SCANS-IV

Small Cetaceans in European Atlantic waters and the North Sea 2022

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ASCOBANS

4th Meeting of the common dolphin group

Presentation by ***Anita Gilles***[1]

Coordinator SCANS-IV

09 Jan 2024

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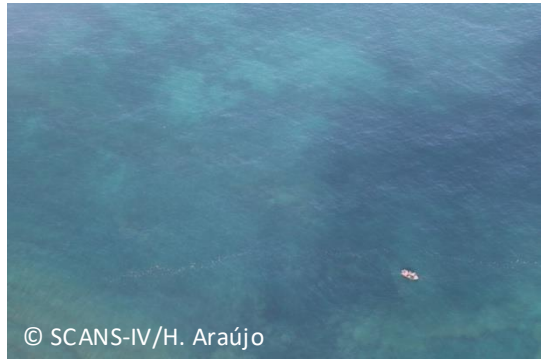
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Small Cetaceans in European Atlantic waters and the North Sea 2022

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Report available here

https://www.tiho-hannover.de/en/clinics-institutes/institutes/institute-for-terrestrial-and-aquatic-wildlife-research-itaw/scans-iv-survey

Funding support

SCANS-IV 2022

Denmark

Ministry of Environment of Denmark
Environmental Protection Agency

France

OFB
OFFICE FRANÇAIS DE LA BIODIVERSITÉ

Germany

Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection

BfN Federal Agency for Nature Conservation

Netherlands

Ministerie van Landbouw, Natuur en Voedselkwaliteit

Portugal

FUNDO AMBIENTAL

ICNF
Instituto da Conservação da Natureza e das Florestas

Spain

GOBIERNO DE ESPAÑA
MINISTERIO DE AGRICULTURA, PESCA Y ALIMENTACIÓN

GOBIERNO DE ESPAÑA
VICEPRESIDENCIA TERCERA DEL GOBIERNO
MINISTERIO PARA LA TRANSICIÓN ECOLÓGICA Y EL RETO DEMOGRÁFICO

Sweden

Swedish Agency for Marine and Water Management

U.K.

Department for Environment Food & Rural Affairs

Department for Business, Energy & Industrial Strategy

Context

SCANS-IV is the fourth SCANS survey (1994, 2005/2007, 2016, **2022**). It is covering shelf and offshore waters of the European Atlantic.

The main objectives are:

Abundance estimates and trend assessment of the regularly occurring cetacean species by population-wide surveys

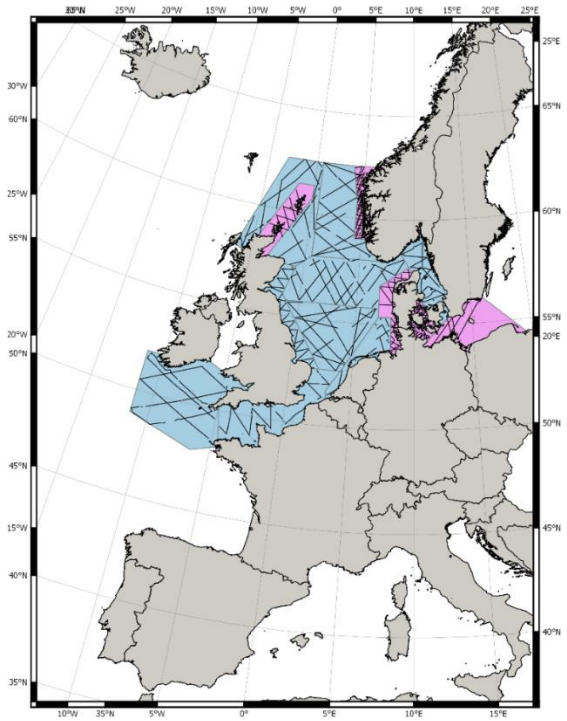
Provide outputs for Member States to report under the **Marine Strategy Framework Directive** (Article 8: due 2024), the **Habitats Directive** (Article 17: 2019 - 2024) and for **OSPAR/HELCOM** assessments.

Provide outputs for **impact assessments** of offshore industries and fisheries.

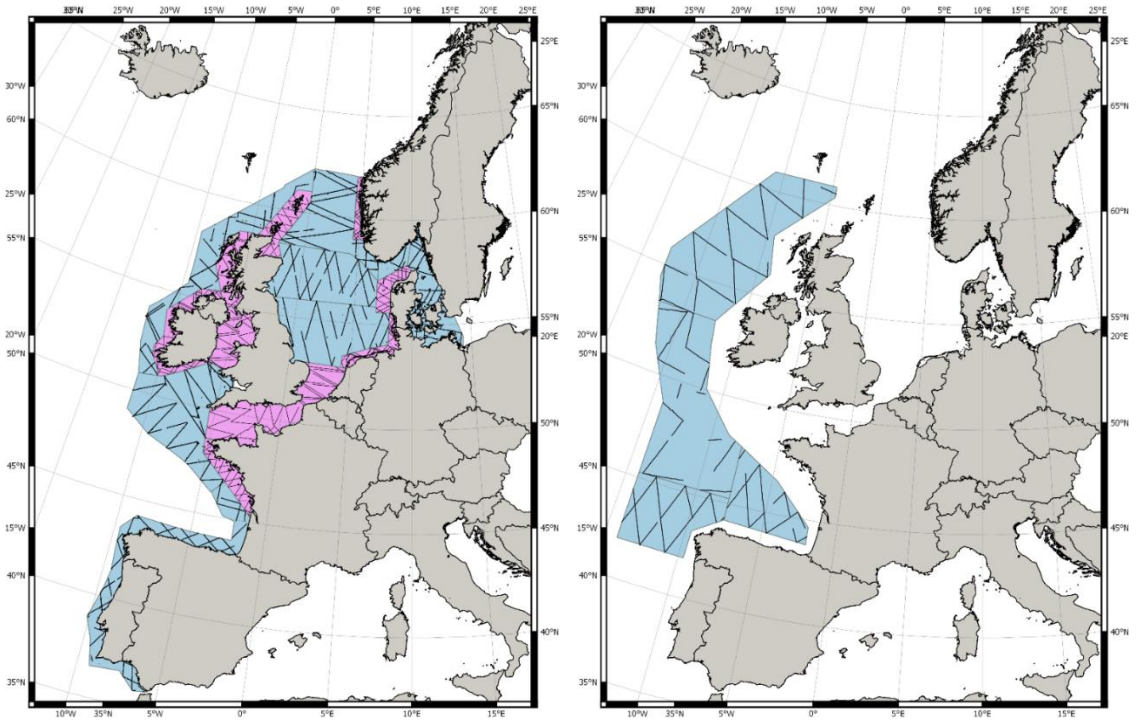
Development of a **governance framework** for future SCANS surveys conducted in 6-year cycles to ensure long-term implementation.

Context

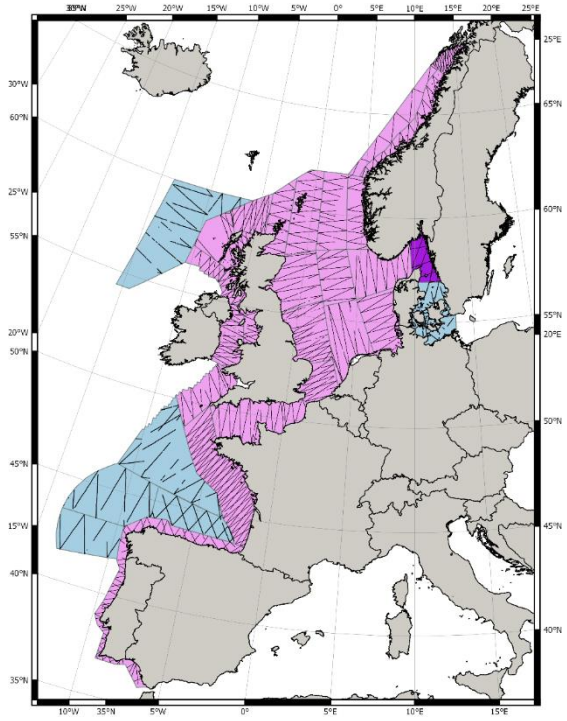
SCANS 1994



SCANS-II 2005 + **CODA 2007**



SCANS-III 2016



ship aerial

Survey area

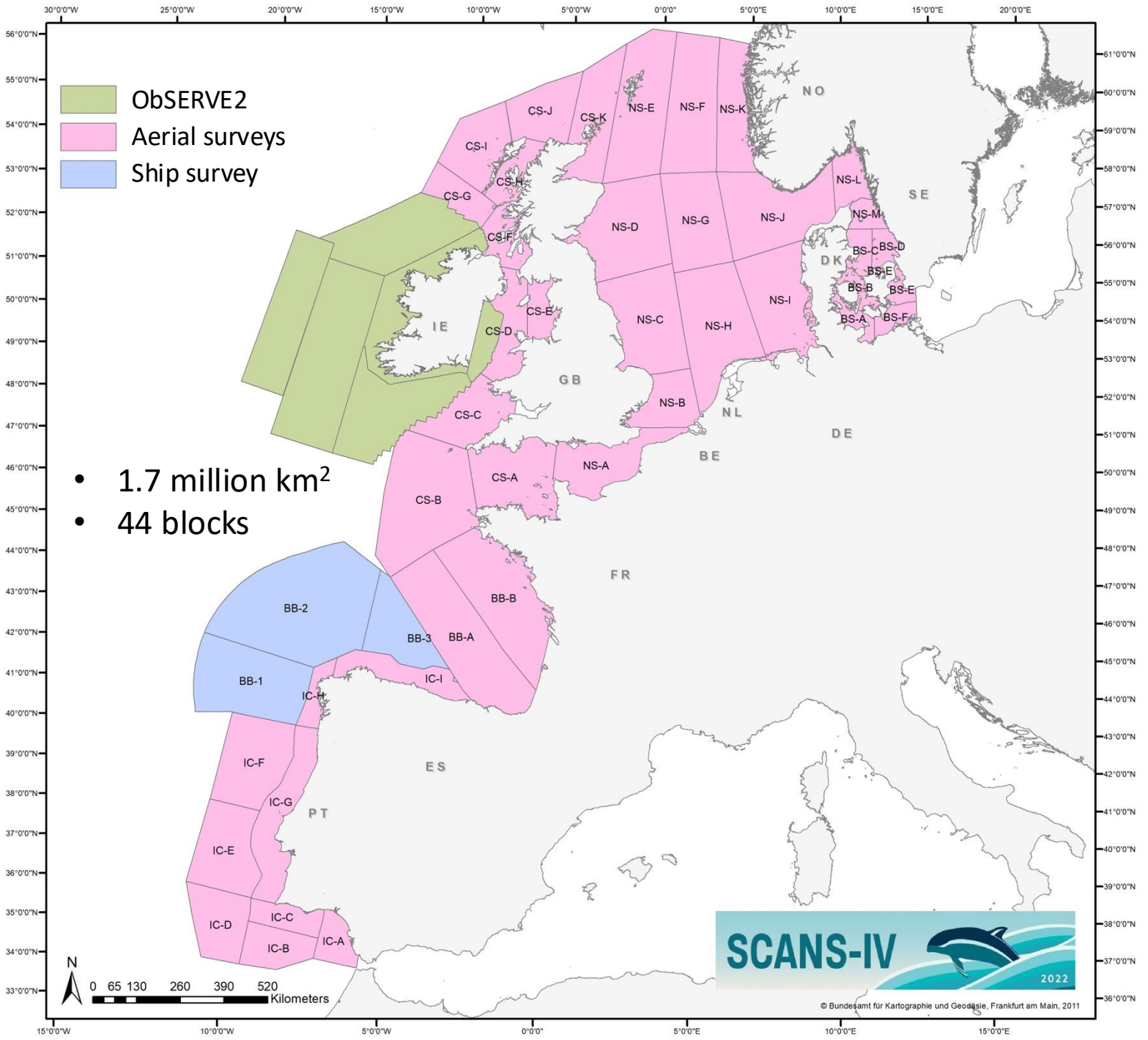
Aerial surveys

- 8 planes (7 P68s and 1 BN)
- Using regional (existing) survey teams where available
- Portuguese offshore waters covered for 1st time in SCANS

Shipboard survey(s)

- 1 vessel in 2022 (Ramón Margalef)
- Covering primarily offshore waters

- No ship survey west of Scotland



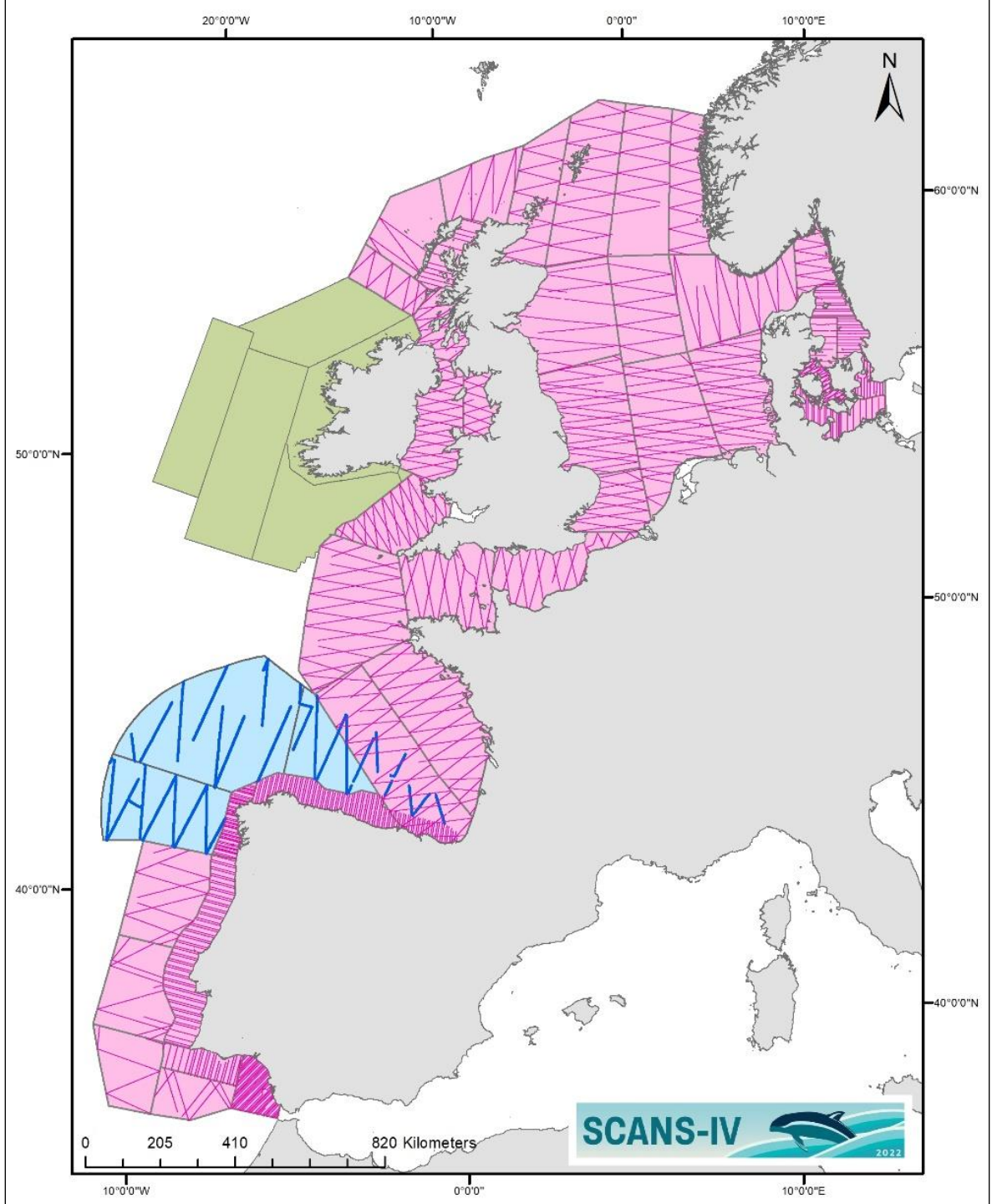
Realised effort

- 28.06. - 15.08.2022 (83% of effort)
- 2nd attempt NW Scotland: 07. - 12.09.2022 (3%)
- Spanish (coastal) aerial survey: 07.09. - 22.10.2022 (14%)

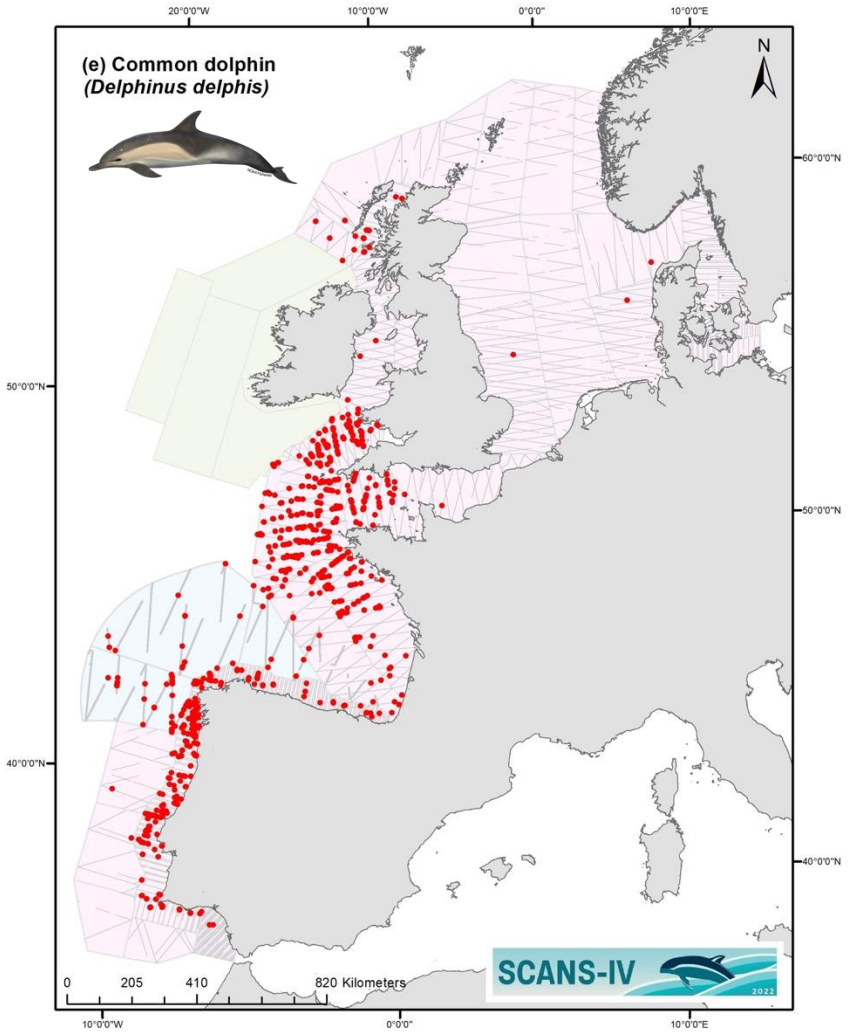
- **Good coverage overall, very high effort**

  Total of 76,000 km on effort

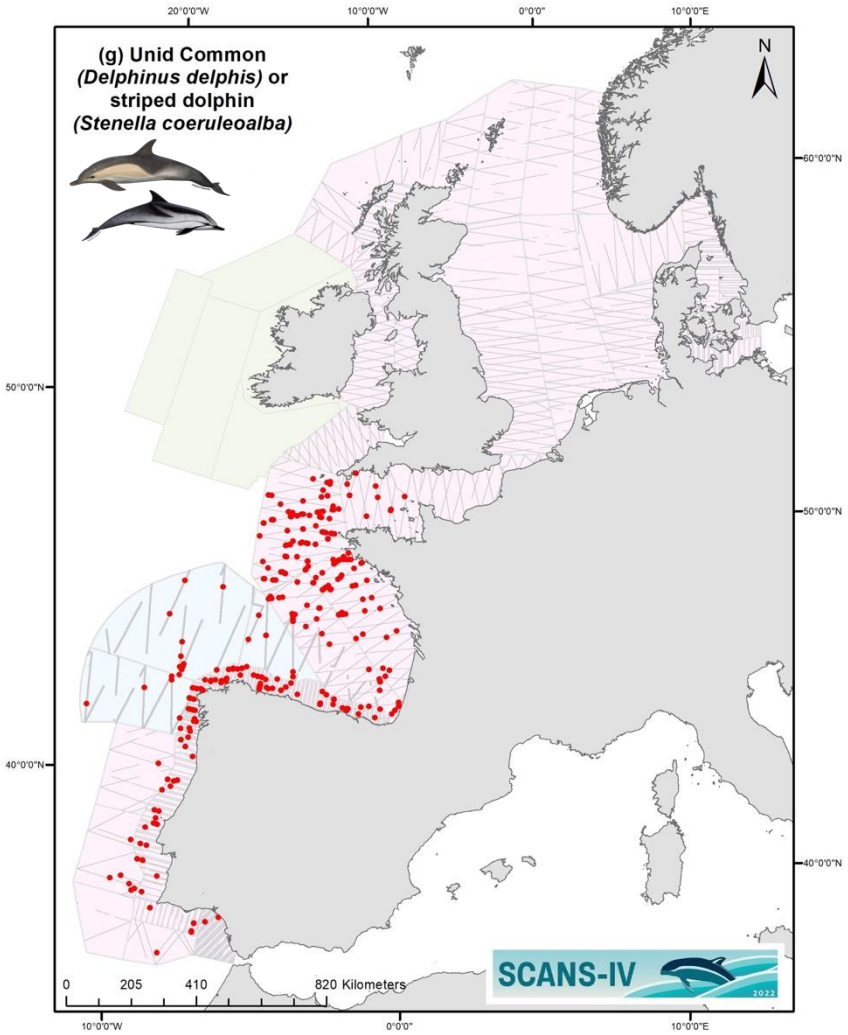
  - Very good cov in central areas and Belt Seas
  - Adequate cov in northern areas
    - Couple of gaps west of Hebrides & northern North Sea
  - Very good coastally and adequate offshore in the south
    - Ship coverage patchy in offshore Bay of Biscay



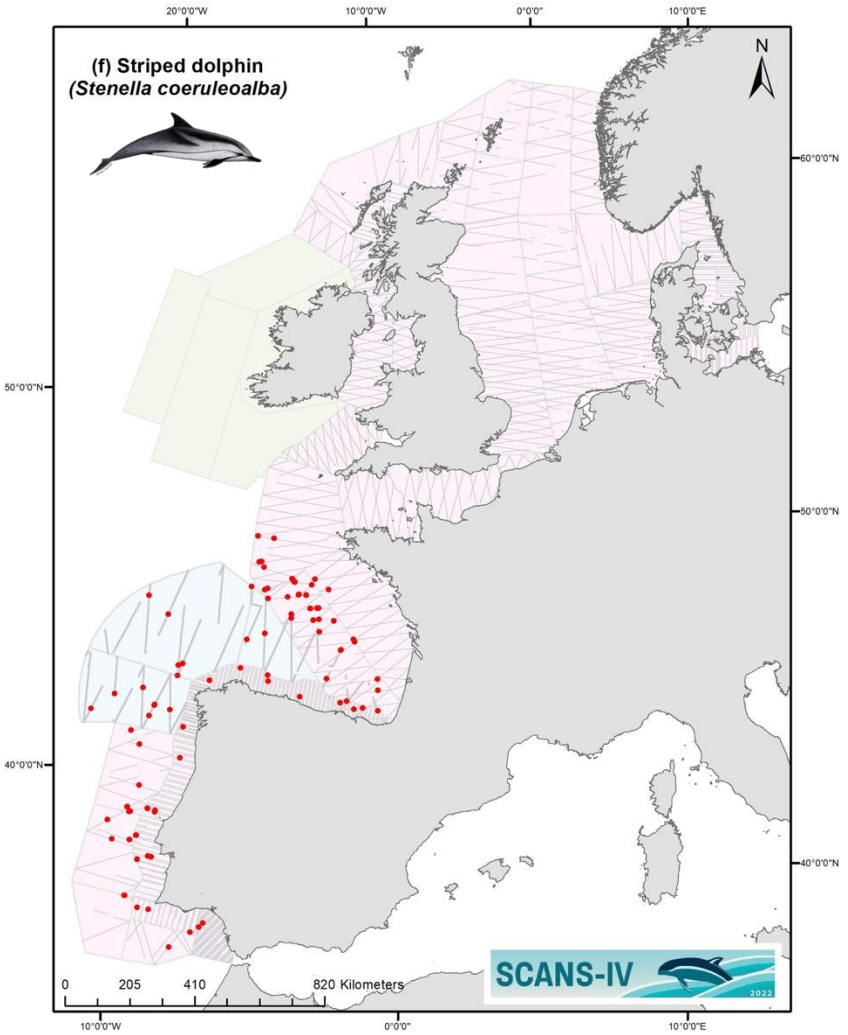
Common and striped dolphin



Common dolphin
N = 439,212 (0.18)



Unidentified Common/Striped
N = 145,567 (0.22)

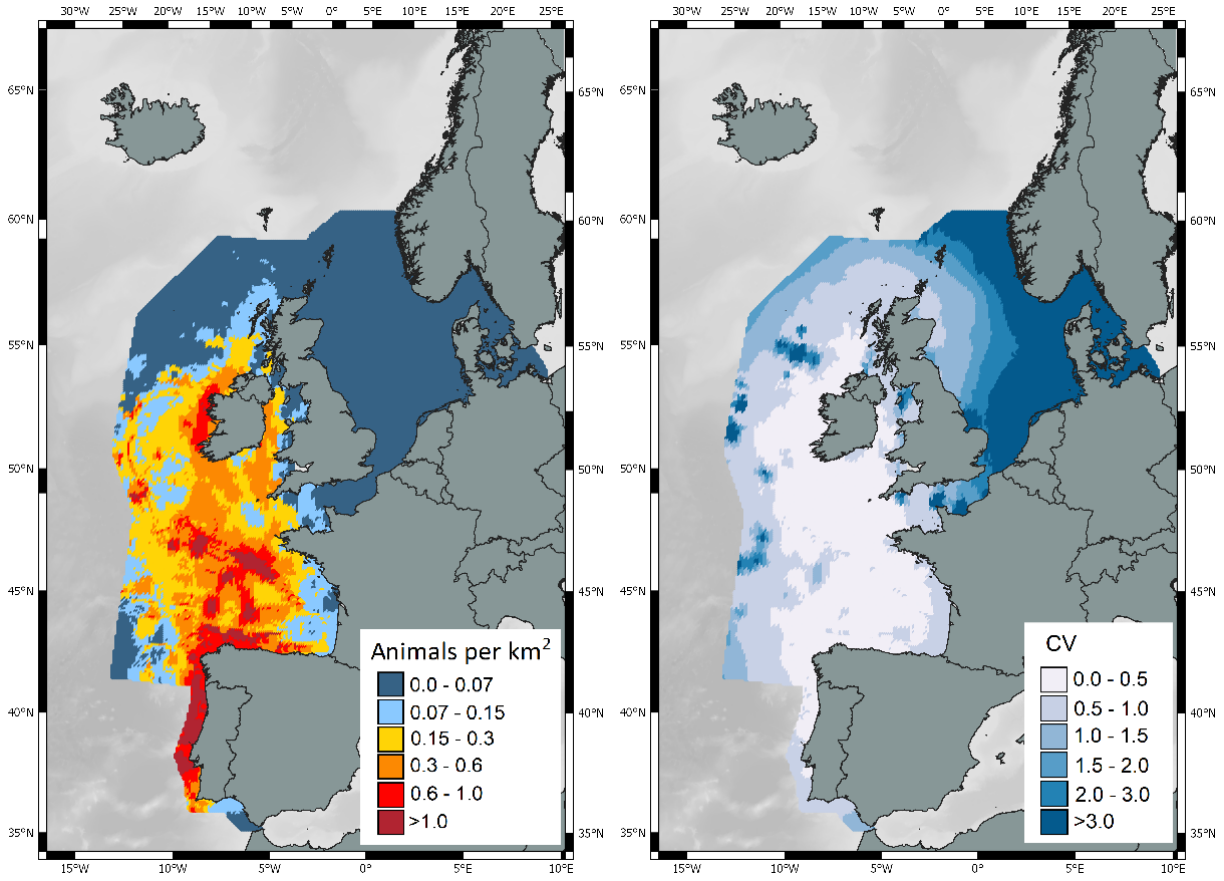


Striped dolphin
N = 186,825 (0.36)

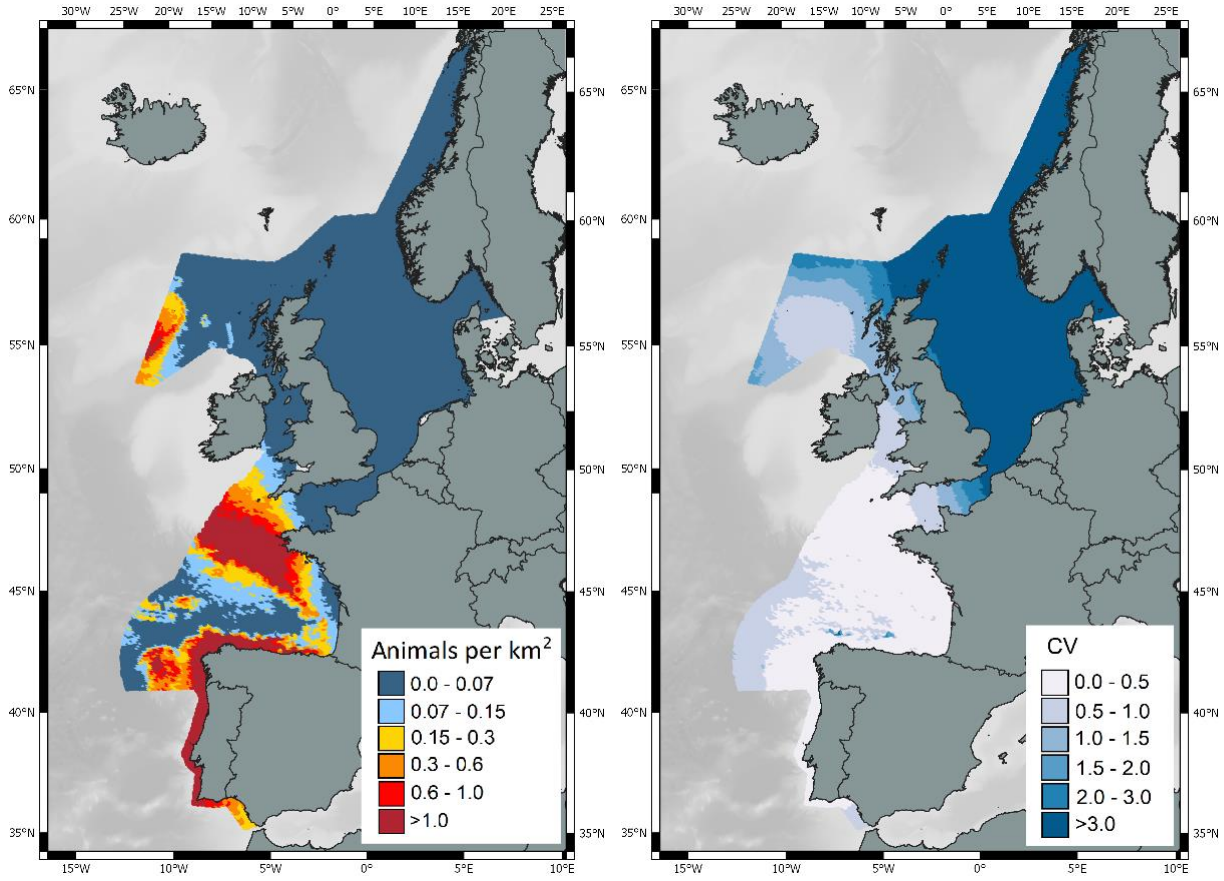
SCANS-II + CODA and SCANS-III density surface modelling

Common dolphin

SCANS-II (2005) + CODA (2007)

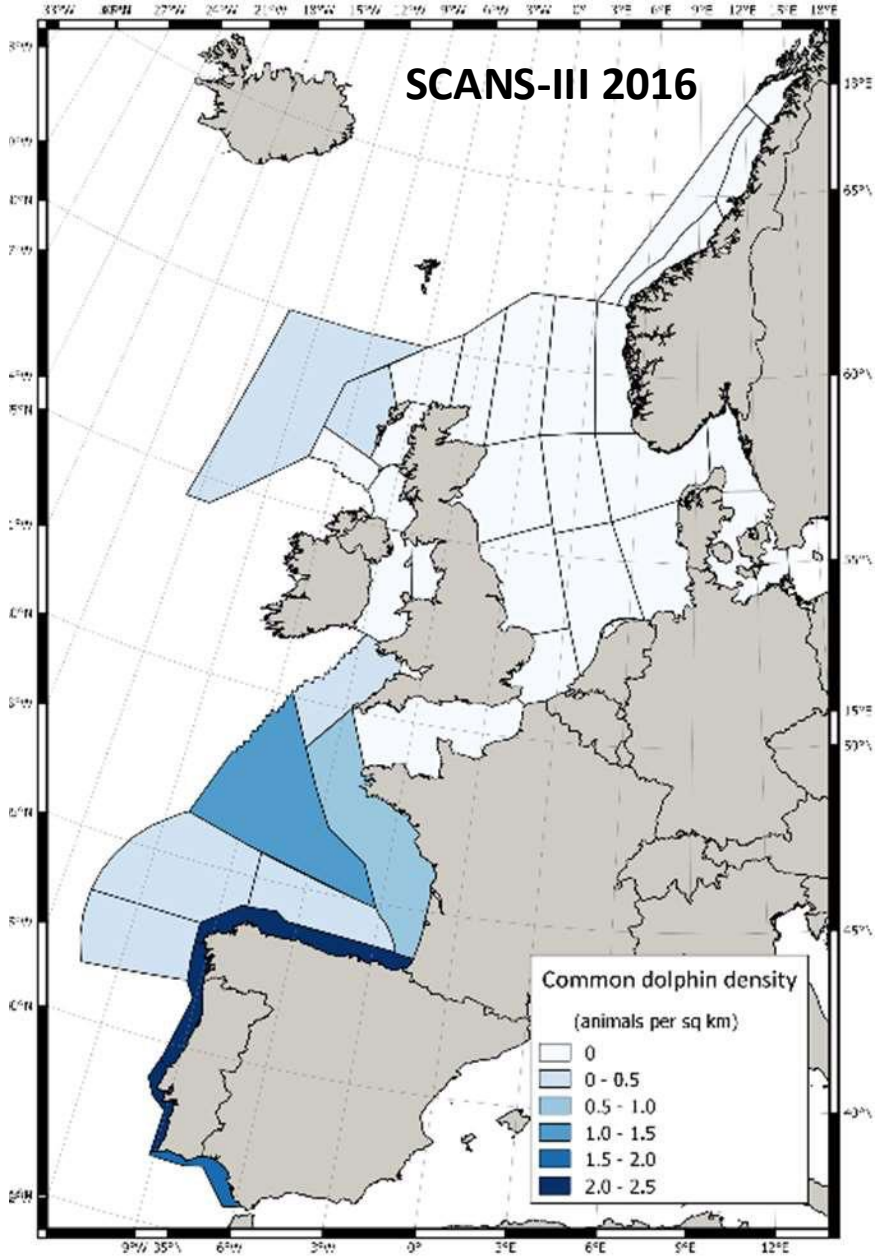


SCANS-III (2016)



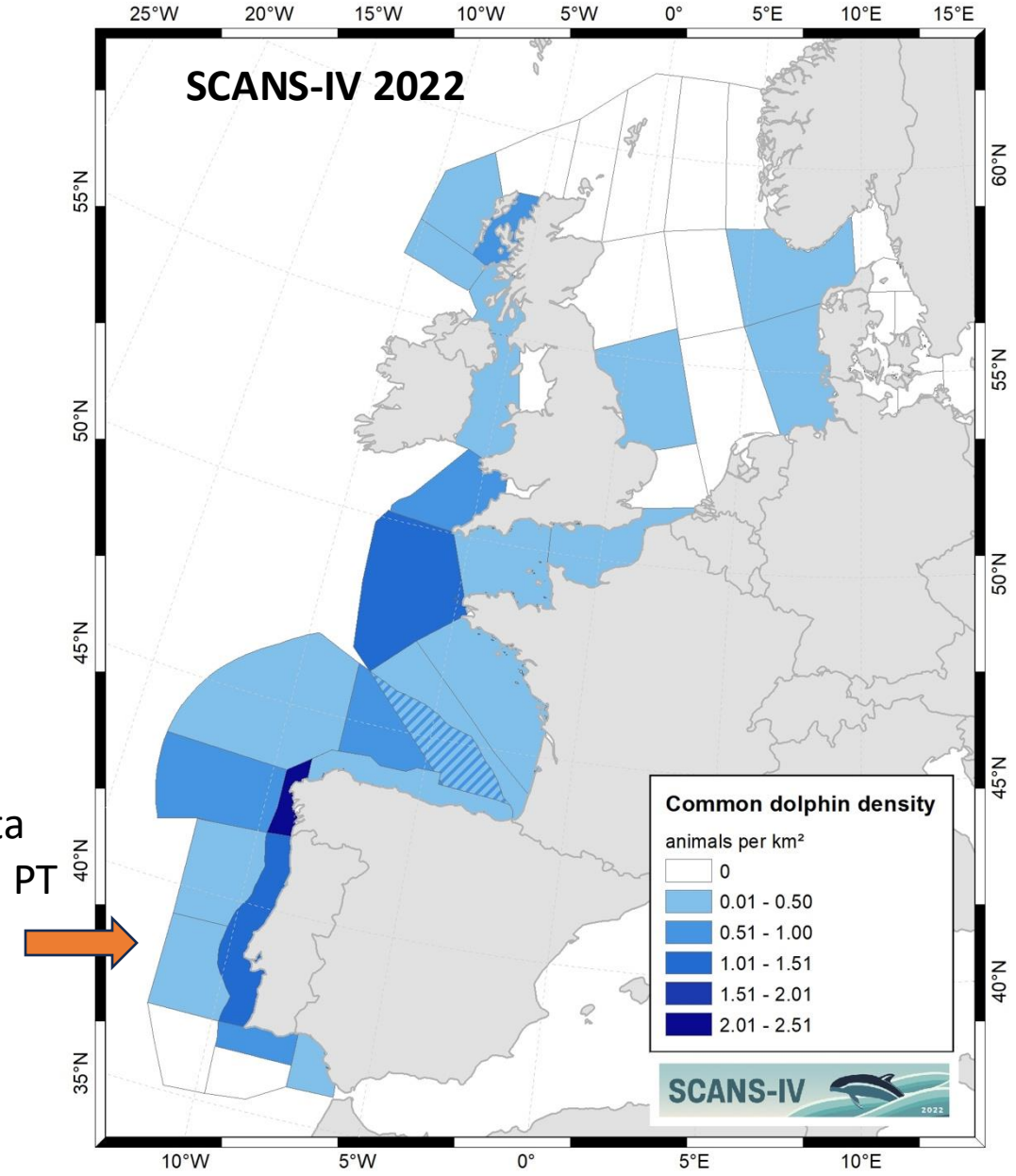
Lacey et al. 2022

Common dolphin



density per block

New data offshore PT



Summary

- SCANS-IV in summer 2022 was a huge success
- Higher effort than SCANS-III in a comparable area

New information on species: COMMON DOLPHIN

- **Distribution** appears to be strongly concentrated in shelf waters. unidentified sightings of the category "either common or striped dolphin" were made in offshore waters, but analysis from the digital system STORMM in SCANS-IV revealed that common dolphin only represented 19% of the unidentified individuals collected in BB-A (offshore Bay of Biscay) while representing 100% in CS-B (Southern Celtic Sea) and 93% on the shelf of the Bay of Biscay (BB-B).
- occurrence increased in the Celtic Sea, as well as southwest of UK and in the western part of the English Channel, suggesting that the population range **may be expanding further north**
- **abundance** estimates in the wider area of the European Atlantic did not vary much among the 3 sets of surveys: SCANS-II/CODA, SCANS-III/ObSERVE and SCANS-IV

    - **BUT** estimates of common (and striped) dolphin abundance from ObSERVE2 will need to be added once available to give a fuller picture of trends in abundance for these species.

Summary

Logistically (WP Governance framework)

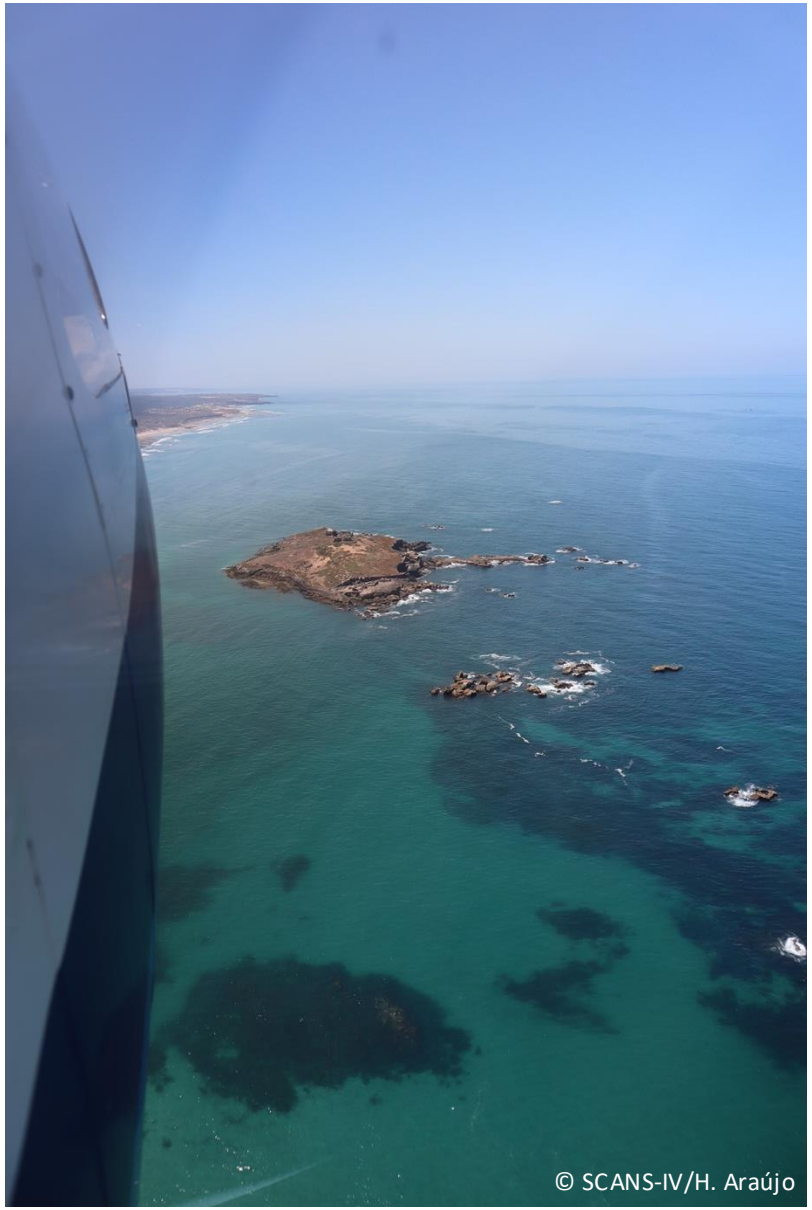
- Establishment of a 6-year frequency (SCANS-V in 2027 or 2028), which needs to be maintained
- Project co-ordination more challenging because of the way countries provide funding (link to future governance);
- Coordination with ObSERVE to ensure consistency (but need to wait for their results before inferences can be made regarding most species/areas);
- Further data collection outside of summer SCANS surveys would support our understanding of this changing distribution and how management may need to be adapted as a result

And much more to come ….

17 cetacean species
Pinnipeds
Turtles
Sharks
Sunfish
Tuna
Anthropo activities

… and, ad-hoc data collection, about 800 flocks of dead seabirds (bird flu summer 2022)

Next steps



SCANS-IV 2022

	Time line
Project coordination	
Survey preparation	Q1 2022
Survey area and transect design	Q2 2022
Aerial surveys / Ship surveys	Q3 2022
Data validation	Q4 2022
Abundance estimates and trend analyses for MSFD	Q1 2023
	Q2 2023
Model-based estimates of abundance and drivers of distribution	Q3 2023
	Q4 2023
Development future governance framework SCANS surveys	Q1 2024
	Q2 2024
Final report	Q3 2024

Dissemination of progress and results in relevant fora

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Big thank you to all teams!!

More questions? please contact Anita Gilles
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Report available here
https://www.tiho-hannover.de/en/clinics-institutes/institutes/institute-for-terrestrial-and-aquatic-wildlife-research-itaw/scans-iv-survey

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