



Third State of the Baltic Sea report (HOLAS III) - Data call

With reference to HELCOM HOD 59-2020 decision 6.16, for the preparation of the Third State of the Baltic Sea report (HOLAS III), **data collection for the assessment period of 2016-2021 is carried out from 2021 until end of May 2022.**

HELCOM HOLAS III Data call covers all current regular monitoring data reporting as well as supplemental data that is required for State of the Baltic Sea report.

The data call is grouped in to two categories:

1. **“Speeded schedule data call”** to facilitate early reporting of monitoring data for the assessment period 2016-2021 and to contain all required parameters for indicator-based assessments.
2. **“Ad hoc data call”** to complement regular data collection, for indicators without existing data flows and to feed into spatial and pressure and impact assessment. Ad hoc data call is subdivided to following strands:
 - 2a. Data for indicators
 - 2b. Data on human activities for cumulative impact assessment / spatial and pressure impact assessment
 - 2c. Data on ecosystem components for cumulative impact assessment / spatial and pressure impact assessment

The data call aims to outline all required information for Contracting Parties to carry out requested data reporting. In case of any questions regarding the data call scope and content, those can be sent to data@helcom.fi.

1. Speeded schedule data call

Speeded schedule data call requests Contracting Parties to report 2021 monitoring data using established HELCOM data formats and reporting routes to the established data host, but earlier than official reporting deadlines outlined in the monitoring manual / guideline.

According to HOLAS III timeline, **the monitoring data for 2021 should be reported by end of May 2022**. Monitoring data for 2016-2020 should be reported using the established data reporting deadlines. The Speeded schedule data call would be targeted to following indicator data flows (Table 1):

Additional substances are requested to be reported under hazardous substances data reporting. These are specified below.

Table 1. Indicators and data flows for speeded schedule data call. NOTE that for hazardous substances theme, data call request also additional substances to be reported, if available from monitoring data.

Theme	Indicator / Data theme	Data Flow (Data host)
Bio	Abundance of coastal fish key functional groups	FISH PRO (HELCOM)
Bio	Abundance of key coastal fish species	FISH PRO (HELCOM)
Bio	Seasonal succession of dominating phytoplankton groups	COMBINE (ICES)
Bio	Zooplankton mean size and total stock (MSTS)	COMBINE (ICES)
Bio	State of the soft-bottom macrofauna community	COMBINE (ICES)
Eutro	Chlorophyll-a	COMBINE (ICES) (in-situ data)
Eutro	Nitrogen/DIN	COMBINE (ICES)
Eutro	Oxygen debt	COMBINE (ICES)
Eutro	Phosphorus/DIP	COMBINE (ICES)
Eutro	Total nitrogen (TN)	COMBINE (ICES)
Eutro	Total phosphorus (TP)	COMBINE (ICES)
Eutro	Water clarity	COMBINE (ICES)
Eutro	Cyanobacterial bloom index	COMBINE (ICES) (in-situ data)
Eutro	Shallow water oxygen	COMBINE (ICES)
Haz.sub	Hexabromocyclododecane (HBCDD)	COMBINE (ICES)
Haz.sub	Metals (lead, cadmium and mercury)	COMBINE (ICES)
Haz.sub	Perfluorooctane sulphonate (PFOS)	COMBINE (ICES)
Haz.sub	Polyaromatic hydrocarbons (PAH) and their metabolites	COMBINE (ICES)
Haz.sub	Polybrominated diphenyl ethers (PBDE)	COMBINE (ICES)
Haz.sub	Polychlorinated biphenyls (PCB) and dioxins and furans	COMBINE (ICES)
Haz.sub	Radioactive substances: Cesium-137 in fish and surface seawater	MORS EG (HELCOM)
Haz.sub	Biological effects ^{1,3}	COMBINE (ICES)
Haz.sub	Reproductive disorders: malformed embryos of amphipods ^{1,3}	COMBINE (ICES)
Haz.sub	Copper ¹²	COMBINE (ICES)
Human activity	Depositing of dredged material at sea	EN DREDS / Recommendation 36-2 (HELCOM)
Human activity	Impulsive noise	Impulsive noise registry (ICES)
Human activity	Ambient underwater noise	Underwater noise database (ICES)

¹) development of indicators to be included the regular hazardous substances reporting to ICES/DOME using Environmental Reporting Format ERF 3.2

²) Relevant information: sediment will be applied as the primary matrix, biota and water will also be included if possible, required supporting parameters include CORG (sediments), depth (water and sediment), grain size (sediment) and TOC (water), reporting of WFD coastal data encouraged if available, focus on 2016-2021 period but longer time series predating 2016 are valuable.

³) COMBINE has the following possible reporting areas related to biological effects: Biological effects: endocrine (B-END), Gross diseases and parasites (B-GRS), Histopathology (B-HST), Biological effects: molecular/biochemical/cellular/assays (B-MBA), Reproductive Success (B-RPS), Biological effects: toxicity tests (B-TOX), Organo-metallic compounds (O-MET), and Pharmaceuticals (OP-GN). Other parameters outside of this such as bioassay data or mammal health (excluding nutritional status and reproductive status or sea eagle data covered by existing data call) should be reported in free format (e.g. excel) form. Data for 2011-2021 (or longer data series where available), with a focus on the 2016-2021 period is welcomed.

2. Ad hoc data call

Ad hoc data call is targeted to those data types which feed indicators planned to be utilized in HOLAS III assessment and/or prioritized spatial pressure impact assessment map layers which are not based on established regular data flows and cannot be acquired from other data sources.

Ad hoc data call is subdivided to following strands:

- 2a. Data for indicators
- 2b. Data on human activities for spatial pressure impact assessment
- 2c. Data on ecosystem components for spatial pressure impact assessment

2a. Indicators

For the following indicators, regular data collection is not in place under HELCOM (Table 2). Data specification, including format and metadata template, for each indicator is included in Annex I. In case of external data flows, reference to reporting mechanism is included and specified in Annex I.

REQUESTED DATA:

Table 2. indicator and data requested to reported according to specification outlined in Annex I.

Theme	Indicator(s)	Data to be reported / Existing data flow
Biodiversity	Abundance of waterbirds in the breeding season, Abundance of waterbirds in the wintering season	Bird observations (coastal breeding and wintering counts, offshore surveys)
Biodiversity	Distribution of Baltic seals, Population trends and abundance of seals	Seal observations (counts)
Biodiversity	Nutritional status of seals, Reproductive status of seals	Seal observations with extended list of attributes
Human activity	Cumulative impact on benthic biotopes	Outlined in section 2b of the data call (Human activity datasets).
Human activity	Number of drowned mammals and waterbirds	Recreational fisheries
Haz. substances	Diclofenac	Diclofenac in 1) WWTPs, 2) rivers and sediments, 3) coastal waters and sediments 4) marine waters and sediments, and 5) biota.
Human activity	Trends in arrival of new non-indigenous species	1) Open sea biological community monitoring data: As in Part 1: Speeded schedule data call: COMBINE (ICES) 2) HELCOM/OSPAR JHP Port survey data 3) Other observations: External data flow: ICES WGITMO / BOSV → AquaNIS
Human activity	Beach litter	Beach litter monitoring data is requested to be reported to EMODnet Chemistry

DATA REPORTING

The requested data specified in Annex I for each indicator, should be reported by end of May 2022 using the provided template(s) to data@helcom.fi, when applicable. Reporting of already available data, e.g. prior 2021, is encouraged to be reported well in advance of 31 May 2022, preferably already during 2021.

If requested dataset with requested attribute information can be accessed from a public web service (e.g. download service, WFS), please provide URL of the service accompanied with relevant supporting information to data@helcom.fi.

Submitted data will be checked for consistency and correct use of specified codelists and data types by HELCOM secretariat. This quality control procedure is carried out to make sure that data is reported according to defined data needs and is suitable for assessment purposes. Possible quality control issues will be flagged and communicated with the data provider.

DATA USE POLICY

The requested national data will be compiled to a Baltic wide HELCOM dataset.

According to [HELCOM data and information strategy](#), all data collected for HELCOM assessment purposes should be openly accessible. The underlying unrestricted data will be made publicly available as a HELCOM dataset using [HELCOM Map and Data service](#) and/or [HELCOM Biodiversity database](#). For transparency and replicability of the assessment, the underlying data should be openly available and documented with proper metadata on lineage and sources. Each compiled dataset will contain a metadata sheet containing lineage information on national data providers.

In case reuse and redistribution of submitted data has to be restricted according to conditions applied by the data provider, the restrictions should be flagged by the national data provider in both metadata and attribute of spatial object which it applies to.

2b. Data on human activities for cumulative impact assessment / spatial and pressure impact assessment

For the following human activities, regular data collection is not in place under HELCOM (Table 3). Therefore, data on these human activities is requested to be reported by all Contracting Parties of HELCOM. The dataset specifications, including format and metadata templates are included in Annex II.

The temporal coverage for this request is dataset specific, refer to Annex II for further information.

Not all human activities are relevant within all HELCOM Contracting Parties. **Therefore, data availability and relevance table is requested to be filled in by each Contracting party and submitted to data@helcom.fi by end of 2021.** Template for reporting human activity data availability and relevance is available from this [link](#).

In case human activity is relevant and data is available, it is requested to be reported according to specifications outlined in Annex II.

REQUESTED DATA:

Table3. Datasets requested to be reported according to specification outlined in Annex II

Dataset
Game hunting of seabirds
Predator control of seabirds
Hunting of seals
Land claim
Watercourse modification
Coastal defence and flood protection
Dredging
Extraction of sand and gravel
Pipelines
Wind turbines
Cables
Oil Platform

DATA REPORTING

The requested data should be reported by end of May 2022 using the provided template to data@helcom.fi. Reporting of already available data, e.g. prior 2021, is encouraged to be reported well in advance of 31 May 2022, preferably already during 2021.

If requested dataset with requested attribute information can be accessed from a public web service (e.g. download service, WFS), please provide URL of the service accompanied with relevant supporting information to data@helcom.fi.

Submitted data will be checked for consistency and correct use of codelists and data types by HELCOM secretariat. This quality control procedure is carried out to make sure that data is reported according to defined data needs and is suitable for assessment purposes. Possible quality control issues will be flagged and communicated with the data provider.

DATA USE POLICY

The requested national data will be compiled to a Baltic wide HELCOM dataset.

According to [HELCOM data and information strategy](#), all data collected for HELCOM assessment purposes should be openly accessible. The underlying unrestricted spatial datasets submitted by national data providers will be made publicly available as a HELCOM dataset using [HELCOM Map and Data service](#). For transparency and replicability of the assessment, the underlying data should be openly available and documented with proper metadata on lineage and sources.

Each compiled dataset will contain a metadata sheet containing lineage information on national data providers.

In case reuse and redistribution of national data has to be restricted according to conditions applied by the data provider, the restrictions should be flagged by the national data provider in both metadata and attribute of spatial object which it applies to.

2c. Data on ecosystem components for cumulative impact assessment / spatial and pressure impact assessment

For the following ecosystem components, regular data collection is not in place under HELCOM (Table 4). Previous data call on benthic species was issued for the Checklist project during 2019 for observation data until 2018. Therefore, observation data on these ecosystem components is requested to be reported by all Contracting Parties of HELCOM.

The dataset specifications, including format and metadata templates are included in Annex III.

The temporal coverage for this request is dataset specific, refer to Annex III for further information.

Not all ecosystem components / species occur in national water of each HELCOM Contracting Parties. **Therefore, data availability and relevance table is requested to be filled in by each Contracting party and submitted to data@helcom.fi by end of 2021.** Template for reporting ecosystem component data availability and relevance is available from this [link](#).

In case ecosystem component occurs in marine waters and observation data is available, it is requested to be reported according to specifications outlined in Annex III.

Table 4. List of ecosystem components requested to be reported according to specification outlined in Annex III.

REQUESTED DATA:	
Table 4. Datasets requested to be reported according to specification outlined in Annex II	
Theme	Datasets
Ecosystem components – Benthic species	Charophyte distribution Fucus distribution Furcellaria lumbricalis distribution Zostera marina distribution Mytilus distribution Potamogeton distribution Myriophyllum distribution Najas marina distribution Fontinalis distribution Callitriche distribution Zanichellia distribution
Ecosystem components – Natura habitats	Sandbanks Estuaries Mudflats and sandflats Coastal lagoons Large shallow inlets and bays Reefs Baltic Esker islands Submarine structures made by leaking gas Boreal Baltic islets and small islands

DATA REPORTING

The requested data should be reported by end of May 2022 using the provided template to data@helcom.fi.

If requested dataset with requested attribute information can be accessed from a public web service (e.g. download service, WFS), please provide URL of the service accompanied with relevant supporting information to data@helcom.fi.

Submitted data will be checked for consistency and correct use of codelists and data types by HELCOM secretariat. This quality control procedure is carried out to make sure that data is reported according to defined data needs and is suitable for assessment purposes. Possible quality control issues will be flagged and communicated with the data provider.

DATA USE POLICY

The requested national data will be compiled to a Baltic wide HELCOM dataset.

According to [HELCOM data and information strategy](#), all data collected for HELCOM assessment purposes should be openly accessible. The underlying unrestricted spatial datasets submitted by national data providers will be made publicly available as a HELCOM dataset using [HELCOM Map and Data service](#). For transparency and replicability of the assessment, the underlying data should be openly available and documented with proper metadata on lineage and sources.

Each compiled dataset will contain a metadata sheet containing lineage information on national data providers.

In case reuse and redistribution of national data has to be restricted according to conditions applied by the data provider, the restrictions should be flagged by the national data provider in both metadata and attribute of spatial object which it applies to.

Annex I. 2a. Indicator data specifications

INDICATOR:

Abundance of waterbirds in the breeding season
Abundance of waterbirds in the wintering season

REQUESTED DATASET:

Bird observations (coastal and offshore)

SCOPE AND SPECIFICATIONS:

The temporal coverage of the activity should last from 1.1.1991 until 31.08.2021.

The dataset should contain the following information:

Coastal survey – wintering period:

- Abundance: individuals of selected species

Coastal survey – breeding period:

- Abundance: breeding pairs or individuals (+ conversion factors) of selected species

Offshore survey:

- Results from offshore surveys provided using offshore template (based on ESAS format).

Guidance document for data preparation for bird indicators ([link](#)).

The reporting template (excel) can be accessed from these links:

Coastal observations ([link](#))

Offshore observations ([link](#))

INDICATOR:

Distribution of Baltic seals
Population trends and abundance of seals

REQUESTED DATASET:

Seal observations (counts) are requested to be reported. The count data are requested to be reported on two spatial scales: Haulout units (required) and by Assessment unit (AU).

SCOPE AND SPECIFICATIONS:

Temporal scope:

The temporal coverage of the monitoring data should last from beginning of surveys until 31.12.2021. If historical data has been provided to the HELCOM core indicator calculation in the previous update cycle during 2018, only update of latest years (2016-2021) is requested.

Spatial scope:

The count data are requested on two spatial scales:

- Observations / haulout units
- Assessment unit (AU)

The seal count data should be provided using the excel template provided with the data call. The template is divided to following sheets:

- Instructions – definitions of attributes requested and codelists
- AU_totals:

- observations_template: Count observations per specific areas (point, grid cell or haulout area)

The reporting template (Excel) can be accessed from [this link](#).

The reporting template (shapefile) for reporting geometries of haulout sites (if relevant) can be accessed from this [link](#). Note that unit_id of haulout site should correspond to unit_id reported for counts using excel template.

INDICATOR:

Nutritional status of seals
Reproductive status of seals

REQUESTED DATASET:

Seal specimen analysed for nutritional and/or reproductive status parameters.

SCOPE AND SPECIFICATIONS:

The temporal coverage of the monitoring data should last from beginning of monitoring until 31.12.2021.

The reporting template can be accessed from [this link](#).

INDICATOR:

Cumulative impact on benthic biotopes

REQUESTED DATASETS:

Requested datasets are described in Annex II, human activity data specifications.

INDICATOR:

Number of drowned mammals and waterbirds

REQUESTED DATASET:

Data request has been prepared with HELCOM indicator leads and referring to HELCOM Roadmap on fisheries data ([HELCOM 41-2020 Outcome, Annex 7](#)). Required data on VMS/Logbook, AIS and bycatch rates (ICES RDB database) are obtained from other sources than this data call. The requested ad hoc data contains following datasets:

- Recreational fisheries

SCOPE AND SPECIFICATIONS:

Requested datasets should be provided by Contracting Parties of HELCOM according to available national formats (free format) containing following information:

Recreational fisheries:

- Recreational fisheries information on effort with static nets where available (e.g. studies / questionnaires).
- Data can be provided as free format.

INDICATOR:

Diclofenac

REQUESTED DATASET:

Newest and most accurate data available, concurrent with the process to prepare indicator update for the Third State of the Baltic Sea report.

Countries are invited to supply relevant data in the format provided within the data call reporting template. The data call is divided into five major sections: WWTPs, rivers (waters and sediments), coastal areas (waters and sediments), marine areas (waters and sediments), and biota.

SCOPE AND SPECIFICATIONS:

The temporal coverage of the data should last from 2016 until 31.12.2021.

Diclofenac concentrations in 1) WWTPs, 2) rivers and sediments, 3) coastal waters and sediments 4) marine waters and sediments, and 5) biota.

The reporting template can be accessed from [this link](#).

INDICATOR:

Trends in arrival of new non-indigenous species

REQUESTED DATASET:

Data is requested to be reported to following data flows:

- 1) Open sea biological community monitoring data: As in Part 1: Speeded schedule data call: COMBINE (ICES)
- 2) Other observations: External data flow: ICES WGITMO / BOSV → AquaNIS
- 3) HELCOM/OSPAR JHP Port survey data

SCOPE AND SPECIFICATIONS:

Temporal scope: NIS observations during 2016-2021

1. Open sea biological community monitoring data: As in Part Speeded schedule data call: COMBINE (ICES) should be reported according to regular practice on reporting biological community data (phytoplankton, zooplankton, zoobenthos).
2. HELCOM/OSPAR JHP Port survey data is requested to be reported following established procedure to according to [JHP port survey data report template](#). The template can be submitted to data@helcom.fi.
3. Other observations stemming from other sources than monitoring: Contracting Parties are requested to report according to established data flow under ICES WGITMO / BOSV groups where data would be collected to AquaNIS database to be used for indicator assessment.

INDICATOR:

Beach litter

REQUESTED DATASET:

Data stemming from national beach litter monitoring is requested to be reported to EMODnet Chemistry.

SCOPE AND SPECIFICATIONS:

Temporal scope: Monitoring data for assessment period 2016-2021.

Beach litter data is requested to be submitted to EMODnet Chemistry (info@emodnet-chemistry.eu) according to [EMODnet Guidelines and forms for gathering marine litter data](#) applying the beach litter categories and types specified in the guideline.

Conversion to updated litter categories will be carried out in assessment data preparation phase (HELCOM BLUES project).

Annex II. 2b. Human activity data specifications

REQUESTED DATASET: GAME HUNTING OF SEABIRDS

Derived from the [MSFD theme](#) “extraction of living resources” and related to the biological pressure “[extraction of, or mortality/injury to wild species](#)” by S&C 13B-2020 - Outcome Att.2 Status of data flows - BSII Human Activities-Pressures.

SCOPE AND SPECIFICATIONS:

GEOMETRY

The recommended geometry type for this dataset is [polygon](#).

TEMPORAL SCOPE

The temporal coverage of the activity should last from [2016 until 2021](#).

METADATA

The dataset should be accompanied with the fulfilled metadata sheet. Please fill in all the metadata description fields (template below).

ATTRIBUTES

The game hunting of seabirds should focus on purely marine species such as **eider, long tailed duck, common scoter, velvet scoter**. In addition to the **spatial extent** indicated by features in the shapefile, the dataset should have information on variables listed below included:

Attribute name	Attribute ALIAS	Description and unit	Value type	Mandatory attribute
Area	Name of the area	Name of the EG administrative unit or other area in which the activity is taking place	Text	YES
Des_Area	Description of the area	EG administrative unit or other area type	Text	NO
Eid_2016 (...) Eid_2021	Amount of hunted Eider	Number of individuals per year (2016 – 2021) for eider	Number	YES
LTD_2016 (...) LTD_2021	Amount of hunted Long Tailed Duck	number of individuals per year (2016 – 2021) for long tailed duck	Number	YES
Sco_2016 (...) Sco_2021	Amount of hunted Common Scooter	Number of individuals per year (2016 – 2021) for common scooter	Number	YES
VSc_2016 (...) VSc_2021	Amount of hunted Velvet Scooter	Number of individuals per year (2016 – 2021) for velvet scooter	Number	YES

TEMPLATES

The metadata template can be accessed in this [link](#).

The shapefile template zip file can be accessed in this [link](#).

REQUESTED DATASET: PREDATOR CONTROL OF SEABIRDS

Derived from the [MSFD theme](#) “extraction of living resources” and related to the biological pressure “[extraction of, or mortality/injury to wild species](#)” by S&C 13B-2020 - Outcome Att.2 Status of data flows - BSII Human Activities-Pressures.

SCOPE AND SPECIFICATIONS:

GEOMETRY

The recommended geometry type for this dataset is [polygon](#).

TEMPORAL SCOPE

The temporal coverage of the activity should last from [2016 until 2021](#).

METADATA

The dataset should be accompanied with the fulfilled metadata sheet. Please fill in all the metadata description fields (template below).

ATTRIBUTES

The predator control of seabirds should include **cormorant hunting**. In addition to the **spatial extent** indicated by features in the shapefile, the dataset should have information on variables listed below included:

Attribute name	Attribute ALIAS	Description and unit	Value type	Mandatory attribute
Area	Name of the area	Name of the EG administrative unit or other area in which the activity is taking place	Text	YES
Des_Area	Description of the area	EG administrative unit or other area type	Text	NO
Corm_2016 (...) Corm_2021	Amount of hunted birds	Number of hunted birds/unit area per year for each target species (cormorant)	Number	YES

TEMPLATES

The metadata template can be accessed in this [link](#).

The shapefile template zip file can be accessed in this [link](#).

REQUESTED DATASET: HUNTING OF SEALS

Derived from the [MSFD theme](#) “extraction of living resources” and related to the biological pressure “[Extraction of, or mortality/injury to wild species](#)” by S&C 13B-2020 - Outcome Att.2 Status of data flows - BSII Human Activities-Pressures.

SCOPE AND SPECIFICATIONS:

GEOMETRY

The recommended geometry type for this dataset is [polygon](#).

TEMPORAL SCOPE

The temporal coverage of the activity should last from [2016 until 2021](#).

METADATA

The dataset should be accompanied with the fulfilled metadata sheet. Please fill in all the metadata description fields (template below).

ATTRIBUTES

In addition to the **spatial extent** indicated by features in the shapefile, the dataset should have information on variables listed below included:

Attribute name	Attribute ALIAS	Description and unit	Value type	Mandatory attribute
Area	Name of the area	Name of the EG administrative unit or other area in which the activity is taking place	Text	YES
Des_Area	Description of the area	EG administrative unit or other area type	Text	NO
Grey_2016 (...) Grey_2021	Number of grey seals	Number of individuals per year (2016 – 2021) for grey seals	Number	YES
Harb_2016 (...) Harb_2021	Number of harbour seals	Number of individuals per year (2016 – 2021) for harbour seals	Number	YES
Ring_2016 (...) Ring_2021	Number of ringed seals	Number of individuals per year (2016 – 2021) for ringed seals	Number	YES

TEMPLATES

The metadata template can be accessed in this [link](#).

The shapefile template zip file can be accessed in this [link](#).

REQUESTED DATASET: LAND CLAIM

Derived from the [MSFD theme](#) “physical restructuring of rivers, coastline or seabed (water management)” and related to the physical pressure “[physical loss](#)” by S&C 13B-2020 - Outcome Att.2 Status of data flows - BSII Human Activities-Pressures.

SCOPE AND SPECIFICATIONS:**GEOMETRY**

The recommended geometry type for this dataset is [polygon](#).

TEMPORAL SCOPE

All available records should be included, especially if between 2016 to 2021.

METADATA

The dataset should be accompanied with the fulfilled metadata sheet. Please fill in all the metadata description fields (template below).

ATTRIBUTES

The land claim (or land reclamation) should include all permanent filling of sea areas e.g. for urban, industrial, leisure or agriculture purposes. In addition to the **spatial extent**, the dataset should have information on variables listed below included:

Attribute name	Attribute ALIAS	Description and unit	Value type	Mandatory attribute
Descrip	Description	Brief description of the type of land claim	Text	NO
Year	Construction year	Year of construction, especially if built between 2016-2021	Year (XXXX)	YES

Area	Area	Area in km ²	Number	Only if not polygon geometry
------	------	-------------------------	--------	------------------------------

TEMPLATES

The metadata template can be accessed in this [link](#).

The shapefile template zip file can be accessed in this [link](#).

REQUESTED DATASET: WATER COURSE MODIFICATIONS

Derived from the [MSFD theme](#) “physical restructuring of rivers, coastline or seabed (water management)” and related to the physical pressures “[physical loss](#)” and “[changes to hydrological conditions](#)” by S&C 13B-2020 - Outcome Att.2 Status of data flows - BSII Human Activities-Pressures.

SCOPE AND SPECIFICATIONS:

The dataset should contain information on the location of canalisation and water course modifications in the Baltic Sea area limited to the coastline (not to include inland waters). The presence of **canalisation, culverting or trenching and dam or weir** should be included.

GEOMETRY

The recommended geometry type for this dataset is point.

TEMPORAL SCOPE

All available records should be included, especially if between 2016 to 2021.

METADATA

The dataset should be accompanied with the fulfilled metadata sheet. Please fill in all the metadata description fields (template below).

ATTRIBUTES

In addition to the **spatial location**, the dataset should have information on variables listed below included:

Attribute name	Attribute ALIAS	Description and unit	Value type	List of possible values	Mandatory attribute
Modifi	Modification structure type	Name of the EG administrative unit or other area in which the activity is taking place	Value from the list	canalisation, culverting/trenching, causeway, damn/weir, other (please specify)	YES
Year	Construction year	Year of construction, especially if built between 2016-2021	Year (XXXX)		YES

TEMPLATES

The metadata template can be accessed in this [link](#).

The shapefile template zip file can be accessed in this [link](#).

REQUESTED DATASET: COASTAL DEFENCE AND FLOOD PROTECTION

Derived from the [MSFD theme](#) “physical restructuring of rivers, coastline or seabed (water management)” and related to the physical pressure “[physical disturbance](#)” by S&C 13B-2020 - Outcome Att.2 Status of data flows - BSII Human Activities-Pressures.

SCOPE AND SPECIFICATIONS:

The dataset should contain information on the location of man-made coastal defences and flood protection in the Baltic Sea area. The presence of **sea walls, breakwaters, groynes and flood protection** built on the strand or offshore as well as flood protection structures should be included.

GEOMETRY

The recommended geometry type for this dataset is polygon.

TEMPORAL SCOPE

All available records should be included, especially if between 2016 to 2021.

METADATA

The dataset should be accompanied with the fulfilled metadata sheet. Please fill in all the metadata description fields (template below).

ATTRIBUTES

In addition to the **spatial extent**, the dataset should have information on variables listed below included:

Attribute name	Attribute ALIAS	Description and unit	Value type	List of possible values	Mandatory attribute
Type	Modification structure type	Type of structure	Value from the list	sea walls, breakwaters, groynes, flood protection, gabions, stone protection, dike, other (please specify)	YES
Year	Construction year	Year of construction, especially if built between 2016-2021	Year (XXXX)		YES
Status	Status	Status of the structure	Value from the list	operational, under construction, application submitted, planned, approved, other (please specify)	YES
Dimension	Spatial dimensions	Spatial dimensions of the structure in m ²	Number		Only if not polygon geometry

TEMPLATES

The metadata template can be accessed in this [link](#).

The shapefile template zip file can be accessed in this [link](#).

REQUESTED DATASET: DREDGING

Derived from the [MSFD theme](#) “physical restructuring of rivers, coastline or seabed (water management)” and related to the physical pressures “[physical loss](#)” for capital and “[physical](#)

[disturbance](#)" for maintenance by S&C 13B-2020 - Outcome Att.2 Status of data flows - BSII Human Activities-Pressures.

SCOPE AND SPECIFICATIONS:

GEOMETRY

The recommended geometry type for this dataset is [polygon](#).

TEMPORAL SCOPE

Records dated between [2016 to 2021](#).

METADATA

The dataset should be accompanied with the fulfilled metadata sheet. Please fill in all the metadata description fields (template below).

ATTRIBUTES

In addition to the **spatial extent**, the dataset should have information on variables listed below included:

Attribute name	Attribute ALIAS	Description and unit	Value type	List of possible values	Mandatory attribute
Type	Type	Type of dredging	Value from the list	maintenance or capital	YES
Start_day	Start date	Date in which the dredging activity started	Day (XX)		YES
Start_month			Month (XX)		
Start_year			Year (XXXX)		
End_day	End date	End date of the dredging activity	Day (XX)		YES
End_month			Month (XX)		
End_year			Year (XXXX)		
Amount_ton	Amount	Amount of dredged material (tonnes or m ³) per event	Number		YES
Depth	Depth	Depth of area (m)	Number		NO
Area	Area of actual dredging site	m ² per event	Number		YES
Sediment	Sediment type ¹	Type of sediment dredged	Value from the list	mud, sand, hard substrate, mixed sand, other (please specify)	YES
Method	Dredging method	Method utilized in the dredging	Value from the list	digging/dredging device (open, enclosed), suction device, flushing, other (please specify)	YES

TEMPLATES

The metadata template can be accessed in this [link](#).

The shapefile template zip file can be accessed in this [link](#).

¹ For details on grain size per sediment type, please, observe the table in the end of Annex II.

REQUESTED DATASET: EXTRACTION OF SAND AND GRAVEL

Derived from the [MSFD theme](#) “extraction of non-living resources” and related to the physical pressures “[physical loss](#)” and “[physical disturbance](#)” by S&C 13B-2020 - Outcome Att.2 Status of data flows - BSII Human Activities-Pressures.

SCOPE AND SPECIFICATIONS:**GEOMETRY**

The recommended geometry type for this dataset is polygon.

TEMPORAL SCOPE

Records dated between 2016 to 2021.

METADATA

The dataset should be accompanied with the fulfilled metadata sheet. Please fill in all the metadata description fields (template below).

ATTRIBUTES

In addition to the **spatial extent**, the dataset should have information on variables listed below included:

Attribute name	Attribute ALIAS	Description and unit	Value type	List of possible values	Mandatory attribute
Name	Name	Name of the extraction site	Text		YES
Area	Area	Area where the activity is taking place in km ²	Number		YES
amount2016 (...) amount2021	Extraction	Amount of extraction reported per year in tonnes or/and m ³	Number		YES
Depth	Depth	Metres per event	Number		NO
Category	Category	Recurrence of the extraction	Value from the list	one-time, recurring event	YES
Start_day	Start date	Date in which the dredging activity started	Day (XX)		YES
Start_mont			Month (XX)		
Start_year			Year (XXXX)		
End_day	End date	End date of the dredging activity	Day (XX)		YES
End_month			Month (XX)		
End_year			Year (XXXX)		
Sediment	Sediment type ²	Type of sediment extracted	Value from the list	mud, sand, hard substrate, mixed sand, other (please specify)	YES
Method	Extraction method	Method used in the extraction	Value from the list	digging/dredging device (open, enclosed), suction device, other (please specify)	NO

² For details on grain size per sediment type, please, observe the table in the end of Annex II.

TEMPLATES

The metadata template can be accessed in this [link](#).

The shapefile template zip file can be accessed in this [link](#).

REQUESTED DATASET: PIPELINES

Related to the physical pressures “[physical loss](#)” and “[physical disturbance](#)” by S&C 13B-2020 - Outcome Att.2 Status of data flows - BSII Human Activities-Pressures.

SCOPE AND SPECIFICATIONS:**GEOMETRY**

The recommended geometry type for this dataset is [polyline](#).

TEMPORAL SCOPE

All available records should be included, especially if between 2016 to 2021.

METADATA

The dataset should be accompanied with the fulfilled metadata sheet. Please fill in all the metadata description fields (template below).

ATTRIBUTES

In addition to the **spatial location**, the dataset should have information on variables listed below included:

Attribute name	Attribute ALIAS	Description and unit	Value type	List of possible values	Mandatory attribute
Name	Name	Name of the pipeline	Text		YES
Type	Type	Type of pipeline	Value from the list	water, oil, gas, effluent, other (please specify)	YES
Diameter	Diameter	Diameter of the pipeline	Number		YES
Unit	Diameter unit	Unit of diameter of pipeline	Text		YES
Status	Status	Status of the pipeline	Value from the list	operational, under construction, application submitted, planned, approved, other (please specify)	YES
Start_year	Construction year start	Year when the construction of the pipeline started	Year (XXXX)		YES
End_year	Construction year end	Year when the construction of the pipeline ended	Year (XXXX)		YES

Pipe_prot	Pipeline protection	Specify the type of pipeline protection	Value from the list	none, sediment fill (specify sediment type), rock fill, other (please specify)	NO
Sediment	Sediment type ³	Sediment type	Value from the list	mud, sand, hard substrate, mixed sand, other (please specify)	NO
Pipe_posit	Pipeline position	Specify the position of pipeline in the seabed	Value from the list	in the sediment, on de sediment	NO
<i>If pipeline position is 'in sediment':</i>					
Lay_depth	Pipeline laying depth	Laying depth in metres	Number		NO
Refiling	Refiling	Refilling of the trench	YES or NO		NO
Method	Pipeline laying method	Method utilized when laying the pipeline	Value from the list	digging/dredging device [open, enclosed], suction device, flushing, other (please specify)	NO
Pipe_width	Width of pipeline trench	Width of the pipeline trench in metres	Number		NO

TEMPLATES

The metadata template can be accessed in this [link](#).

The shapefile template zip file can be accessed in this [link](#).

REQUESTED DATASET: WIND TURBINES

Derived from the [MSFD theme](#) “production of energy” and related to the physical pressures “[physical loss](#)”, “[physical disturbance](#)” and “[changes to hydrological conditions](#)” by S&C 13B-2020 - Outcome Att.2 Status of data flows - BSII Human Activities-Pressures.

SCOPE AND SPECIFICATIONS:

GEOMETRY

The recommended geometry type for this dataset is [point](#).

TEMPORAL SCOPE

All available records should be included, especially if between 2016 to 2021.

METADATA

The dataset should be accompanied with the fulfilled metadata sheet. Please fill in all the metadata description fields (template below).

ATTRIBUTES

³ For details on grain size per sediment type, please, observe the table in the end of Annex II.

In addition to the **spatial location**, the dataset should have information on variables listed below included:

Attribute name	Attribute ALIAS	Description and unit	Value type	List of possible values	Mandatory attribute
Name	Name (whole park)	Name of the wind farm	Text		YES
Status	Status (whole park)	Status of the wind farm	Value from the list	operational, under construction, application submitted, planned, approved, other (please specify)	YES
Company	Company (whole park)	Operation company name	Text		YES
CCapacity	Current capacity (whole park)	Current capacity of the whole wind farm in megawatts (MW)	Number		YES
PCapacity	Planned capacity (whole park)	Planned capacity of the whole wind farm in megawatts (MW)	Number		YES
CN_turbine	Current number of turbines (whole park)	Current number of turbines in the whole park	Number		YES
PN_turbine	Planned number of turbines (whole park)	Planned number of turbines for the whole park	Number		YES
Start_year	Construction year start (per turbine)	Year when the construction of the turbine started	Year (XXXX)		YES
End_year	Construction year end (per turbine)	Year when the construction of the turbine ended	Year (XXXX)		YES
Foundation	Foundation type (per turbine)	Foundation type	Value from the list	monopile, gravity, tripod, tripile, jacket, floating, other (please specify)	NO
Scour_prot	Scour protection (per turbine)	Scour protection	YES or NO		NO
Transf_L	Length of the transformer	If transformer, length of the transformer in metres	Number		NO
Transf_W	Width of the transformer	If transformer, width of the transformer in metres	Number		NO

Sediment	Sediment type ⁴	Sediment type	Value from the list	mud, sand, hard substrate, mixed sand, other (please specify)	NO
----------	----------------------------	---------------	---------------------	---	----

TEMPLATES

The metadata template can be accessed in this [link](#).

The shapefile template zip file can be accessed in this [link](#).

REQUESTED DATASET: CABLES

Derived from the [MSFD theme](#) “production of energy” and related to the physical pressures “[physical loss](#)” and “[physical disturbance](#)” by S&C 13B-2020 - Outcome Att.2 Status of data flows - BSII Human Activities-Pressures.

SCOPE AND SPECIFICATIONS:

GEOMETRY

The recommended geometry type for this dataset is [polyline](#).

TEMPORAL SCOPE

All available records should be included, especially if construction year between 2016 to 2021.

METADATA

The dataset should be accompanied with the fulfilled metadata sheet. Please fill in all the metadata description fields (template below).

ATTRIBUTES

In addition to the **spatial location**, the dataset should have information on variables listed below included:

Attribute name	Attribute ALIAS	Description and unit	Value type	List of possible values	Mandatory attribute
Status	Status	Status of the cable	Value from the list	operational, under construction, application submitted, planned, approved, other (please specify)	YES
Type	Type	Cable type	Value from the list	telecommunication, power, other (please specify)	YES
Capacity	Capacity	Potential capacity of the cable or amount of data	Number		YES
Unit	Capacity unit	kV or GB	Text		YES
Year	Construction year	Year the cable was built	Year (XXXX)		YES
Cab_prot	Cable protection	Specify the type of cable protection	Value from the list	none, sediment fill (specify sediment type), rock fill, other (please specify)	NO

⁴ For details on grain size per sediment type, please, observe the table in the end of Annex II.

Sediment	Sediment type ⁵	Sediment type	Value from the list	mud, sand, hard substrate, mixed sand, other (please specify)	NO
Cab_posit	Cable position	Specify the position of pipeline in the seabed	Value from the list	in the sediment, on de sediment	NO
<i>If cable position is 'in sediment':</i>					
Lay_depth	Cable laying depth	Laying depth in metres	Number		NO
Refiling	Refiling	Refilling of the trench	YES or NO		NO
Method	Cable laying method	Method utilized when laying the cable	Value from the list	digging/dredging device [open, enclosed], suction device, flushing, other (please specify)	NO
Cab_width	Width of the cable trench	Width of the cable trench in metres	Number		NO

TEMPLATES

The metadata template can be accessed in this [link](#).

The shapefile template zip file can be accessed in this [link](#).

REQUESTED DATASET: OIL PLATFORMS

Derived from the [MSFD theme](#) "extraction of non-living resources" and related to the physical pressure "[physical loss](#)" and "[changes to hydrological conditions](#)" by S&C 13B-2020 - Outcome Att.2 Status of data flows - BSII Human Activities-Pressures.

SCOPE AND SPECIFICATIONS:

GEOMETRY

The recommended geometry type for this dataset is [point](#).

TEMPORAL SCOPE

All available records should be included, especially if operation year between 2016 to 2021.

METADATA

The dataset should be accompanied with the fulfilled metadata sheet. Please fill in all the metadata description fields (template below).

ATTRIBUTES

In addition to the **spatial location**, the dataset should have information on variables listed below included:

Attribute name	Attribute ALIAS	Description and unit	Value type	List of possible values	Mandatory attribute
----------------	-----------------	----------------------	------------	-------------------------	---------------------

⁵ For details on grain size per sediment type, please, observe the table in the end of Annex II.

Type	Foundation type	Type of structure	Value from the list	monopile, gravity, tripod, tripile, jacket, floating, other (please specify)	YES
Scour_prot	Scour protection	Scour protection	YES or NO		YES
Sediment	Sediment type ⁶	Sediment type	Value from the list	mud, sand, hard substrate, mixed sand, other (please specify)	YES
Pla_length	Platform length	Length of the platform	Number		YES
Pla_width	Platform width	Width of the platform	Number		YES

TEMPLATES

The metadata template can be accessed in this [link](#).

The shapefile template zip file can be accessed in this [link](#).

Tables on details on grain size per sediment type:

Authors: Torsten Berg & Isabelle Taubner (Marilim aquatic research)

Date: 15th March 2021

The **sediment type** classification used in the table below is as follows:

Weight-%, based on Long, D (2006): "BGS detailed explanation of seabed sediment modified Folk classification" & WFD CIS guidance no. 5

sediment type	Grain size [mm]		
	< 0.063	0.063–2	> 2
mud	≥ 95 %	≤ 50 %	
sand/gravel		≥ 60 %	
sand/gravel		≥ 50 %	< 10 %
hard substrate			≥ 60 %
mixed sediment	everything not classified as mud, sand/gravel, hard substrate		

⁶ For details on grain size per sediment type, please, observe the table in the end of Annex II.

Annex III. 2c. Ecosystem component data specifications

REQUESTED DATASET: ECOSYSTEM COMPONENTS – BENTHIC SPECIES

SCOPE AND SPECIFICATIONS:

GEOMETRY

The recommended geometry type for observation data is point or polyline for observations. Data reporting templates for observation are available below.

Modelled data is free format (presence/absence).

TEMPORAL SCOPE

Temporal scope should reflect the distribution of benthic species during assessment period 2016-2021. Therefore, survey data from years 2016-2021 should be used. In case older data is available and correctly reflects the distribution, it should be reported.

METADATA

The dataset should be accompanied with the fulfilled metadata sheet. Please fill in all the metadata description fields (template below).

ATTRIBUTES

In addition to the **spatial location**, the observation data for each species / genus / family (Characeae, Fucus, Furcellaria lumbricalis, Zostera marina, Mytilus, Potamogeton, Myriophyllum, Najas marina, Fontinalis, Callitriche, Zannichellia) should have information on variables listed below included:

- **Species:** Accepted scientific name according to WoRMS / AphiaID
- **Data type:** modelled distribution area / point observation data
- **Method:** surveying / modeling method (ROV / Dive / Drop video / Benthic sampling / other)
- **Year:** Year of data collection/model run
- **Presence (only for modelled distribution data type):** Present / Absent
- **Count_value:** Coverage / Number of individuals
- **Count_unit:** Unit of count value, e.g. individuals per m / other

TEMPLATES

The metadata template can be accessed in this [link](#).

The excel template for the observation data can be accessed in this [link](#).

The shapefile template zip file for observation data in point geometry can be accessed in this [link](#).

The shapefile template zip file for observation data in polyline geometry can be accessed in this [link](#).

REQUESTED DATASET: ECOSYSTEM COMPONENTS – NATURA HABITATS

SCOPE AND SPECIFICATIONS:

Data on spatial distribution of Habitats Directive Annex 1 habitat types (Marine and coastal)

- Sandbanks (1110)
- Estuaries (1130)
- Mudflats and sandflats (1140)
- Coastal lagoons (1150)
- Large shallow inlets and bays (1160)

- Reefs (1170)
- Baltic Esker islands (1610)
- Submarine structures made by leaking gas (1180)
- Boreal Baltic islets and small islands (1620)

GEOMETRY

The recommended geometry type for this dataset is polygon.

TEMPORAL SCOPE

Temporal scope should reflect the distribution of habitats during assessment period 2016-2021.

METADATA

The dataset should be accompanied with the fulfilled metadata sheet. Please fill in all the metadata description fields (template below).

ATTRIBUTES

In addition to the **spatial extent**, the dataset for each biotope (following the names and coding of the Habitats Directive) should have information on variables listed below included:

Attribute name	Attribute ALIAS	Description and unit	Value type	List of possible values	Mandatory attribute
Biotope	Biotope	Biotope	Value from the list	sandbanks, estuaries, mudflats and sandflats, coastal lagoons, large shallow inlets and bays, reefs, baltic esker islands, submarine structures made by leaking gas, boreal baltic islets and small islands	YES
year_colle	year_collected	Year of data collection/model run	Year (XXXX)		YES
month_coll	month_collected	Month of observation	Month (XX)		NO
day_collec	day_collected	Day of observation	Day (XX)		NO
start_year	start_year_collected	Year of observation (start of monitoring period, if relevant)	Year (XXXX)		NO
start_mont	start_month_collected	Month of observation (start of monitoring period, if relevant)	Month (XX)		NO
start_day_	start_day_collected	Day of observation (start of monitoring period, if relevant)	Day (XX)		NO
end_year_c	end_year_collected	Year of observation (end of monitoring period, if relevant)	Year (XXXX)		NO
end_month_	end_month_collected	Month of observation (end of monitoring period, if relevant)	Month (XX)		NO

end_day_co	end_day_collected	Day of observation (end of monitoring period, if relevant)	Day (XX)		NO
data_host	data_host	Data host organization	Text		YES
restrictio	restriction	Yes/no: whether any information is restricted for this observation, that cannot be shared freely).	YES / NO		YES
restrict_1	restriction_description	If restriction=yes, reason why data cannot be shared freely	Text		NO
citation	citation	If specific citation should be used for observation, it should be described here	Text		NO
notes	notes	Free text field additional information on observation, if relevant	Text		NO

TEMPLATES

The metadata template can be accessed in this [link](#).

The shapefile template zip file can be accessed in this [link](#).