utilisation of renewable fuels in shipping. The offshore renewable energy sector will continue to map global renewable energy resources and explore technologies for placing large scale installations at sea, including in deeper water sites, such as floating offshore wind technologies. The co-location of renewable offshore infrastructure with other uses will be another priority.

Further information on instruments of relevance to marine scientific research is presented in Annex 6F.

4. HIGHLIGHTS

1) MSP and global ocean governance share a need for long-term, integrative approaches

International instruments and commitments in various thematic areas are of great relevance to MSP processes, in relation to ocean governance, sustainable management, environmental protection, trade and economic development. It is important for Member States' MSP authorities to consider these when framing their long-term perspectives for sustainable conservation and management of their maritime areas. Given the current pressures on the oceans and seas from maritime and land-based activities, sectors cannot be considered in isolation or simply in the short-term.

MSP, by including all sectors, should work holistically and with a long-term perspective, to capitalise on the economic potential of the seas in a sustainable manner.

2) The legal regime of maritime zones for coastal States underpins MSP

UNCLOS⁵⁸ provides the general legal framework within which all activities in the oceans and seas must be carried out, thus covering the majority of issues taken into consideration in MSP. UNCLOS is of strategic importance as the basis for national, regional and global action and cooperation. It necessitates the protection and conservation of the marine environment and resources, and a large number of agreements and commitments support, strengthen and extend it.

3) MSP can itself play an important role in ocean governance

Given the negative trends in the status of marine ecosystems and the demand for growth of maritime activities, MSP can play an important role in accommodating needs, limiting impacts and avoiding conflicts. MSP can thus support the achievement of the obligations and goals set out in UNCLOS, the Paris Agreement, CBD post-2020 GBF and Agenda 2030 for Sustainable Development.⁵⁹

⁵⁴ <https://www.ipcc.ch/>

⁵⁵ <https://ipbes.net/>

⁵⁶ Report of the Secretary-General on Oceans and the Law of the Sea, A/72/70, on "The effects of climate change on oceans".

⁵⁷ <https://www.oceandecade.org/>

⁵⁸ In particular UNCLOS art 192

⁵⁹ The Goals of the Post-2020 Global Biodiversity Framework refer to the interlinked nature of biodiversity and climate and Target 8 of the Post-2020 Framework connects climate change with biodiversity by referencing the mitigation and adaptation potential of ecosystem-based approaches (CBD, 2021).

4) MSP must comply with the international obligations of the ocean governance framework

MSP processes should promote transboundary cooperation and comply with international obligations established by UNCLOS and other international instruments. They should consider the overarching global framework of the 2030 Agenda for Sustainable Development for addressing ocean health and climate change and its interlinkages with other policy areas.

MSP should consider not just SDG14 (*Life below water*), but also others, such as SDG7 (*Affordable and clean energy*), SDG8 (*Decent work and economic growth*), SDG9 (*Industry, innovation and infrastructure*), SDG13 (*Climate actions*) and SDG15 (*Halting biodiversity loss*).

5) MSP should reflect international ocean obligations and commitments

Under the Paris Agreement, the international community has agreed a net-zero carbon target by 2050. The post-2020 Global Biodiversity Framework will establish the objectives and targets for biodiversity and conservation. The UN Decade of Ocean Science will consider multi-stressors in the marine environment. These policies and workstreams will steer the activities covered by MSP, and they should be reflected in maritime spatial plans.

6) Key issues in ocean governance and MSP are inter-connected

Concerted efforts are needed, both in the development of the ocean governance framework and in MSP, to ensure coherent action across thematic areas and towards addressing cross-cutting ocean challenges, including climate change, pollution and biodiversity loss. Due regard must also be given to linkages between land and water, and coastal and marine systems. The closer cooperation and synergies that are developing on ocean-related issues among UN conventions and other international and regional processes can be supported by parallel efforts in MSP.

7) Global policy provides the context for regional blue growth

The future development and use of the seas and oceans have regional dimensions set within the international context provided by the ocean governance framework. Member States should look to the global policy perspective when considering possibilities for future regional blue growth at national and sea basin scales.

5. REFERENCES

- Amsdorf, J., Engel, A. et al (2017) *Ocean Atlas: Facts and Figures on the Threats to Our Marine Ecosystems*, https://www.researchgate.net/publication/321134059_Ocean_Atlas_Facts_and_Figures_about_Our_Relationship_with_the_Ocean
- Convention on Biological Diversity (online) *Convention on Biological Diversity*, <https://www.cbd.int/>
- European Commission (2019) *The European Green Deal*, Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, COM (2019) 640 final, https://ec.europa.eu/info/sites/default/files/european-green-deal-communication_en.pdf
- European Commission (online) *A European Green Deal*, https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en
- European Commission (online) *Climate Action, 2050 long-term strategy*, https://ec.europa.eu/clima/policies/strategies/2050_en
- European Commission (online) *Natura 2000*, https://ec.europa.eu/environment/nature/natura2000/index_en.htm
- European Commission (online) *Oceans and fisheries: Maritime Spatial Planning*, https://ec.europa.eu/oceans-and-fisheries/ocean/blue-economy/maritime-spatial-planning_en
- European Commission (online) *The International Ocean Governance Forum (IOG Forum)*, <https://webgate.ec.europa.eu/maritimeforum/en/frontpage/1469>
- European Economic & Social Committee (online) *International Ocean Governance: an agenda for the future of our oceans*, <https://www.eesc.europa.eu/en/our-work/opinions-information-reports/opinions/international-ocean-governance-agenda-future-our-oceans-communication>
- European Parliament and Council (2002) *Recommendation of the European Parliament and of the Council of 30 May 2002 concerning the implementation of Integrated Coastal Zone Management in Europe*, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32002H0413>
- European Parliament and Council (2014) *Directive 2014/89/EU of 23 July 2014 establishing a Framework for Maritime Spatial Planning*, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2014.257.01.0135.01.ENG%20
- International Maritime Organization, *International Convention for the Prevention of Pollution from Ships (MARPOL)*, [http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-\(MARPOL\).aspx](http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-(MARPOL).aspx)
- International Maritime Organization (online) *IMO*, <https://www.imo.org/en>
- IOC-UNESCO (2021) *Ocean Governance and Marine Spatial Planning: Policy Brief*, <https://unesdoc.unesco.org/ark:/48223/pf0000375723>
- IOC-UNESCO & DG-MARE (2017) *Joint Roadmap to Accelerate Maritime/Marine Spatial Planning Processes Worldwide*, https://www.mspglobal2030.org/wp-content/uploads/2019/03/Joint_Roadmap_MSP_v5.pdf
- IPCC (online) *Special Report on the Ocean and Cryosphere in a Changing Climate*, <https://www.ipcc.ch/srocc/>
- Lecerf M. (2022) *Integrating further the ocean-climate-biodiversity nexus into the Post-2020 Global Biodiversity Framework. Ocean & Climate Platform, CNRS, OPRI*
- IPCC (2022) *Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Lösschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press. <https://www.ipcc.ch/report/sixth-assessment-report-working-group-ii/>

OECD (2016) *The Ocean Economy in 2030*, OECD, Paris, <https://www.oecd.org/environment/the-ocean-economy-in-2030-9789264251724-en.htm>

Schumm R., et al. (2021) *Giving greater attention to the ocean in the development and implementation of the Post-2020 Global Biodiversity Framework*

Smith, H., Suarez de Vivero, J. & Agardy, T. (eds) (2015) *Routledge Handbook of Ocean Resources and Management*, Routledge, London

United Nations (online) *Climate Change*, <https://unfccc.int/>

United Nations (online) *Intergovernmental Conference on Marine Biodiversity of Areas Beyond National Jurisdiction*, <https://www.un.org/bbnj/>

United Nations (online) *The Sustainable Development Agenda*, <https://www.un.org/sustainabledevelopment/development-agenda/>

UN Environment Assembly (2022) *End plastic pollution: Towards an international legally binding instrument* [https://wedocs.unep.org/bitstream/handle/20.500.11822/38522/k2200647 - unep_ea-5-l-23-rev-1 - advance.pdf?sequence=1&isAllowed=y](https://wedocs.unep.org/bitstream/handle/20.500.11822/38522/k2200647_-_unep_ea-5-l-23-rev-1_-_advance.pdf?sequence=1&isAllowed=y)

United Nations Convention of the Law of the Sea (1982) *United Nations Convention of the Law of the Sea*, https://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf

United Nations Decade of Ocean Science for Sustainable Development (online) *The Ocean Decade: The Science We Need for the Ocean We Want*, <https://www.oceandecade.org/>

United Nations Division on Ocean Affairs and the Law of the Sea (online) *Oceans and the Law of the Sea in the General Assembly of the United Nations*, Reports of the Secretary-General, https://www.un.org/Depts/los/general_assembly/general_assembly_reports.htm

United Nations Division on Ocean Affairs and the Law of the Sea (online) *The Second World Ocean Assessment (WOA II)*, <https://www.un.org/regularprocess/woa2launch>

United Nations Economic Commission for Europe, (1991) *Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, 1991) - the 'Espoo (EIA) Convention'*, <https://unece.org/fileadmin/DAM/env/eia/eia.htm>

United Nations Environment Management Group (2022) *Addressing marine litter and microplastics: UN system-wide contributions - A Synthesis Report by the United Nations Environment Management Group* https://unemg.org/wp-content/uploads/2022/03/UNEP_EMG-REPORT_Marine-Litter-Microplastics-220317-05-Small-web.pdf

United Nations Environment Programme (online) *Regional Seas Programme*, <https://www.unenvironment.org/explore-topics/oceans-seas/what-we-do/working-regional-seas>

United Nations Global Compact (2021) *Roadmap to Integrate Clean Offshore Renewable Energy into Climate-smart Marine Spatial Planning*: <https://www.unglobalcompact.org/library/5977>

United Nations Global Compact (2021) *Blueprint for a Climate-Smart Ocean to Meet 1.5°C* <https://unglobalcompact.org/library/5968>

Zaucha, J. & Gee, K. (eds) (2019) *Maritime Spatial Planning: past, present and future*, Palgrave Macmillan, Cham, Switzerland, <https://link.springer.com/content/pdf/10.1007%2F978-3-319-98696-8.pdf>

6. ANNEXES

Annex 1: EU Instruments for the management of marine and coastal areas and related sectoral policies

Table A1: Key EU instruments for the management of marine and coastal areas, and related sectoral policies

Integrated Maritime Policy (IMP, 2007) takes into account how well the sea-related industries are interconnected with human activities. One of the key IMP components is the **Blue Growth**, a strategy aiming to support sustainable growth in the marine and maritime sectors. It implies the development of sectors with high potential for sustainable growth, such as: aquaculture, ocean energy, marine biotechnology, coastal tourism and seabed mining. It also aims to provide knowledge, legal certainty and security in the Blue Economy through: marine knowledge, **maritime spatial planning** and integrated maritime surveillance. To ensure suitable measures and foster cooperation between countries, it incorporates the European sea basin strategies. This Blue Growth strategy has been replaced by a strategy to develop a Sustainable Blue Economy (Sustainable Blue Economy, 2021)

The Maritime Spatial Planning Directive (MSP, 2014) represents "a cross-cutting IMP tool enabling public authorities and stakeholders to apply a coordinated, integrated and trans-boundary approach". The EU framework for MSP aims to contribute to the effective management of marine activities and the sustainable use of marine and coastal resources, by creating a framework for consistent, transparent, sustainable and evidence-based decision-making. The EU framework encourages the Member States to establish and implement national MSPs that apply an ecosystem-based approach and take into account land-sea interactions. The Member States remain responsible for designing and determining the format and content of their national MSPs. They are also responsible for environmental impact assessments of these plans.

The Marine Strategy Framework Directive (MSFD, 2008) establishes a framework for community action in the field of marine environmental policy. It represented the first piece of legislation on protection of the marine environment and resources, aiming to ensure the sustainable use of marine waters, and covers all marine waters under the sovereignty and jurisdiction of EU Member States. The Directive promotes the integration of environmental considerations into all relevant policy areas with the purpose of marine conservation and sustainable use of marine resources and ecosystems. It implies the application of an ecosystem-based approach to the management of human activities and development of a transparent and coherent national legislative framework. The Directive encourages Member States to develop marine strategies for their marine waters, and to cooperate on associated transboundary issues.

The Common Fisheries Policy (CFP) was adopted to reduce overfishing, conserve fish stocks, and ensure a long-term stable, secure and healthy food supply. Introduced in the 1970s, the CFP has gone through a number of updates with the most recent taking place in 2014. CFP represents a set of rules for the management of the European fishing fleet and fish stocks' conservation, and aims to ensure environmentally, economically and socially sustainable fishing and aquaculture. The CFP adopts a cautious approach that applies restrictions on catch limits, making fishing fleets more selective in the way they catch, and eliminating practices of discarding unwanted fish. The policy encourages the EU countries to take actions to ensure the sustainability of the European fishing industry, with no threat to the fish populations size and productivity in the long term.

Recommendation on Integrated Coastal Zone Management (2002) provided by the European Parliament and by the European Council establishes a framework for the implementation and planning of Integrated Coastal Zone Management in Europe. This tool aims to ensure the sustainable development of European coastal zones based on environmental, economic, social and cultural considerations. It takes into account the current and emerging coastal threats to ensure efficient use of resources, avoiding space conflicts.

Directive on port reception facilities for the delivery of waste from ships (2019) aims to protect the marine environment from discharges of waste at sea. The Directive integrates all relevant international and European regulations to ensure smooth operation of maritime transport with the marine environment and to reduce waste discharged at sea. To tackle sea-based marine litter, the Directive introduces new rules on port reception facilities and measures to ensure that waste generated on ships or collected at sea is not abandoned but returned to land. The regulation also includes measures on reducing the administrative burden on ports, ships and competent authorities. It outlines and harmonises a range of principles regarding the adequacy of the port reception facilities, existing enforcement instruments, monitoring, incentives for delivery of waste onshore and social accountability of the EU maritime sector.

Directive on the conservation of natural habitats and of wild fauna and flora (1992) aims to promote the maintenance of biodiversity, taking into consideration the economic, social, cultural and regional requirements. It seeks to ensure the conservation of rare, threatened and endemic animal and plant species, as well as preserving the characteristic habitat types. As habitat loss and degradation represent significant threats to the biodiversity conservation (i.e. plant, animal and bird species), the Directive represents the key element of the European nature conservation policy, along with the **Birds Directive**, and establishes the **Natura 2000** network of protected areas throughout the EU.

Water Framework Directive (WFD) (2000) sets up the principles and a framework of sustainable water policy in the EU by expanding the scope of water protection and sustainable use and management to all waters, including surface and groundwater resources. The integrated water policy addresses: ensuring the water quality and monitoring; promoting sustainable water use in terms of quantity and quality; protection of aquatic ecosystems; progressive reduction of priority hazardous substances; and mitigating the effects of floods and droughts. The WFD emphasises the necessity for the protection, sustainable use and management of coastal waters and ecosystems. Regulated by the WFD, prepared river basin management plans cover surface waters that include coastal waters and ground waters.

The EU Floods Directive (2007) aims to establish a framework for the assessment and management of flood risks to reduce the negative consequences of flooding on human health, environment, economic activities, and cultural heritage. The Directive requires EU Member States to assess whether their river basins and coastal areas are at risk from flooding. This requires developing flood risk maps, assessing whether populations are at risk in these areas, and taking coordinated measures to reduce flood risk, including establishing flood risk management plans focused on prevention, protection and preparedness. Implementation of the Directive requires coordination with the Water Framework Directive, e.g. between the flood risk management plans and river basin management plans.

The 2050 long-term strategy and climate and energy targets progressively reduce GHG emissions and seek to achieve the low-carbon economy by 2050. The 2020 climate and energy package and 2030 climate and energy framework have been established. Progress on Cutting Emissions is tracked via regular monitoring and reporting. The packages represent a set of legislative measures to ensure the EU meets established targets by 2020 and 2030, and include: reductions in GHG emissions; increase in EU energy from renewables (under the **Renewable Energy Directive**); and improvement in energy efficiency. The **EU Emissions Trading System** (covering nearly 45% of the EU GHG emissions) is the key tool for cutting GHG emissions in the power industry and aviation sectors.

The Communication from the Commission on the European Green Deal (2020) sets out the vision for the EU on achieving climate neutrality by 2030 and 2050. It represents a new growth strategy and the EU response to climate and environmental challenges, aiming to modernise and transform the European economy in order to achieve climate neutrality objectives. It seeks to underpin and accelerate the necessary transition in all sectors to achieve a resource-efficient and competitive economy. It also aims "to protect, conserve and enhance the EU's natural capital, and protect the health and well-being of citizens from environment-related risks and impacts". The Member States are encouraged to revise their national energy and climate plans (end of 2019) and update them, reflecting the new climate ambition (by 2023).

European Strategy for Plastics in a Circular Economy (2018) aims to transform the way plastic products are designed, produced, used and recycled, and sets out a vision for a circular plastics economy in the EU. The Strategy represents part of the European transition towards a circular economy that will contribute to addressing the global marine litter problem, which results in damage to the environment, ecosystems, economic activities and human health.

The Directive on reducing the impact of certain plastic products on the environment (2019) aims to address the issues of single-use plastic products and fishing gear, that represent a serious problem in the context of marine and coastal litter. The Directive encourages Member States to introduce extended producer responsibility for fishing gear and its plastic-containing components to ensure waste monitoring and assessment, collection, and financing the fishing gear waste management and recycling.

The INSPIRE Directive (2007) establishes the infrastructure for spatial information in Europe to support environmental policies, as well as the policies and activities that may have an impact on the environment. The Directive relies on the spatial information infrastructure established and operated by the EU countries, and addresses 34 spatial data themes necessary for environmental applications.

Annex 2: An overview of EU involvement in international ocean governance

- The EU has advocated for a legal instrument to protect biodiversity in the high seas. Within the UN Convention for Biological Diversity (CBD), it has been actively promoting the establishment of ecologically or biologically significant marine areas (EBSAs).
- To ensure legal and sustainable trade in marine wildlife, the EU supports the implementation of the Convention on International Trade in Endangered Species (CITES).
- The EU has continued to promote stronger conservation and fisheries management at the regional level, through regional Seas Conventions and Regional Fisheries Management Organisations (RFMOs). In 2017-2018, the EU provided €17 million to improve governance, compliance, capacity building and science. In 2018, it signed the Agreement to prevent unregulated fishing in the High Seas of the Central Arctic Ocean, which aims to contribute to the preservation of sensitive Arctic ecosystems.
- To address common challenges and opportunities, the EU established regional strategies, in close cooperation with non-EU countries and stakeholders from the civil society and private sector. It engaged with key ocean players in bilateral partnerships (i.e. signing the first ocean partnership with China in 2018 and with Canada in 2019), and allocated significant financial funds to international cooperation (i.e. Pacific States, Western Africa, Indian Ocean region, and Cambodia) in the framework of international programmes.
- To identify, prevent and respond to security challenges, the EU adopted the maritime security strategy, acting as a global security provider in the Horn of Africa and the Gulf of Guinea. It provided resources to protect against maritime threats (i.e. piracy, human trafficking, maritime accidents, natural disasters), including the satellite data (via Copernicus programme), used by the European Maritime Safety Agency and for international search and rescue, upon the UN request.
- To address the common challenges, the EU engaged in international and cross-sectoral forums: The International Ocean Governance Forum (IOG Forum) provides a platform for ocean stakeholders from within and outside the EU for sharing understanding, experiences and good practices on ocean governance. The IOG Forum supports the follow-up and further development of the EU policy on International ocean governance: an agenda for the future of our oceans. The current objective of the EU IOG Agenda is "to ensure safe, secure, clean and sustainably managed oceans through a coherent, cross-sectoral and rules-based international approach". It is a fundamental part of the European Green Deal and the EU response to the SDG 14 Life Below Water.
- Action 10 of the Joint Communication on International Ocean Governance stands for promoting Maritime/Marine Spatial Planning at a global level. To achieve this objective the IOC-UNESCO and the European Commission adopted a Joint Roadmap to accelerate MSP processes worldwide (2017), which defines the priority areas and strategic objectives for mutual cooperation. The Roadmap outlines the vision and the role for MSP in implementing the Agenda 2030. In 2018, this partnership resulted in the establishment of the International MSP Forum and the MSPglobal Initiative. The project aims to contribute to the UN Decade of Ocean Science for Sustainable Development (2021-2030).
- To implement the Paris Agreement, the EU has been promoting and developing renewable energy solutions. In 2018, the Commission adopted a strategic vision for achieving a climate-neutral Europe by 2050 that highlights sustainable management of marine resources and ecosystems as one of the priorities for climate change mitigation and adaptation. Since 2017, the EU has allocated over €90 million for marine and coastal ecosystems restoration in various parts of the world (i.e. the Mediterranean, Southeast Asia, and the ACP countries). The EU is also promoting offshore energy worldwide (i.e. mobilising the technical expertise to assist India in launching its first offshore wind farm) and it encourages global action to reduce shipping emissions by 2050 in line with the International Maritime Organization's (IMO) strategy.
- The EU has been collaborating with over 50 countries to fight illegal, unreported and unregulated (IUU) fishing, resulting in the successful reformation of control and management systems in 14 countries, in line with their international obligations. The EU network of

Sustainable Fisheries Partnership Agreements (SFPAs) is also supported the EU IUU policy. In 2018, 10 SFPAs with the budget of €135 million per year were in place. In 2017, the EU adopted the rules to ensure sustainable fishing by EU fleets outside EU waters. It has also continued support in fighting against IUU in regional fisheries management organisations (i.e. a plan on IUU fishing in the Mediterranean and Black Sea and strict procedures for IUU vessels in the Indian and Southern Oceans). In cooperation with the European Fisheries Control Agency and European Maritime Safety Agency, a pilot project on restriction of IUU worldwide is being implemented.

- The EU contributes to tackling the marine litter problem at a global level by adopting A European Strategy for Plastics in a Circular Economy, and continues active support of the 2017 UNEA resolution on marine litter and microplastics, support to Canada's Presidency of the G7 in 2018 and improving waste management in the Pacific and in Southeast Asia. By 2018, over 10% of marine and coastal areas in the EU were designated as the Marine Protected Areas (MPAs). The EU is now providing worldwide support to promote and ensure sustainable well-managed MPAs. It invested over €23 million in developing guidelines, scientific research, and international projects to encourage the exchange of expertise globally.
- The EU has also been actively cooperating internationally to strengthen ocean science and drive innovation. The Galway Statement on Atlantic Ocean Cooperation (2013) has deepened the marine research collaboration with the US and Canada, the Belém Statement on Atlantic Research and Innovation Cooperation (2017) expanded its partnership with Brazil and South Africa, cooperation with Argentina and Cape Verde (2018) has further contributed to marine research and innovation, resulting in All Atlantic Ocean Research Alliance expanding from Arctic to Antarctica. The EU allocated €3.5 million for ocean data cooperation with China in 2018. Through the Horizon Research and Innovation Programme (Horizon 2020), the EU has been funding ocean observations projects in the Atlantic and European seas.
- In July 2020, the European Commission and the European External Action Service (EEAS) launched a Targeted Consultation on International Ocean Governance with the purpose to assess development needs and options for the EU International Ocean Governance Agenda in support of the European Green Deal objectives. The consultation supplements the International Ocean Governance Forum in support of the follow-up and development of the Agenda.
- The targeted consultation seeks contributions from relevant stakeholders (including the public authorities, international organisations, NGOs, financial institutions, academic, scientific, social and economic partners) within and outside Europe (i.e. Member States and third countries). The contributions will allow the role of the EU in the International Ocean Governance to be re-examined, assessing the three priorities of the current Agenda for the future of the oceans, its goals and actions, and identifying new policy areas or actions to address existing and emerging challenges. The expected consultation outcomes include improved International Ocean Governance framework, reduced pressure on the ocean and seas, established conditions for a sustainable Blue Economy, and strengthened international ocean science (i.e. research, data and knowledge systems).

Annex 3: International instruments and processes of relevance to MSP

Legal international regulations on maritime uses, protecting the environment and ecosystems have a long history, such as the International Convention for the Regulation of Whaling from 1946, the Convention on Fishing and Conservation of the Living Resources of the High Seas from 1958 and the International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties from 1969. The United Nations started discussing the Convention on the Law of the Sea in the 1970s, which was adopted as the United Nations Convention on the Law of the Sea (UNCLOS) in 1982 and entered into force in its current form in 1994. UNCLOS has 168 Parties, including the European Union and all its Member States.

An indicative list of treaties by the Division of Ocean Affairs and the Law of the Sea (DOALOS) Secretariat is provided in Table A2. This list is not exhaustive, but includes global and regional treaties and other international instruments of direct and indirect relevance to MSP. Annexes 5 and 6 below contain supplementary information that relate to each of the topics covered in sections 2.2 and 3 of this report.

Table A2: An indicative list of global and regional treaties of relevance to MSP

Global treaties
United Nations Convention on the Law of the Sea, 1982
Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982, 1994
Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, 1995
International Convention for the Regulation of Whaling, 1946
Convention on the High Seas, 1958
Convention on Fishing and Conservation of the Living Resources of the High Seas, 1958
International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969
Protocol relating to Intervention on the High Seas in Cases of Marine Pollution by Substances other than Oil, 1973
Patent Cooperation Treaty, 1970
Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972
Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1996
Convention on International Trade in Endangered Species of Wild Fauna and Flora, 1973
International Convention for the Prevention of Pollution from Ships (MARPOL 1973) as modified by the Protocol of 1978 relating thereto (MARPOL 73/78)
Convention on the Conservation of Migratory Species of Wild Animals, 1979
Agreement on the Conservation of Albatrosses and Petrels, 2001
The Budapest Treaty on the International Recognition of the Deposit of Micro-organisms for the Purposes of Patent Procedure, 1980
Vienna Convention for the Protection of the Ozone Layer, 1985
Montreal Protocol on Substances that Deplete the Ozone Layer, 1987
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, 1989
International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990
Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances, 2000
Convention on Biological Diversity, 1992
United Nations Framework Convention on Climate Change, 1992
Kyoto Protocol to the United Nations Framework Convention on Climate Change, 1998
Paris Agreement, 2015
Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, 1993
Agreement on Trade-Related Aspects of Intellectual Property Rights, 1994
Stockholm Convention on Persistent Organic Pollutants, 2001
International Convention on the Control of Harmful Anti-fouling Systems on Ships, 2001
International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004
Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, 2009
Minamata Convention on Mercury, 2013
UN developments, processes and outcomes including UNGA resolutions and related processes
The United Nations Open-ended Informal Consultative Process on Ocean and the Law of the Sea
The Regular Process for Global Reporting and Assessment of the State of the Marine Environment
United Nations Ocean Conferences to Support the Implementation of SDG 14

Sustainable development

The 2030 Agenda for Sustainable Development containing 17 Sustainable Development Goals (SDGs)
Agenda 21 – Global Programme of Action on Sustainable Development
The Johannesburg Declaration on Sustainable Development: The Johannesburg Plan of Implementation
The Future We Want
Our Ocean, Our Future: Call for Action
Addis Ababa Action Agenda
SAMOA Pathway
The UN Decade of Action

Conservation and Biodiversity

The Convention on Biological Diversity (CBD)
The Convention on the Conservation of Migratory Species of Wild Animals (CMS)
The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
Ramsar Convention on Wetlands of International Importance
The Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR)
The Convention on the Protection of the Marine Environment of the Baltic Sea Area
The Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean
The UN Decade on Ecosystem Restoration (2021-2030)

Climate Change

The United Nations Framework Convention on Climate Change (UNFCCC)
The Kyoto Protocol
The Paris Agreement

Marine Pollution

The IMO International Convention for the Prevention of Pollution from Ships (MARPOL 73/78)
The Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter (the London Convention)
The London Protocol
The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships
The International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC)
The Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances
The Convention on the Protection and Use of Transboundary Watercourses and International Lakes
The Protocol on Water and Health
The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal
The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
The Stockholm Convention on Persistent Organic Pollutants
The Convention for the Protection of the Mediterranean Sea Against Pollution (Barcelona Convention)
The Convention on the Protection of the Black Sea Against Pollution
The Global Program of Action for the Protection of the Marine Environment from Land-Based Activities
United Nations Environment Assembly (UNEA) resolutions on marine litter and microplastics
The Honolulu Commitment and the Honolulu Strategy

Disaster Risk Reduction

The Sendai Framework for Disaster Risk Reduction 2015–2030 (UNDRR)
The Paris Agreement
The 2030 Agenda for Sustainable Development SDG 13

Land-sea interaction

The Regional Seas Programme: Regional Action Plans, Regional Convention and associated Protocols
The Sendai Framework for Disaster Risk Reduction 2015–2030 (UNDRR)
The Convention on the Protection and Use of Transboundary Watercourses and International Lakes
Protocol on Water and Health

Transboundary context

The Convention on Environmental Impact Assessment in a Transboundary Context (ESPOO)

Relevant sectoral instruments of relevance to UNCLOS and MSP**Shipping and navigation**

The Convention on the International Regulations for Preventing Collisions at Sea (COLREG)
IMO Energy Efficiency Design Index (EEDI)
IMO Particularly Sensitive Sea Area (PSSA) Guidelines
Ballast Water Management Convention (BWMC) - Convention for the Control and Management of Ships' Ballast Water and Sediments
Transport of hazardous and noxious substances (HNS)
BUNKER - Defines the liability and ensures that persons who suffer damage caused by oil spills when carried as fuel in ships' bunkers are compensated
Standards of Training, Certification and Watchkeeping (STCW)
Nairobi Convention on the removal of wrecks
International Maritime Solid Bulk Cargoes (IMSBC) code
Maritime Labour Convention (MLC)
Civil Liability Convention (CLC/FUND)

Fisheries and aquaculture, including social aspects

The Implications of the Ocean Governance Framework established by the United Nations
for the Implementation of the EU MSP Directive

The UN Fish Stocks Agreement (UNFSA)
The regional fisheries management organizations (RFMOs)
The Agreement on Port State Measures (PSMA)
The Code of Conduct for Responsible Fisheries (CCRF)
The Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (The FAO Compliance Agreement)
The IMO Cape Town Agreement (CTA)
The IMO International Convention on Training, Certification and for Fishing Vessels Personnel
The ILO Work in Fishing Convention (C188)
The ILO Work in Fishing Recommendation
The World Trade Organization's (WTO) negotiations on fisheries subsidies
Energy
The Paris Agreement
Trade and labour
The World Trade Organisation's Committee on Trade and Environment (CTE)
The Basel Convention - Amendment on Global Trade in Plastic Waste
UN Conference on Trade and Development's Forum for sustainable economic development
ILO Maritime Labour Convention
ILO Chemicals Convention
ILO Guidelines for a just transition towards environmentally sustainable economies and societies for all
Marine Research
The World Ocean Assessment
The UN Decade of Ocean Science for Sustainable Development (2021-2030)
The Intergovernmental Panel on Climate Change (IPCC)
The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)
The Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP)
Regional treaties (of EU relevance)
Agreement for the Establishment of the General Fisheries Commission for the Mediterranean, 1949
Antarctic Treaty, 1959
Protocol on Environmental Protection to the Antarctic Treaty, 1991
Convention for the International Council for the Exploration of the Sea, 1964
International Convention for the Conservation of Atlantic Tunas, 1966
Convention for the Protection of the Mediterranean Sea against Pollution, 1976
Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, 1995
Protocol for the Prevention of Pollution in the Mediterranean Sea by Dumping from Ships and Aircraft, 1976, amended by Protocol for the Prevention and Elimination of Pollution in the Mediterranean Sea by Dumping from Ships and Aircraft or Incineration at Sea, 1995*
Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean, 1995
Protocol on the Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Wastes and their Disposal, 1996
Protocol concerning Cooperation in Preventing Pollution from Ships and, in Cases of Emergency, Combating Pollution of the Mediterranean Sea, 2002
Convention on Future Multilateral Cooperation in North-East Atlantic Fisheries, 1980
Convention on the Conservation of Antarctic Marine Living Resources, 1980
The Convention for the Conservation of Salmon in the North Atlantic Ocean, 1982
Agreement on Cooperation in Research, Conservation and Management of Marine Mammals in the North Atlantic, 1992
Agreement on the Conservation of African-Eurasian Migratory Waterbirds, 1995
Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic Area, 1996
Convention on the Conservation and Management of Fishery Resources in the South East Atlantic Ocean, 2001
Agreement on Cooperation on Marine Oil Pollution, Preparedness and Response in the Arctic, 2013

The United Nations Open-ended Informal Consultative Process on Ocean and the Law of the Sea (ICP)

The ICP was established by the UNGA resolution 54/33 of 24 November 1999 to facilitate its annual review of developments in ocean affairs and the law of the sea by considering the Secretary-General's report on oceans and the law of the sea and by suggesting particular issues to be considered, with an emphasis on identifying areas where coordination and cooperation at the intergovernmental and inter-agency levels should be enhanced. The ICP is dedicated to the integration of the three dimensions of sustainable development: environmental factors, socioeconomic factors and factors relating to the ocean. In recent years, the ICP discussed themes such as marine renewable energies (13th ICP Meeting), the impacts of ocean acidification on the marine environment (14th ICP Meeting), the issue of marine litter and microplastics (17th ICP Meeting), the effects of climate change on oceans (18th ICP Meeting), and the sea-level rise and its impacts (21st ICP Meeting): https://www.un.org/depts/los/consultative_process/consultative_process.htm. Discussions at the ICP meetings are informed by the Secretary-General's reports on the topic of focus and on the basis of contributions of States: https://www.un.org/Depts/los/general_assembly/general_assembly_reports.htm. For example, to inform discussions on the area of focus at the 21st meeting "Sea-level rise and its impacts"

(14-18 June 2021), the Secretary-General was requested to prepare a report on the topic of the rising sea-level: https://www.un.org/Depts/los/consultative_process/icp21/SG_Report_ICP21_Sea_level_rise.pdf.

Other UNGA Processes of relevance to marine planning and management

An ocean and law of the sea resolution and a resolution addressing sustainable fisheries are both negotiated every year addressing the full range of issues constituting the global coordination of ocean issues. This is part of the annual review carried out by the UNGA on the basis of comprehensive reports on ocean affairs and developments relating to the law of the sea by the UN Secretary General. It has also established processes in relation to the ocean, in particular the UN Informal Consultative Process, a Regular Process to assess the state of the global marine environment producing a World Ocean Assessment, informal consultations on oceans and the law of the sea, and the implementation of SDG 14. The UNGA established a process on the Biodiversity of areas beyond national jurisdiction (BBNJ) Intergovernmental Conference. The UN Division for Ocean Affairs and the Law of the Sea (DOALOS) provides secretariat services to many UNGA ocean-related processes and acts as the secretariat for UNCLOS and its Implementing Agreements. An inter-agency mechanism "UN-Oceans" has been established to enhance coordination across all the UN System organisations with activities related to ocean and coastal areas and the International Seabed Authority.

Biodiversity of areas beyond national jurisdiction (BBNJ)

In 2017, after discussions in the context of an open-ended working group and a preparatory committee, the UNGA voted to convene an Intergovernmental Conference on an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ Conference): General Assembly resolution 72/249 <https://www.un.org/bbnj/>. The package that was agreed upon as part of the potential treaty includes aspects related to marine genetic resources, area-management based tools, including Marine Protected Areas (MPAs), environmental impact assessments and capacity-building as well as the transfer of marine technology.

The Regular Process for Global Reporting and Assessment of the State of the Marine Environment

The Regular Process is a global mechanism established by the UNGA after the 2002 World Summit on Sustainable Development to regularly review the environmental, economic and social aspects of the world's oceans. The First Global Integrated Marine Assessment (the World Ocean Assessment I: <https://www.un.org/regularprocess/content/first-world-ocean-assessment>), was the outcome of the first cycle of the Regular Process. In 2021, the Regular Process launched the Second World Ocean Assessment (WOA II): <https://www.un.org/regularprocess/woa2launch>.

United Nations Ocean Conferences to Support the Implementation of SDG 14

The first high-level UN Conference to Support the Implementation of SDG 14 (in 2017) delivered a document, "Our ocean, our future: call for action" (A/RES 71/312), that recognised that the ocean plays a vital role in the water cycle and the climate system, and expressed alarm at the adverse impacts of climate change on the ocean. The second high-level UN Ocean Conference (in 2022) will focus on science-based innovative solutions to underpin effective global ocean action. The Note by the Secretary-General on the Conference's preparatory process (A/74/630) outlines that addressing climate change and its adverse impacts on the ocean and its resources as well as pollution and biodiversity loss are among the most significant challenges to achieving the 2030 Agenda and SDG 14. It underlines the need for urgent adaptation and mitigation, including through area-based conservation measures and management tools, further investment in research, as well as on ecosystem services, and on regional variability of such impacts and their interaction with other stressors. Areas in which further voluntary commitments are required include, inter alia, ocean acidification, innovative ocean technologies and engineering solutions, such as marine renewable energy. <https://www.un.org/en/conferences/ocean2022>

Annex 4: Sustainable Development Goal Targets

In 2015, the UNGA Resolution 70/1 established 17 Sustainable Development Goals (SDGs) and 169 associated targets, of which many are relevant to MSP, especially those shown below.

Table A3: Examples of SDGs and targets that are of relevance to MSP

SDG 6 CLEAN WATER AND SANITATION
6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate
6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes
SDG 7 AFFORDABLE AND CLEAN ENERGY
7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
7.3 By 2030, double the global rate of improvement in energy efficiency
7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology
SDG 8 DECENT WORK AND ECONOMIC GROWTH
8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors
8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services
8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead
8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products
SDG 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all
9.2 Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries
9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending
SDG 11 SUSTAINABLE CITIES AND COMMUNITIES
11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning
11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels
SDG 12 RESPONSIBLE CONSUMPTION AND PRODUCTION
12.2 By 2030, achieve the sustainable management and efficient use of natural resources
12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses
12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment
12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle
12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities
12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature
12.b Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products

SDG 13 CLIMATE ACTION

13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

13.2 Integrate climate change measures into national policies, strategies and planning

13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities

SDG 14 LIFE BELOW WATER

14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution

14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans

14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels

14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics

14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information

14.6 By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation

14.7 By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism

14.a Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries

14.b Provide access for small-scale artisanal fishers to marine resources and markets

14.c Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of The Future We Want

SDG 15 LIFE ON LAND

15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species

15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts.

15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems

SDG 16 PEACE, JUSTICE AND STRONG INSTITUTIONS

16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels.

16.10 Ensure public access to information and the protection of fundamental freedoms.

The MSP context: SDG 16 recognises the importance of public participation and relates to access to environmental information, participation in the decision-making process, as well as access to justice as elements of MSP.

Annex 5: Further Information on Instruments of Relevance to Key Thematic Areas

5A: Conservation and Biodiversity

- UNCLOS provides the legal framework for the conservation and management of marine living resources. It specifies that coastal States have the sovereign right for conserving and managing the living marine resources within the EEZ⁶⁰, while on the high seas, States (as flag States) have a duty to collaborate with other States on the conservation and management of marine living resources⁶¹, including through their participation in subregional or regional fisheries organisations. All States are required to protect and preserve the marine environment⁶², including when exploiting their natural resources⁶³, and are required to take measures to prevent, reduce and control pollution of the ocean⁶⁴ and to assess the potential effects of their planned activities under their jurisdiction or control⁶⁵. In addition, UNCLOS also obliges States to cooperate for the purpose of the protection and preservation of the marine environment⁶⁶.
- *The Convention on Biological Diversity (CBD)*⁶⁷ is a multilateral treaty with 196 parties that aims to conserve biological diversity and to enable the sustainable use of the components of biological diversity and the fair and equitable sharing of the benefits arising out the utilisation of genetic resources. CBD Article 1 states that the objectives of the CBD are the conservation of biological diversity and the sustainable use of its components. The CBD coordinates the work on coastal and marine biodiversity, with programmes addressing many aspects of biodiversity, including a recent topic of mainstreaming biodiversity that divides biodiversity into different sectors. The Post-2020 Global Biodiversity Framework⁶⁸ delivers new targets on biodiversity, which will apply to the whole UN System, regional bodies and Member states that will require work on marine issues for the conservation of marine biodiversity. Article 22 of the CBD states that it shall respect other agreements and UNCLOS in its application towards the protection of the marine environment.
- *The Convention on the Conservation of Migratory Species of Wild Animals (CMS)*⁶⁹ aims to conserve terrestrial, aquatic and avian migratory species throughout their range. In terms of marine issues, CMS has, for instance, raised the impacts of plastic pollution on aquatic species as an emerging issue. CMS's Resolution on the "Management of Marine Debris" has been consolidated into Resolution 12.20⁷⁰ and CMS focuses on enhancing knowledge on the impact of marine litter on migratory species.
- *The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)*⁷¹ is a multilateral treaty to protect endangered plants and animals. CITES is an international agreement to which States and regional economic integration organizations adhere voluntarily. Although CITES is legally binding on the Parties, it does not take the place of national laws. Rather it provides a framework to be respected by each Party, which has to adopt its own domestic legislation to ensure that CITES is implemented at the national level.
- *Ramsar Convention on Wetlands of International Importance*⁷² is an intergovernmental treaty for the conservation and sustainable use of wetlands, including lakes, rivers and coastal marine ecosystems - mangroves, marine seagrass, shallow waters, and other water-related ecosystems. Ramsar focuses on water quality in wetlands, water flows, species migration, biodiversity and onsite management issues in coastal and riverine areas and further upstream catchments.

⁶⁰ Art 56 UNCLOS

⁶¹ Art 118 UNCLOS

⁶² Art 192 UNCLOS

⁶³ Art 193 UNCLOS

⁶⁴ Art 194 UNCLOS

⁶⁵ Art 206 UNCLOS

⁶⁶ Art 197 UNCLOS

⁶⁷ <https://www.cbd.int/>

⁶⁸ <https://www.cbd.int/conferences/post2020>

⁶⁹ <https://www.cms.int/>

⁷⁰ https://www.cms.int/sites/default/files/document/cms_cop12_res.12.20_marine_debris_e.pdf

⁷¹ <https://cites.org/eng/disc/what.php>

⁷² <https://www.ramsar.org/>

5B: Climate Change

- *The United Nations Framework Convention on Climate Change (UNFCCC)* aims to stabilise greenhouse gas concentrations at a level that would prevent dangerous anthropogenic interference with the climate system. *The Kyoto Protocol*⁷³ (1997) operationalises the UNFCCC by committing industrialised countries to limit and reduce greenhouse gas (GHG) emissions in accordance with agreed individual targets, while *the Paris Agreement*⁷⁴ (2016) aims to strengthen the global response to the threat of climate change by keeping a global temperature rise this century to well below 2 degrees Celsius above pre-industrial levels, and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. The Ocean plays a direct and indirect role in the goals under the Paris Agreement, including Articles 2, 4, 7, 8, 14, and it is becoming an increasingly important part of the climate change conversation under UNFCCC. In the Paris Agreement, it is stated that all ecosystems, including marine ecosystems, should be considered with regard to a number of issues related to the oceans. The Subsidiary Body for Scientific and Technological Advice (SBSTA) of the UNFCCC have identified that systematic observation and research is needed to understand the role of the oceans in climate change, predict changes, determine risk and take appropriate action. In 2019 the SBSTA 50 mandated several actions under the thematic area of oceans, including the Ocean Dialogue that aims to address ocean and climate issues under the UNFCCC's relevant bodies and processes in the future. In 2021, at the UNFCCC Conference COP 26, the ocean was recognized by the political process under the UNFCCC with a call for all workstreams and constituted bodies to consider and report on ocean-based action, and for a recurring ocean dialogue in the May/June session with a report from the dialogue back to COP every year (Decision 1/CP.26 para 58-61). Also, a role of (blue C) ecosystems in mitigation (Decision 1/CP.26 para 21) and importance of protecting, conserving and restoring ecosystems (Decision 1/CP.26 para 50-51) were recognized. Parties were encouraged to take an integrated approach to addressing the issues of protecting, conserving and restoring ecosystems in national and local policy and planning decisions (Decision 1/CP.26 para 51).
- In resolution 74/2019 on Oceans and the law of the sea, the UNGA reiterated its serious concern at the current and projected adverse effects of climate change and ocean acidification on the marine environment and marine biodiversity, and emphasised the urgency of addressing these issues. UNGA called for the development and strengthening of capacity-building activities and recalled the importance of assessments such as those prepared under the Intergovernmental Panel on Climate Change (IPCC), the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) and the Regular Process and encouraged States and relevant international institutions to address levels of ocean acidity and the negative impact of such acidity on vulnerable marine ecosystems, particularly coral reefs, and to improve efforts to address coral bleaching (paras. 22, 212, 213, 277, 296 and 308).
- The global frameworks for sustainable development and governance of ocean and coastal areas, e.g. *the 2030 Agenda for Sustainable Development, Aichi Biodiversity Targets, and the Disaster Risk Reduction UNDRR/Sendai Framework for Disaster Risk Reduction*, also include considerations for responding to climate change impacts such as sea-level rise, coastal erosion and extreme weather events.

5C: Marine Pollution

- *Annex V of the IMO International Convention for the Prevention of Pollution from Ships (MARPOL 73/78)*⁷⁵, amended in 1988, prohibits the disposal of waste at sea, including dumping at sea from ships and fixed or floating platforms except in the cases explicitly permitted under the Annex. Some sea areas require higher degrees of protection and can be designated as Special Areas under MARPOL. This is the main international convention to protect the marine environment from sea-based pollution and is binding for 153 States. All ships flagged under countries that are signatories to MARPOL are subject to its requirements, regardless of where they sail, and member nations are responsible for vessels registered on

⁷³ https://unfccc.int/kyoto_protocol

⁷⁴ <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>

⁷⁵ [http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-\(MARPOL\).aspx](http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-(MARPOL).aspx)

their national ship registry. Compliance with the provisions of MARPOL Annex V is undertaken by a Garbage Record Book (GRB), in which vessels larger than 400 Giga Tonnes have to record any disposal of waste, both at sea and at ports. Competent authorities at ports in states that are party to MARPOL may inspect these GRBs. Where irregularities or non-compliance are discovered, penalties may be set by each state domestically. Unintentional losses of waste are not covered by MARPOL and there are also exemptions based on vessel size.

- *The IMO Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter*⁷⁶ (the London Convention) of 1972, is binding for 87 parties. Article I posits that Parties must “individually and collectively promote the effective control of all sources of pollution to the marine environment, and pledge themselves specifically to take all practicable steps to prevent the pollution of the sea by dumping waste and other matter that is liable to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea.” *The London Protocol* prohibits all dumping at sea. The Protocol to the London Convention established both a compliance mechanism and a Compliance group with representatives from all regions.
- *The IMO Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships*⁷⁷ aims to ensure that ships, when being recycled after reaching the end of their operational lives, do not pose any unnecessary risk to human health and safety or to the environment. It aims to promote the substitution of hazardous materials in the construction and maintenance of ships by less hazardous, or preferably, non-hazardous materials. It was developed in co-operation with the International Labour Organization and the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.
- *The IMO International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC)*⁷⁸ and *the Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances (OPRC-HNS Protocol)*⁷⁹ establish measures for dealing with marine oil pollution incidents, both nationally and in co-operation with other countries. There are 112 parties to the convention. The OPRC-HNS Protocol is a framework designed to establish national systems for preparedness and response and to foster international cooperation in the event of major incidents of marine pollution. The goal of the OPRC-HNS Protocol is to enable States to create national plans for the prevention and response to maritime pollution and to provide guidelines for the cooperation between States in the formation of the national plans and the response to any incidents of pollution by hazardous or noxious substances.
- *The UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes* is a global framework for transboundary cooperation to ensure the sustainable use of transboundary water resources. The Water Convention covers transboundary freshwaters up to the point where rivers enter the sea. The marine environment is mentioned in the Convention in that ‘countries should reduce pressures on the rivers (the riverine pollution), which impacts on the sea and marine ecosystems’ - Article 2.6 of the Convention on the Principle of Cooperation with other Conventions. One of the obligations under the Water Convention is to monitor and evaluate the status of shared inland waters as well as to undertake assessments of the pressures that have an impact on the water in river basins. In this respect, the member countries assess the status of waters by jointly coordinating, monitoring, exchanging on the status of data, etc.
- *The UNECE-WHO/Europe Protocol on Water and Health to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes* was adopted in 1999 and supports the Water Convention. The Protocol covers the water cycle, including freshwater, coastal and marine areas, etc. The Protocol is linked to the treatment of water and water quality, including aspects such as the presence of microplastics. This international agreement was adopted specifically to assure adequate supplies of safe drinking water and adequate

⁷⁶ <http://www.imo.org/en/OurWork/Environment/LCLP/Pages/default.aspx>

⁷⁷ <http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/The-Hong-Kong-International-Convention-for-the-Safe-and-Environmentally-Sound-Recycling-of-Ships.aspx>

⁷⁸ <https://treaties.un.org/doc/Publication/UNTS/Volume%201891/volume-1891-I-32194-English.pdf>

⁷⁹ A Hazardous and Noxious Substance is defined as any substance other than oil which, if introduced into the marine environment is likely to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea:

[http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/Protocol-on-Preparedness,-Response-and-Co-operation-to-pollution-Incidents-by-Hazardous-and-Noxious-Substances-\(OPRC-HNS-Pr.aspx](http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/Protocol-on-Preparedness,-Response-and-Co-operation-to-pollution-Incidents-by-Hazardous-and-Noxious-Substances-(OPRC-HNS-Pr.aspx)

sanitation, and to protect sources of drinking water. Parties are required to establish national and local targets for the quality of drinking water and the quality of discharges, and for the performance of water supply and waste-water treatment. The Protocol on Water and Health introduces a social component into cooperation on water management: water resources management should link social and economic development to the protection of natural ecosystems.

- *The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal*, adopted in 1989, is a multilateral international agreement governing all transboundary movements for the recovery or disposal of hazardous waste. It has provisions on minimising hazardous and other wastes and demands for sound disposal facilities. The Convention requires prior written consent for the import of hazardous and other wastes for disposal, while prohibiting trade of hazardous wastes with non-parties.
- *The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade*, which was signed in 1998 and entered into force in 2004, is an international treaty designed to facilitate informed decision-making by countries with regard to trade in hazardous chemicals; it has 161 Parties. The convention requires Parties seeking to export a chemical to first establish that the intended importing country has consented to the import. It also requires that a Party seeking to export a chemical, that is not listed under the Convention but that is subject to a ban or severe restriction in its own territory, must provide notice to the importing country of the proposed export.
- *The Stockholm Convention on Persistent Organic Pollutants* is an international environmental treaty, signed in 2001 and effective from 2004, that aims to eliminate or restrict the production and use of persistent organic pollutants (POPs). Binding for 182 parties, the Stockholm Convention focuses on eliminating or reducing releases of POPs. The Convention requires its Parties to take measures to eliminate or reduce the release of POPs into the environment.
- *The Global Program of Action for the Protection of the Marine Environment from Land-Based Activities (GPA)*⁸⁰ is a non-legally binding instrument, with the aim of preventing the degradation of the marine environment from land-based activities by facilitating the realisation of the duty of States to preserve and protect the marine environment. The Parties set, as their common goal, sustained and effective action to deal with all land-based impacts upon the marine environment, specifically those resulting from sewage, persistent organic pollutants (POPs), radioactive substances, heavy metals, oils (hydrocarbons), nutrients, sediment mobilisation, litter, and physical alteration and destruction of habitat. The implementation of the GPA is primarily the task of governments in partnership with stakeholders.
- *United Nations Environment Assembly (UNEA)* adopted four non-legally-binding resolutions on marine litter and microplastics: UNEA1 2014/1/6, UNEA2 2016/2/11, UNEA3 2017/3/7, UNEA4: UNEP/EA.4/Res.6,⁸¹. These emphasise that improved waste management and litter prevention are key to combating marine litter. In 2017, UNEA agreed to support the long-term elimination of the discharge of litter and microplastics into the oceans and adopted the resolution that called for the strengthening of international governance structures in order to fight plastic pollution. UNEA3 established an Ad Hoc Open-ended Expert Group on Marine Litter and Microplastics (AHEG), with the mandate to further examine the barriers to, and options for, combating marine plastic litter and microplastics from all sources. The global partnerships on marine litter and Clean Seas campaign are hosted by UNEP to support the implementation of relevant resolutions of the General Assembly, resolutions of the UNEA on, or relevant to, marine litter and microplastics, and other relevant international resolutions and decisions.
- *The Honolulu Commitment and the Honolulu Strategy* call on international organisations, governments, industry, non-governmental organisations, citizens and other stakeholders to halt and reverse the occurrence of waste and turn it into a resource in an environmentally sustainable manner. The Honolulu Commitment was signed by the representatives of 64 governments and the European Commission in 2011. Following the Honolulu Commitment,

⁸⁰ <https://www.unenvironment.org/explore-topics/oceans-seas/what-we-do/addressing-land-based-pollution/governing-global-programme>

⁸¹ Compilation of United Nations Environment Assembly resolutions on marine litter and microplastics: https://papersmart.unon.org/resolution/uploads/unep.aheg_2019.3.inf_2_compilation_of_resolutions.pdf

stakeholders were invited to take part in the development and implementation of the Honolulu Strategy that focuses on land- and sea-based sources of marine litter.

- In 2017, the United Nations adopted *the resolution "Our Ocean, Our Future: Call for Action"* (A/71/L.74), and all countries agreed to "implement long-term and robust strategies to reduce the use of plastics and microplastics, in particular plastic bags and single-use plastics, including by partnering with stakeholders at relevant levels to address their production, marketing and use."
- *United Nations Environment Assembly (UNEA-5)* adopted in March 2022 a resolution to End Plastic Pollution and create an international legally binding agreement on plastic pollution, including in the marine environment, by 2024.⁸² This resolution is the merge of three separate draft resolutions on the topic, by Rwanda and Peru; by Japan; and by India, and it addresses the full lifecycle of plastic, including its production, design and disposal. The resolution specifies that the instrument could include both binding and voluntary approaches, based on a comprehensive approach that addresses the full lifecycle of plastic. The adopted resolution requests the convening of an intergovernmental negotiating committee to develop an international legally binding instrument on plastic pollution, including in the marine environment, during the second half of 2022. An ad-hoc open-ended working group will convene during the first half of 2022 to prepare for the work of the intergovernmental negotiating committee.
- *United Nations Environment Management Group (EMG)* received a mandate from UNEA to engage in and contribute to the Ad Hoc Open-ended Expert group on marine litter and microplastics by providing a mapping of all relevant UN agencies, programmes, initiatives and other sources of expertise relating to marine litter including plastic pollution and microplastics (resolution UNEP/EA.4/Res.6), that resulted in the establishment of the UN Task Team on Marine Litter and Microplastics (2019)⁸³ and in the synthesis report of all UN instruments of relevance to marine pollution (2022).⁸⁴ In 2022, the Consultative Process on Pollution-Free Planet started that considers all sorts of pollution and focuses on multilateral solutions to pollution across the life cycle for inclusive and just transition towards a pollution-free planet.⁸⁵

5D: Disaster Risk Reduction (related to climate change and natural hazards)

- *The Sendai Framework for Disaster Risk Reduction 2015–2030 (UNDRR)*⁸⁶ is a global agreement to reduce and prevent disaster risks across the globe that outlines targets and priorities for action: understanding disaster risk; strengthening disaster risk governance to manage disaster risk; investing in disaster reduction for resilience and; enhancing disaster preparedness for effective response, and to "Build Back Better" in recovery, rehabilitation and reconstruction. It aims to strengthen social and economic resilience to ease the negative effects of climate change, man-made disasters, and natural hazards, and to achieve a substantial reduction of disaster risk and loss of lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries.
- *The Paris Agreement* articulates the need for forward adaptation, in addition to rehabilitation and building back better. It enhances disaster preparedness for effective response and to recovery, rehabilitation and reconstruction, with resilience including both the ability to recover from a hazardous event and the opportunity to improve or 'adapt forward'. It aims at comprehensive risk management that is a multifaceted approach to deal with risk including risk assessment, reduction, transfer and sharing, retention, and transformational approaches which foster a holistic approach to risk management⁸⁷.

⁸² United Nations Environment Assembly 5 Resolution "End plastic pollution: Towards an international legally binding instrument" (2022) https://wedocs.unep.org/bitstream/handle/20.500.11822/38522/k2200647_-unep-ea-5-l-23-rev-1-advance.pdf?sequence=1&isAllowed=y

⁸³ United Nations Task Team on Marine Litter and Microplastics: <https://unemg.org/marine-litter-and-microplastics/>

⁸⁴ United Nations Environment Management Group (2022) "Addressing marine litter and microplastics: UN system-wide contributions - A Synthesis Report by the United Nations Environment Management Group" <https://unemg.org/wp-content/uploads/2022/03/UNEP-EMG-REPORT-Marine-Litter-Microplastics-220317-05-Small-web.pdf>

⁸⁵ United Nations Environment Management Group Consultative Process on Pollution-Free Planet: <https://unemg.org/pollution-free-planet/>

⁸⁶ <https://www.undrr.org/publication/sendai-framework-disaster-risk-reduction-2015-2030>

⁸⁷ UNFCCC, Compendium 2019

- *The 2030 Agenda for Sustainable Development* states that urgent action needs to be taken to combat climate change and its impacts in all targets of SDG 13: 13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries; 13.2 Integrate climate change measures into national policies, strategies and planning; 13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning; 13a and 13b.

5E: Land-sea Interaction

- *The United Nations Economic Commission for Europe (UNECE) Water Convention and United Nations Watercourses Convention*: parties to the transboundary water conventions, in the terrestrial areas, recognise the connection between transboundary rivers and coastal zones. The global legal frameworks for transboundary cooperation on surface and groundwaters are important instruments as they foster harmonisation between basins and regions, strengthen the transboundary water aspect at the global level, and foster synergies with other global issues, e.g. climate change.
- *The UNEP Regional Seas Programme*⁸⁸ addresses the accelerating degradation of the marine and coastal areas through the sustainable management and use of the marine and coastal environment, by engaging neighbouring countries in comprehensive and specific actions to protect their shared marine environment. Under the umbrella of Regional Seas Programmes, sound environmental management of marine areas is coordinated and implemented by countries sharing a common body of marine water. The Regional Seas programmes function through an Action Plan, which in most cases is underpinned with a legal framework in the form of a Regional Convention and associated Protocols. The regional plans take into account the environmental, social and economic situation of each regional sea and they vary in the detail and extent of actions recommended to the Member States. The Regional Seas Programmes comprise 18 Regional Seas Programmes, reflecting a similar approach, yet each tailored by its own governments and institutions to suit their particular environmental challenges.
- *Regional Commissions*⁸⁹ are the regional outposts of the United Nations in their respective regions and represent an integral part of the regional institutional landscape. Stationed in five regions of the world, they share the key objectives of aiming to foster economic integration at the subregional and regional levels, promoting the regional implementation of internationally agreed development goals, including the 2030 Agenda for Sustainable Development and to support regional sustainable development by contributing to bridging economic, social and environmental gaps among their Member countries and subregions. Regional Commissions deal with economic development, trade facilitation, food security and sustainable development in the regions on both the land- and sea-sides. There are five Regional Commissions; UNECE covers the European Region.

⁸⁸ <https://www.unenvironment.org/explore-topics/oceans-seas/what-we-do/working-regional-seas>

⁸⁹ <http://www.regionalcommissions.org/about-the-rcs/> ; <https://www.unsystem.org/agencies/regional-commissions>

Annex 6: Further Information on Instruments of Relevance to Key Sectors

Annex 6A: Shipping and navigation

- In accordance with UNCLOS, the coastal State has full discretion to establish sea lanes and traffic separation schemes in its territorial sea while taking into consideration the recommendations of the competent international organisation.
- If governments wish to establish or amend an existing route, they should submit a proposal to the IMO for adoption. These measures are prescribed by the International Convention for the Safety of Life at Sea (SOLAS) concerning the safety of merchant ships.
- The Convention on the International Regulations for Preventing Collisions at Sea (COLREG) prescribes the conduct of vessels when navigating through traffic separation schemes adopted by the IMO. These regulations are the foundation for routing measures of ships and other vessels at sea to prevent collisions in the EEZ and on the high seas.
- IMO's Energy Efficiency Design Index (EEDI) delivers environmental effectiveness by generating, through enhanced energy efficiency measures, significant reductions in GHG emissions from ships. Following adoption in 2011 and entry into force in 2013, the introduction of the EEDI for all new ships will mean that between 45 and 50 million tonnes of CO₂ will be removed from the atmosphere annually by 2020, compared with "business as usual" and depending on the growth in world trade⁹⁰.
- UNCLOS stipulates that States are obliged to prevent, reduce and control pollution of the marine environment including as a result of dumping from ships, including the IMO's MARPOL Convention, London Convention and London Protocol, Hong Kong Convention (addressed in Section on Marine Pollution). Other examples of the IMO and ILO conventions include the following.
- Ballast Water Management Convention (BWMC) - Convention for the Control and Management of Ships' Ballast Water and Sediments.
- Transport of hazardous and noxious substances (HNS) - Liability and compensation regime for damage caused by the transportation of hazardous and noxious substances other than oil.
- BUNKER - Defines liability and ensures that persons who suffer damage caused by oil spills when carried as fuel in ships' bunkers are compensated.
- Standards of Training, Certification and Watchkeeping (STCW) - Requirements on training, certification and watchkeeping for seafarers at an international level.
- Nairobi Convention on the removal of wrecks that provides the legal basis for states to remove, or have removed, shipwrecks that may have the potential to adversely affect the safety of lives, goods and property at sea, as well as the marine environment.
- The 2018 Initial IMO Strategy on reduction of GHG emissions from vessels envisages a reduction in total GHG emissions from international shipping.
- International Maritime Solid Bulk Cargoes (IMSBC) code - Facilitates safe stowage and shipment of solid bulk cargoes.
- Maritime Labour Convention (MLC) that sets out seafarers' rights to decent conditions of work.
- Civil Liability Convention (CLC/FUND) that regulates the liability, compulsory insurance requirements and a principle for cost sharing between the ship owner and the cargo owner for oil pollution damage.

Annex 6B: Fisheries and aquaculture

The conservation and management of straddling and highly migratory fish stocks is regulated through:

- *The UN Fish Stocks Agreement (UNFSA)*, which entered into force in 2001, defines principles for the conservation and management of straddling and highly migratory fish stocks and articulates the principles of cooperation through appropriate regional and subregional organisations. UNFSA promotes the long-term sustainability of straddling fish stocks and highly migratory fish stocks as well as their optimum utilisation, seeking to balance

⁹⁰ <http://www.imo.org/en/MediaCentre/HotTopics/GHG/Pages/EEDI.aspx>

conservation and management and consider the integrity of marine ecosystems and the conservation of biodiversity, including through the application of the precautionary approach.

- *The regional fisheries management organizations (RFMOs)* are international organisations through which States fishing, or with interests in stocks in a particular area, meet their obligation to cooperate under the UNCLOS. Some of them manage all the fish stocks found in a specific area, while others focus on particular highly migratory species, notably tuna, throughout vast geographical areas.

Other fisheries instruments and processes:

- *The Agreement on Port State Measures (PSMA)* is the first international binding instrument that aims specifically to prevent, deter and eliminate illegal, unreported and unregulated (IUU) fishing. Its main objective is to prevent vessels engaged in IUU fishing from using ports and landing their catches. The Agreement complements other instruments and tools, and is part of an international framework of legally binding and voluntary international fisheries instruments that aim to ensure the long-term conservation and sustainable use of living marine resources and marine ecosystems. States are significantly improving their capacity to manage fisheries effectively by, for example, ratifying and implementing the Global Port State Measures Agreement.
- *The Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (The FAO Compliance Agreement)*, aims to enhance the role of flag States and ensure that a State strengthens its control over its vessels to ensure compliance with international conservation and management measures. It notes the special responsibility of flag States to ensure that none of their vessels are fishing on the high seas unless authorised, and that they can effectively exercise their responsibilities to ensure their vessels comply with international measures. The Compliance Agreement also seeks to prevent the “re-flagging” of vessels fishing on the high seas under the flags of States that are unable or unwilling to enforce international fisheries conservation and management measures.
- Other international binding fisheries instruments (conventions and agreements) that promote the safety of fishing vessels, safety of fishers, training of fishers and responsible and safe fisheries operations include for example: *the IMO Cape Town Agreement (CTA)*, *the IMO International Convention on Training, Certification and for Fishing Vessels Personnel (STCW-F)*, *the ILO Work in Fishing Convention (C188)*. They are summarised in a brochure of IMO, ILO and FAO⁹¹, providing guidance to policy and decision makers and other stakeholders in the fisheries, maritime and labour sectors with a view to promote ratification and implementation of these fisheries instruments.
- The Code of Conduct for Responsible Fisheries (CCRF) of the FAO sets the principles and international standards of behaviour for responsible fishing practices and aquaculture development. It serves as a reference for national and international efforts, including for policies and institutional frameworks and instruments, to ensure sustainable exploitation of aquatic living resources in harmony with the environment. It includes provisions on the duties of all States, flag States, port States and market States, and the role of RFMOs. Article 8 (fishing operations) of the Code of Conduct for Responsible Fisheries provides the principles for responsible fishing practices. The article covers the duties of states to ensure that fishing operations are done in a responsible manner, including aspects related to safety at sea, social security and decent employment in fisheries, fishing technologies and fisheries finance and insurance. An integral requirement of the Code of Conduct for Responsible Fisheries is marking fishing gear, to identify its ownership and location and to ascertain its legality. Properly marked fishing gear with gear tracking technology and an associated reporting system can reduce abandoned, lost or otherwise discarded fishing gear (ALDFG) and its impacts, including ghost fishing.
- Mandated by the United Nations General Assembly, a regular review of the actions taken by States and Regional Fisheries Management Organizations/Arrangements (RFMO/As) takes place in response to the relevant paragraphs of UN General Assembly resolutions addressing the impacts of bottom fishing on Vulnerable Marine Ecosystems and the long-term sustainability of deep-sea fish stocks. The General Assembly has provided for a further review

⁹¹ <http://www.fao.org/3/cb0627en/CB0627EN.pdf> ; <http://www.fao.org/port-state-measures/resources/detail/en/c/1305748/>

of the actions taken by States and regional fisheries management organisations and arrangements in response to specific paragraphs (e.g. paragraphs 113, 117 and 119 to 124 of resolution 64/72, paragraphs 121, 126, 129, 130 and 132 to 134 of resolution 66/68 and paragraphs 156, 171, 175, 177 to 188 and 219 of resolution 71/123).

- *The World Trade Organization's (WTO) negotiations on fisheries subsidies* were launched in 2001 with a mandate to clarify and improve existing WTO disciplines on fisheries subsidies. The negotiation is ongoing. In 2017, WTO members decided on a work programme to conclude the negotiations by aiming to adopt an agreement on fisheries subsidies which delivers on Sustainable Development Goal 14.6: "by 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, and eliminate subsidies that contribute to IUU fishing, and refrain from introducing new such subsidies, recognising that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the WTO fisheries subsidies negotiation". During recent meetings of the Negotiating Group on Rules, 14-18 September 2020, WTO members have started text-based negotiations on fisheries subsidies and as such begin a new phase of their work on an agreement to curb harmful fisheries subsidies.⁹²
- Marine aquaculture is currently a stationary activity, operating in waters under national jurisdiction. Governance of aquaculture interlinks with many different regulatory bodies such as those responsible for regional planning, spatial planning, industrial development, environmental issues, food safety etc. The regulatory frameworks and their implementations vary greatly from country to country and FAO publishes regular updates through fact sheets on aquaculture laws and regulations.

Annex 6C: Energy

- UNCLOS provides general principles for the exploitation of natural resources. According to UNCLOS, the coastal state has full sovereignty in its territorial sea, as well as its seabed and subsoil. In the EEZ and continental shelf, the coastal state has rights that enable the exploration, exploitation and management of natural resources of the seabed and its subsoil.
- According to international law as reflected in UNCLOS, a coastal state has the right to produce energy from water, currents and winds. Such activity may require the construction of artificial islands, installations and structures, which is empowered to coastal states by UNCLOS. UNCLOS establishes a limit on these rights if such construction and practices interfere with recognised sea lines essential to international navigation. Such installations may have safety zones of up to 500 meters to secure the construction and navigation.
- Offshore oil and gas: The exploration, development and production of crude oil or natural gas from below the seabed takes place on the continental shelf of coastal States, where, under UNCLOS, States enjoy sovereign rights over resources and their domestic legislation regulates activities.
- Offshore renewable energy, comprising wave, tidal and offshore wind energy generation, currently take place on stationary installations in the EEZs of coastal states. Member States create binding regulation applicable to offshore energy. Promoting systemic approaches for offshore energy is crucial to decrease the levelised cost of electricity for offshore energy technologies, which according to predictions can provide baseload power and stabilise the grid. They are therefore well suited to be developed in harmony with other renewables, offshore as well as onshore. This is of particular interest in coastal regions and islands where a mix of energies is needed due to land limitations and high presence of renewables.
- Due to the present international objectives in reducing CO2 emissions/the Paris Agreement target (see section on Climate Change), the demand for the use of marine renewable energy will be expanding in the space of EEZ and beyond. New technologies will also play a role in generating offshore energy through other processes, including by salinity gradients and thermal gradients.

⁹² https://www.wto.org/english/news_e/news20_e/fish_21sep20_e.htm

Annex 6D: Seabed mining

- The exploitation of marine mineral resources in areas beyond national jurisdiction is regulated by UNCLOS through the establishment of the International Seabed Authority (ISA).
- The international legal framework is laid down in Part XI of UNCLOS as well as in the 1994 agreement relating to the implementation of Part XI.
- UNCLOS provides coastal States with sovereign rights to resources on their continental shelf. The deep seabed beyond the continental shelf, “the Area”, and the minerals contained in it, are considered the common heritage of mankind (all rights over the resources of the Area are governed by the principle of Common Heritage of Mankind). UNCLOS Article 137(1) ensures that the Area will not be subject to national jurisdiction of any state.
- The regime is regulated by the International Seabed Authority (ISA), which administers seabed mining-related activities through an Assembly and Council, as advised by a Legal and Technical Commission.
- Seabed mining activities are to be regulated to ensure effective protection of the marine environment. The regulatory framework for activities of seabed mining for the Area is under development at the ISA. A draft regulation for exploitation of minerals was issued in August 2017 and has been through a hearing for stakeholder submission.

Annex 6E: Trade and Labour

- *The World Trade Organization’s Committee on Trade and Environment (CTE)*⁹³ is the WTO focal point for policy dialogue among WTO members on trade and environment issues that takes into consideration both the trade and environmental dimensions of pollution. The Committee has a broad 10-point work programme with items, some of which are now being negotiated while some others are focal issues in the regular committee, including for example: trade rules, environmental agreements, and disputes; environmental protection and the trading system, transparency of environmental trade measures; environment and trade liberalisation; domestically prohibited goods on the issue of exports of these prohibited goods, in particular hazardous waste. Aspects of the relationship between trade and pollution (e.g. plastic) are being discussed in the CTE, specifically in terms of global and regional efforts on trade-related aspects of waste management and the interaction between trade and the ocean economy. There is growing interest by WTO Members to discuss trade-related aspects of environmental sustainability since trade policy can help address pollution and establish a global circular economy⁹⁴.
- *The Basel Convention - Amendment on Global Trade in Plastic Waste*⁹⁵ is a global legally-binding framework for transboundary movement of plastic waste, which makes global trade in plastic waste more transparent and better regulated, to better control the export of unsorted and problematic plastic waste, whilst ensuring that its management is safer for human health and the environment. For plastic-waste, the Basel Convention focuses mainly on three pillars: (i) Controlling plastic trade waste: transboundary movements, technical assistance to customs officers, tracking of plastic waste, etc.; (ii) Environmentally sound management: identifying plastic waste, plastic waste inventory, environmentally sound management strategies, policy recommendation on Environmentally Sound Management (ESM) strategies, financing schemes, etc.; (iii) Prevention and minimisation of waste: tackling the source of plastic waste. In decision BC-14/13, adopted at its fourteenth meeting, the COP emphasised the need to adopt a life-cycle approach to plastics and to increase resource efficiency and the importance of the waste management hierarchy. This is reflected throughout the work programme of the Basel Convention.
- *UN Conference on Trade and Development’s Forum for sustainable economic development* provides a global forum where representatives of all countries engage in dialogue, share experiences and tackle critical issues affecting the global economy, promoting consensus at the multilateral level. Ocean forum deals with economic and sustainable development issues with the main objective to promote production in a sustainable manner, including externalities, circular economy in relevant economic sectors and value chains.

⁹³ https://www.wto.org/english/tratop_e/envir_e/wrk_committee_e.htm

⁹⁴ https://www.wto.org/english/news_e/news20_e/envir_03jul20_e.htm

⁹⁵ <http://www.basel.int/Implementation/Plasticwaste/Amendments/Overview/tabid/8426/Default.aspx>

- *International Labour Organization (ILO) Guidelines for a just transition towards environmentally sustainable economies and societies* for all recommend a tripartite approach with the focus on a just transition, climate change and sustainability with circular economy and decent jobs creation. In light of climate change and environmental degradation, which reduce productivity and destroy jobs with their effects falling disproportionately on the most vulnerable, just transition to environmental sustainability for the implementation of greener ways of production and service delivery will require reskilling and upskilling of workers to reduce the risk of rising unemployment, poverty and inequality. As such, there is a growing need to increase the number of professionals with knowledge and skills in offshore renewable energy technology development and deployment, including facilitating reskilling of the work force from the fossil fuel industry to renewables.

Annex 6F: Marine Scientific Research

- *The UN Decade of Ocean Science for Sustainable Development (2021-2030)*⁹⁶ will provide a common framework to ensure that ocean science can fully support countries' actions to sustainably manage the Oceans and to achieve the ocean-related priorities of the 2030 Agenda for Sustainable Development. Through stronger international cooperation, the Decade will bolster scientific research and innovative technologies to ensure science responds to the needs of society: a clean ocean where sources of pollution are identified and removed; a healthy and resilient ocean where marine ecosystems are mapped and protected; a predictable ocean where society has the capacity to understand current and future ocean conditions; a safe ocean where people are protected from ocean hazards; a sustainably harvested ocean ensuring the provision of food supply; a transparent ocean with open access to data, information and technologies.
- *The Intergovernmental Panel on Climate Change (IPCC)*⁹⁷ is an intergovernmental body of the United Nations dedicated to providing scientific information relevant to understanding the scientific basis of the risk of human-induced climate change, its natural, political, and economic impacts and risks, and possible response options. The IPCC produces reports that contribute to the work of the UNFCCC and other global instruments like UNCLOS refer closely to them. The IPCC published in 2019 the Special Report on the Ocean and Cryosphere in a Changing Climate (SROCC),⁹⁸ which identifies a number of ocean-climate linkages, including the role of the ocean in regulating the global climate, mediating global temperature, and its relation with living ecosystems and human communities.
- *The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)*⁹⁹ is the intergovernmental body which assesses the state of biodiversity and of the ecosystem services it provides to society, in response to requests from decision makers. In 2019 IPBES published the Global Assessment of Biodiversity and Ecosystem Services (2019).¹⁰⁰
- *The Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP)*¹⁰¹ is a group of independent scientific experts that provides advice as a solid scientific foundation to UN organisations on scientific aspects of marine environmental protection.

⁹⁶ <https://www.oceandecade.org/>

⁹⁷ <https://www.ipcc.ch/>

⁹⁸ <https://www.ipcc.ch/srocc/>

⁹⁹ <https://ipbes.net/>

¹⁰⁰ <https://ipbes.net/global-assessment>

¹⁰¹ <http://www.gesamp.org/>

GETTING IN TOUCH WITH THE EU

In person

All over the European Union there are hundreds of Europe Direct information centres. You can find the address of the centre nearest you at:

https://europa.eu/european-union/contact_en

On the phone or by email

Europe Direct is a service that answers your questions about the European Union. You can contact this service:

- by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),
- at the following standard number: +32 22999696, or
- by email via: https://europa.eu/european-union/contact_en

FINDING INFORMATION ABOUT THE EU

Online

Information about the European Union in all the official languages of the EU is available on the Europa website at: https://europa.eu/european-union/index_en

EU publications

You can download or order free and priced EU publications from:

<https://publications.europa.eu/en/publications>. Multiple copies of free publications may be obtained by contacting Europe Direct or your local information centre (see https://europa.eu/european-union/contact_en).

EU law and related documents

For access to legal information from the EU, including all EU law since 1952 in all the official language versions, go to EUR-Lex at: <http://eur-lex.europa.eu>

Open data from the EU

The EU Open Data Portal (<http://data.europa.eu/euodp/en>) provides access to datasets from the EU. Data can be downloaded and reused for free, for both commercial and non-commercial purposes.



doi: 10.2926/135072
ISBN 978-92-95225-50-3

