

16th Lme

Meeting with
Coastal Partners

Paris (FR) 8 - 11 July 2014



ICES DATA SYSTEMS FOR OCEAN GOVERNANCE

Author: **Kadji Okou**

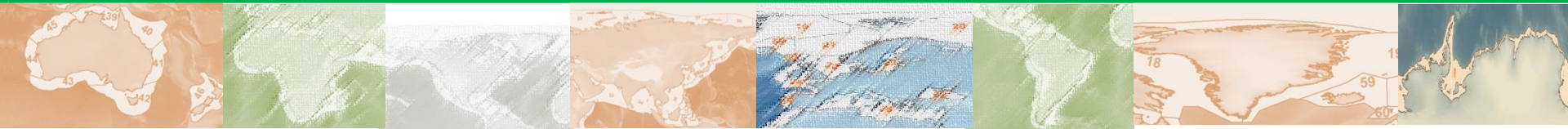
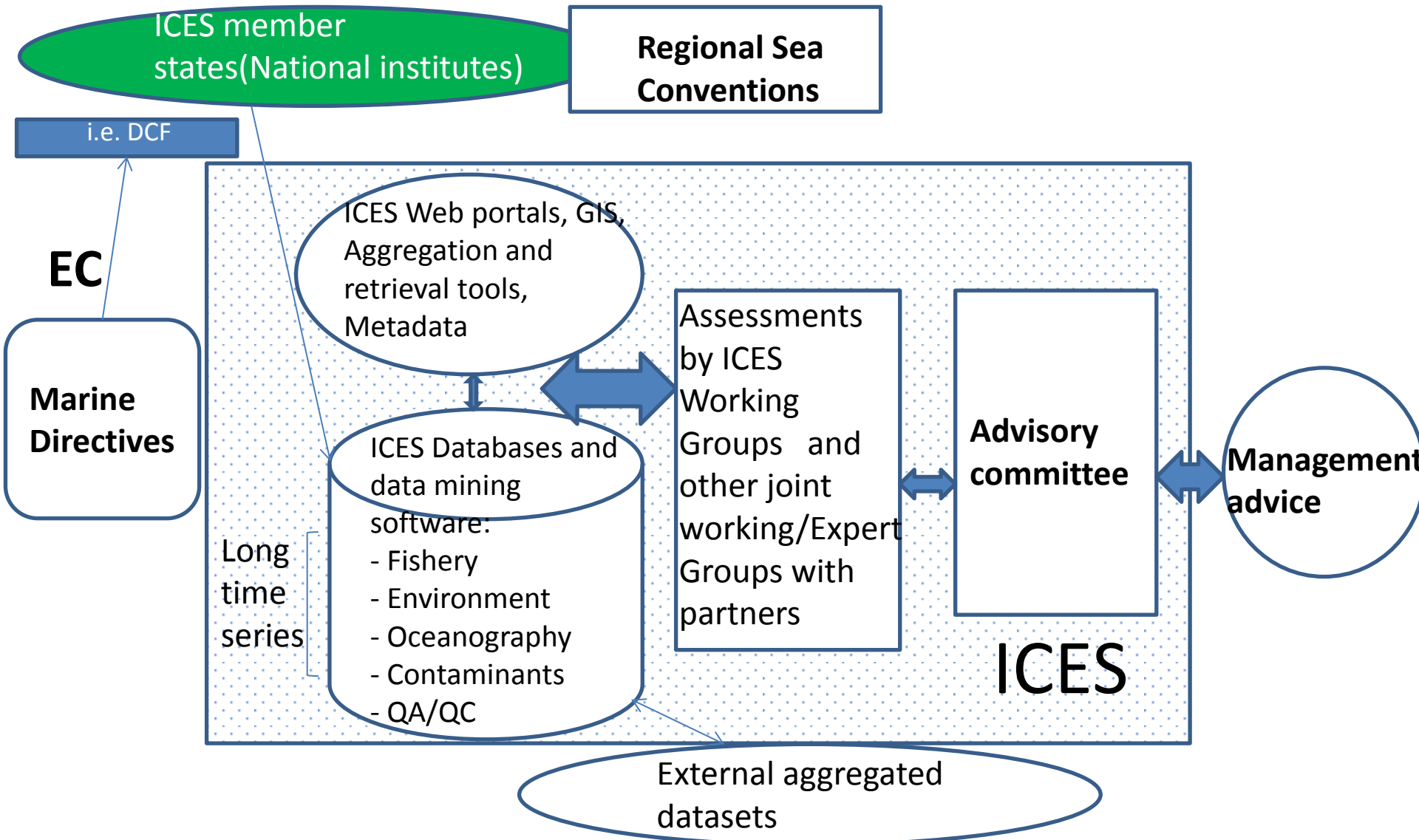
Institution: **INTERNATIONAL COUNCIL FOR THE
EXPLORATION OF THE SEA**

Session 2

Day of presentation: **9 july 2014**

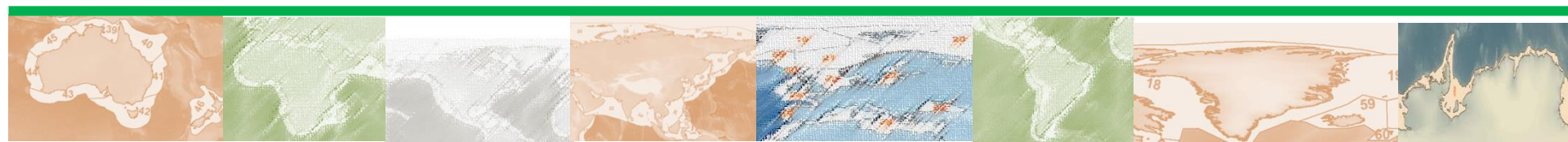


FROM POLICY TO ADVICE



ICES DATA HOLDINGS

Discipline	Type of data
Environmental	Fish predation(Stomach data), Eggs and Larvae, Contaminants, Biological community, Intercalibration results, Marine litter
Oceanographic	High resolution CTD, Hydro-Chemistry data, Underway data, Cruise summary report/ROSCOP (Meta data)
Fishery	Trawl survey (DATRAS), Regional Database Fishframe, Commercial catches and sampling (InterCatch), Preliminary catch statistics, VMS(Restricted)
Interdisciplinary	Accession (audit and trail), Vocabularies



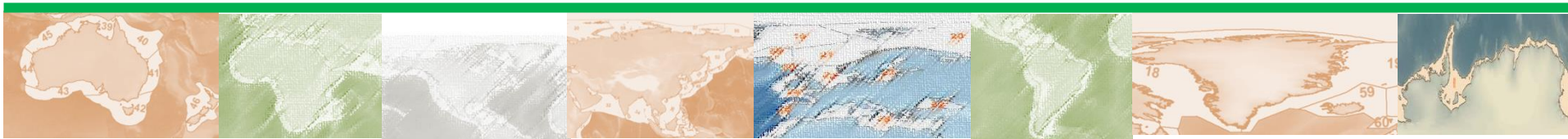
Automated quality checking and vocabulary

DATSU: A common screening utility accross all systems. Data submitters will typically correct their data until it passes the screening stage.

Vocabulary server: A reference codes library for trawl survey, oceanographic, commercial fishery and environmental data. Used across all ICES Data systems.

Quality checking:

- InterCatch (Biological stock related commercial fishery data)
- Regional Database Fishframe (Biological metier related commercial fishery data)
- DATRAS(Trawl survey data)
- Other quality checking and quality assurance that are not automated



ICES spatial facility

A set of GIS tools increasingly used in the integrated ecosystem assessments and essential for marine spatial planning.

[ICES Spatial Facility](#) Username: Password:


Welcome to the **ICES Spatial Facility**, this facility contains a collection of metadata and spatial datasets relevant to the ICES community, featuring:

- Free access for search, viewing and download of spatial data, no need to login
- For download of data you must accept the [ICES data policy](#)
- Use the maps in map clients through [WMS](#)
- Upload of spatial data (shape file format) and metadata (ISO 19115/19139)
- For upload of data you need to login. [Contact us](#) to get an account, specifying who you are and what kind of data you want to upload

Working Group on Marine Habitat Mapping ([WGMHM](#)) maintains a collection of habitat map outlines and metadata descriptions

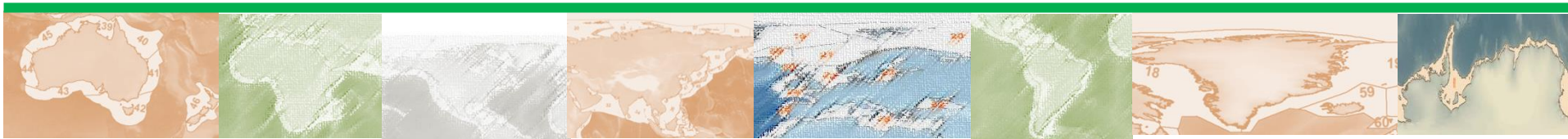
- [See a view](#) of the Marine Habitat Map outlines/metadata descriptions maintained by WGMHM
- For instructions on how to capture metadata in relation to Working Group on Marine Habitat Mapping (WGMHM), [see document](#)

[Search ICES Spatial Facility](#)

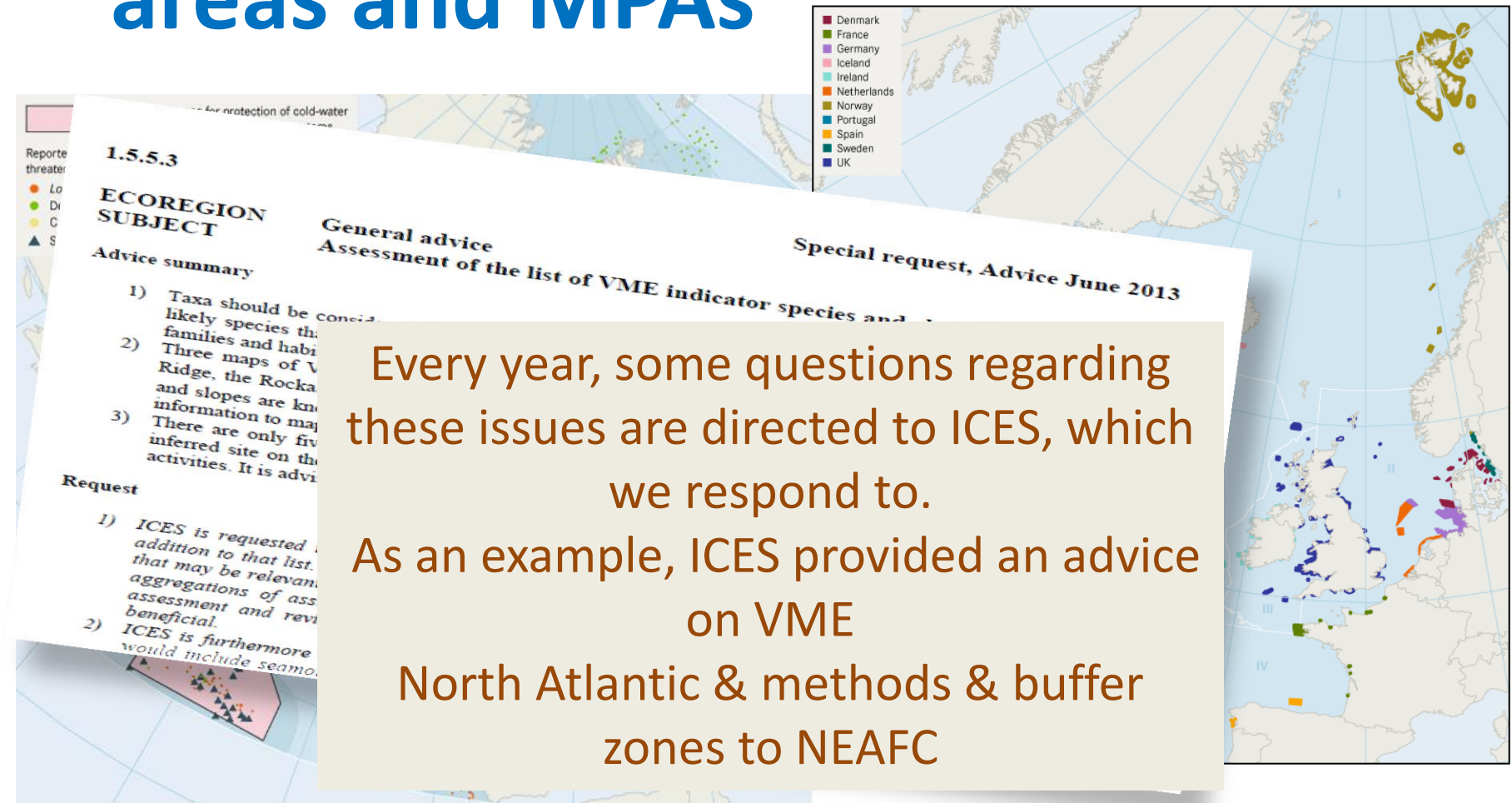


<http://geo.ices.dk/>

<http://ecosystemdata.ices.dk/>



Tools-NEAFC/OSPAR closed areas and MPAs



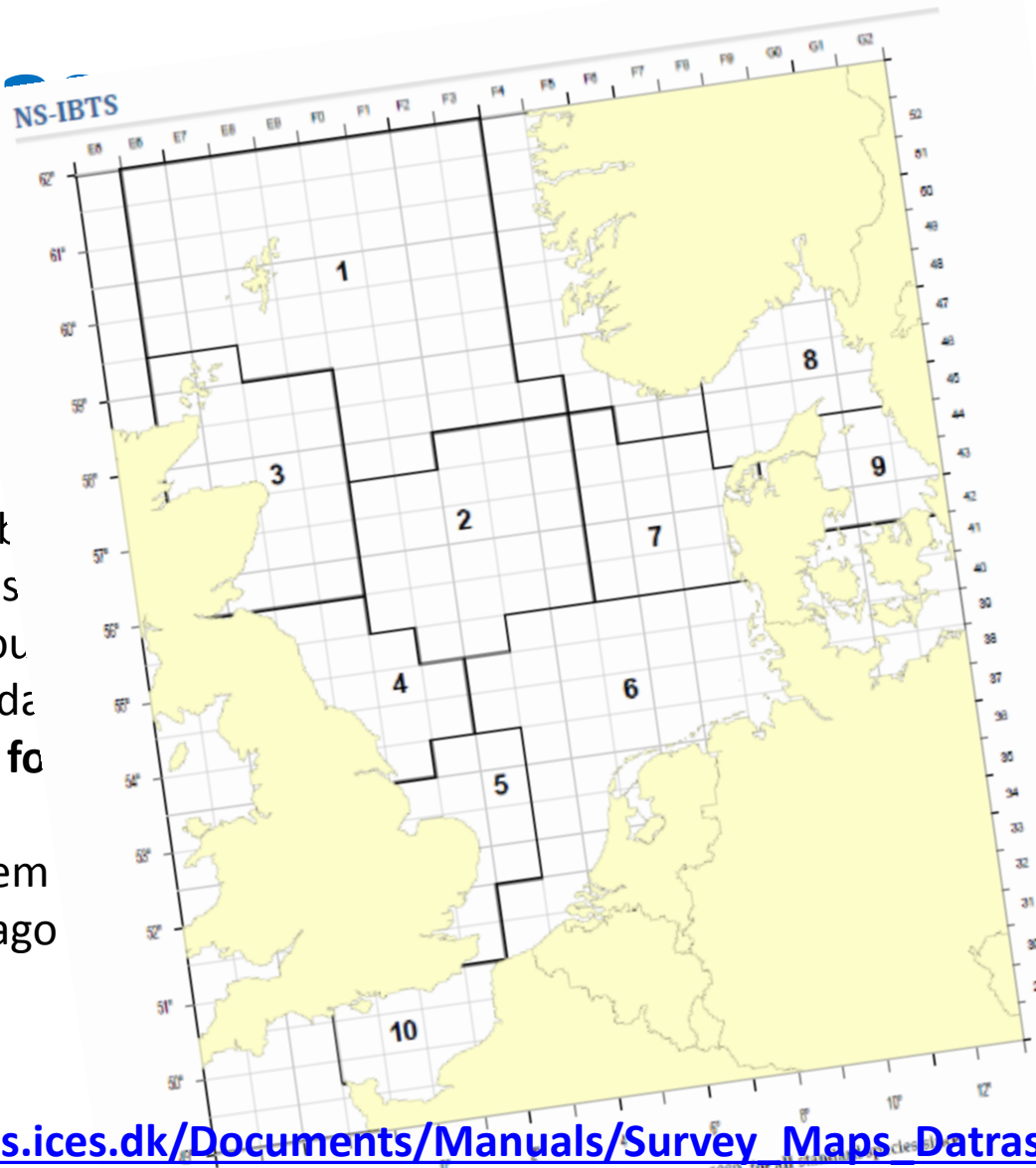
Every year, some questions regarding these issues are directed to ICES, which we respond to.

As an example, ICES provided an advice on VME

North Atlantic & methods & buffer zones to NEAFC

Stock Trawl

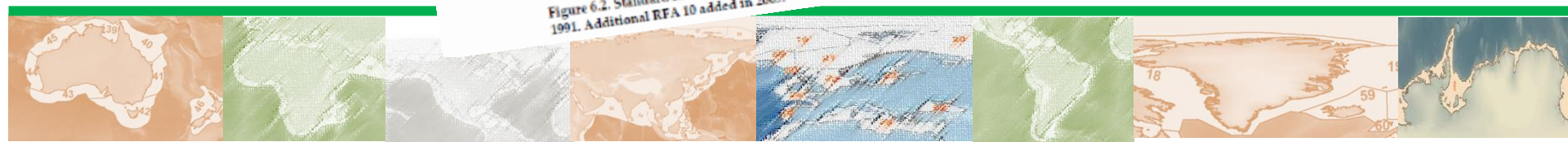
- Very important
- The standard for sharing the data
- ICES working year to improve it
- All fish species measured (although means that the data is not good for **biodiversity and food community**).
- The ICES system started about 15 years ago



https://datras.ices.dk/Documents/Manuals/Survey_Maps_Datras.pdf

<http://www.ices.dk/marine-data/data-portals/Pages/DATRAS.aspx>

Figure 6.2. Statistical rectangles (RFA) for all standard fish since 1980, for all standard fish since 1991. Additional RFA 10 added in 2000.



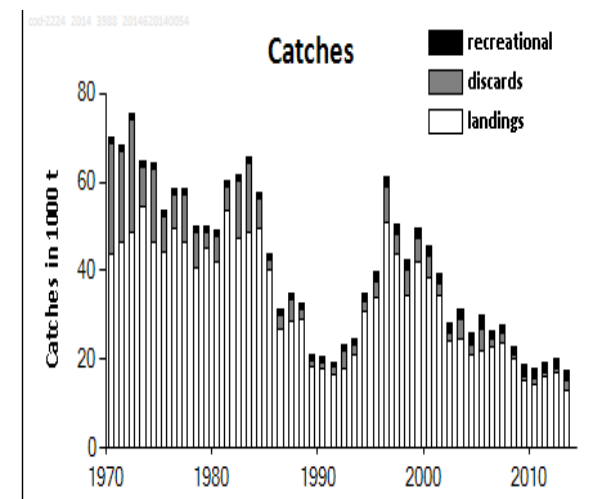
Stock assessment tools:

INTERCATCH

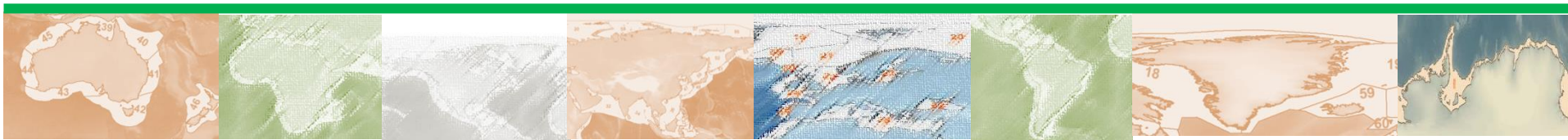
- Standardized data exchange and creation of missing biological information for commercial catches
- Standardized output and automated documentation of the data used for the assessment

Regional Database Fishframe

- Enables the implementation of regional approach to sampling program and the regional management of data.
- Decrease problem with data deficiency through more centralised transmission processes
- Primarily used by EU member states for coordinating their national programmes with other Member States (RCM meetings)
- The same system is used both in the Baltic, North Atlantic and North Sea and Eastern Arctic thanks to the standardised sampling and data



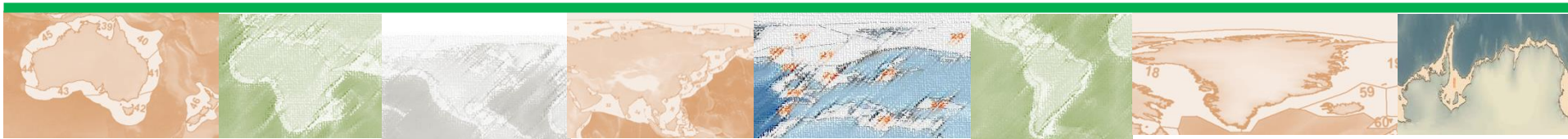
Both systems can be exported through LMEs upon minor customizations



Upcoming developments

Assessment data flow

- Inputs- Improved access and transparency in stock assessment inputs
- Outputs- Standardised data output from all stocks assessments or trends in populations
- Integration- of stock assessment and data and knowledge on impact of bycatch and habitat sensitivity

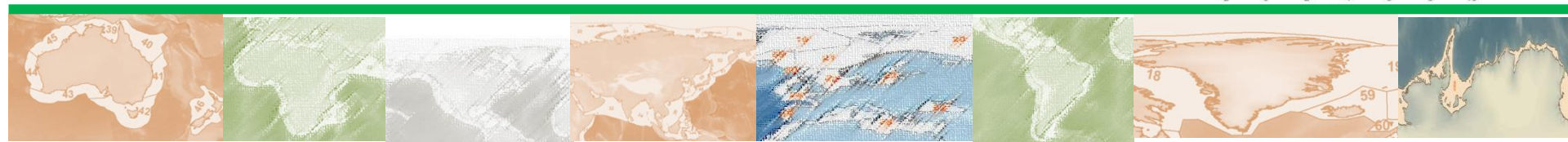
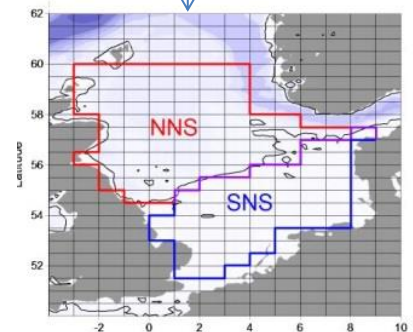
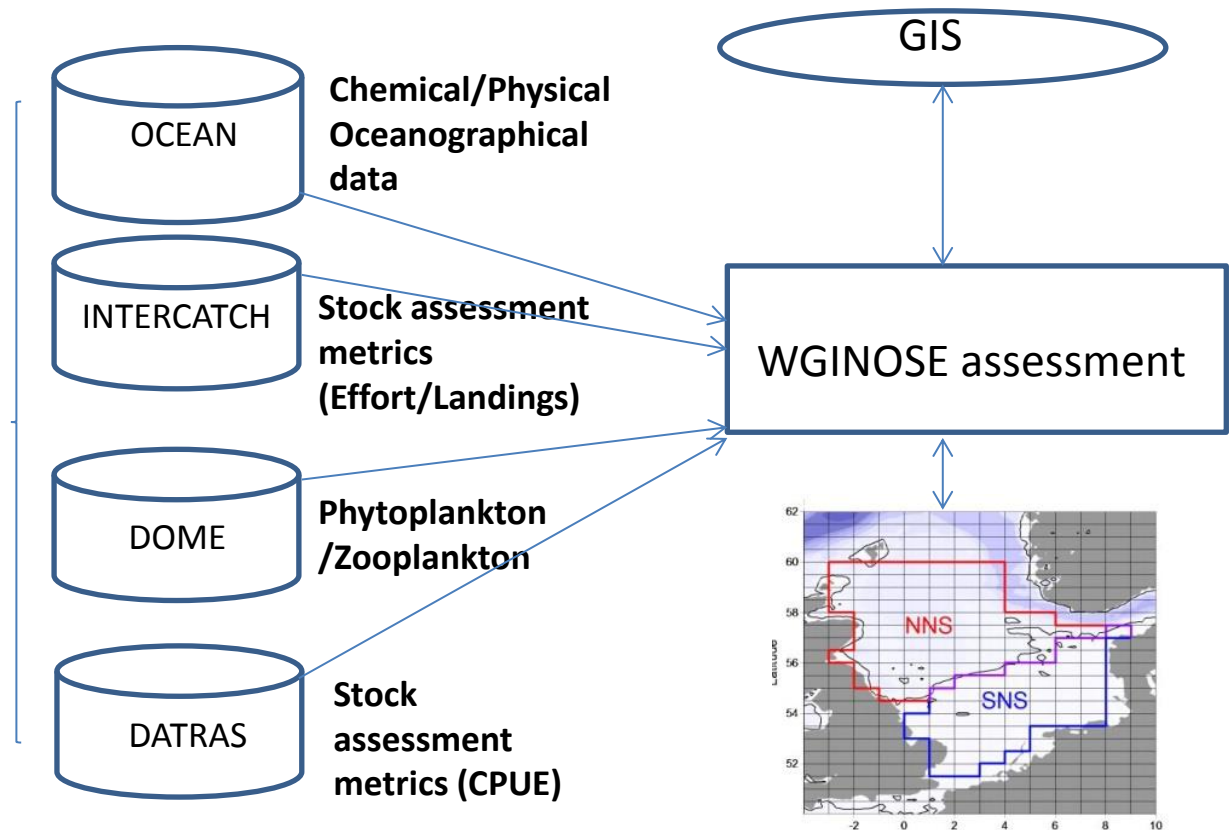


Assessing structural changes in the North Sea ecosystem

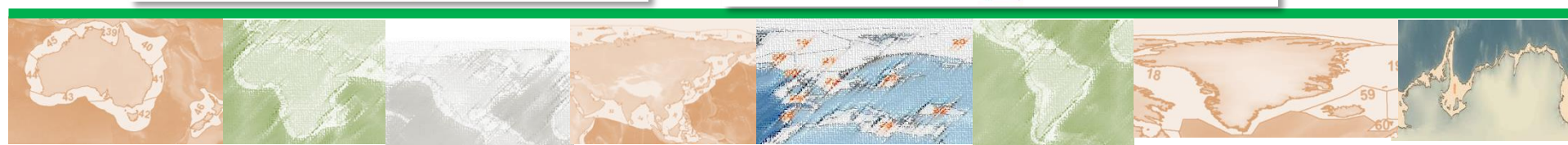
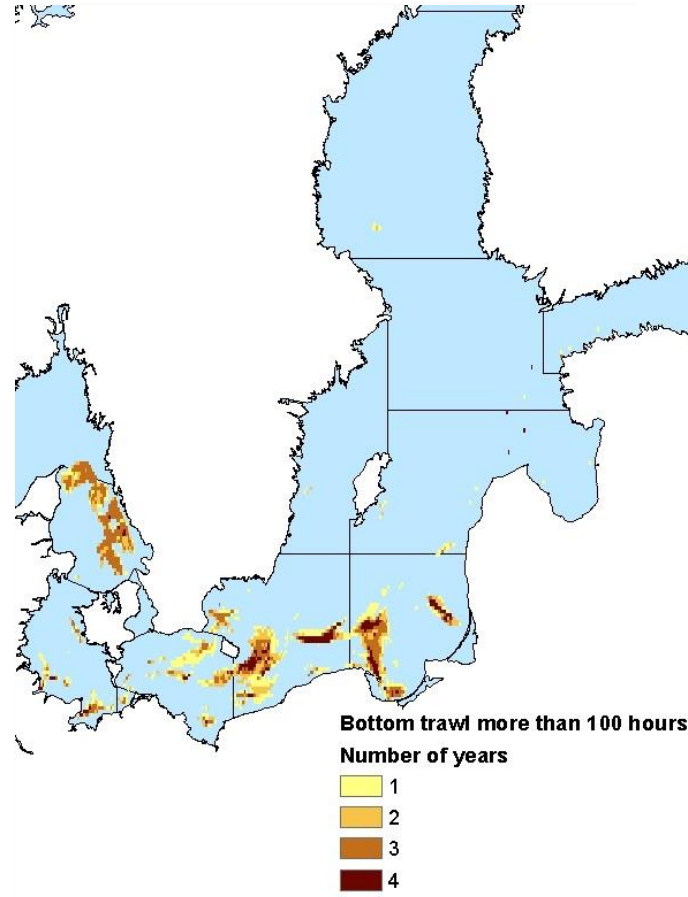
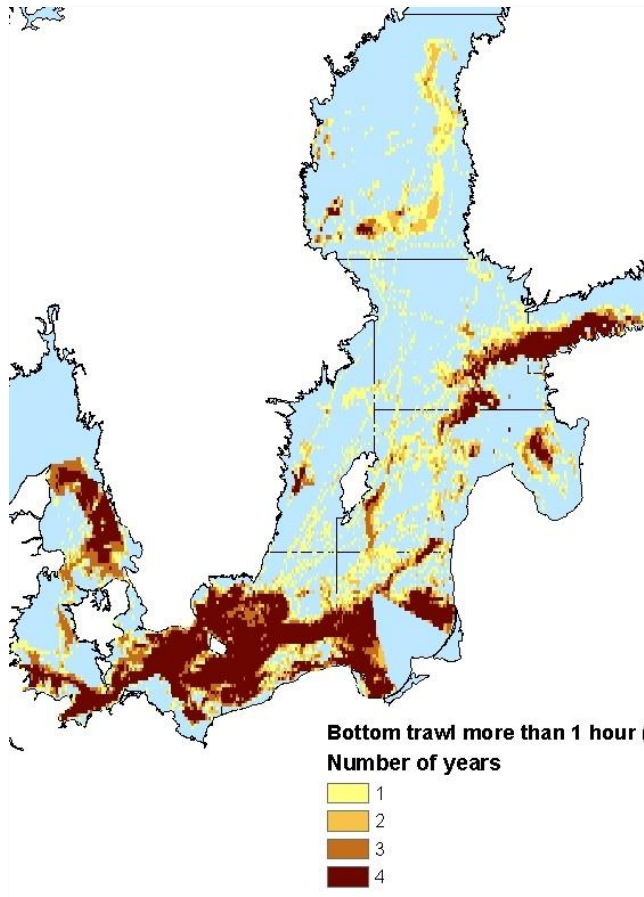
Working Group on Integrated Assessments of the North Sea (WGINOSE)

Using interdisciplinary data from the **ICES Data holdings**, the groups showed that cold waters hosting specific zooplankton changed to warmer waters.

35 variables were used

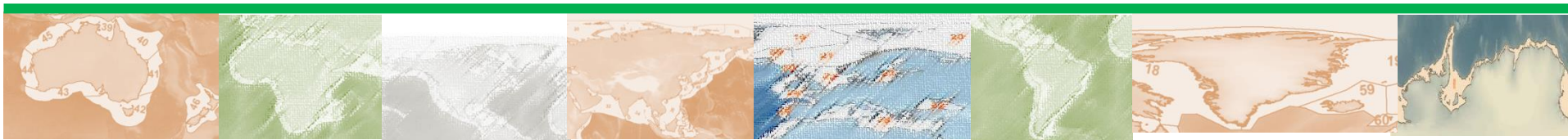


Sea floor integrity assessment with VMS data and GIS TOOLS



Future challenges and LME opportunities

- Integration of fishery in environmental survey
- Most ICES Data systems can be used through LMEs upon agreement with ICES, however actual datasets are subject to individual **Data policy**. Access may be granted upon approved request to Data providers. **VMS Data** as an example may only be used for the purpose for which it has been requested and is **not publicly available**.





Thank you for your attention

Any question?

