



Document title	Updated HELCOM reporting format to the register of occurrence of impulsive noise events
Code	5-2
Category	DEC
Agenda Item	5 – Underwater noise
Submission date	19.9.2018
Submitted by	EN-Noise
Reference	

Background

PRESSURE 4-2016 approved the reporting format to the OSPAR-HELCOM registry of underwater noise ([Outcome of PRESSURE 4-2016](#), para 3.21 and Annex of [document 3-2](#)). HELCOM EN-Noise discussed and agreed on the need to update the reporting format to the registry after two years of experience in uploading data to the system and in view of the improvements of the tool conducted by ICES ([Memo of the online meeting 16 August 2018](#)). The update was prepared by the Secretariat and subsequently circulated to the network for consideration. Comments, as provided by Germany and Poland, were considered in the finalisation of the document.

This document contains the updated HELCOM reporting format to the register of occurrence of impulsive noise events.

Action requested

The Meeting is invited to consider and agree on the updated reporting format to the OSPAR-HELCOM registry of underwater noise.

Updated HELCOM reporting format to the register of occurrence of impulsive noise events

The reporting format to be used to upload data to the impulsive noise register (database) is available to download in the [ICES data portal](#) (please see snapshot below). It consists of an [Excel file](#) and an ancillary XSD-File for XML conversion that converts data to an XML file that can be finally uploaded to the database by the registered user via the website.

DATA PORTALS

> ICES data portal

THEMATIC

- > All data
- > Acoustic trawl surveys
- > Biodiversity
- > DATRAS
- > DOME (Marine Environment)
- > Eggs and larvae
- > Fish stomach
- > Historical plankton
- > Oceanography
- > SmartDots
- > **Underwater Noise**
- > Vulnerable Marine Ecosystems

LOGIN REQUIRED

- > InterCatch

Underwater Noise

Impulsive noise events registry in support of OSPAR and HELCOM

This portal assembles data supplied by contracting parties to OSPAR (North East Atlantic) and HELCOM (Baltic Sea). The data are collated nationally from registers of licenced events such as pile driving, controlled explosions from naval operations and other activities that release energy.

This registry is specifically purposed with supporting OSPAR and HELCOM in providing information that will feed their regional assessments, and in reporting by its contracting parties to MSFD descriptor 11.1.1 (Low and mid frequency impulsive noise).

Print it | Send to | f | t | in | Share it

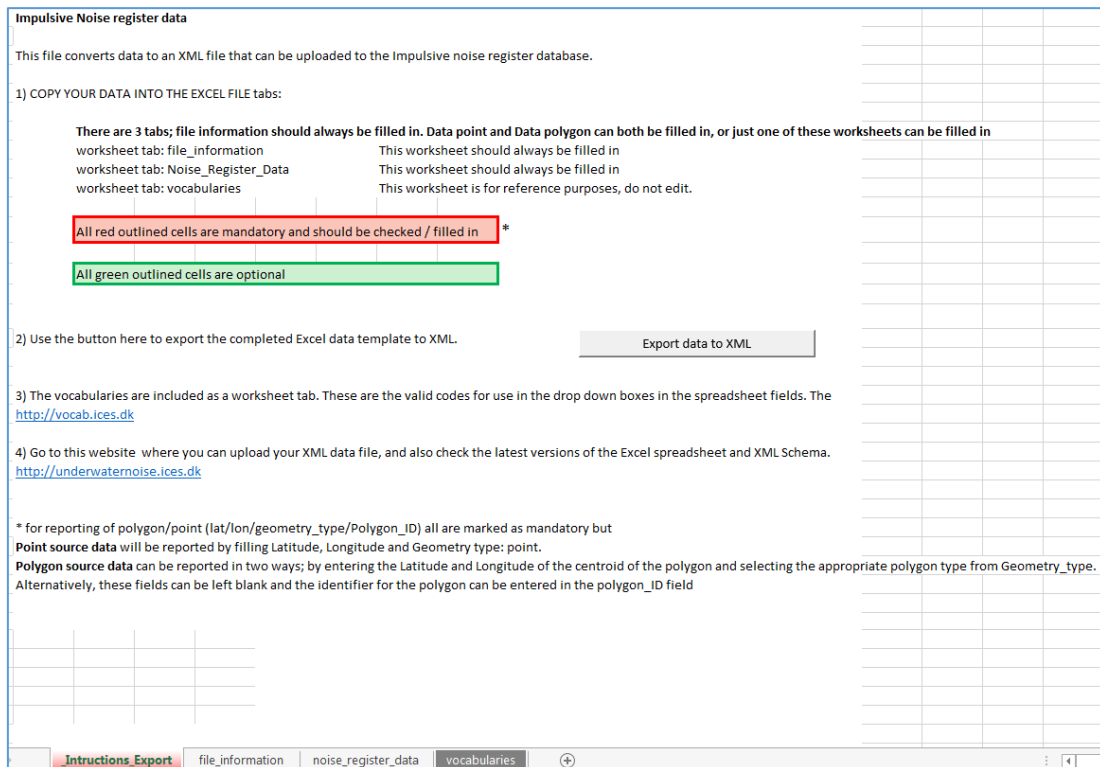
VIEW ON MAP

MANAGE NOISE EVENTS

BROWSE SUBMISSIONS

DOWNLOAD REPORTING FORMAT

The Excel file contains four sheets with: (i) instructions and rules on how to fill the data and the button for XML Export ('Instructions_Export'); (ii) information on the country providing the data ('file_information'); (iii) data and information to be reported ('noise_register_data'); and (iv) valid codelists to be used in the drop down boxes in the spreadsheet fields ('vocabularies') (please see snapshot below of the 'Instructions_Export' sheet of the Excel file).



Information to be provided is either mandatory (red outline, i.a. latitude/longitude of the station) or optional (green outline, i.a. mitigation measures). The following tables compile the reporting format to be used to load data to the registry.

The register supports two options to report data: point source data (i.e. latitude, longitude and geometry type) or polygon source data. Polygon source data can be reported in two ways; by entering the Latitude and Longitude of the centroid of the polygon and selecting the appropriate polygon type from 'Geometry_type'. Alternatively, these fields can be left blank and the identifier for the polygon can be entered in the 'Polygon_ID' column.

Column header	Content																				
XLS-Tab: "file_information"																					
Country (ISO 1366 code)	The country where the source was registered. Codes are provided in the 'vocabularies' spreadsheet. Below the codes for HELCOM countries are listed: <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>ISO Country Codes</th> <th>Country</th> </tr> </thead> <tbody> <tr> <td>DK</td> <td>Denmark</td> </tr> <tr> <td>EE</td> <td>Estonia</td> </tr> <tr> <td>FI</td> <td>Finland</td> </tr> <tr> <td>DE</td> <td>Germany</td> </tr> <tr> <td>LV</td> <td>Latvia</td> </tr> <tr> <td>LT</td> <td>Lituania</td> </tr> <tr> <td>PL</td> <td>Poland</td> </tr> <tr> <td>RU</td> <td>Russia</td> </tr> <tr> <td>SE</td> <td>Sweden</td> </tr> </tbody> </table>	ISO Country Codes	Country	DK	Denmark	EE	Estonia	FI	Finland	DE	Germany	LV	Latvia	LT	Lituania	PL	Poland	RU	Russia	SE	Sweden
ISO Country Codes	Country																				
DK	Denmark																				
EE	Estonia																				
FI	Finland																				
DE	Germany																				
LV	Latvia																				
LT	Lituania																				
PL	Poland																				
RU	Russia																				
SE	Sweden																				
Preparation Date (ddmmyyyy)	Date when data was uploaded in YYYYMMDD format																				
Organization (EDMO code)	Organization who is reporting the data. EDMO codes (European Directory of Marine Organisations) are provided in the 'vocabularies' spreadsheet																				

XLS-Tab.: "noise_register_data"	
Data_entry_point_ID (string)	
start_date (ddmmyyyy)	Start date of the detection in YYYYMMDD format
end_date (ddmmyyyy)	End date of the detection in YYYYMMDD format
Latitude (WGS84)	To report point source data or polygon centroids. The latitude of the detection in decimal degrees, using WGS84. Can be left blank when polygon_ID is used.
Longitude (WGS84)	To report point source data or polygon centroids. The longitude of the detection in decimal degrees, using WGS84. Can be left blank when polygon_ID is used.
Geometry_type (Point, UK license blocks, ICES sub-rectangles, German naval polygon)	Please see explanation above
polygon_ID (ICES sub-rectangle ID or Regional Polygon ID)	Please see explanation above
source_event (vocab list)	One of these options is to be chosen based on the source of the event (also provided in the 'vocabularies' sheet and in ICES website): <ul style="list-style-type: none"> - Airgun arrays - Explosions - Generic explicitly impulsive source - Impact pile driver - Sonar or acoustic deterrents.
value_code (from list: NA/very_low/low/medium/high/very_high)	One of these options is to be chosen based on the source and duration of the event (also provided in the 'vocabularies' sheet and in ICES website): not available, very low, low, medium, high or very high.
	- Airgun arrays (zero to peak source level, rounded to nearest decibel):
	NA Not available
	Very low 209-233 dB re 1 μ Pa m
	Low 234-243 dB re 1 μ Pa m
	Medium 244-253 dB re 1 μ Pa m
	High > 253 dB re 1 μ Pa m
	- Explosions (equivalent TNT charge mass, rounded to nearest 10 g if less than 10 kg and to nearest 1 kg otherwise):
	NA Not available
	Very low 8g – 210g
	Low 220g – 2,1kg
	Medium 2,11kg – 21kg
	High 22kg – 210kg
	Very high > 210kg
	- Generic explicitly impulsive source (energy source level, rounded to nearest decibel):
	NA Not available
	Very low 186-210 dB re 1 μ Pa ² m ² s
	Low 211-220 dB re 1 μ Pa ² m ² s
	Medium 221-230 dB re 1 μ Pa ² m ² s
	High >230 dB re 1 μ Pa ² m ² s
	- Impact pile driver (hammer energy, rounded to nearest 10 kJ):
	NA Not available
	Very low <280kJ
	Low 290kJ – 2,8MJ
	Medium 2,81MJ – 28MJ
	High >28MJ
	- Sonar or acoustic deterrents (source level, rounded to nearest decibel):
	NA Not available

	Very low	176-200 dB re 1 μ Pa m
	Low	201-210 dB re 1 μ Pa m
	Medium	211-220 dB re 1 μ Pa m
	High	>220 dB re 1 μ Pa m
sound_mitigation_bool (yes/no)	Choose 'yes' or 'no'.	

The following data are optional (outlined in green in the Excel reporting format):

Column header	Content	
NMS_type (from list: BBC/SBC/IHC/HSD/HEP/COF/CBB CIHC/CBBCHSD/CBBCCOF/Other)	Types of noise mitigation systems (NMS) to be chosen among these options:	
	BBC	Big Bubble Curtain
	SBC	Small Bubble Curtain
	IHC	I H C - Noise Mitigation System
	HSD	HydroSoundDamper
	HEP	Pile-in-Pile Jacket
	COF	Cofferdam
	CBBCIHC	Combined BBC and I H C-NMS
	CBBCHSD	Combined BBC and HSD
	CBBCCOF	Combined BBC and Cofferdam
	Other	Other system or other combination
sound_measurement_bool (yes/no)	Choose 'yes' or 'no'.	
SEL (dB re 1 μ Pa ² s)	Sound Exposure Level expressed in dB re 1 μ Pa ² s	
Lpeak (dB re 1 μ Pa)	Peak Level expressed in dB re 1 μ Pa	
distance_to_pile (metres, decimal)	Distance to the pile	
type_hammer (Model number of hammer used, e.g. S-2000, 3000S)	Model of the hammer used	
max_energy (Kj)	Maximum energy reached during the event	
source_Spectra (UNIT to be determined)	The frequency band of the event (format to be determined)	
duty_cycle (decimal)	The percentage of the duration the signal was active	
start_time (hhmm)	Start time of the event transmission	
duration (seconds, integer)	The duration of the event in seconds	
Directivity (decimal)	A Q value representing the directivity of the sound source	
source_depth (metres, decimal)	Approximate depth, in meters, of the sound source	
platform_speed (Knots, decimal)	Speed of the platform recording the event	
remarks (free text)	Any free text comments or additional supporting information	

Once the Excel file has been filled according to the template provided it can be uploaded to the registry selecting the "manage noise events" option (see first screenshot below), and subsequently "upload a data file" in the new window that opens (see second screenshot below) using the log in account permissions previously provided by ICES (see third screenshot below). The system also provides the possibility for countries to inform of their lack of data to report to the registry (see second screenshot below):

- No activity: a country is reporting that there were no recorded events for that noise event type,
- Null/Blank: a country has not reported activity,
- Non-quantifiable activity: a country is reporting events occurred, but they do not have any information on them.

Finally, in order to access data contained in the registry, the “browse submissions” option is to be checked from the homepage.

DATA PORTALS

- › ICES data portal
- THEMATIC
- › All data
- › Acoustic trawl surveys
- › Biodiversity
- › DATRAS
- › DOME (Marine Environment)
- › Eggs and larvae
- › Fish stomach
- › Historical plankton
- › Oceanography
- › SmartDots
- › Underwater Noise
- › Vulnerable Marine Ecosystems
- LOGIN REQUIRED
- › InterCatch
- › Regional DataBase FishFrame


Underwater Noise

Impulsive noise events registry in support of OSPAR and HELCOM

This portal assembles data supplied by contracting parties to OSPAR (North East Atlantic) and HELCOM (Baltic Sea). The data are collated nationally from registers of licenced events such as pile driving, controlled explosions from naval operations and other activities that release energy.

This registry is specifically purposed with supporting OSPAR and HELCOM in providing information that will feed their regional assessments, and in reporting by its contracting parties to MSFD descriptor 11.1.1 (Low and mid frequency impulsive noise).

Print it Send to f t in Share it



VIEW ON MAP

MANAGE NOISE EVENTS

BROWSE SUBMISSIONS

DOWNLOAD REPORTING FORMAT

LINKS

- › Code lists and new codes
- › MSFD Descriptor 11

IMPULSIVE NOISE REGISTER

[Impulsive Noise Register](#) / [Submit data](#) / [Browse submissions](#) / [Map](#) / [Web Services](#)

[Impulsive noise register](#) > Report data to the Impulsive noise register

Below you can see which data are available in the current database. You can choose to:

[Upload a data file](#)

[Report that the country has no data to submit for a type event](#)

IMPULSIVE NOISE REGISTER

[Impulsive Noise Register](#) / [Submit data](#) / [Browse submissions](#) / [Map](#) / [Web Services](#)

If you have been granted access to manage the data, you can login with your sharepoint password:

Username: ICES\
Password:

If you have not been granted access please contact the ICES secretariat (professional secretary to your meeting or accessions@ices.dk)
If you have a sharepoint login please try again.
If you have forgotten your sharepoint password, please check this [link](#)