

Joint Cetacean Data Programme

Data Submission Guidance Guide to submitting and managing data in the JCDP Portal

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Project managed by



Funded by

Department for Environment Food & Rural Affairs Data portal hosted by



Contributors to the JCDP can be found on the JCDP Information Hub <u>https://jncc.gov.uk/our-work/jcdp-contributors/</u>

From 2022 the JCDP is managed by the ICES Working Group for the Joint Cetacean Data Programme (WGJCDP).

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Joint Cetacean Data Programme

Data Submission Guidance Guide to submitting and managing data in the JCDP Portal

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1 What is the JCDP

The Joint Cetacean Data Programme (JCDP) is a platform for collation, storage and access of cetacean data collected at-sea via ship-based or aerial observer/digital methodologies. It is a growing resource, aiming to enable best use of all available data of comparable types from which to carry out analyses at relevant spatial and temporal scales to inform cetacean research, management, policy and conservation.

1.1 Purpose of this document

This document gives an introduction to data collectors and custodians to prepare and submit cetacean survey data to the JCDP. This document should be used in conjunction with the <u>JCDP Data Standard</u> and the <u>JCDP Metadata guidance</u>, which provide detail on the format of JCDP data and metadata, including established vocabularies and fields.

2 The Joint Cetacean Data Programme platform

The JCDP Platform is a term which encompasses the ICES database portal and the JCDP hub which provides access to the related resources and services available to facilitate standardisation and enable universal access to cetacean survey data. The elements of the JCPD Platform are outlined below:

2.1 The JCDP Information Hub

This is a series of webpages hosted on the JNCC website which provide the background for the JCDP, information and resources to support the submission to and use of the JCDP Data Portal and products.

www.JNCC.gov.uk/JCDP



2.2 The JCDP Data Portal

The data portal is hosted by ICES and provides access to submit and download datasets in the JCDP database.

cetaceans.ices.dk

DATA PORTALS						
ICES data portal	Cetaceans	🚇 Print it 📓 Send to 🕴 🌑 🔝 Share it				
Biodiversity						
> Cetaceans	Cetaceans (whales, dolphins and porpoises) data to					
Nesting Seabirds;	understand their abundance and distribution					
Seal Sightings	This portal assembles at-sea effort-related data collected via ship- based or aerial methods, collated under the Joint Cetacean Database					
Vulnerable Marine	Programme (JCDP).					
Ecosystems	The JCDP aims to streamline the process of accessing and utilising					
Fisheries Independent	these data by collating the existing and forthcoming cetacean evidence base into a single resource. These data have a wide range of					
 Acoustic trawl surveys 	applications and have the potential to support analyses at a range of spatial and temporal scales. For more information, visit the JCDP hub					
DATRAS	(see links)					
Eggs and larvae	How to Cite					
Fish stomach	Joint Cetacean Data Programme (JCDP)	VISUALISE ON MAP				
> SmartDots	(https://cetacean.ices.dk), 2022. ICES, Copenhagen					

In the portal you can:

Visualise data on a map: The JCDP map view allows users to visualise submitted survey data on an interactive map. This map also allows users to filter the data based on a number of criteria, and links to the download facility.

View the data inventory: The data Inventory is a list of all survey data available through the JCDP, this also includes facilities to filter the data based on a number of criteria (the same as in the map view) and options to download or request access to specific datasets.

View data format: The data template can be downloaded from the JCDP Data Portal landing page. This excel spreadsheet outlines the JCDP data format and vocabularies, as detailed in the JCDP Data Standard.

Submit data: The submit data function is only available to users who have an ICES account (<u>see above</u> for information on how to request an account). The submission process involves; uploading an .XML file with cetacean survey data which will be screened before it can be submitted to the database. This area also gives you access to data and data request management facilities.

Access the JCDP information hub: You can find links to the full database metadata record, the data standard and other resources available on the JCDP Hub.

2.3 The JCDP metadata catalogue

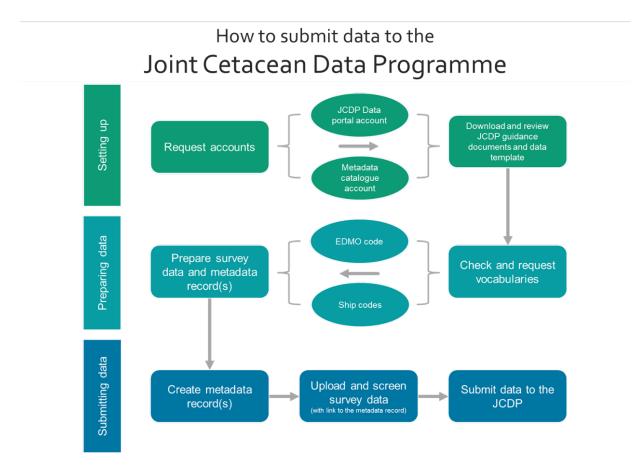
The JCDP metadata system is hosted on the Geonetwork and follows INSPIRE protocols. The JCDP has two levels of metadata; one overarching metadata record covering the whole JCDP database, and survey-level entries as defined in the Data Standard.

gis.ices.dk/geonetwork

EES Metadata Catalogue	Q Search 🛛 🎯 Map				🔿 Sign in 👻	English -
	Search	Search 1459 data se	is, services and maps,	Q		
Browse by Topic INSPIRE themes						
💋 Biota	••• Boundaries	Environment	Geoscientific information	Imagery base maps eart h cover	🗜 Oceans	
₿ 559	11	₿ 584	219	B 3	737	
Type of resources						
Dataset	Service					
₽ 847	₽ 47					

3 Getting set up on the JCDP Platform

There are a number of steps required from data contributors before any data can be submitted to the JCDP. These ensure that the data can be managed and is in the required format. Here you can find an overview of the process involved, with each step detailed below:



3.1 Request your accounts

You'll need accounts to access the JCDP Data Platform and the Metadata Catalogue to be able to upload your data. You will only need to set these up once, but we suggest using an organisational email rather than individual email where possible, so credentials can be maintained throughout any changes in personnel.

Account for JCDP Data Portal

You will need to log in to the JCDP system using your ICES credentials. If you do not have an ICES login, please send a request to <u>accessions@ices.dk</u>

Account for JCDP Metadata system

If you don't already have a login for the JCDP Metadata system, please send a request to <u>accessions@ices.dk</u>, and CC <u>MarineMammals@jncc.gov.uk</u>.

3.2 Adding information to the JCDP applied vocabularies

For datasets to be collated into a single database, there needs to be a commonality at least between core fields within the data and having a defined standard facilitates this. Standardising data offers advantages in four main areas:

- development of expertise and data quality
- suitability of data for analyses
- ease of data collation
- compatibility

These components also all contribute towards maximising the use of independent datasets.

The JCDP applies various set vocabularies used for specific fields in the data standard. These help to define data and ensure commonality between datasets contributed from a range of sources. The <u>JCDP Data Standard</u> includes definitions and links for all the vocabularies used by the JCDP.

There are two vocabularies that you will need to check in advance of submitting data, to ensure your relevant information is included:

European Directory of Marine Organisations (EDMO) Code

In order to submit data you MUST have the submitting organisation or 'data custodian' registered in EDMO [http://vocab.ices.dk/?ref=1398]. This ensures there is no confusion over who is responsible for the data in the JCDP and maintains up to date information on how to contact the organisation.

You can add your organisation to EDMO on their <u>website</u>, or contact <u>accessions@ices.dk</u>

Platform codes / Ship codes

You need to ensure all relevant seaborne vessels used for surveys are listed in the platform code vocab list before submitting data. You can check if the vessels are listed here [https://vocab.ices.dk/?ref=315] and if not, contact accessions@ices.dk to organise getting them added.

4 **Preparing your data**

Before you start to upload data to the system, preparing the data and information early will help streamline the process.

4.1 Drafting metadata information

Metadata is essential as part of any data submission to ensure data are understood and used appropriately. Metadata is information about data which can improve discoverability, describe and define the resource and help bring similar resources together.

The <u>JCDP database overarching metadata record</u> is in INSPIRE format which provides highlevel information about the programme and database. It is worth looking through this record to help you understand what information is needed for your own metadata records.

The JCDP data portal hosts metadata on each of the hosted surveys contributed to the JCDP. When preparing data for upload, data providers will be required to provide metadata to accompany the submission. For the JCDP, the term 'survey' may be applied differently between organisations, depending on how data are collected. In order to reduce the burden of data uploads and associated metadata, the data submitter may combine multiple 'survey trips' that share certain characteristics (year of collection; data custodian and location) into a single 'survey'. You can find the definition of a survey for the purposes of the JCDP in the JCDP Data Standard.

A <u>metadata guidance document</u> has been produced to help with creation and management of JCDP metadata records.

In the JCDP Metadata catalogue, there is an INSPIRE JCDP template which has pre-filled fields and prompt text to help you to with your records. Follow the steps in the guide to find this template record and complete your own entries. Once submitted, the JCDP project team will validate and publish the records.

4.2 Formatting survey data to the JCDP standard

A standardised approach to data formatting is essential to not only streamline the collation process, but also to ensure user confidence in the data. The JCDP developed and agreed a data standard with support from the assembled expert steering group, based on existing data collection projects and knowledge of data analysis needs.

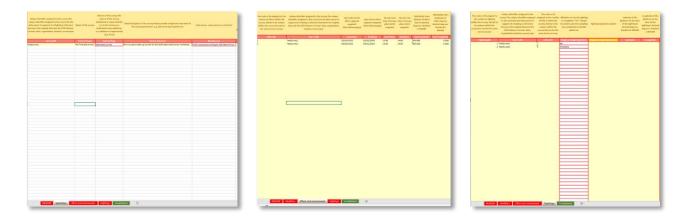
The data standard outlines the core fields and vocabulary required for submission to the JCDP. It is essential for data to meet this standard in order to be submissible to the JCDP.

You can access the data standard here: <u>jncc.gov.uk/our-work/jcdp-resources/#jcdp-data-standard-and-resources-data-standard</u>

To upload the data to the JCDP Data Portal, the survey data needs to be in an .XML file format. To help with data formatting and creation of the xml file, a JCDP template has been created which outlines the mandatory, conditional and optional fields; references to the vocabularies; and a tool to export the survey data into the necessary .xml files ready for submission.

The latest version of this template can be <u>downloaded</u> from the JCDP Data Portal

A summary of which vocabularies are used in each field can be found in the tab "Vocabularies". The template looks like this:



4.3 Exporting to XML

Cetaceans data template

Under the Read Me tab in the template linked above, you can find the 'Export data to XML' button. This will prompt you to state where you would like this file saved so you can process the data. Please note, if there is a lot of data in the template this export can take some time to process.

Please use the export button instead of using the "Save as" option in EXCEL. Below is the 'README' tab of the JCDP data template, illustrating the export data to XML button.

This Excel file converts data to an XM	L file that can be uploaded to the Cetaceans data	abase.				
1) COPY YOUR DATA INTO THE TABLES						
Identifiers Effort and environment Sightings	This table should be filled in This table should be filled in This table should be filled in					
Red cells should be checked / filled in Yellow cells are conditionally mandatory fields						
Green cells sho	uld be filled in but are not mandatory	Export data to	XML			
2) EXPORT TO XML TEMPLATE Click the 'export' button on the "REAI	DME" table					
3) VERIFY AND UPLOAD The .xml file can be uploaded to the http://cetaceans.ices.dk/	Biodiversity - Cetaceans database via:					
4) CODES Some of the fields in the tables refer to a 'vocabulary'. Detailed information can be found in the sheet "Vocabularies" ICES vocabulary server: <u>http://vocab.ices.dk</u>						
List of EDMO codes for reporting orga http://vocab.ices.dk/?ref=1398	nisations can be found here:					
README Identifie	rs Effort and environment	Sightings Vocabu	ılaries			

NOTE It is important that you refer back to these online resources each time you upload new data, as there may be updated versions available as the JCDP evolves.

5 Submitting survey data to the Data Portal

Once you've completed or checked the preceding steps, you are ready to upload your data! The portal is hosted by ICES in their Biodiversity data centre through the following landing page:

The JCDP Data Portal - cetaceans.ices.dk

ICES data portal	Cetaceans	Print it 📓 Send to 👔 y in Share it
Biodiversity		
> Cetaceans	Cetaceans (whales, dolphins and porpoises) data to	
 Nesting Seabirds; Seal Sightings 	understand their abundance and distribution This portal assembles at-sea effort-related data collected via ship-	
 Vulnerable Marine Ecosystems 	 based or aerial methods, collated under the Joint Cetacean Database Programme (JCDP). The JCDP aims to streamline the process of accessing and utilising 	
Fisheries Independent	these data by collating the existing and forthcoming cetacean	
 Acoustic trawl surveys 	 evidence base into a single resource. These data have a wide range of applications and have the potential to support analyses at a range of spatial and temporal scales. For more information, visit the JCDP hub 	
> DATRAS	(see links)	
> Eggs and larvae	How to Cite	
Fish stomach	Joint Cetacean Data Programme (JCDP)	VISUALISE ON MAP
SmartDots	(https://cetaceans.ices.dk), 2022. ICES, Copenhagen	VISORESE ON MAR
Marine Environment		
 DOME (Marine Environment) 	View full dataset meta-record	VIEW DATA INVENTORY
> Historical plankton	K	VIEW DATA FORMAT
Oceanography	V. / ALASSAN	
> Underwater Noise		
Login Required		SUBMIT DATA
> InterCatch		
 Regional DataBase FishFrame 	Joint Cetacean Data Programme	LINKS
	Development of this portal was funded by DEFRA (UK)	Feedback form JCDP hub

5.1 Uploading data

To submit your survey data, clink on the 'Submit Data' button.

You will be asked to sign in, please use the credentials for the JCDP Data Portal account (see above on how to request an account).

You will then see a list of options to manage your submissions to the JCDP database:

CETACEANS
Cetaceans database > Manage
List of options in the manage Cetaceans database
Bellow you can select one of the options:
a) Screen a cetaceans file for a data submission
b) View list of your file screenings
c) View your database submissions
d) View list of download requests
e) View list of organizations which you are a data custodian
f) Logout

5.2 Screening data

The JCDP Data Portal has inbuilt data validation steps. This screening checks the data against the standard and some additional rational testing for the data to ensure the coordinate information, sightings and effort data is as expected.

Select option a) Screen a cetaceans file for a data submission.

CETACEANS
Cetaceans > Manage > Upload File to the Cetaceans Database
Upload File (Cetaceans data format) to the Cetaceans database
Choose file Test_data.xml
Upload file for format checking
You can use the Excel template to convert data from Excel to XML, click here to download template
You can check the Cetaceans format here

Once the screening has been completed, you will receive an email, or you can re-fresh the page to display the results. If the file is according to the format and there are no errors that prevent data to be imported to the database, you can confirm your submission using the "Import cetaceans data to the database" button.

Below is an example of a file that cannot be uploaded to the database due to an error flagging the wrong data type being used in two of the fields (PlatformHeight and Latitude).

If you come across errors that you cannot resolve please contact <u>accessions@ices.dk</u> and <u>marinemammals@jncc.gov.uk</u> for support.

Country 11							
Dataset	в	iodiversity - Cetaceans (JCDP)					
File Name	т	ESTJCDP_errors.xml					
Email	x	xxx@ices.dk					
Screening	Date 0	7/12/2021 13:21:00					
List in Record	Iformat	tion, errors and warnir	ngs during th	ne screening process: Reported Errors	Error Fields		
Record Line					Error Fields PlatformHeight		
Record	Туре	Message	ror)	Reported Errors			
Record Line	Type error	Message Data type mismatch (critical er DATSU has stopped checking d	ror) ata. Unexpected	Reported Errors High Failed to AddRecord. Error message: Input string was not in a correct format.Couldn't			
Record Line	Type error error	Message Data type mismatch (critical er DATSU has stopped checking d File Format Error or Overflow	ror) ata. Unexpected ror)	Reported Errors High Failed to AddRecord. Error message: Input string was not in a correct format.Couldn't store <high> in PlatformHeight Column. Expected type is Double.</high>	PlatformHeight		

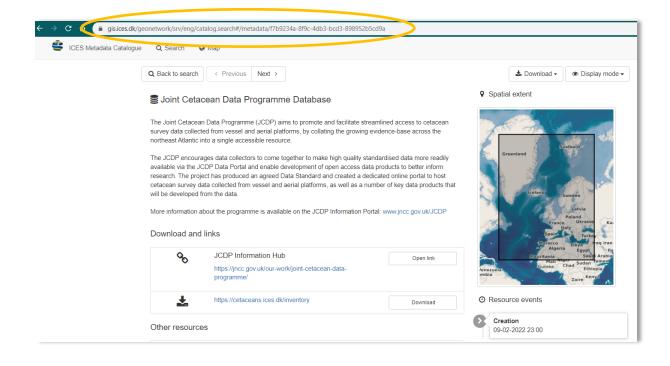
5.3 Importing your data

If your data passes validation, you'll see a message stating there are no errors and you can proceed with the upload.

Results	from t	the ICES Data	a Screening Utility pr	ogram for t	the following data:	
Country	11					
Dataset	Biodivers	sity - Cetaceans (JCDP)				
File Name	Test_dat	a.xml				
Email	xxxx@jn	cc.gov.uk				
Screening Date	20/05/20	022 12:55:00				
Record					Number of Rows	
record: Identifier	rs				14 Row(s)	
record: Effort an	d Environme	nt			3803 Row(s)	
record: Sightings	5				2058 Row(s)	
List information, errors and warnings during the screening process:						
Record Line	Туре	Message			Reported Errors	Error Fields
-1	warning	Same SurveyID is detec	tted in the database, all related records	will be overwritten	Syntax error is SQL rules: CheckID = 540	in the record:ID
There are no errors in the file. You can now include the URL link to the Metadata record for the survey and upload the file to the database.						
/alid Metadata URL's available at http://gis.ices.dk/geonetwork/srv/eng/catalog.search#/home						

You will be asked to add the URL for the metadata record associated with the survey(s) before uploading to the data portal. This URL can be found in the address bar when you view your metadata record (even if it has not been submitted for publication yet).

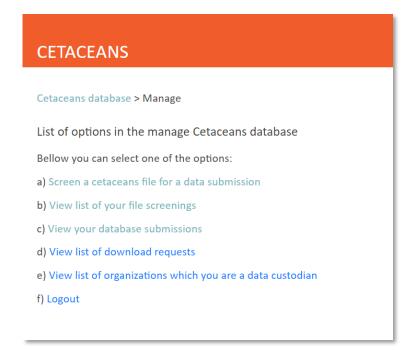
Paste ID metadata URL in box below:	
http://gis.ices.dk/geonetwork/srv/eng/catalog.search#/metadata/	resource ID
Import cetaceans data to the database	



Then you can submit your data and provide a valuable contribution to the JCDP.

6 Managing your data

While you are logged in you can also do the following actions visible in the portal screenshot below:



If you are a custodian of restricted data, here you can also review requests to download your organisation's data. This facility allows you to see which surveys are being requested and by whom, and the facility to manage requests.

7 Final comments

We would like to thank you for being part of the JCDP and contributing your cetacean survey data. This is what will make the JCDP a success.

If you need any further assistance, please contact the JCDP team within JNCC: <u>MarineMammals@jncc.gov.uk</u>.

If you have any feedback on the JCDP Data Portal, submitting process or inventory please fill in this online form noting the issue(s) so we can improve the portal: <u>https://forms.office.com/r/rwEym4XPZq</u>

You can keep up to date with the JCDP news and update by subscribing to the <u>JCDP email</u> <u>updates</u> or <u>follow us on Twitter</u>