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For the attention of:

OSPAR BDC Heads of Delegation
ICG-COBAM contact points
Pelagic Habitat contact points

Cc: OSPAR Heads of Delegation

09 July 2025

OSPAR Data call 2025

Plankton Abundance, Biomass and Primary Productivity data to be used in common indicators PH1/FW5 and PH2, and candidate indicator FW2 for the Intermediate Assessment 2029

Contacts

Content: Regarding plankton abundance, chlorophyll biomass, and primary productivity data: Matthew Holland (UK) matt.holland@plymouth.ac.uk
Please contact Matthew if you have any queries about what data to include in your submission.

ICES technical contact: ICES Accessions accessions@ices.dk
Please contact ICES Accessions with access requests or if you require assistance submitting data via ICES DOME or ICES Oceanography interfaces for plankton abundance and chlorophyll biomass data.

OSPAR data contact: data@ospar.org
Please contact the OSPAR Data Team with access requests or queries with the OSPAR Data Submission Site.

Reporting deadline

Please submit completed reporting formats by **17h00 (CET-1) 19 December 2025,** note that this is the deadline date and data are welcomed prior to this date.

Submission instructions

Contracting Parties are invited to submit data for all months of the year for the period 1958 – present:

1. Plankton abundance data to ICES via
   ICES DOME: https://www.ices.dk/data/data-portals/Pages/DOME.aspx
   Reporting Format: Environmental Reporting Format (ERF3.2) or Simplified Format for Communities data https://www.ices.dk/data/Documents/ENV/Environment_Formats.zip, separately for phytoplankton and zooplankton

FAQ:
https://www.ices.dk/data/Documents/ENV/DOME%20Frequently%20asked%20questions.docx

Request access: accessions@ices.dk

2. Chlorophyll biomass data to ICES via
ICES Oceanography: https://www.ices.dk/data/data-portals/Pages/ocean.aspx
Reporting Format: https://www.ices.dk/data/Documents/ocean/ICES-Oceanography-Data-Submission-Format.zip
How to submit data: https://www.ices.dk/data/data-portals/Pages/ocean-submit.aspx

3. Primary productivity data via:
OSPAR Data Submission Site: https://osparcsp.sharepoint.com/sites/datasubmission > Data Submission Pages > Primary Productivity (IA2029)
Reporting Format: Submit data using the "Primary_Prod_List_Format" worksheet in the provided Excel template
https://osparcsp.sharepoint.com/:x:/r/sites/datasubmission/Shared%20Documents/BDC%20-%20Primary%20Productivity%20(IA2029)/OSPAR_FW2_reporting_format_IA2029.xlsx?d=w3af117c0b2e547adb6279a841ec4b3d9&csf=1&web=1&e=SRtP8e.

Annexes 1 and 2 include tables mapping the historic OSPAR Reporting Format to the ICES formats, to facilitate Contracting Parties in their reporting. Annex 3 includes additional information on the 'Primary Productivity' Reporting Format.

Use of the reported data

Contracting Party reported data will enable assessment of two Biodiversity Common Indicators and one candidate indicator, as part of the OSPAR Intermediate Assessment 2029 (IA 2029):

PH1/FW5 – Changes in phytoplankton and zooplankton communities

PH2 – Changes in phytoplankton biomass and zooplankton abundance

FW2 – Productivity of phytoplankton (candidate indicator)

IA 2029 Assessments of PH1/FW5 and PH2 indicators will be made for OSPAR Region II – Greater North Sea, OSPAR Region III – Celtic Seas, and OSPAR Region IV – Bay of Biscay and Iberian Coast, where the indicators have been agreed as common. Extension of these two indicator assessments into OSPAR Region I – Arctic Waters and OSPAR Region V – Wider Atlantic will also be considered, depending on whether suitable data are received to support robust assessment in these Regions.

FW2 is a candidate indicator in OSPAR Region II – Greater North Sea, OSPAR Region III – Celtic Seas, and OSPAR Region IV – Bay of Biscay and Iberian Coast.

Table 1. *Overview of indicators covered by this data call. Blue the indicator is common, Orange the indicator is a candidate indicator; "Update" the indicator assessment will be updated with new data or methods.*

Code	Indicator name	Lead country	OSPAR Region I Arctic Seas	OSPAR Region II Greater North Sea	OSPAR Region III Celtic Seas	OSPAR Region IV Bay of Biscay and Iberian Coast	OSPAR Region V Wider Atlantic
PH1/ FW5	Changes of plankton functional types (life form) index Ratio	UK	Pilot	Update	Update	Update	Pilot
PH2	Plankton biomass and/or abundance	UK	Pilot	Update	Update	Update	Pilot
FW2	Production of phytoplankton	UK		Update	Update	Update	

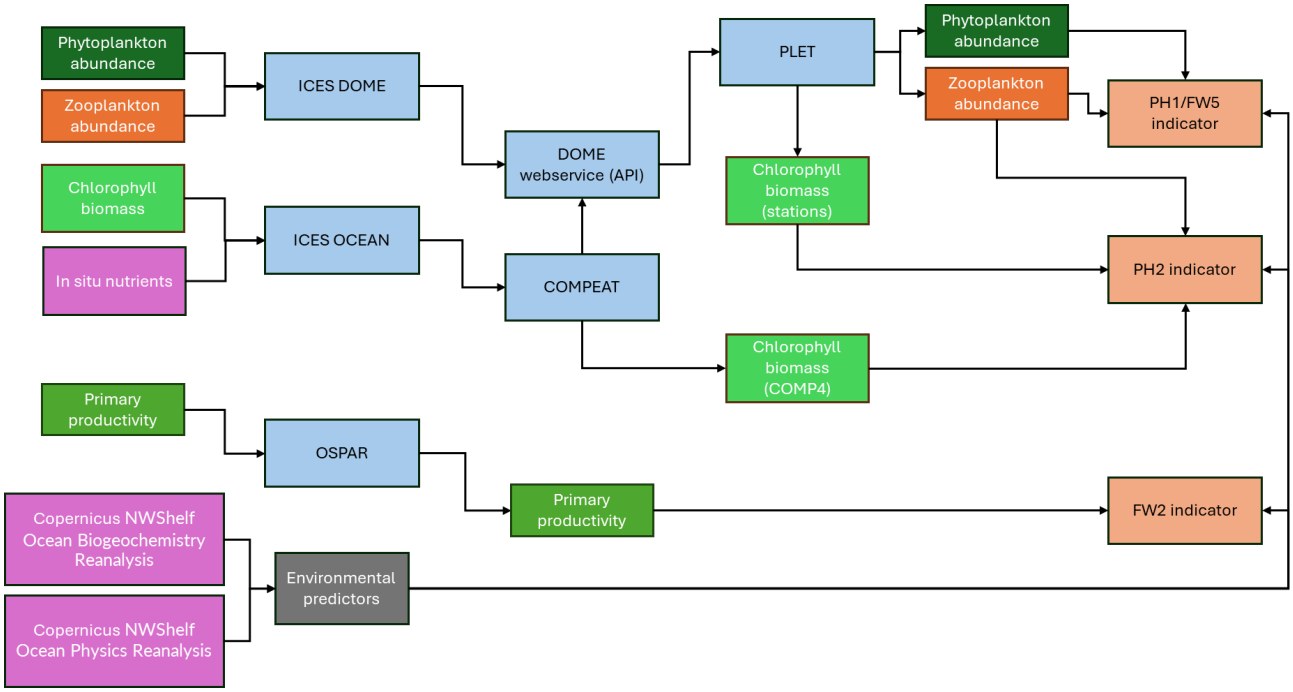
The overall geographical extent of the assessments in each OSPAR Region will depend on the amount, and quality, of data made available by Contracting Parties.

The data will be used to construct regional indicators, with trends in these indicators linked to environmental pressures. Assessment results will be integrated to determine status for four pelagic habitat types (Variable salinity, Coastal, Shelf, and Oceanic habitats). The work will be conducted by the OSPAR Pelagic Habitats (and Food Webs) Expert Group under ICG-COBAM, reporting to the OSPAR Biological Diversity Committee. The assessment work will in part be resourced through OSPAR via Contracting Parties.

PH1/FW5 (https://oap.ospar.org/en/ospar-assessments/quality-status-reports/qsr-2023/indicator-assessments/changes-plankton-communities/) and PH2 (https://oap.ospar.org/en/ospar-assessments/quality-status-reports/qsr-2023/indicator-assessments/changes-plankton-biomass-abundance/) were included in the Quality Status Report 2023 (QSR 2023) for OSPAR Regions II, III, and IV, and FW2 was a pilot indicator for Regions II, III, and IV (https://oap.ospar.org/en/ospar-assessments/quality-status-reports/qsr-2023/indicator-assessments/primary-prod-pilot-assessment/). This data call will aim to extend the time-series for the indicators and to collate all available data on plankton abundance and chlorophyll biomass for all five OSPAR Regions.

It should be noted that FW2 will only be assessed in OSPAR Regions II, III, and IV. FW2 is a candidate indicator and pilot assessments were carried out as part of the OSPAR Intermediate Assessment 2017 (IA2017): https://oap.ospar.org/en/ospar-assessments/intermediate-assessment-2017/biodiversity-status/fish-and-food-webs/phytoplankton-production/ and QSR 2023 (https://oap.ospar.org/en/ospar-assessments/quality-status-reports/qsr-2023/indicator-assessments/primary-prod-pilot-assessment/). Phytoplankton productivity data is included in this data call with the caveat that a new assessment is being developed, with the intention to promote FW2 to a common indicator for IA 2029 at BDC 2026.

The data will follow an updated data flow:



Data Access

The data will be stored in ICES DOME, ICES Oceanography, The Archive for Marine Species and Habitats Data (DASSH) and made available via the OSPAR Data and Information System (ODIMS) and an OSPAR version of the Plankton Lifeform Extraction Tool (PLET) in support of delivery of the IA 2029.

Data submitted to ICES for inclusion in OSPAR assessments are licenced in accordance with the ICES Data Policy (https://www.ices.dk/data/guidelines-and-policy/Pages/ICES-data-policy.aspx) and according to CC BY 4.0. By submitting data for this assessment, data providers are agreeing with the licencing terms.

Datasets available from ICES are acknowledged based on the Reporting organisation (RLABO) information in DOME (see Annex 1) and the Data Originator information in ICES Oceanography. It is possible to store an existing or to assign a new DOI to your dataset. Contact accessions@ices.dk for more information.

OSPAR is committed to making as much information as possible publicly available, consistent with achieving other similarly important goals of public policy. The framework for this is set out in Article 9 of the OSPAR Convention and Annex 3 of the OSPAR Rules of Procedure (2013-2): https://odims.ospar.org/en/data_policy/

Contracting Parties should contact Chris Moulton (Chris.Moulton@ospar.org) if they have any queries regarding data licencing.

Annex 1 – Plankton Abundance Reporting Format

This table is provided for information, allowing Contracting Parties to more easily see the mapping between a previously used 'OSPAR Field' and the corresponding 'ICES Field'. Data are to be reported to ICES via ICES DOME using either the Simplified Format for Plankton Communities Data (recommended for the new data submitters) or the ERF3.2 format.

	OSPAR Field	ICES Field	Data type	Description	Mandatory/Optional
ID	Reporting Laboratory	RLABO	Text	Reporting laboratory Select from: https://vocab.ices.dk/?ref=101 and https://datsu.ices.dk/web/rlabo_ls.aspx	Mandatory
	Contracting Party	CNTRY	Text	Taken from 'CNTRY' under 'RLABO'	Mandatory
	Monitoring Year	MYEAR	YYYY	Taken from 'SDATE' if blank	Optional
	Ship or platform code	SHIPC	Text	SeaDataNet Ship and Platform Codes Select from: https://vocab.ices.dk/?ref=315, AA-codes can be used for uspecified platforms	Mandatory
	Cruise identifier (series of sampling occasions)	CRUIS	Text	Make it up if you don't go on cruises - one name to be used for a year is fine. Example, use year or season if cruise number is not used.	Mandatory
	Station identification /Sampling event ID	STNNO	Text	Use sequential numbering or station name if unique for file. Repetitive sampling at the same station (different date/ time/ or position) would require a unique STNNO.	Mandatory
Station	Latitude	LATIT	Number	Latitude (degrees/minutes/decimal minutes or as decimal degrees). Report as WGS84.	Mandatory
	Longitude	LONGI	Number	Longitude (degrees/minutes/decimal minutes or as decimal degrees). Report as WGS84.	Mandatory
	Station Name	STATN	Text	Monitoring stations: a specific geographic location that is visited at set intervals for monitoring purposes. Information: https://www.ices.dk/data/tools/Pages/Station-dictionary.aspx OSPAR Map: https://gis.ices.dk/sf/index.html?widget=station&program=OSPAR	Mandatory
When	Sampling Date	SDATE	Date	Date of sample, YYYYMMDD	Mandatory
	Time	STIME	Time	Time of sample, HHMM [24 hrs UTC]	Optional (recommended)

	OSPAR Field	ICES Field	Data type	Description	Mandatory/Optional
Sample	Data Type	DTYPE		Select from: https://vocab.ices.dk/?ref=27 'PP' - (Phytoplankton community data) 'ZP' - (Zooplankton community data)	Mandatory
	Sample number	SMPNO	Text	Sample number / Sample identification for haul or group of individuals/cores/bottles collected at that time/place	Mandatory
	Depth (min)	MNDEP	Number	Minimum depth of sample in metres	Mandatory
	Depth (max)	MXDEP	Number	Maximum depth of sample in metres	Mandatory
	Total sampled volume	SMVOL	Number	Total sampled volume (litre for PP; cubic meter for ZP)	Optional (recommended)
	aphiaID	SPECI	Number	Aphia ID for taxon at the appropriate level. It is not necessary for all taxa submitted to be of the same taxonomic resolution, but the higher the resolution, the better. Aphia IDs can be found at http://www.marinespecies.org/aphia.php?p=match and Plankton lifeform traits master list: https://doi.mba.ac.uk/data/3260/1	Mandatory
	Species codelist	RLIST	Text	Reference code list used for species ID Select From: https://vocab.ices.dk/?ref=44 Default = 'ERID' - European Register of Marine Species (ERMS/WoRMS) Aphia ID	Mandatory
	Size Class	SIZCL	Number	If your taxa has a size component, include this field (linked to SIZRF)	Optional
	Size Class Ref. List	SIZRF	Text	Select corresponding size class reference list for the reported size class (SIZGL). Select from: https://vocab.ices.dk/?codetypeguid=0b6e0872-3c1f-48b2-863d-116bd2195124	Optional / Mandatory where SIZCL reported
	Developmental stage	STAGE	Text	Stage of zooplankton developmental (e.g., copepodite stages). Select from: https://vocab.ices.dk/?ref=52	Optional
	Species flag	SFLAG	Text	Indicator of whether one or more species are reported under the given taxon (e.g., if identification down to species level was not possible). Select from: https://vocab.ices.dk/?ref=46	Optional
Measurement	Plankton Parameter Type	PARAM	Text	From Pargroup > B-COM Select from the list of PARAMs linked to https://vocab.ices.dk/?codeguid=f16fd77c-75cc-4915-be63-f5eebe418537	Mandatory

	OSPAR Field	ICES Field	Data type	Description	Mandatory/Optional
	Units	MUNIT	Text	Select appropriate code from: https://vocab.ices.dk/?ref=155, units adjusted per volume	Mandatory
	Plankton Parameter Value	VALUE	Number	Value of the measured plankton parameter, corresponding to the PARAM and MUNIT fields.	Mandatory
Monitoring	Purpose of Monitoring	PURPM	Text	Purpose of Monitoring. S - Spatial (geographical) distribution monitoring, or T - Temporal trend monitoring are recommended Select from: https://vocab.ices.dk/?ref=42	Mandatory
	Monitoring Programme	MPROG	Text	Monitoring Programme. Multiple programmes can be reported with ~ as a delimiter. For joint OSPAR and national reporting, CEMP~NATL is recommended. Select from: https://vocab.ices.dk/?ref=147	Mandatory

Annex 2 – Chlorophyll Biomass and Nutrients Reporting Format

This table is provided for information, allowing Contracting Parties to more easily see the mapping between a previously used 'OSPAR Field' and the corresponding 'ICES Field'. Data are to be reported to ICES via ICES Oceanography.

OSPAR Field	ICES Field	Data type	Description	Mandatory/Optional
Cruise identifier (series of sampling occasions)	Cruise	Text	Cruise label to identify the given cruise	Mandatory
Station identification /Sampling event ID	Station	Text	Station label to identity the given station	Mandatory
	Type***	Text	Type label to identify the given sample type	Mandatory
Sampling date and time	yyyy-mm-ddThh:mm:ss.sss****	Text	ISO 8601 Date and time of the given station (year, month, day, hour, minute and seconds) in UTC	Mandatory
Longitude	Longitude [degrees_east]	Number	Longitude in decimal degrees in WGS84	Mandatory
Latitude	Latitude [degrees_north]	Number	Latitude in decimal degrees in WGS84	Mandatory

OSPAR Field	ICES Field	Data type	Description	Mandatory/Optional
	Bot. Depth [m]	Number	Bottom Depth in metres	Optional
Ship or platform code	Platform Code	Text	ICES Platform Code Select from: https://vocab.ices.dk/?ref=315	Mandatory
Sampling device or instrument	Device Category Code	Text	SDN Device Category Code Select from: https://vocab.ices.dk/?ref=1686	Mandatory
Data distributor	Distributor Code	Text	EDMO Organisation Code of Data Distributor Select from: https://vocab.ices.dk/?ref=1398	Mandatory
Data custodian	Custodian Code	Text	EDMO Organisation Code of Data Custodian Select from: https://vocab.ices.dk/?ref=1398	Mandatory
Data originator	Originator Code	Text	EDMO Organisation Code of Data Originator Select from: https://vocab.ices.dk/?ref=1398	Optional
Project or dataset name	Project Code	Text	EDMERP Project Codes Select from: https://vocab.ices.dk/?ref=1402	Optional
Quality control flag for a measured variable	QV:Scheme:Variable [Units]	Text	Quality Flag of the given Quality Flag Scheme and variable. Any Quality flag scheme can be used. Examples of quality flag schemes can be found at: https://odv.awi.de/fileadmin/user_upload/odv/misc/ODV_QualityFlagSets.pdf	Optional
Sample depth	Pressure [dbar] or Depth [m]	Number	Pressure [dbar] or Depth [m] of the given sample	Mandatory
Chlorophyll	Chlorophyll a [ug/l]	Number	Chlorophyll biomass in micrograms per litre	Mandatory
Temperature	Temperature [degC]	Number	Temperature in degree Celsius of the given sample	Optional
Salinity	Practical Salinity [dmnless]	Number	Practical Salinity of the given sample	Optional
Dissolved oxygen	Dissolved Oxygen [ml/l]	Number	Dissolved Oxygen in ml/l of the given sample	Optional
Phosphate	Phosphate Phosphorus (PO4-P) [umol/l]	Number	Phosphate concentration in umol/l	Optional

OSPAR Field	ICES Field	Data type	Description	Mandatory/Optional
Total phosphorus	Total Phosphorus (P) [umol/l]	Number	Total phosphorus concentration in umol/l	Optional
Silicate	Silicate Silicon (SiO4-Si) [umol/l]	Number	Silicate concentration in umol/l	Optional
Nitrate	Nitrate Nitrogen (NO3-N) [umol/l]	Number	Nitrate concentration in umol/l	Optional
Nitrite	Nitrite Nitrogen (NO2-N) [umol/l]	Number	Nitrite concentration in umol/l	Optional
Ammonium	Ammonium Nitrogen (NH4-N) [umol/l]	Number	Ammonium concentration in umol/l	Optional
Total nitrogen	Total Nitrogen (N) [umol/l]	Number	Total nitrogen concentration in umol/l	Optional

Annex 3 – Primary Productivity Format

OSPAR reporting format, to be submitted via the OSPAR Data Submission Site.

Field	Data type	Description	Mandatory/Optional
Contracting Party	Text	The Contracting Party this data is associated with, using ISO two letter country code, e.g. DE	Mandatory
Data Access	Text	Select from Public or Restricted. If Restricted, please supply reference material underpinning reasoning (report in "Comment" field) noting The OSPAR Convention Text, Article 9. Access to Information. Default data access will be Public. e.g. Public, Restricted	Optional
Dataset Name	Text	Identifier for your dataset, preferably including your institute name. e.g. PML_L4_Phyto, MBA_CPR Zoo, SAMS_Phyto	Mandatory

Field	Data type	Description	Mandatory/Optional
Phytoplankton Primary productivity and photosythetic parameters Type/Units	Text	The type of phytoplankton primary productivity data you are submitting (measured PP or photosynthetic parameters and/or computed PP from photosynthetic parameters or models at ecosystem level). Please include measured variable (and for VF the ETR algorithm computation used), incubation technique (time and light source), data correction method, FLC fit model, FLC quality parameter, units if appropriate. e.g. In situ Primary production measurements (Carbon absorption, oxygen flux); or photosynthetic parameters (Fv/Fm, r.alpha, alphaII, P^B_{max}, r.ETR_{max}, $ETRII_{max}$, r.Ek, etc. see below) from C incubations or from variable fluorescence (VF, Fast Repetition Rate fluorescence, PAM, PhytoPAM tech.), 15 mn under artificial white or blue light , VF background correction (with filtered sea water on GF/F), Eilers and Peters (1988) model, R^2 fit control; or PP from ecosystem models	Mandatory
Date	Date	Date of sample, e.g. 15/03/2016	Mandatory
Time	Time	Time of sample, hh:mm [24 hrs GMT], e.g. 14:31	Mandatory
Latitude	Number	Latitude of sample, in decimal degrees, calculated using WGS84, e.g. 50.20	Mandatory
Longitude	Number	Longitude of sample, in decimal degrees, calculated using WGS84, e.g. -5.01	Mandatory
Depth (min)	Number	Minimum depth of sample in metres, e.g. 7.2	Mandatory
Depth (max)	Number	Maximum depth of sample in metres, e.g. 9.3	Mandatory
Primary Productivity	Number	Surface or vertically integrated PP rates on daily, monthly or annual time scale (in units and from technique previously described) e.g. 600 µg $C.m^{-2}.h^{-1}$	Mandatory
Maximum Yield Fv/Fm	Number	Quantum efficiency of PSII under dark conditions e.g. Fv/Fm = 0.56 (dimensionless, 10' dark acclimation)	Optional
r.alpha, alphaII or $alpha_{RCII}$	Number	Initial slope of photosynthesis light curve (from C, O_2 or VF technique) in relative or absolute units (specify the absorption variable studied and units) e.g. $alpha_{RCII}$ = 2.5 mol electrons.mol $RCII^{-1}.s^{-1}$ (using RCII number, a*Phy, aLHII absorption or SigmaPSII)	Optional
P^B_{max} or r.ETR_{max}, $ETRII_{max}$ or $ETR_{RCIImax}$	Number	Photosynthetic capacity/carbon assimilation number (C or O_2 technique) or maximum photosynthetic electron transport rate in relative or absolute units (VF with the same units and technique as alphaII) e.g. P^B_{max} = 5.5 mgC.$(mgChla)^{-1}.h^{-1}$ or $ETR_{RCIImax}$ = 350 mol electrons.mol $RCII^{-1}.s^{-1}$	Optional

Field	Data type	Description	Mandatory/Optional
r.Ek, EkII, or Ek_{RCII}	Number	Saturation irradiance parameter in relative or absolute units as previous parameters e.g. Ek_{RCII} = 270 µmol photons.m^{-2}.s^{-1}	Optional
Other parameters	Number	Like Φe,C (electron/carbon conversion factors) and photobiological parameters: NPQ (Non Photochemical Quenching), a^*_{phy} (specific absorption coefficient of phytoplankton), a_{LHII} (absorption coefficient of PSII light harvesting), SigmaPSII (functional absorption cross section of PSII), RCII concentration (Reaction Center II concentration or number) etc e.g. $\Phi_{e,C}$ = 18.9 $mole^{-}$.mol C^{-1}	Optional