

## Glossary

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Abyssal plain The more or less flat region of the deep ocean floor below 4000 m, excluding ocean

trenches, formed by deposition of pelagic sediments and turbidity currents that

obscure the pre-existing topography

Acquis The OSPAR Acquis: the Decisions, Recommendations and Other Agreements that

constitute the accumulated body of OSPAR measures and actions

Adaptive The integration of programme design, management and monitoring to

management systematically test assumptions in order to adapt and learn

Adaptation (Climate

change)

Actions addressing the consequences of climate change through enhancing the resilience of natural and human systems, i.e., their capacity to cope with those

consequences

Advection The transfer of heat or matter by horizontal movement of air or water

Agenda 2030 for sustainable development

United Nations' plan of action for people, planet and prosperity, underpinned by 17

Sustainable Development Goals and 169 targets

Anthropogenic Caused or produced by human activities

Anti-foulant A coating, paint, surface treatment, surface or device that is used on a ship to

control or prevent attachment of unwanted organisms

Artificial reef A submerged structure placed on the seabed deliberately to mimic some

characteristics of a natural reef.

Background concentrations of naturally occurring substances Concentrations of certain naturally occurring hazardous substances that would be expected in the North-East Atlantic if certain industrial developments had not

happened

Ballast water Water, with its suspended matter, taken on board a ship to control trim, list,

draught, stability or stresses of the ship

Benthos Organisms attached to, living on, or in the seabed

Best Available Techniques (BAT) The latest stage of development (state of the art) of processes, of facilities or of methods of operation which indicate the practical suitability of a particular measure

for limiting discharges, emissions and waste.

Best Environmental Practice (BEP)

The application of the most appropriate combination of environmental control

measures and strategies.

Bioaccumulation The accumulation of a substance within the tissues of an organism, which can lead

to the biomagnification through the food web.

Bioavailability The extent to which a substance can be absorbed into the tissues of organisms.

Possibly the most important factor determining the extent to which a contaminant

will enter the food chain and accumulate in biological tissues

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Biological diversity Variability among living organisms from all sources including, inter alia, terrestrial,

marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.

Biomass The total mass of organisms in a given place at a given time

Bloom An abundant growth of phytoplankton or certain macroalgae, typically triggered by

sudden favourable environmental conditions (e.g., excess nutrients, light availability,

reduced grazing pressure)

Blue carbon The IPCC define Blue Carbon as biologically-driven carbon fluxes and storage in

marine systems that are amenable to management. Coastal blue carbon focuses on rooted vegetation in the coastal zone, such as tidal marshes, mangroves and seagrasses. These ecosystems have high carbon burial rates on a per unit area basis and accumulate carbon in their soils and sediments. Some definitions of blue carbon include sediments and for the QSR 2023 we use the term "marine sedimentary

carbon" to distinguish these from the IPCC Blue Carbon definition

By-catch That part of the catch that is not the main target of the fishery, i.e., the retained

catch of non-targeted species together with the portion of the catch returned to the

sea as a result of economic, legal, or personal considerations

Catchability The fraction of the stock which is caught by a standardised (effective) unit of effort.

Carbon dioxide capture and storage

(CCS)

The IPCC define CCS as a process in which a relatively pure stream of carbon dioxide (CO<sub>2</sub>) from industrial and energy-related sources is separated (captured), conditioned, compressed and transported to a storage location for long-term

isolation from the atmosphere. Sometimes referred to as Carbon Capture and  $\,$ 

Storage

Circular economy A model of production and consumption, which involves sharing, leasing, reusing,

repairing, refurbishing and recycling existing materials and products as long as possible. In this way, the life cycle of products is extended. (Taken from European

Parliament)

Climate The long-term average conditions of the atmosphere and/or ocean

Collective Arrangement Collective Arrangement between competent international organisations on cooperation and coordination regarding selected areas in areas beyond national jurisdiction in the North-East Atlantic' (Collective Arrangement, OSPAR Agreement

2014-09

Common Procedure The 'Common Procedure for the Identification of the Eutrophication Status of the

OSPAR Maritime Area' provides the framework for a comprehensive, harmonised characterisation of marine areas by OSPAR countries in terms of 'problem areas',

and 'non-problem areas' with regard to eutrophication

Congeners Related or similar substances forming a group of substances

Continental shelf The shallowest part of the continental margin between the shoreline and the

continental slope; not usually deeper than 200 m

Continental slope The steeply sloping seabed from the outer edge of the continental shelf to the

continental rise

Contracting Parties The Contracting Parties to the OSPAR Convention are Belgium, Denmark, Finland,

France, Germany, Iceland, Ireland, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom, and the European Union

Coordinated Environmental Monitoring

Programme (CEMP)

That part of the monitoring under the OSPAR Joint Assessment and Monitoring Programme where the national contributions overlap and are co-ordinated by the use of commonly agreed monitoring guidelines, quality assurance procedures and

assessment tools (OSPAR Agreement 2016-01)

Cumulative effects A systematic procedure for identifying and evaluating the significance of effects

from multiple pressures and/or activities on single or multiple receptors. CEA

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assessment provides management options, by quantifying the overall expected effect caused by

multiple pressures and by identifying critical pressures or pressure combinations and vulnerable receptors. The analysis of the causes (source of pressures), pathways, interactions and consequences of these effects on receptors is an essential and integral part of the process." (Judd et al., 2015, adapted from Cooper, 2003).

Cuttings Solid material removed from drilled rock together with any solids and liquids derived

from any adherent drilling fluids

DAPSIR Framework Driver(s), Activit(ies), Pressure(s), State, Impact, Response.

The DAPSIR Framework is a way to describe causal relationships between society and the environment. It outlines the causal links between Drivers, activities, pressures, environmental status, impacts, and responses in a management setting

(Atkins et al. 2011).

Demersal fish Fish that feed on or near the bottom of the sea

Diatoms Common type of unicellular phytoplankton with a silicate cell wall. The ratio of

diatoms to flagellates in phytoplankton communities is used as an indicator of

eutrophication

Diffuse sources Sources of pollution that are not discrete and extend over a wide geographical area

Discards That part of the catch taken on board a fishing vessel that is not landed, consumed

on board or used as bait in subsequent fishing operations, but put back into the sea

Discharge Intentional transfer of substances into water

Displacement water Seawater contained in oil storage tanks which is displaced by incoming or outgoing

crude oil, due to the densities of oil and water

Dose rate The quantity of radiation absorbed per unit time

Drilling fluids The fluid with added chemicals used when drilling boreholes to lubricate and cool

the drilling bit

Dumping The deliberate disposal in the maritime area of wastes or other matter from vessels

or aircraft, from offshore installations, and any deliberate disposal in the maritime

area of vessels or aircraft, offshore installations and offshore pipelines

Ecological quality

objective (EcoQO)

Objectives set by OSPAR and the North Sea Conferences for the desired state of individual aspects of the structure and function of the marine ecosystem.

Ecosystem A community of organisms and their physical environment interacting as an

ecological unit

Ecosystem approach The comprehensive integrated management of human activities based on the best

available scientific knowledge about the ecosystem and its dynamics, in order to identify and take action on influences which are critical to the health of the marine ecosystems, thereby achieving sustainable use of ecosystem goods and services and

maintenance of ecosystem integrity

Ecosystem services The benefits provided by ecosystems that contribute to making human life both

possible and worth living. Examples of ecosystem services include products such as food and water, regulation of floods, soil erosion and disease outbreaks, and non-material benefits such as recreational and spiritual benefits in natural areas. The term 'services' is usually used to encompass the tangible and intangible benefits that

humans obtain from ecosystems, which are sometimes separated

into 'goods' and 'services'

Emission A release into air

Endemic Native, and restricted to a particular locality or specialised habitat

Endocrine disrupter A substance from an external source that interferes with an organism's endocrine

system, including hormone regulation and hormone equilibria, and produces

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adverse developmental, reproductive, neurological, and immune effects Eutrophication The enrichment of water by nutrients causing an accelerated growth of algae and higher forms of plant life to produce an undesirable disturbance to the balance of organisms present in the water and to the quality of the water concerned, and therefore refers to the undesirable effects resulting from anthropogenic enrichment by nutrients **Exclusive Economic** An area in which a coastal state has sovereign rights over all the economic resources Zone (EEZ) of the sea, seabed and subsoil (see Articles 56 – 58, Part V, UN Convention on the Law of the Sea 1982) Fishing effort The amount of fishing taking place, quantified as the effective utilization of the existing fishing capacity (fleet power) in a management period. It is usually expressed as kilowatt-days. Fishing mortality A measure of the proportion of a fish stock taken each year by fishing. A limit reference point (Flim) and a precautionary reference point (Fpa) guide management of fisheries targeting the stock **Flagellates** Common type of unicellular phytoplankton with a whip like flagellum. The ratio of diatoms to flagellates in phytoplankton communities is used as an indicator of eutrophication Food web The network of interconnected food chains along which organic matter flows within an ecosystem or community Gases such as carbon dioxide, methane and nitrous oxide which have the potential Greenhouse gases to trap heat radiation from the Earth's surface and cause warming in the lower atmosphere **Gross Domestic** Market value of all final goods and services made within the borders of a country in Product (GDP) a year Harmful Algal Blooms Blooms of phytoplankton that result in harmful effects such as the production of (HABs) toxins that can affect human health, oxygen depletion and kills of fish and invertebrates and harm to fish and invertebrates, e.g., by damaging or clogging gills Harmonised This comprises OSPAR Decision 2000/02 on a Harmonised Mandatory Control Mandatory Control System for the Use and Reduction of the Discharge of Offshore Chemicals (as System (HMCS) amended), OSPAR Recommendation 2016/04 on a Harmonised Pre-screening Scheme for Offshore Chemicals, and OSPAR Recommendation 2019/03 on a Harmonised Offshore Chemical Notification Format (HOCNF) (as amended) Hazardous Substances or groups of substances which are either (i) toxic, persistent and liable to substances bioaccumulate; or (ii) assessed by OSPAR as giving rise to an equivalent level of concern Retaining on board for ulterior landing only those fish that can fetch good prices at High-grading the market, while discarding the less-valued fish **Imposex** A condition in which the gender of an organism has become indeterminate as a result of hormonal imbalances or disruption, as in the case of the effect of tributyltin on marine gastropods Indicator (common or Indicators are single, measurable components which reflect the overall condition of candidate) the marine environment (definition from Intermediate Assessment 2017). For the purposes of the QSR 2023, these are either common indicators or candidate indicators. A candidate indicator is a common indicator in development. It follows as much as possible the common indicator assessment template, but something is lacking, and/or the candidate indicator has not been agreed at OSPAR level. When assessed, a candidate indicator leads to a pilot assessment whereas a common indicator leads to a common indicator assessment. Inshore waters Shallow waters on the continental shelf, a term usually applied to territorial waters

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within 6 nautical miles of the coasts

Integrated assessment

For the purposes of the QSR 2023, an integrated assessment is where multiple indicators are brought together in a structured manner (e.g. via defined integration rules) to provide an assessment of a broader topic. The topic may be a reporting 'feature' under MSFD (e.g. eutrophication, UPBT substances, seals). For biodiversity assessments for example, the indicators are first integrated to species level (e.g. grey seal) before integration to species group level (e.g. seals).

Integrated Coastal Zone Management (ICZM)

A dynamic, multidisciplinary and iterative process to promote sustainable management of coastal zones through a variety of tools to balance environmental, economic, social, cultural and recreational objectives.

JAMP

OSPAR's Joint Assessment and Monitoring Programme approved by the OSPAR Commission on 27 June 2014, as from time to time amended by the OSPAR Commission (OSPAR Agreement 2014-02)

Losses

Unintentional transfers of substances, other than as discharges, emissions or the result of accidents, directly or indirectly to the marine environment, which have, for example leached, eroded or become detached from a manufactured product, waste or structure; leached or run off from land on which it has been spread or deposited; leaked or escaped from a container in which it has been kept.

Macrophytes

Large, often rooted aquatic plants

Marine protected area (MPA)

An area within the maritime area for which protective, conservation, restorative or precautionary measures, consistent with international law have been instituted for the purpose of protecting and conserving species, habitat, ecosystems or ecological processes of the marine environment

Marine spatial planning

A public process of analysing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic, and social objectives that are usually specified through a political process (synonym: Maritime Spatial Planning)

Maritime area (synonym: OSPAR area)

The waters covered by the OSPAR Convention

Marine litter

Marine litter covers any solid material which has been deliberately discarded, or unintentionally lost on beaches and on shores or at sea, including materials transported into marine environment from land by rivers, draining or sewage systems or winds. It includes any persistent, manufactured or processed solid material.

Maximum sustainable yield (MSY)

The largest yield (or catch) that can be taken from a fish stock over an indefinite period. Management policies should ideally aim at maintaining fish stocks, for a long term, at levels capable to produce MSY, although other environmental, economic and social objectives may also play an important factor

Mitigation (Climate change)

Actions addressing anthropogenic causes of climate change and ocean acidification

Natural capital

Natural capital is another term for the stock of renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals) that combine to yield a flow of benefits to people. (United Nations)

Natural capital accounting

An umbrella term covering efforts to use of an accounting framework to provide a systematic way to measure and report on stocks and flows of natural capital. Its underlying premise is that since the environment is important to society and the economy, it should be recognised as an asset that must be maintained and managed, and its contributions (services) be better integrated into commonly used frameworks like the System of National Accounts.

NCA covers accounting for individual environmental assets or resources, both biotic

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and abiotic (such as water, minerals, energy, timber, fish), as well as accounting for ecosystem assets (e.g. forests; wetlands), biodiversity and ecosystem services. (United Nations).

Nature-based solutions

Actions to protect, sustainably manage, and restore natural and modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits (taken from IUCN)

Noise/sound

Sound refers to all types of acoustic energy in the sea, while noise refers to that part of sound that has the potential to cause negative impacts on marine life

Non-problem area (with respect to eutrophication)

Those areas for which there are no grounds for concern that anthropogenic enrichment by nutrients has disturbed the marine ecosystem

**Nordic Seas** 

Collective term for the Norwegian, Iceland and Greenland Seas

NO<sub>x</sub> (nitrogen oxides)

For the purposes of OSPAR reporting on emissions from offshore installations, NOx is the sum of nitric oxide (NO) and nitrogen dioxide (NO<sub>2</sub>)

Nuisance species

Species that are not in themselves dangerous or toxic but can negatively disrupt ecosystems and environments

**Nutrients** 

**OECM** 

Dissolved phosphorus, nitrogen and silicon compounds

Ocean acidification

Decrease in the pH of the ocean. Causative factors include the oceanic uptake of carbon dioxide from the atmosphere

Other effective area-based conservation measure: A geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in situ conservation of biodiversity, with associated ecosystem functions and services and where applicable, cultural, spiritual, socio-economic, and other locally relevant values. (As adopted by CBD COP 14 in November 2018)

Organic-phase drilling fluid

An emulsion of water and other additives in which the continuous phase is a waterimmiscible organic fluid of animal, vegetable or mineral origin

Organohalogens

Substances in which an organic molecule is combined with one or more of the halogen group of elements (i.e., fluorine, chlorine, bromine, iodine)

OSPAR area (synonym OSPAR maritime area)

The waters covered by the OSPAR Convention

Other assessment

For the purposes of the QSR 2023: An "other" assessment is based on an element which is not an OSPAR indicator, but which could prove useful to support the delivery of QSR 2023. Two main categories of 'other assessments' have been identified:

- OSPAR non-indicator assessments: An OSPAR non-indicator uses OSPAR data but does not follow at all the structure that would allow this indicator to be considered a common indicator or a candidate indicator.
- Third Party Assessments are reports and/or assessments specifically produced by a third party for OSPAR, intended for use in the OSPAR QSR 2023. It is therefore different from simply quoting external sources for example.

Oxidised nitrogen

For the purpose of OSPAR, atmospheric monitoring of oxidized nitrogen includes nitrate (NO<sub>3</sub>) in precipitation and nitrogen dioxide (NO<sub>2</sub>), nitric acid (HNO<sub>3</sub>) and nitrogen monoxide (NO) in air/aerosol

Pelagic fish

Fish that spend most of their life swimming in the water column with little contact

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with or dependency on the bottom Substances that persist in the environment. The principal criterion is that the Persistent substances substance has a half-life in the freshwater or marine environment of 50 days or more Phytoplankton The collective term for the photosynthetic members of plankton PLONOR substance Substance on the OSPAR List of Substances / Preparations Used and Discharged Offshore which are Considered to Pose Little or No Risk to the Environment (OSPAR Agreement 2013-06) Point source Identifiable and localised point of emissions to air and discharges to water Pollution The introduction by man, directly or indirectly, of substances or energy into the maritime area which results, or is likely to result, in hazards to human health, harm to living resources and marine ecosystems, damage to amenities or interference with other legitimate uses of the sea Precautionary Management approach where preventive measures are to be taken when there are approach reasonable grounds for concern that substances or energy introduced, directly or indirectly, into the marine environment may bring about hazards to human health, harm living resources and marine ecosystems, damage amenities or interfere with other legitimate uses of the sea, even when there is no conclusive evidence of a causal relationship between the inputs and the effects Those areas for which there is evidence of an undesirable disturbance to the marine Problem area (with ecosystem due to anthropogenic enrichment by nutrients respect to eutrophication) Produced water The water that comes up from oil and gas wells along with the oil and gas. Some of it is water that has been in the hydrocarbon reservoir for geological time along with the oil or gas ('formation water'). Some of it is water produced by condensation during the production process ('condensation water') Priority chemical For the purpose of the Quality Status Report (QSR), substance on the OSPAR List of Chemicals for Priority Action Radioactive Naturally occurring and human-made radionuclides substances Radionuclide Atoms that disintegrate by emission of electromagnetic radiation, i.e., emit alpha, beta or gamma radiation ( $\alpha$ -emitting particles,  $\beta$ -emitting particles,  $\gamma$ -rays) Reduced nitrogen For atmospheric emission/deposition reduced nitrogen includes ammonia (NH<sub>3</sub>) in air/aerosol and ammonium (NH<sub>4</sub>) in precipitation Risk-based approach A method of prioritising mitigation actions on the issues that pose the greatest risk to the environment Safe biological limits Limits (reference points) for fishing mortality rates (Fpa) and spawning stock biomass (B<sub>pa</sub>), beyond which the fishery is unsustainable. Science Agenda A prioritised list of OSPAR's scientific knowledge needs, aimed at improving OSPAR assessments Seamount An elevated area of limited extent rising 1000 m or more from the surrounding

of sound that has the potential to cause negative impacts on marine life

The outer margin of the continental shelf marked by a pronounced increase in the slope of the seabed; usually occurring at around 200 m in depth along European

Sound refers to all types of acoustic energy in the sea, while noise refers to that part

ocean floor, usually conical in shape

margins

Shelf break

Sound/noise

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SMART [objectives] Specific, Measurable, Achievable, Relevant, Time-bound Spawning Stock The total weight of fish in the stock that are old enough to spawn. It is one of the Biomass (SSB) most important metrics of the size and health of commercial fish stocks. A limit reference point (Blim) and a precautionary reference point (Bpa) guide management of fisheries targeting the stock The storage site and surrounding geological domain which can have an effect on Storage complex (Carbon capture) overall storage integrity and security; that is, secondary containment formations (definition as in Directive 2009/31/EC on the geological storage of carbon dioxide) Stratification The separation of seawater into layers Sustainable United Nations' 17 Sustainable Development Goals (SDGs) are an urgent call for **Development Goals** action by all countries in a global partnership (SDG) System of The accepted international standard for environmental-economic accounting, Environmental providing a framework for organizing and presenting statistics on the environment **Economic Accounting** and its relationship with the economy. It brings together economic and (SEEA) environmental information in an internationally agreed set of standard concepts, definitions, classifications, accounting rules and tables to produce internationally comparable statistics. (United Nations) Thematic assessment For the purposes of the QSR 2023: an intermediate level product of the QSR process, which brings together, sometimes via an integrated assessment, a number of indicator assessments, other assessments, data products and other relevant information to present the evidence base for the key conclusions/statements which will be presented in the synthesis report Total allowable catch The maximum quantity of fish that is allowed to be caught and subsequently landed (TAC) from a stock during a management period (usually one year) Toxic The property of a substance that will cause damage to a living organism or their progeny Toxin A poisonous substance produced by living organisms and biological processes, usually proteinaceous Trophic Pertaining to nutrition Turbidity The degree to which the water loses its transparency due to the presence of suspended particulates Upwelling This occurs near coasts where winds persistently drive surface water seaward, causing an upward movement of cold, nutrient-rich water from ocean depths, and in the open ocean where surface currents are divergent Vitellogenin A protein in blood plasma used as a biomarker for exposure to endocrine disrupters that promote the development of female sex characteristics For the purposes of OSPAR reporting on emissions from offshore installations, Volatile organic compounds (VOCs) volatile organic compounds comprise all hydrocarbons, other than methane released to the atmosphere Water column The vertical column of water extending from the sea surface to the seabed Water mass A body of water within an ocean characterised by its physicochemical properties of temperature, salinity, depth and movement Zoobenthos Animals that live on or in the seabed

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column including larvae of many fish and benthic invertebrates

The animal component of the plankton; animals suspended or drifting in the water

Zooplankton