Agenda Item 6.1

Project Funding through ASCOBANS
Progress of Supported Projects

Document 6-09

**Project Report:
Development of the HELCOM-
ASCOBANS Harbour Porpoise
Database**

Action Requested

- Take note of the report
- Comment

Submitted by

Secretariat

Report on development of the HELCOM-ASCOBANS Harbour Porpoise Database

Background

The Contracting Parties to the Helsinki Convention, have agreed in the Baltic Sea Action Plan to develop a reporting system and database on Baltic harbour porpoise sightings, by-catches and strandings in co-operation with ASCOBANS. Following a recommendation of the 16th Meeting of the ASCOBANS Advisory Committee (Bruges, Belgium, 20-24 April 2009), a small scale funding agreement, between UNEP/ASCOBANS and HELCOM was signed in the beginning of 2010 for a project running from beginning of March until the end of May. A project researcher, Ms. Reetta Ljungberg, was hired for that period and the funding has been used to cover her salary as indicated in the Financial report (attached as a separate document).

The project aims were to:
- update the existing ASCOBANS database on opportunistic sightings, strandings and bycatch hosted previously by the German Forschungs- und Technologie-zentrum Westküste der Christian-Albrechts-Universität zu Kiel (FTZ)
- Enlarge the coverage of data to cover the whole HELCOM marine area
- Develop a reporting system for data collection in the future
- Search for possibilities to include data also on size, age and sex of individuals
- Create a web-based map service for viewing and down-loading the data

Information from the old database on oppostunistic sightings in this database was submitted by Ms. Ursula Siebert to the HELCOM Secretariat.

Data compilation

Project aimed to increase the coverage of the data from Baltic Proper to cover the whole Baltic Sea, including Kattegat. Data requests were sent to all HELCOM Contracting States (Denmark, Estonia, Finland, Latvia, Lithuania, Germany, Poland, Russian Federation and Sweden). A list of participants to the 6th Jastarnia Meeting and SAMBAH project Meeting (Hel Marine Station, Poland 2010) received from the ASCOBANS Secretariat was used as an initial list of experts to be involved and other experts were added from the HELCOM SEAL Experts' group for countries which had not taken part in the Jastarnia Meeting. More people were involved in the work through communication following the data requests sent. A full list of participants involved in the data collection is given in **Annex 1**.

Results

Based on the received replies and the hence the type of data available, new reporting form was created and this has been attached as a separate Excel document. At the moment it is not feasible to develop an electronic reporting system, since such are technically demanding and would require further considerable resources to be spent.

A HELCOM-ASCOBANS Harbour Porpoise database now created is bases on the old ASCOBANS database hosted by the FTZ. The data entries during the development of the database increased on some sighting types enormously (**Table 1**). The numbers of incidental

sightings have increased in the database by 20-fold (now 6678 entries), strandings by 5-fold (now 897 entries) and the bycatch by almost half (now 317 entries). The number of effort sightings and numbers of reported hunted or killed harbour porpoises remain at previous levels. All data coordinates were converted from WGS84 projection (and KKJ3 Finnish Grid) to ETRS89-LAEA to have them in line with EU INSPIRE directive and HELCOM data.

The new database includes some additional features to the original database, as suggested by national experts. These features are listed in **Table 2**. As new features to the data received from the FTZ database, following information was included: sex, weight, length, age (mature/juvenile), number of individuals caught during one event, method of catch, numbers of individuals observed - Germany has reported exact numbers and Sweden has given estimates of minimum and maximum numbers as estimate - and numbers of juveniles, behaviour, information on the surrounding boats at the time of sighting, information on dead/live specimen, and estimate of maximum and minimum distance of the observer to the sighted porpoise. Similar data cannot be given to all sighting types, for example weight cannot be recorded for swimming individuals. The type of data that will be requested from the HELCOM Contracting Parties during annual reporting can be viewed from **Table 2.** and the reporting forms. The HELCOM Secretariat has also added data on the basins and Economic Exclusive Zones where the sighting has occurred.

During summer 2010 the HELCOM Secretariat is moving from one online database server to another (ArcIMS-Server to ArcGIS Server) and hence the publishing of the HELCOM-ASCOBANS Harbour porpoise database will take place during the summer. Web-based map-service will allow both viewing and down-loading of the data. All involved experts in the communication have been notified of the situation and similarly there will be a press release at the time of publication. The data (attached as a separate zip-file) will be available prior to the publication and requests can be sent to the Secretariat (Ms. Hanna Paulomäki, hanna.paulomäki@helcom.fi).

Table 1. Numbers of data entries* prior and after the development of the HELCOM-ASCOBANS Harbour Porpoise database.

Type of sightings	Data entries prior to the update of the FTZ database	Data entries in the HELCOM-ASCOBANS database	Number of individuals per data entry
Incidental Sightings	323	6678	One or more**
Effort Sightings	66	65 (one double removed)	One individual
Hunted/Killed	4	4	One individual
Bycatch	222	317	One ***
Strandings	173	897	One individual
Unknown	1	2	One or more****

* Number of harbour porpoises per single data entry (=data row) varies for different data types (c.f. column on the right).
** In the data; columns *"MinIndividuals"* and *"MaxIndividuals"* describe the numbers in a flock.
*** In the data; column *"NumbCaught"* indicates if more than one individual was caught during the same event.
**** In the data; information given in column "*Additiona*l".

The data distribution after the update in the HELCOM-ASCOBANS Harbour porpoise database is shown in Screenshots from the tested online HELCOM GIS Services (ArcGIS Server) in **Annex 2.**

Table 2. The HELCOM-ASCOBANS Harbour Porpoise database features. Old and new features to the original ASCOBANS database are grouped for different sighting types. (X marks that data is available for all or almost all entries. If data is scarce country data indicates the availability of data. Darkened cells indicate features that are not feasible for the sighting type.)

Type of an opportunistic sighting	Incidental Sightings	Effort Sightings	Hunted/ Killed	Bycatch	Strandings	Unknown
Data received from the ASCOBANS (FTZ) Harbour Porpoise Database						
Day Month Year Latitude & longitude (WGS84 > ETRS89-LAEA) Location[1] Data Reference Original ID (Not reported for effort and unknown sightings) Country who has reported the data			Data shared by all Harbour Porpoise sighting types			
Time	X	X		-	DE	
Time description		X				
New data suggested by HELCOM Contacts						
End-date[2]				FI		
Age (mature/juvenile)				LI		
Length, cm				LI, FI, DK	DK, DE	
Weight, kg				LI, FI	FI, DE	
Sex (male, female, juvenile)				LI, FI, DK	DK	
Number of caught individuals				FI[3]		
Method of catch (*Caught by* = fishing gear)				FI		
Additional information				FI	DE, DK	
Numbers of individuals observed[4] (*MinIndividuals*)	SE, DE					
Maximum numbers of individuals observed[4] (*MaxIndividuals*)	SE					
Numbers of juveniles (*Juveniles*)	SE, DE					
Behavior (Travelling, foraging, social, resting or dead)	SE					
Surrounding boats (*BoatsPresent*)	DE					
Alive/Dead	SE					
District	SE					
Nearest Major Place	SE					

Sea area/Province	SE					
Maximum distance to observed porpoises	DE					
Minimum distance to observed porpoises	DE					
Data added by HELCOM Secretariat						
HELCOM ID	Starting from ID number 1 in each of the Sighting types (i.e. incidental sighting, effort etc.)					
EEZ	The Exclusive Economic Zone where the sighting has been made					
Basin	The Baltic Sea basin where the observation lies					
Subbasin	The sub-basin where the observation lies					

[1] Place description in the FTZ database.

[2] Finland has in some cases reported observation periods for which the end-date has been given separately.

[3] Finland has reported sometimes more than one individual for the same ID. Otherwise one ID marks one individual.

[4] Germany has reported the exact numbers of individuals observed during one event, but Sweden has reported separately estimates of minimum and maximum numbers observed.

Attachments to this report:

Financial Report_HELCOM-ASCOBANS database.pdf

HELCOM-ASCOBANS Habrour porpoise - Reporting form.xls

2010_HELCOM-ASCOBANSbalticseaporpoise.zip

**Contributors to the HELCOM-ASCOBANS Harbour Porpoise database:**
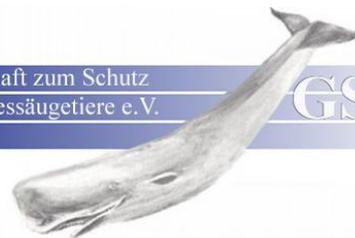
Hosting the European Seabirds at Sea, ESAS

Annex 1 List of people contacted during the development of the HELCOM-ASCOBANS database (submitters and primary contacts (1st) are underlined)

ASCOBANS contacts from the 6th Jastarnia Meeting and SAMBAH Project

Mats Amundin	mats.amundin@kolmarden.com
Eugeniusz Andrulewicz	eugene@mir.gdynia.pl
<u>Penina Blankett</u>	<u>penina.blankett@ymparisto.fi</u> (*Finnish 1st contact*)
Stefan Bräger	stefan.braeger@meeresmuseum.de
<u>Petra Deimer-Schuette</u>	<u>pdeimer@gsm-ev.de</u> (*GSM 1st contact, Germany*)
<u>Lidia Kacalska-Bienkowska</u>	<u>l.kacalska@minrol.gov.pl</u> (*Polish 1st contact*)
Jan-Erik Holmber	jan.holmberg.eros@beta.telenordia.se
Karl-Hermann Kock	karl-hermann.kock@vti.bund.de
Iwona Pawliczka	iwona.pvp@ug.edu.pl
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Signe Sveegaard	sign@dmu.dk
Jonas Teilmann	jte@dmu.dk
Robert Vagg	rvagg@cms.int
Radek Koza	ocerk@univ.gda.pl
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Olli Loisa	olli.loisa@turkuamk.fi
Juha Kääriä	juha.kaaria@turkuamk.fi
<u>Rappe Christina</u>	<u>christina.rappe@naturvardsverket.se</u> (*Swedish 1st contact*)
Line A. Kyhn	lky@dmu.dk
Julia Carlström	julia.carlstrom@aquabiota.se

HELCOM SEAL Experts (participants from Estonia, Latvia, Lithuania, Russia)

<u>Ivar Jüssi</u>	<u>ivar.jyssi@keskkonnaamet.ee</u> (*Estonian 1st contact*)
<u>Arunas Grusas</u>	<u>a.grusas@muziejus.lt</u> (*Lithuanian 1st contact*)
<u>Valdis Pilāts</u>	<u>valdis.pilats@daba.gov.lv</u> (*Latvian 1st contact*)
<u>Verevkin Mikhail</u>	<u>vermiv@yandex.ru</u> (*Russian 1st contact*)
Rustam A. Sagitov	rustam_sagitov@bfn.org.ru

People and institutions involved through communication:

DTU Aqua – Technical University of Denmark:

Brian MacKenzie	brm@aqua.dtu.dk
Lotte Kindt-Larsen	lol@aqua.dtu.dk

Danish Forest and Nature Agency (focal point for bycatches)

Fisheries and Maritime Museum, Denmark (focal point for Strandings):

<u>Charlotte Bie Thøstesen</u>	<u>cbt@fimus.dk</u> (*submitter: both strandings & bycatch*)
<u>Lasse Fast Jensen</u>	<u>lfj@fimus.dk</u> (*1st contact person*)

Finnish Ministry of Environment, Finland:

<u>Liukko Ulla-Maija</u>	<u>ulla-maija.liukko@ymparisto.fi</u> (*submitter*)

GSM - Society for the Conservation of Marine Mammals, Germany:

<u>Philip Loos/GSM-Office</u>	<u>ploos@gsm-ev.de/info@gsm-ev.de</u> (*submitter*)

Ministry of agriculture and rural development, Poland:

Marta Kaniewska-Królak	Marta.Kaniewska@minrol.gov.pl
<u>Małgorzata Wierzbicka</u>	<u>Malgorzata.Wierzbicka@minrol.gov.pl</u> (*submitter, pending*)

The Swedish Museum of Natural History, Sweden:

<u>Anna Roos</u>	<u>anna.roos@nrm.se</u> (*submitter*)

Annex 2   **General view (may change slightly) of the HELCOM-ASCOBANS Harbour porpoise database – publication pending (lighter symbols generally present older data, unfortunately legend could not be shown at this stage)**

Preview 1. Data distribution of the harbour porpoise sighting types; *Effort sightings, hunted/killed, unknown sighting*.
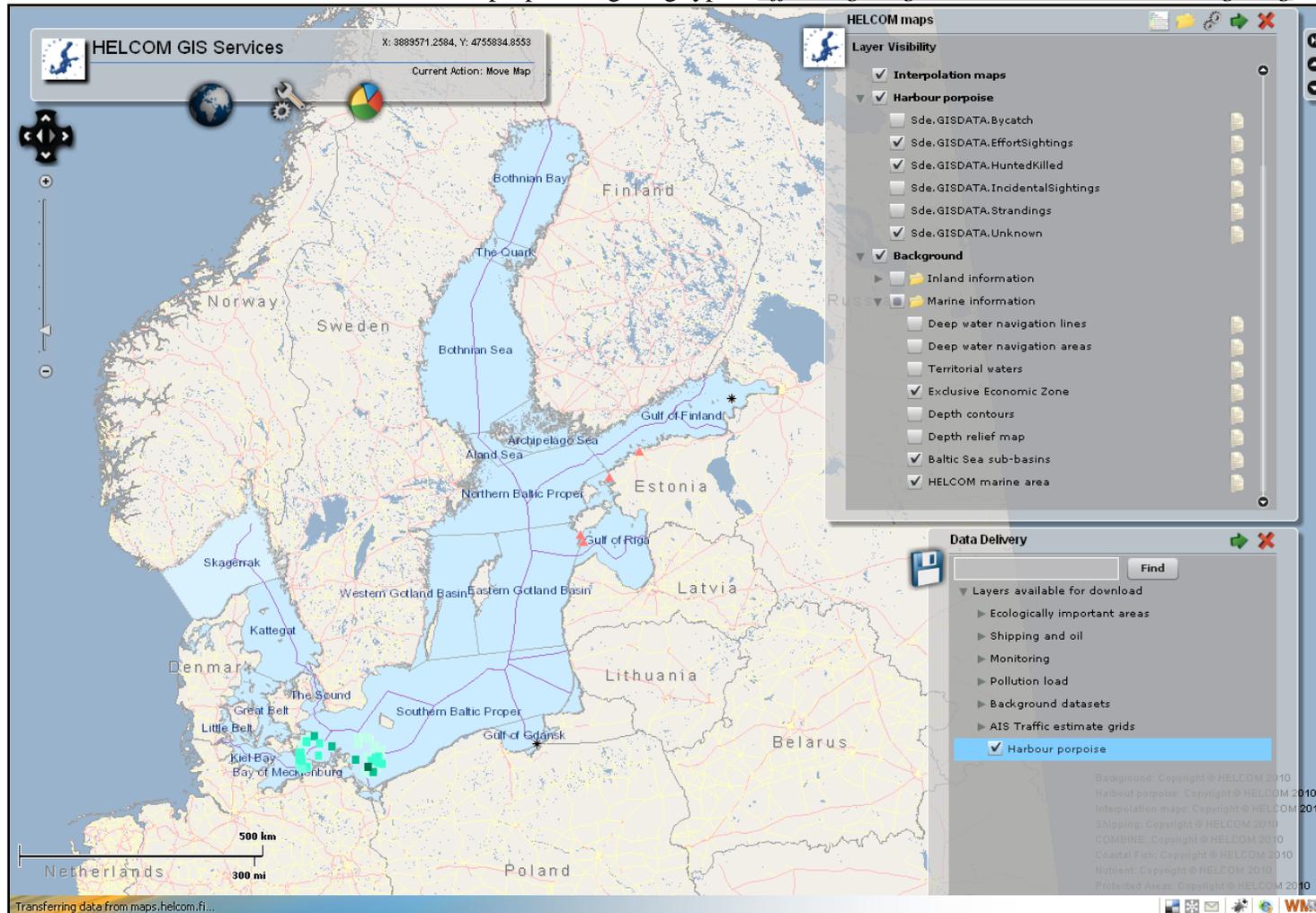
Preview 2. Data distribution of the harbour porpoise *strandings*, in the Baltic Sea.
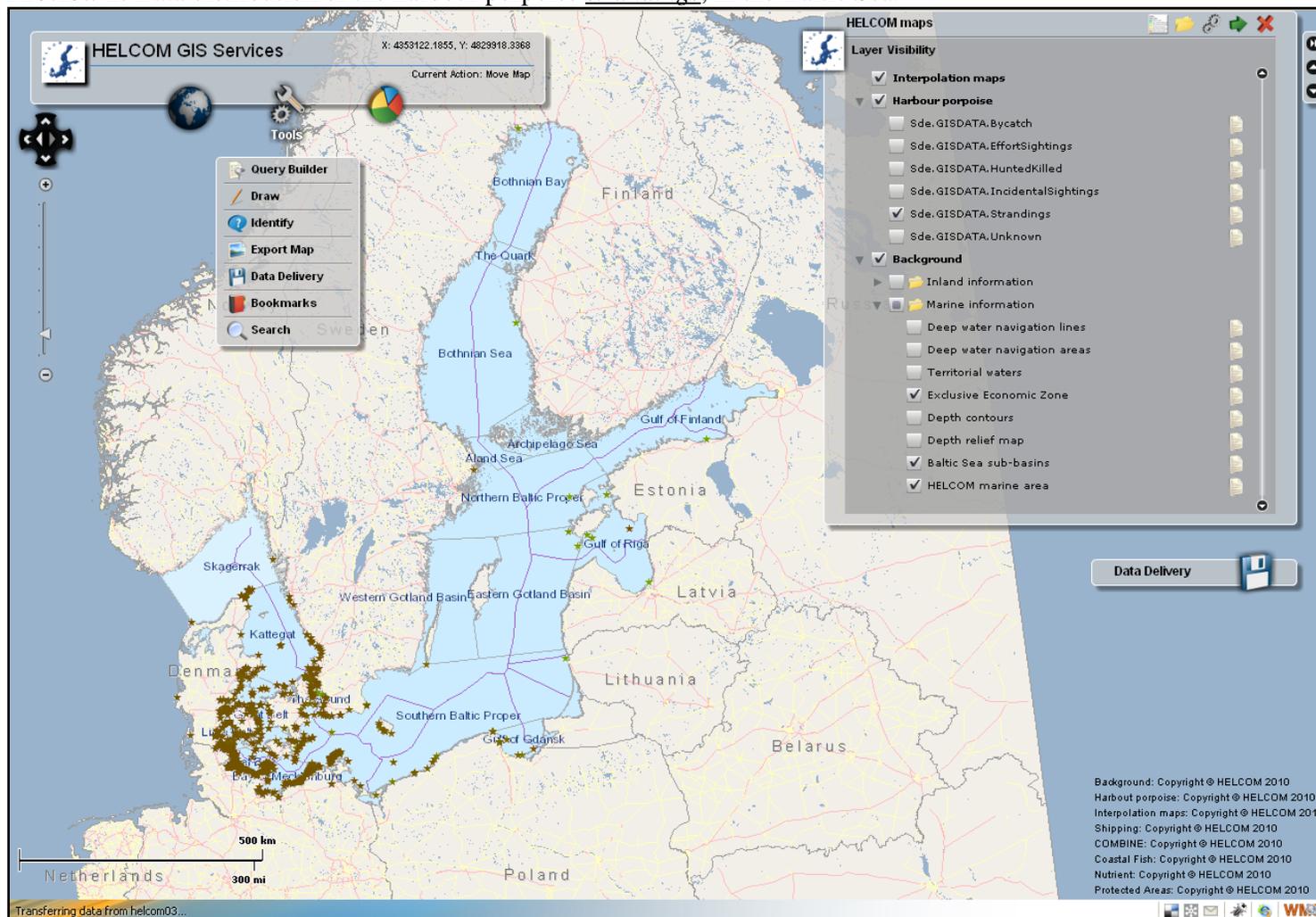
Preview 2. Data distribution of the _incidental sightings of_ harbour porpoise.
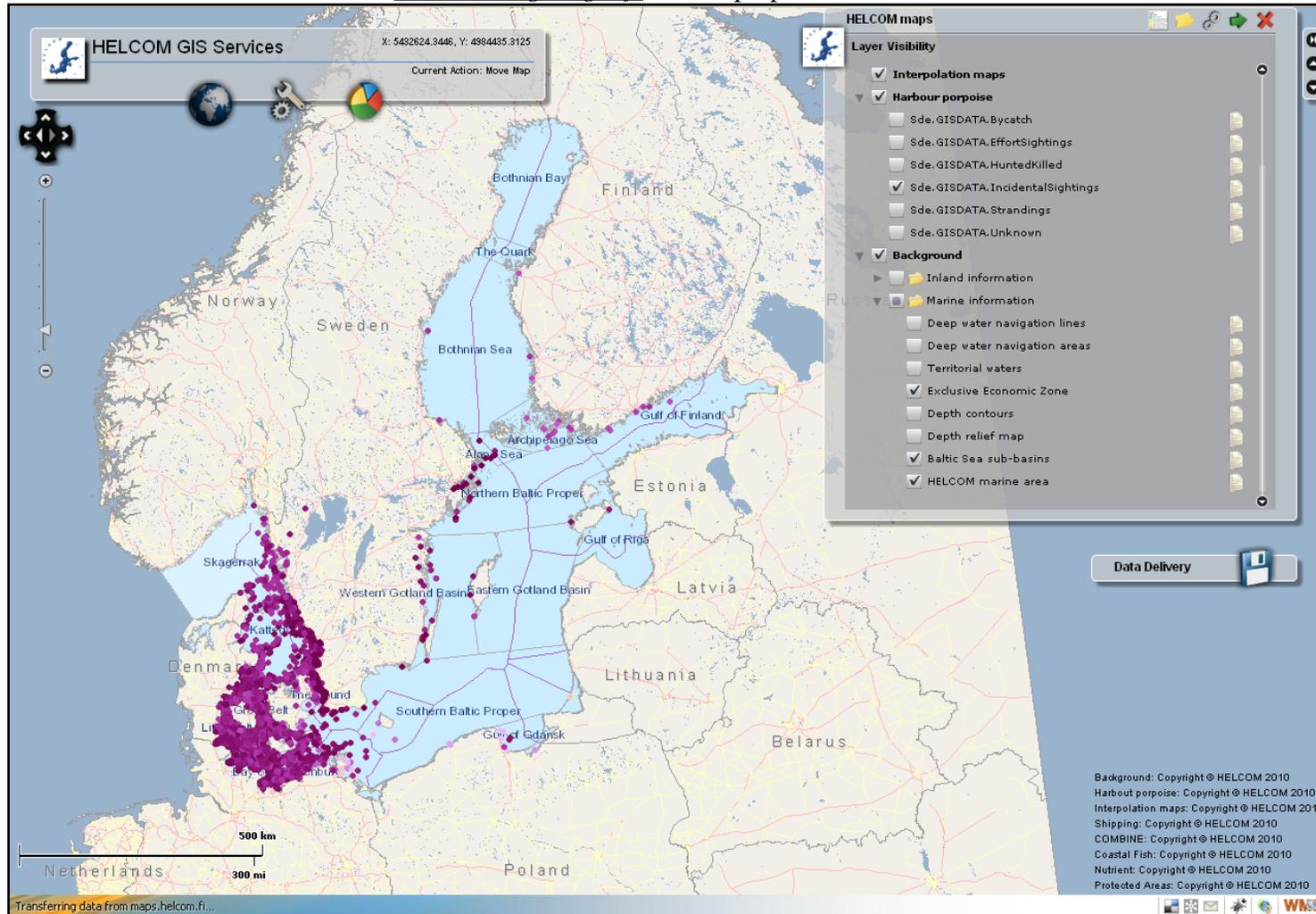
Preview 2. Data distribution of the harbour porpoise *bycatch*, in the Baltic Sea.