

International conference on Marine Data and Information Systems

























Modernised Cruise Summary Report directory: enhanced access to and management of marine cruises

Marine Vernet, Ifremer
Vanessa Tosello, Ifremer
Nolwenn Danioux, Ifremer
Fred Merceur, Ifremer
Steven Piel, Ifremer

CSR content



The Cruise Summary Report directory is part of the SeaDataNet pan-european infrasturcture for marine and ocean data management

HOW? WHO? platform type, ship name, instruments scientists and organisations WHERE? **CSR CATALOGUE** ports of departure/ arrival, sea areas, WHEN? bounding boxes of Cruise Summary Reports (CSR) are the usual research activities, means for reporting on cruises or field time frame of experiments at sea. This provides an inventory ship routes, track the cruise of measurements and samples collected at sea. charts Currently, the Cruise Summary Reports directory covers cruises from 1873 till today from more than 1,500 research vessels: a total of nearly 68000 cruises, in all European waters catalogue, and global oceans. The CSR managed by IFREMER since 2021, is part of the SeaDataNet infrastructure. WHAT? https://csr.seadatanet.org objectives of the cruise, measurements or moorings, relevant WHICH DATA? projects link to data stored in SeaDataNet

data directory (CDI)

CSR workflow

CSR BACK-OFFICE

Online tool to allow Chief Scientists and NODCs to create and update CSR entries

https://csr-backoffice.seadatanet.org



Online forms



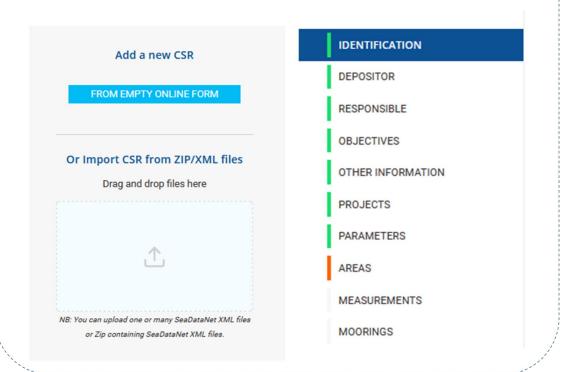
XML submission

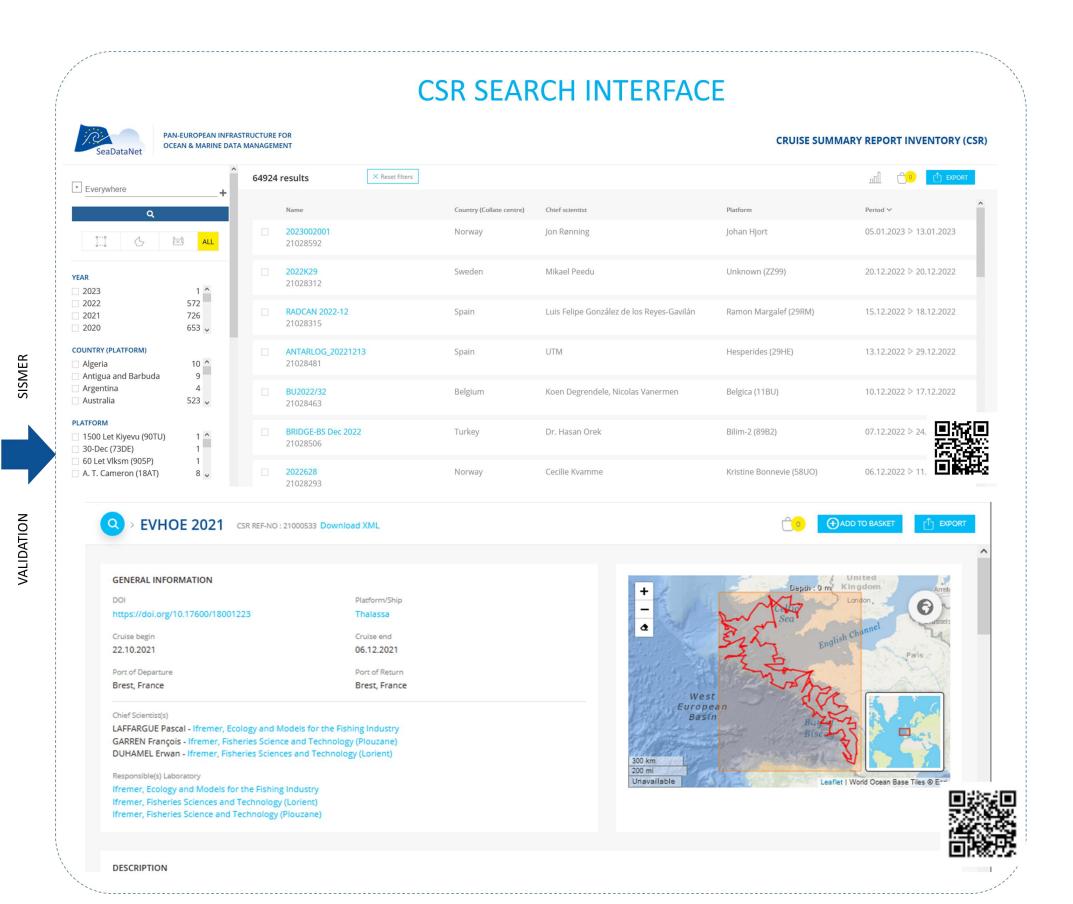


Preview



Status and history of submissions





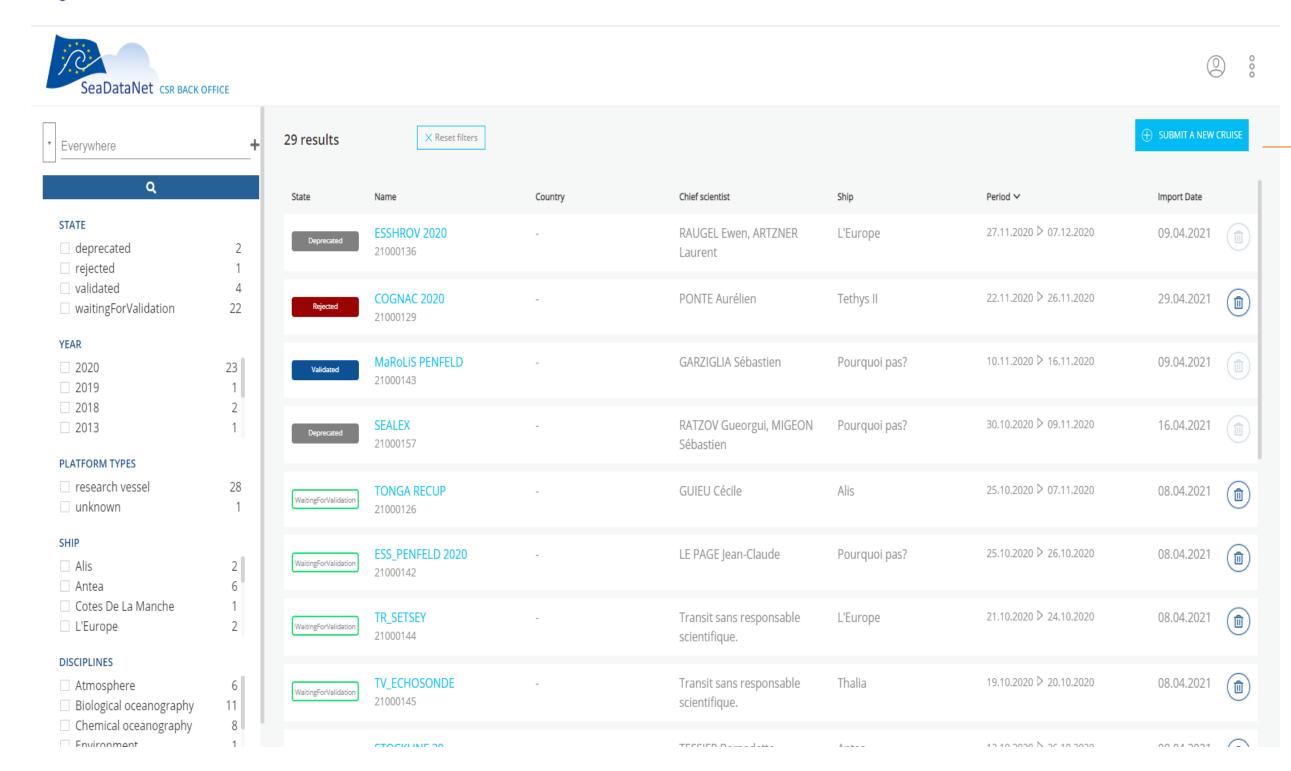


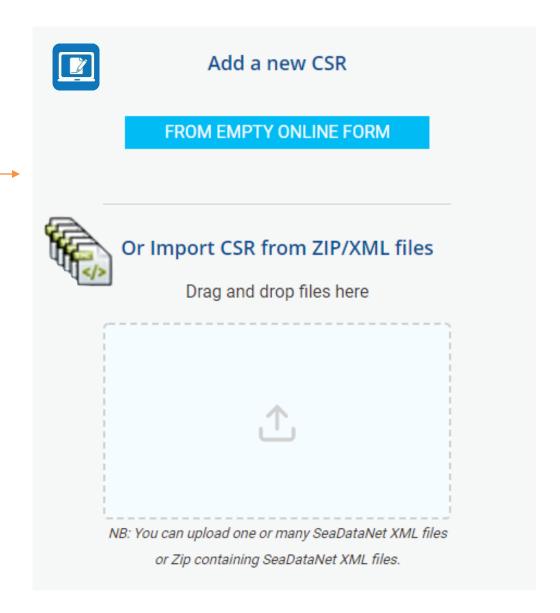
NODCs

CSR back-office

https://csr-backoffice.seadatanet.org

Identification using Marine-id





CSR back-office

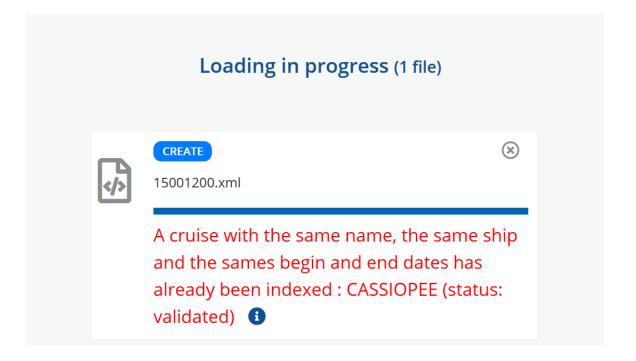
Duplicate checks

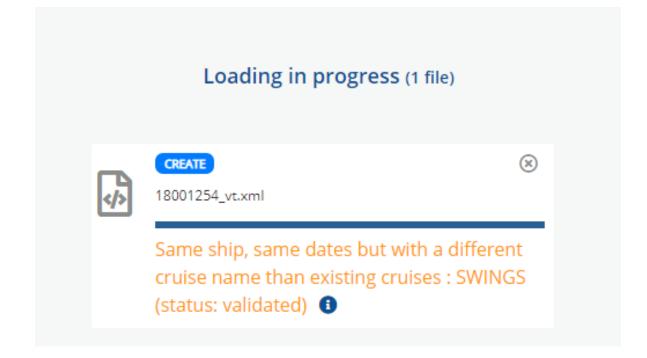
• ERROR: Same ship, same dates, same names

A cruise with the same name, the same ship and the sames begin and end dates has already been indexed: FocusX2 (state: validated)

- WARNING
 - -Same ship, same dates, different names
 - -Same ship, overlapping dates

Same ship, same dates but with a different cruise name than existing cruises: FocusX2 (state: validated)

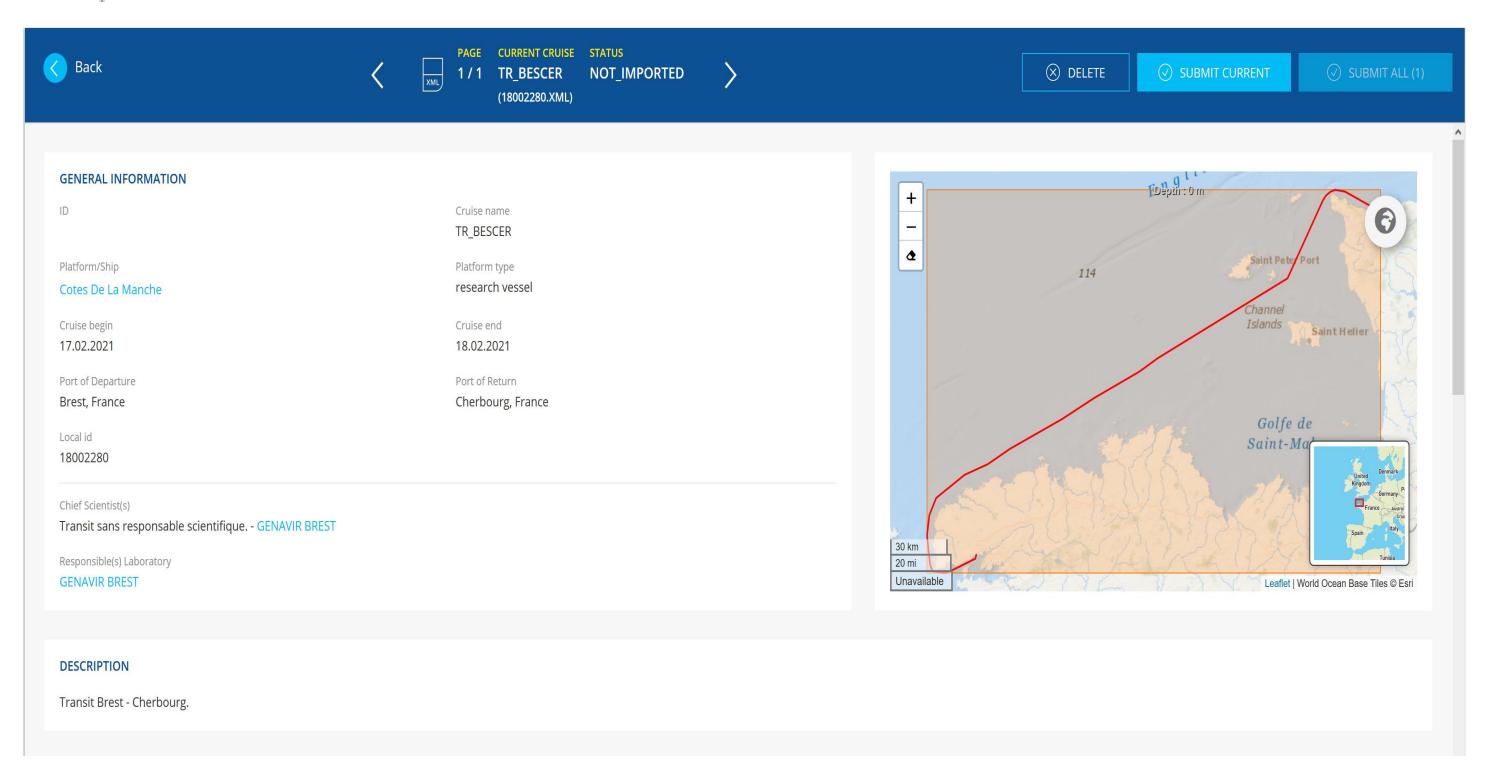




CSR back-office



Preview and submission for validation by the administrator.



CSR search interface

https://csr.seadatanet.org



× Reset

Cancel

Validate

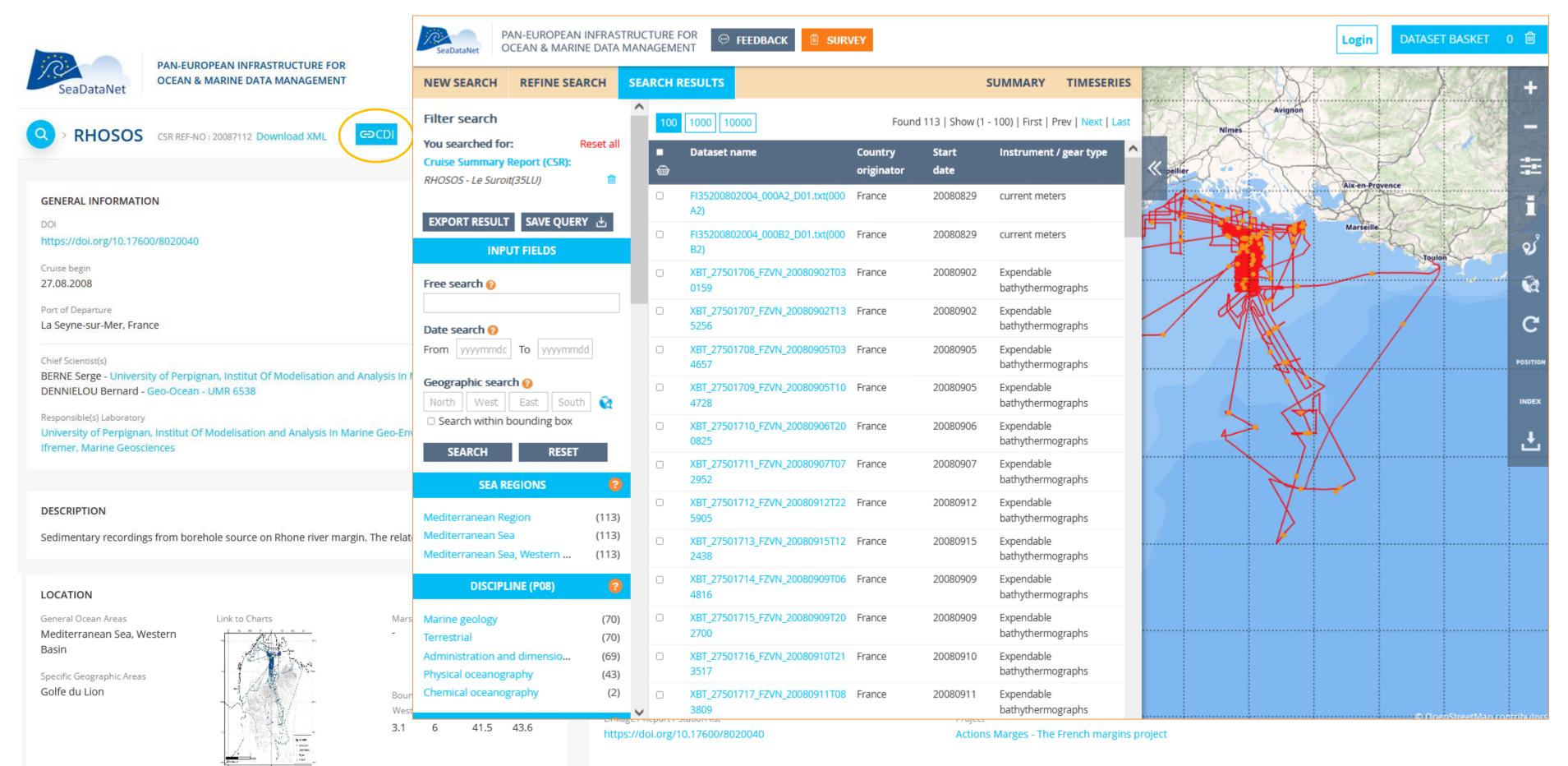
PAN-EUROPEAN INFRASTRUCTURE FOR OCEAN & MARINE DATA MANAGEMENT

Main functionnalities: Search facets, Filters, Geographical selection on map, MD export in csv, xml

CRUISE SUMMARY REPORT INVENTORY (CSR)



CSR search interface – Access data in CDI



Link to CSR in EMODnet ingestion

GO-SHIP A25 - OVIDE 2018 Cruise data

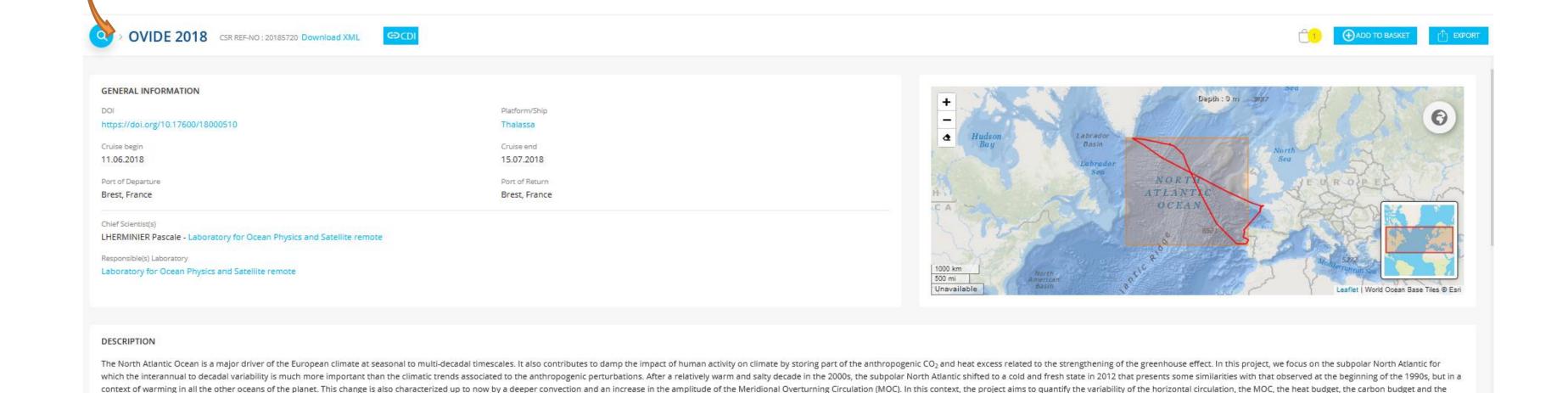
Period: 2018-06-11 - 2018-07-14

Observation type: Carbonate system, Dissolved gases, Isotopes, Nutrients, Water column temperature

water mass properties by repeating the OVIDE-A25 section in June-July 2018, from Portugal to Greenland. The section is composed of 98 stations that combine hydrographic, biogeochemical and current measurements down to the bottom.

and salinity





An interoperable system

• The Cruise Summary Report (CSR) metadata format is based upon the ISO19139 content standard (INSPIRE compliant). The SeaDataNet ISO 19139 Cruise Summary Report (CSR) format as described at:

https://www.seadatanet.org/Standards/Metadata-formats/CSR

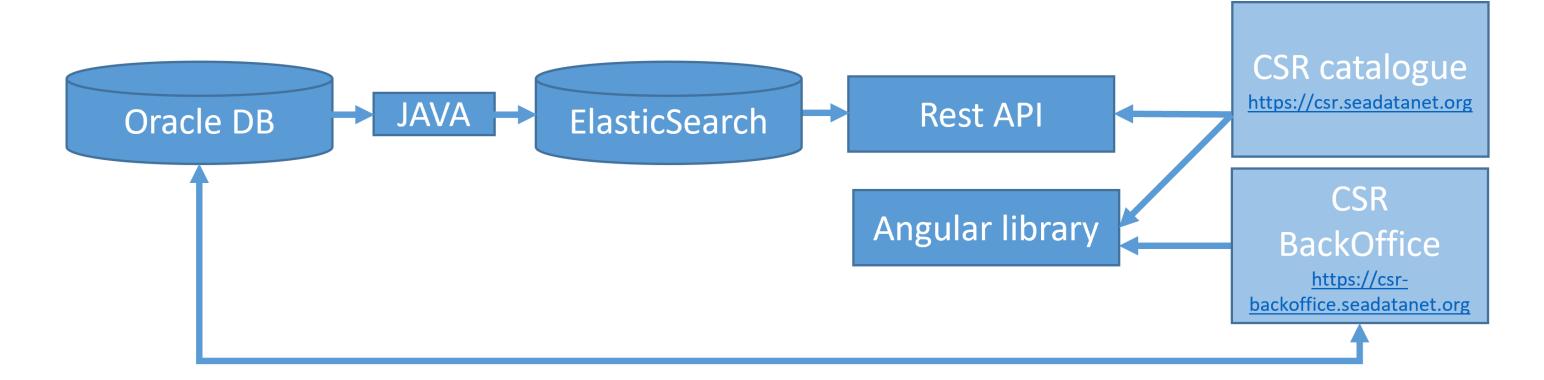
• The CSR metadata content is supported for many metadata tags by the **SeaDataNet common vocabularies** and **EDMO** directory (*European Directory of Marine <u>Organisations</u>*), and extra optional elements are included for bibliography and **EDMERP** directory (*European Directory of Marine Environmental Research Projects*) references:

https://www.seadatanet.org/Standards/Common-Vocabularies https://www.seadatanet.org/Metadata

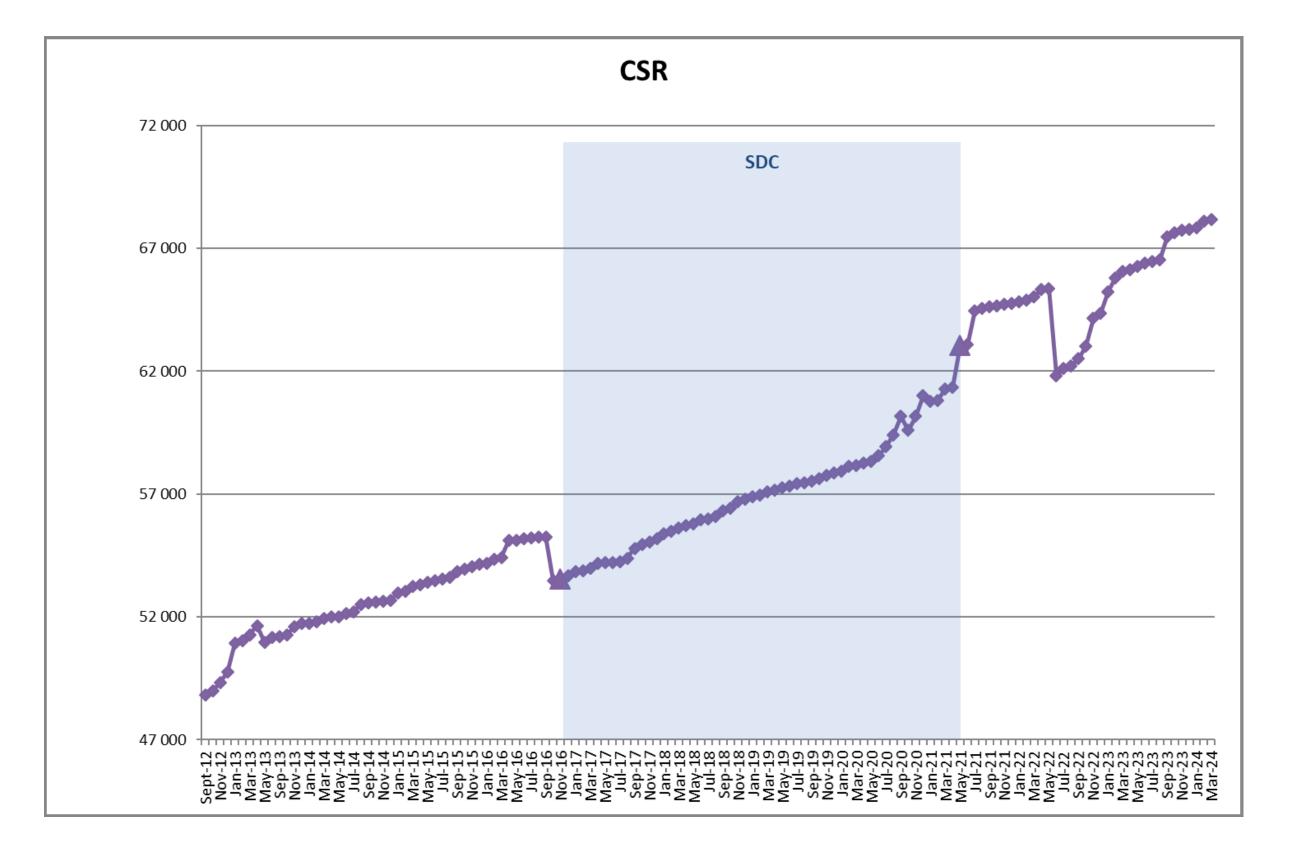
CSR sparql endpoint
 https://csr.seadatanet.org/sparql

CSR architecture

- The CSR metadata is stored in an Oracle database DB.
- The Oracle database is populated by the CSR back-office
- Metadata are synchronised in a ElasticSearch database using a Java batch.
- The CSR front-office query the ElasticSearch index using an API.
- The CSR back-office shares a set of functionnalities (search masks, facets ...) using an Angular library.



Number of CSR & users



Nb de CSRs		
	New	Update
Jan-23	904	98
Feb-23	599	184
Mar-23	245	149
Apr-23	86	70
May-23	134	98
Jun-23	113	267
Jul-23	88	42
Aug-23	81	66
Sep-23	1 009	20
Oct-23	143	21
Nov-23	107	14
Dec-23	58	20
TOTAL	3 567	1 049

+ 3567 new CSR and 1049 updates in 2023

Number of users:

162 back-office users, +43 in 2023 From 32 different countries

CSR multiple uses

- Share & preserve oceanographic cruises information
- Foster data discovery & reuse
- Connected to several initiatives: SeaDataNet
 <u>EuroFleet +</u>, <u>ARICE</u>, <u>POGO</u>
 - Specific search interfaces declined from CSR catalog
- Rich database providing analysis material
 I.e: Prototype of Oceanographic cruises per Marsden Squares based on CSR data developed in the context of a study performed by SIRIS ACADEMIC for the French Oceanographic Fleet RI

Oceanographic cruises by Marsden squares 920 cruises

What's next

In 2024...

Study to collect user's needs and help identify & prioritize possible improvments of the CSR service

- Facilitate the use of back-office to fit different uses
- Improve geographical search
- Offer statistics per country/collate center
- Etc.

And...

Explore connections with existing and future initiatives: future EuroFleet RI, MFP, etc.





Thank you for your attention!

Contact:

sdn-userdesk@seadatanet.org

https://csr.seadatanet.org/



International conference on Marine Data and Information Systems



















