




# **Scoping the Development of a European Marine Strandings Database**

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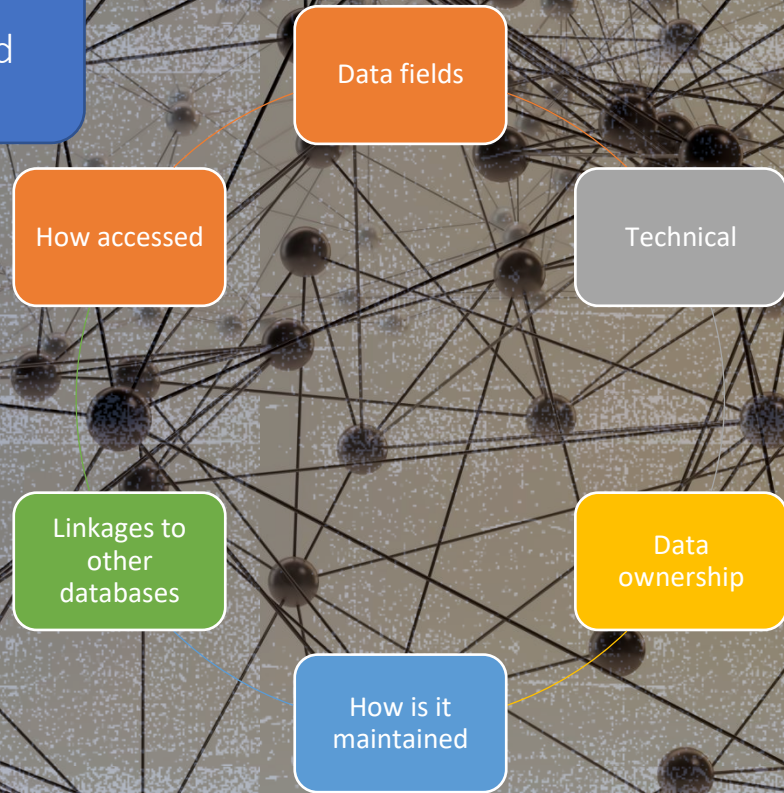
# Context

- Various regional stranding schemes collect data on stranded marine animals in Europe
- Data range from basic morphometrics to full necropsies
- These data are useful for assessing the cause of death and monitoring marine animal health
- International reporting is mainly annual and document-based
- The need for a centralised stranding database has been recognized to improve monitoring (ICES, ASCOBANS, IWC)

## ASCOBANS small-scale project grant Jan-July 2023:

### Scoping the development of a shared stranding and necropsy database

- Based on Action point 7 of the 27th Meeting of the ASCOBANS Advisory Committee, and objectives 3 (use of bycatches and strandings) and 5 (information and education) of the ASCOBANS Conservation and Management Plan and objective 5
- Builds on two previous small grants awarded to ZSL
  - (2011) Feasibility study on the creation of a web-accessed strandings database covering Agreement Party and Range States within the ASCOBANS region"
  - (2016) "Development of a fully costed proposal for a web-accessed database for cetacean stranding and necropsy data in the ASCOBANS region" in 2015-2016





## Web-accessed database for marine mammal strandings and necropsy data

ASCOBANS AC27, Action Point 7:

Feb  
2023

An initial online survey to gauge interest in joining a collaboration which would seek to explore the advantages and challenges in developing an online web-accessed data repository for strandings information

March  
2023

- Review of existing or planned databases containing marine strandings data

April  
2023

A workshop to:

- Identify stakeholder requirements /specifications/ concerns for any database
- Address data ownership and technical considerations.
- Discuss the possibility of ASCOBANS developing its own database or collaborating with other IGOs
- Identify individuals for a Working Group.

July/Aug  
2023

- Scope database structure with developer
- Formulation of a design brief, including potential outline costs and timescales for the project

ASCOBAN  
SAC 28

- Report on scoping the development of a shared stranding and necropsy database presented to the 28th Meeting of the ASCOBANS Advisory Committee.

# ECS/ASCOBANS Workshop on Scoping the Development of a European Marine Strandings Database

**Half day workshop held as part of ECS conference, 16<sup>th</sup> April 2023**

**32 attendees**

- **1. Presentations from national strandings networks**

Germany, Netherlands, France, Poland, Sweden, Spain and UK

- **2. Strandings data integration- Pathways and pitfalls**

- EU JRC survey across European networks
- IWC strandings database initiative
- ICES WGMME review: Use of strandings to quantifying marine mammal bycatch
- ACCOBAMS
- Joint Cetacean Data Programme

# ECS/ASCOBANS Workshop on Scoping the Development of a European Marine Strandings Database

## 3. Small group discussions:

- **Issue one: Why build a European strandings database**

Identify the main advantages. Who would be interested in this who are the beneficiaries and what data do they need? What does the database need to achieve this?

- **Issue two: What data should the database contain?**

Identify the main types of data the database needs to store and potential strategies for addressing issues around this such as harmonisation, validation, and curation.

- **Issue three: How should this database be built and managed**

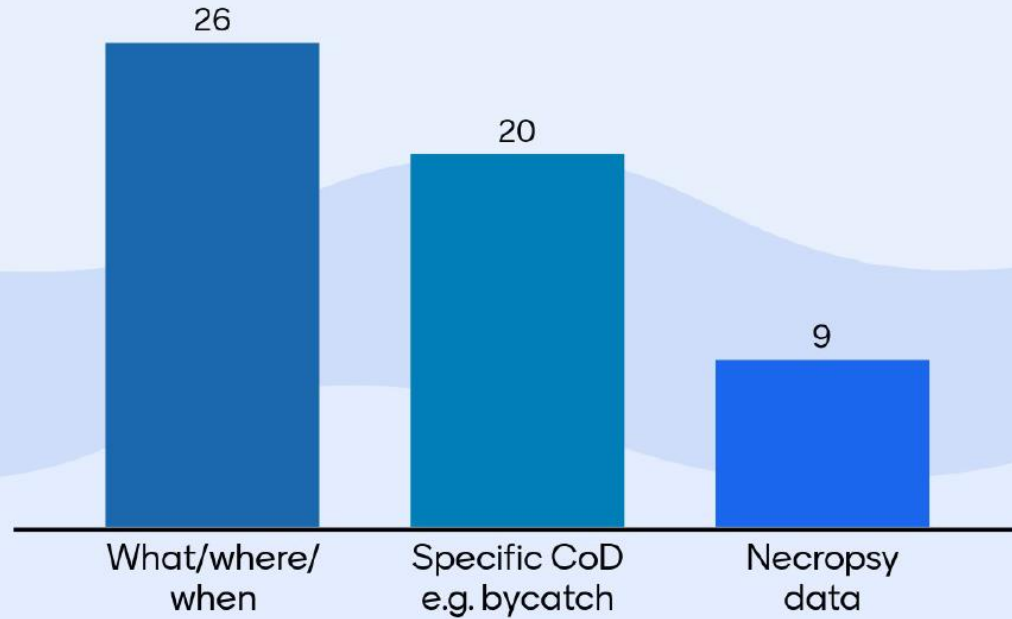
A modular or phased approach to development. How should the data be managed. Who would curate it? What can we learn from other systems?

- **Issue four: Funding**

Possible outcomes: Identify funding sources. Considerations for building in addition to maintenance?

## 4. Discussion and Mentimeter survey

# What should the database include as data? Mentimeter





# Positives

- There was a unanimous will to have a Europe-wide database
- International collaboration
  - Open access
  - Ease of one-stop shop
  - Researcher/stakeholder/policy maker/public access
- Geographical overview –relevant for regulatory frameworks
  - Species/stranding distribution & seasonality
  - Identifying problems and their spatial extent
  - Early warning of UME allowing coordinated responses

## ECS 2023 Marine Strandings Database Workshop

The following questions are about your opinion on the development of a European marine strandings database and invite interested participants to an upcoming workshop on the topic

The ASCOBANS region contains many long-term strandings monitoring and investigation programmes, several spanning multiple decades. Data that are collected through these programmes are routinely collated on national/local databases, and in many instances, made available through reports and/or public release of information. Currently, there is no mechanism to combine and display these data at an international level or across the range-states of the species under investigation. Collating data at a wider spatial resolution is likely to assist in identifying unusual mortality events, assessing trends in species distribution and streamline IGO reporting requirements.

The objective of the workshop is to identify the possible benefits and challenges associated with developing and

# Positives

- Opportunity to standardize data collection procedures
  - Validation of techniques
  - Quality assurance
- Highlight value of funding for individual stranding networks
  - Platform for support between networks
- Suggested phased approach, starting with basic data and expanding over time

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# Concerns

## Practical issues

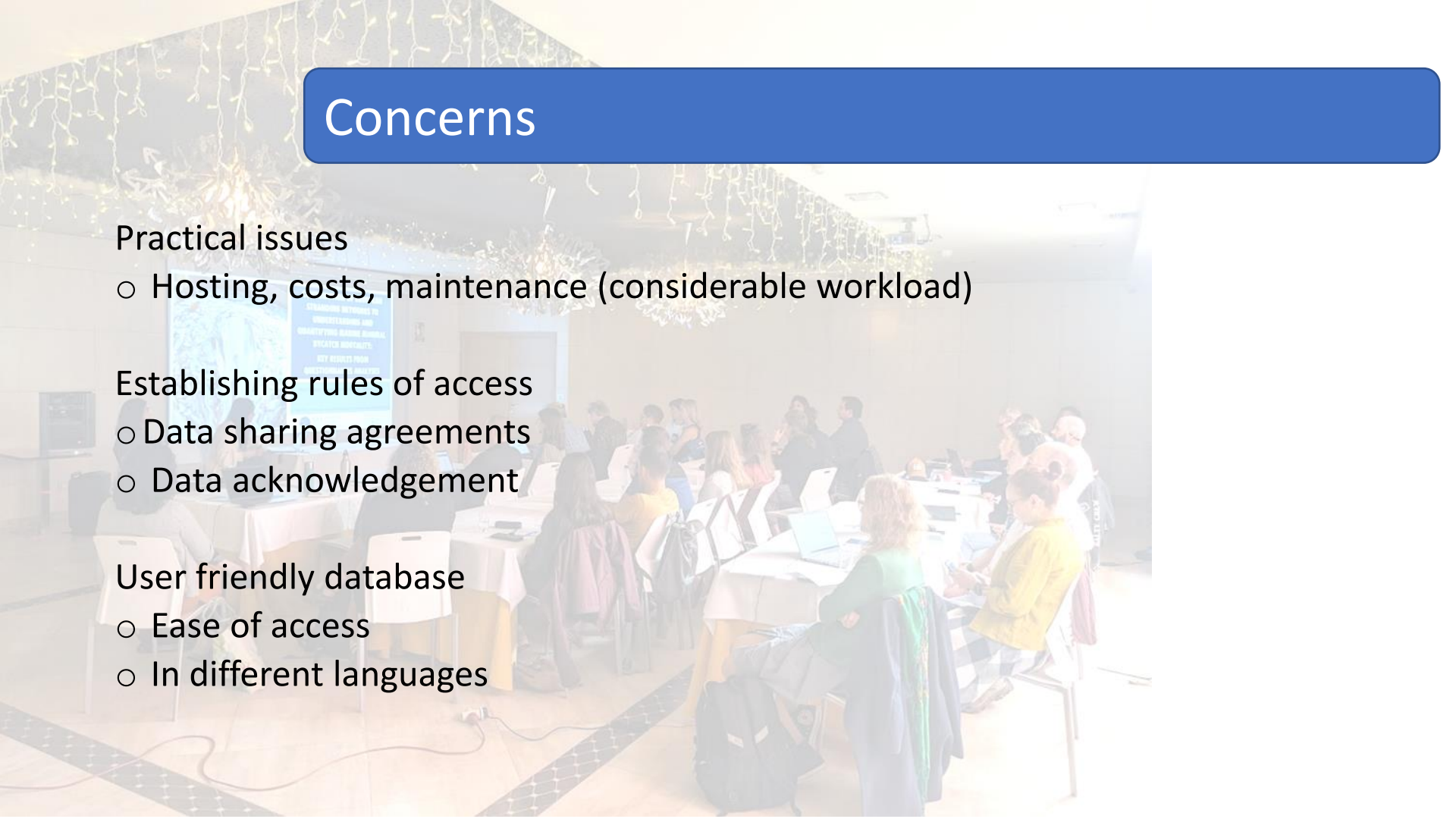
- Hosting, costs, maintenance (considerable workload)

## Establishing rules of access

- Data sharing agreements
- Data acknowledgement

## User friendly database

- Ease of access
- In different languages



# Concerns

## Standardising of data

- Different levels of monitoring available to stranding schemes due to resources
- Addressing data harmonisation is essential

## Timescale for data upload

- To be useful data needs to be shared almost in real time (2 week buffer)

## Unified collaboration

- Need similar levels of data input
- Differences in admin/funder requirements between stranding networks
- Unanimous agreement on terms & conditions



# Proposed goals and strategy

- Streamlined recording and management of marine stranding incidents
- Strengthen communication channels among experts.
- Advance marine conservation through standardized data and international cooperation
- Adopt a modular approach to development
- Formation of steering group
- 'Phase one'
  - Standardized documentation of strandings.
  - Timely data flow and mapping for management and reporting.
  - Build communication among experts worldwide
  - Agreed common format for data validation.



# Data and Information Services

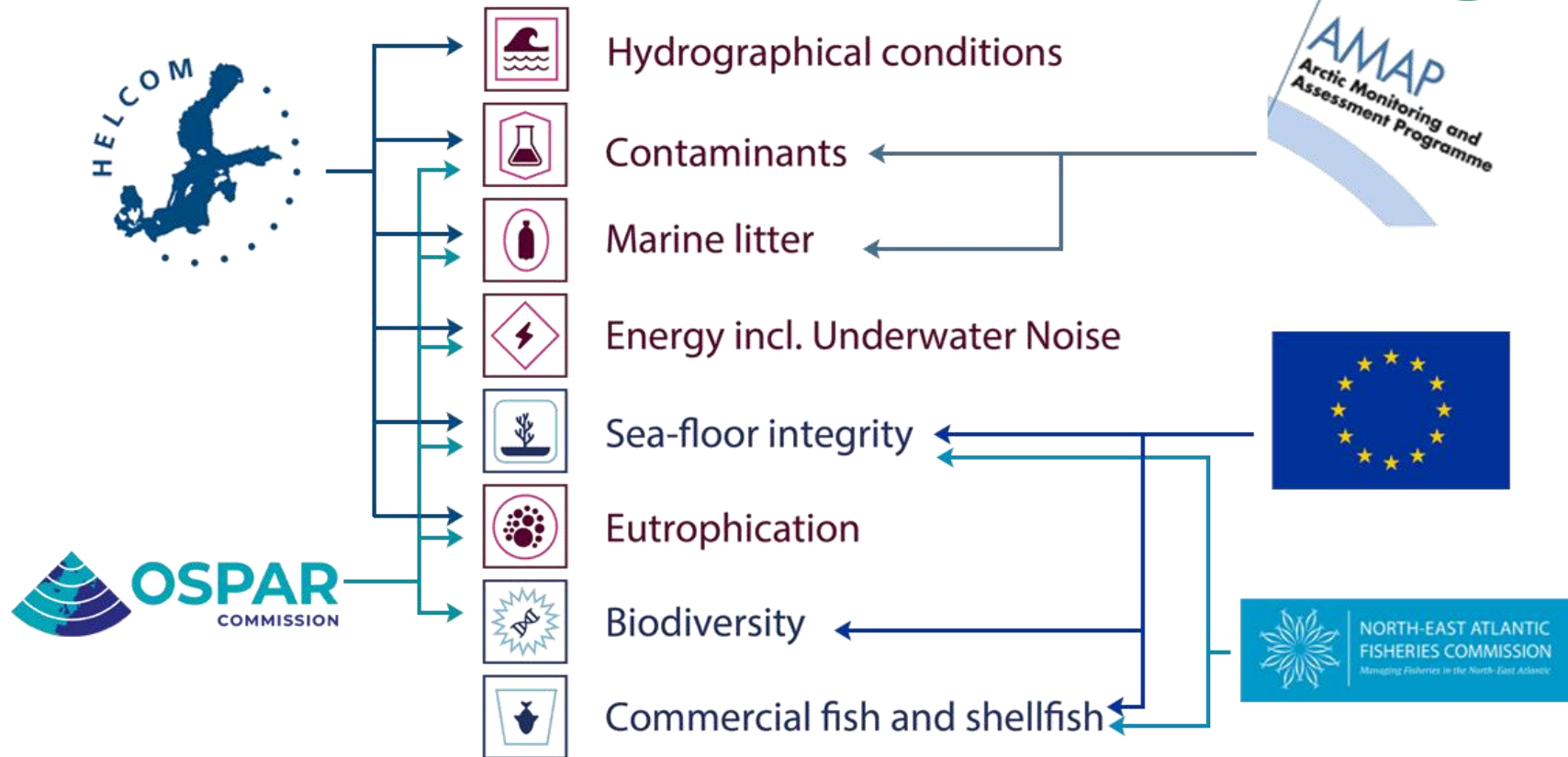


<https://www.ices.dk/data/Pages/default.aspx>





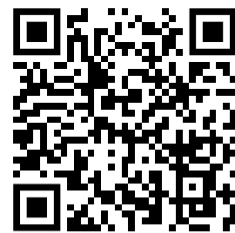
# ICES managed data flows



# ICES Data centre

## CETACEANS - EFFORT AND SIGHTING

ings and effort. This tool can be used to filter data to download



- ICES data centre identified as a potential collaborator
- Proposal for developing a phased database
- Track record designing similar systems
  - Emphasis on consistent data flow, prompt display, and data validation.
  - Alignment with FAIR data principles (Findable, Accessible, Interoperable, Reusable)

# Phase One (minimum viable product)



Capacity to upload and validation of data records detailing 'What where when' instances of strandings



An online summary of uploaded data with information from individual stranding events



An online map that plots presence/absence of stranding events by species/taxa



Data download functionality (open access licence data)



An agreed data format and vocabularies (managed code lists)



Basic data validation rules



A recognised data licence



Cost: 23,421 Euro + 5,768 Euro annual fee



Around 9 months



# Additional elements



A governance model for the ongoing maintenance, funding and development



Capacity to hold metadata or restricted data (eg cause of death, bycatch, marine litter ingestion, shipstrike)



Harmonisation of data and data validation



-Data portal, link to other databases?



Data products (i.e. state indicators, data dashboarding)

# IWC strandings database



- IWC68 Commission endorsed several recommendations related to database development and data management of strandings data.
- Similar drivers to ASCOBANS but also include specific information on
  - Ship strike
  - Bycatch
  - Marine debris
- IWC has a full-time data coordinator (Lydia Oloughlin)
- Development endorsed at IWC 69A and by IWC SEP

# IWC Statement of Support

- The IWC identifies the need to collate, standardise, store and disseminate strandings data at a global scale. This goal cannot be accomplished without regional organizations leading the data management work on strandings data. As the IWC explores the development options for a global database, there is value in ASCOBANS and ICES developing this regional database.
- As mentioned in the proposal, there are options for IWC to join forces and expand the database in the future to a global scale or to connect relevant data from this regional database to a global database. Either option relies on the development of this regional database.
- IWC **supports** the proposal and **thanks** ASCOBANS and ICES for being included in the discussions about developing a database.



# Asks for the Advisory Committee

- Endorsement of ISD phase 1 as outlined in the ICES proposal.
- Call for the additional members of steering group and resource for subsequent workshop to progress the work
  - Technical
  - Data harmonisation (links to [CetAMBICion](#), [CiBBRINA](#), [IWC SEP](#))
- Assistance/advice for sourcing funding (c30,000 Euro) for initial phase



