

# **FRENCH PING PROJECT**

## **Towards the production of S-124 navigational warnings**

# OBJECTIVE

## Digitization of nautical information

French Government's directive (20th April 2020):

*“**nautical information shall be digitised** whenever possible in order to facilitate its **larger diffusion** and **integration into client systems** (ships navigation systems, user systems, etc...). Nautical information data are **geo-localised**, **formatted** and supplied following applicable standards and recommendations\* in order to be **interoperable and accessible** according to standard exchange protocols.*

*(\*): In particular, the standards and recommendations developed by the IHO in the framework of the World Wide Navigational Warning Service”*

## With the creation of a **national platform for nautical information**

*“a shared information system for the transmission, formatting, digitization and posting on Internet of nautical information.”*

# THE PROJECT

- **Launched in 2020** with the support of the European Union funds Interreg (MED OSMOSIS project) and European Maritime and Fisheries Fund (EMFF).
- Following a successful **demonstration phase in 2016-2017** reusing Danish Maritime Authority MSI-NM demonstrator.
- Subject: build a web platform with a portal for humans and APIs for systems.
- 3 functional modules:
  - **Navigational warnings**: production and delivery of navigational warnings
  - **Transmission of source information**: way for the stakeholders (maritime services and users) to contribute to the nautical information.
  - **Geo-regulation**: delivery of geo-maritime regulation produced by French authorities
- Creation a **mobile app** associated to the platform

# INFORCE SYSTEM

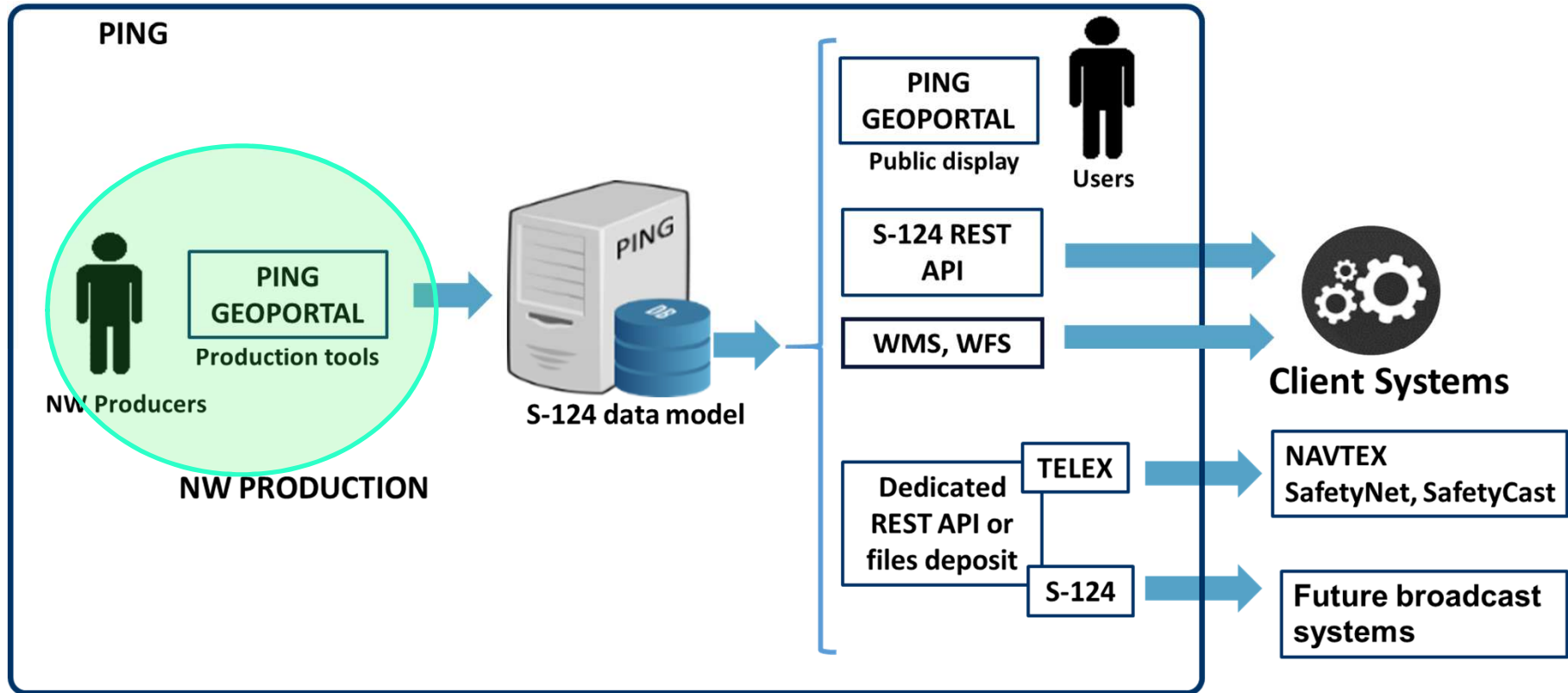
Facing a lack of  
interoperability

```
AVURNAV TOULON 10/2022  
LION  
SPECIAL OPERATIONS  
- SEAPLANE OPERATIONS  
FROM 172200 UTC AUG 22  
AREA BOUNDED BY:  
43-23.85N 003-48.14E  
43-30.42N 003-58.98E  
43-28.90N 004-01.13E  
43-22.32N 003-50.13E
```

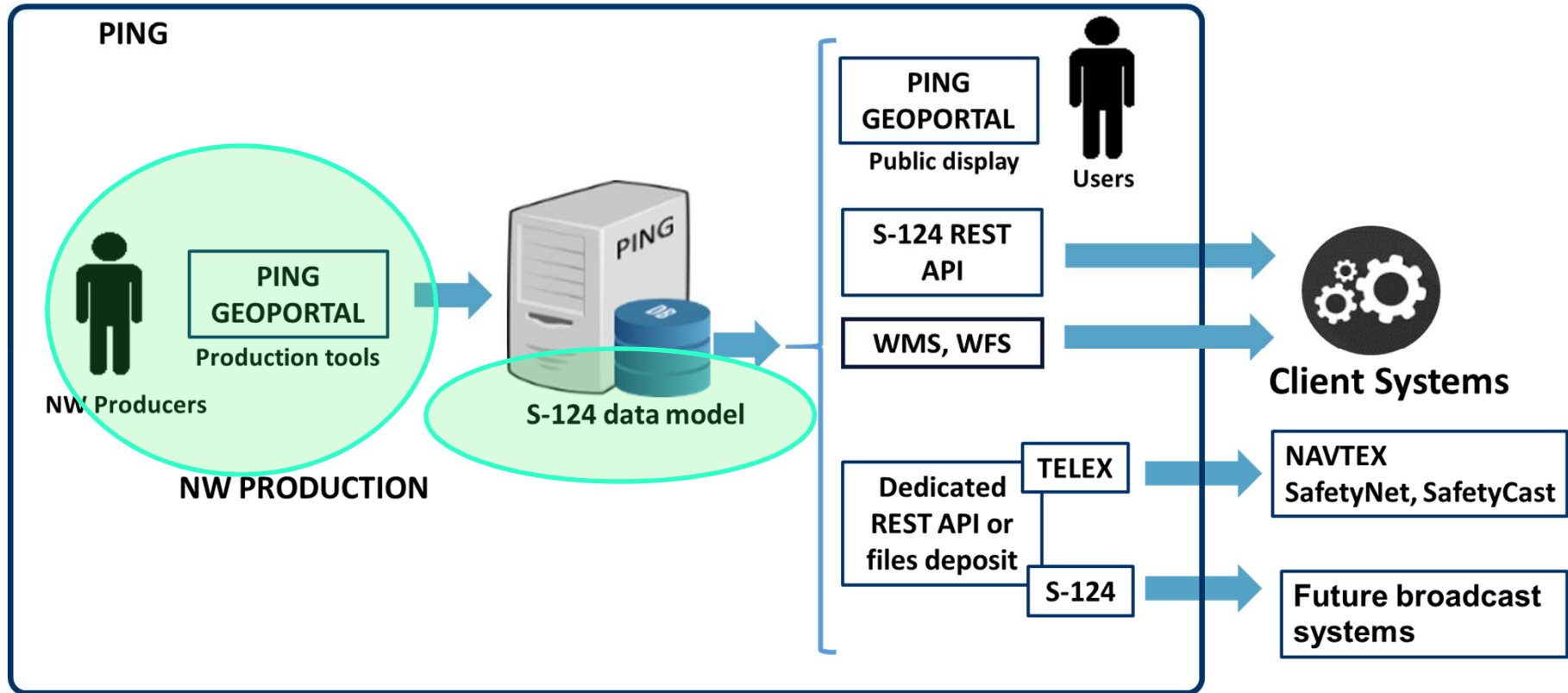


Current navigational warnings

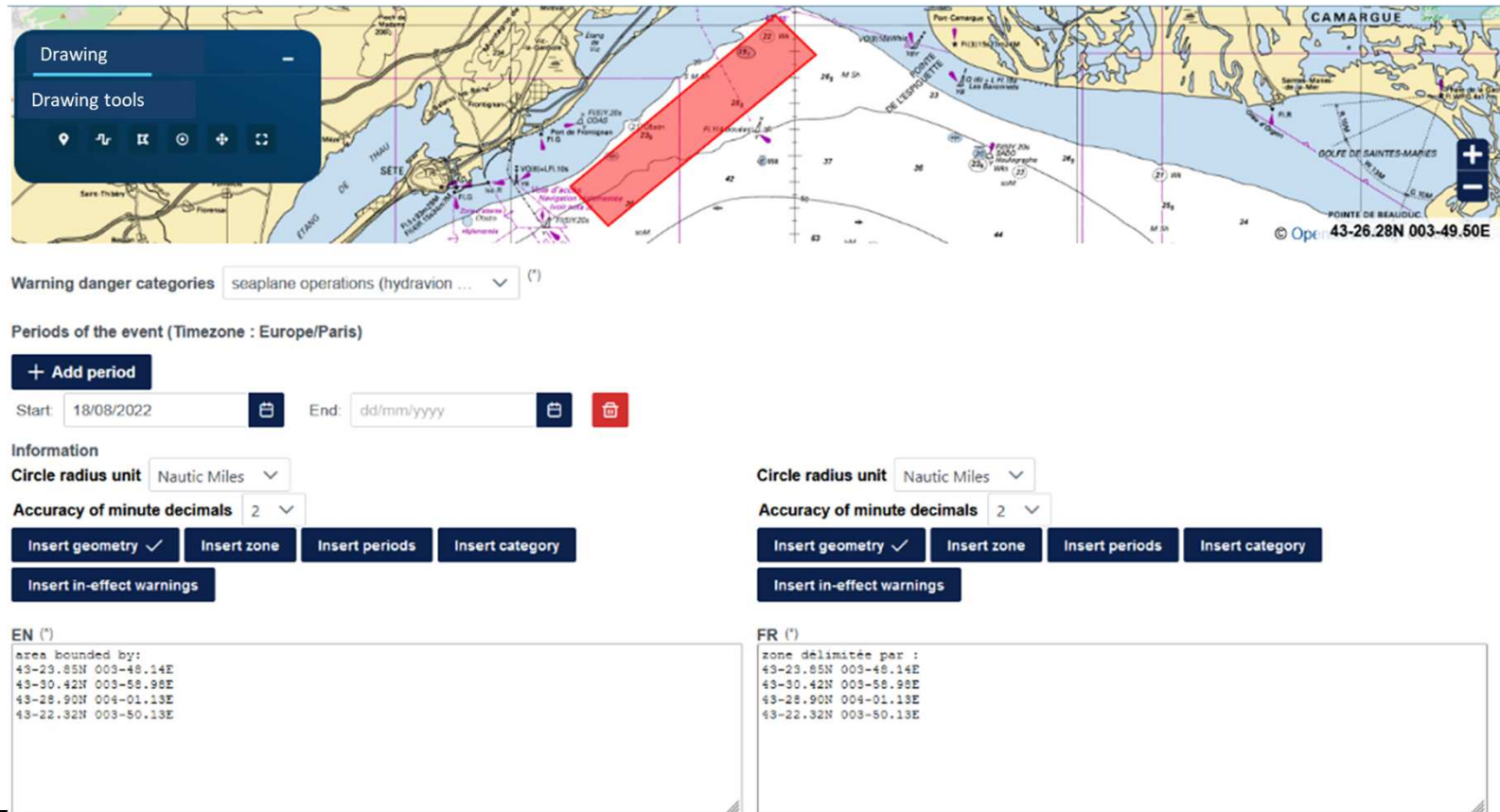
# NAVWARNINGS MODULE OVERVIEW



# NAVWARNINGS MODULE OVERVIEW



# GEOPORTAL – NEW PRODUCTION TOOLS BASED ON S-124 DATA MODEL



**Drawing**

Drawing tools

Warning danger categories: seaplane operations (hydravion ...) (\*)

Periods of the event (Timezone : Europe/Paris)

+ Add period

Start: 18/08/2022 End: dd/mm/yyyy

Information

Circle radius unit: Nautic Miles

Accuracy of minute decimals: 2

Insert geometry ✓ Insert zone Insert periods Insert category

Insert in-effect warnings

EN (\*)

area bounded by:

43-23.85N 003-48.14E

43-30.42N 003-58.98E

43-28.90N 004-01.13E

43-22.32N 003-50.13E

FR (\*)

zone délimitée par :

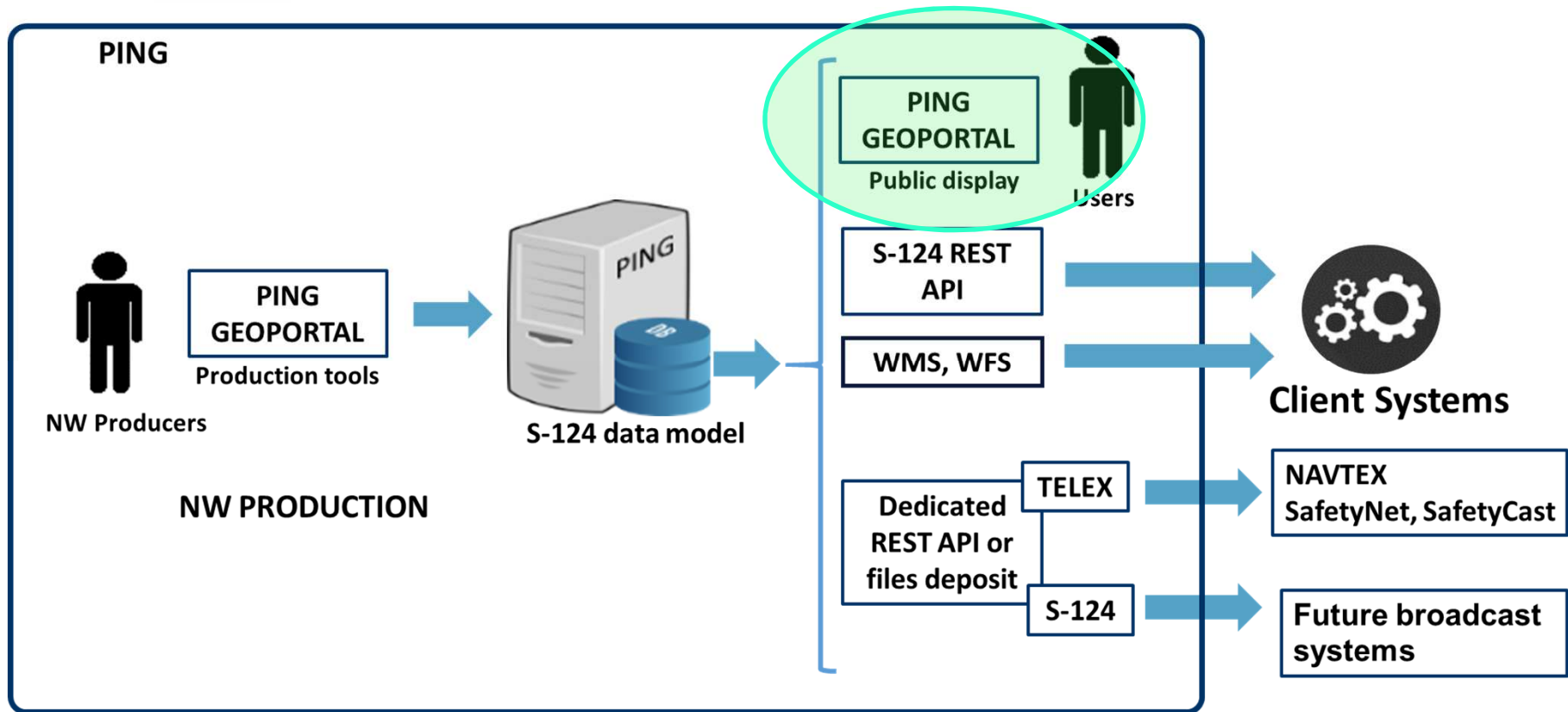
43-23.85N 003-48.14E

43-30.42N 003-58.98E

43-28.90N 004-01.13E

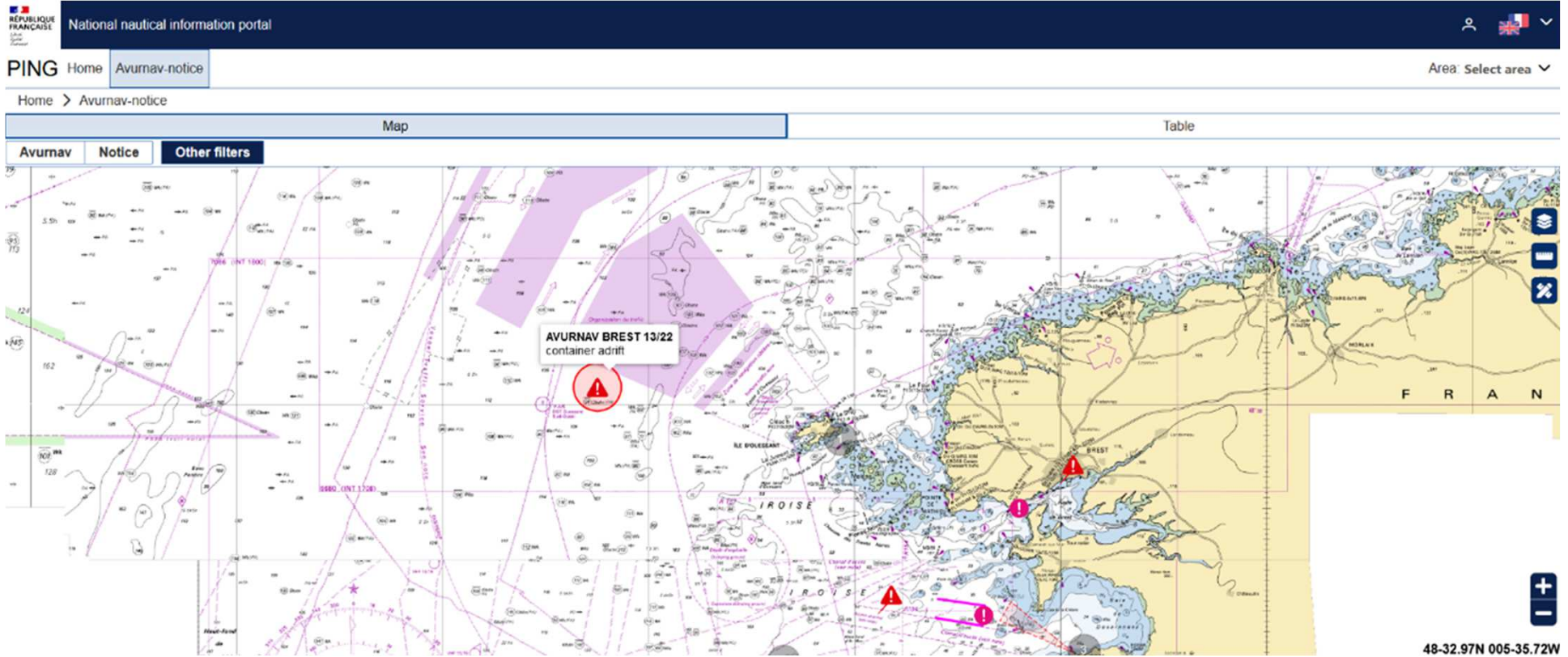
43-22.32N 003-50.13E

# NAVWARNINGS MODULE OVERVIEW





# GEOPORTAL – PUBLIC DISPLAY

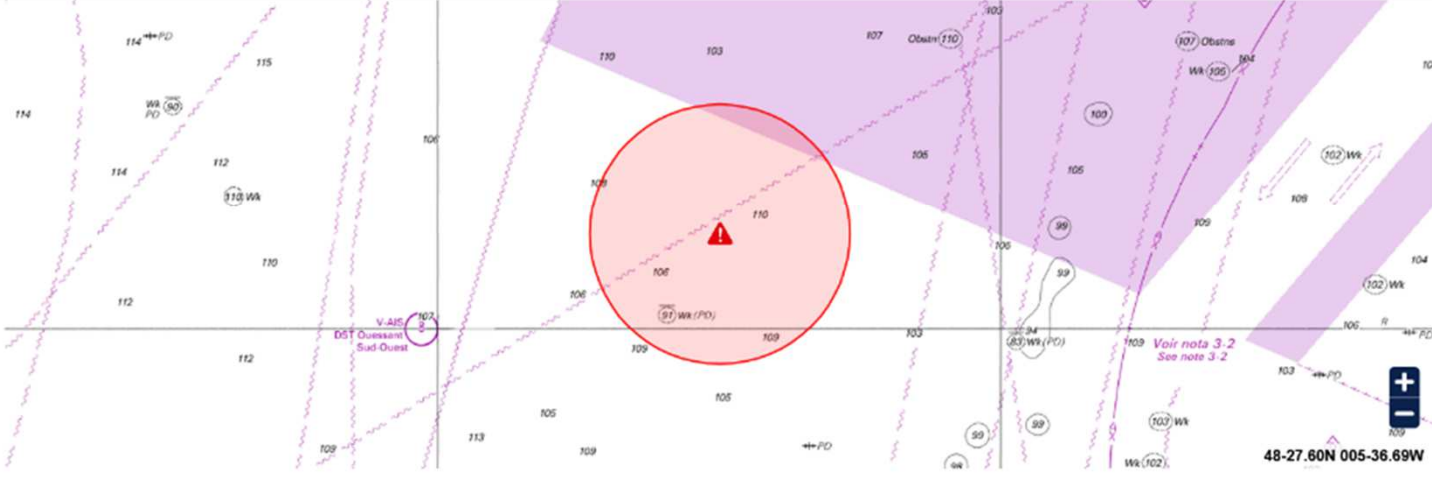


# GEOPORTAL – PUBLIC DISPLAY

National nautical information portal

Home > Avurnav > AVURNAV BREST 2001/22 Details

Area: Select area



Number : AVURNAV BREST 13/22  
General area : IROISE  
Category : drifting hazards

Details :

container adrift  
in area within 2.30 M radius of 48-31 68N 005-37 49W

Status :

Published from : 2022/08/18 11:51:37 UTC +02:00

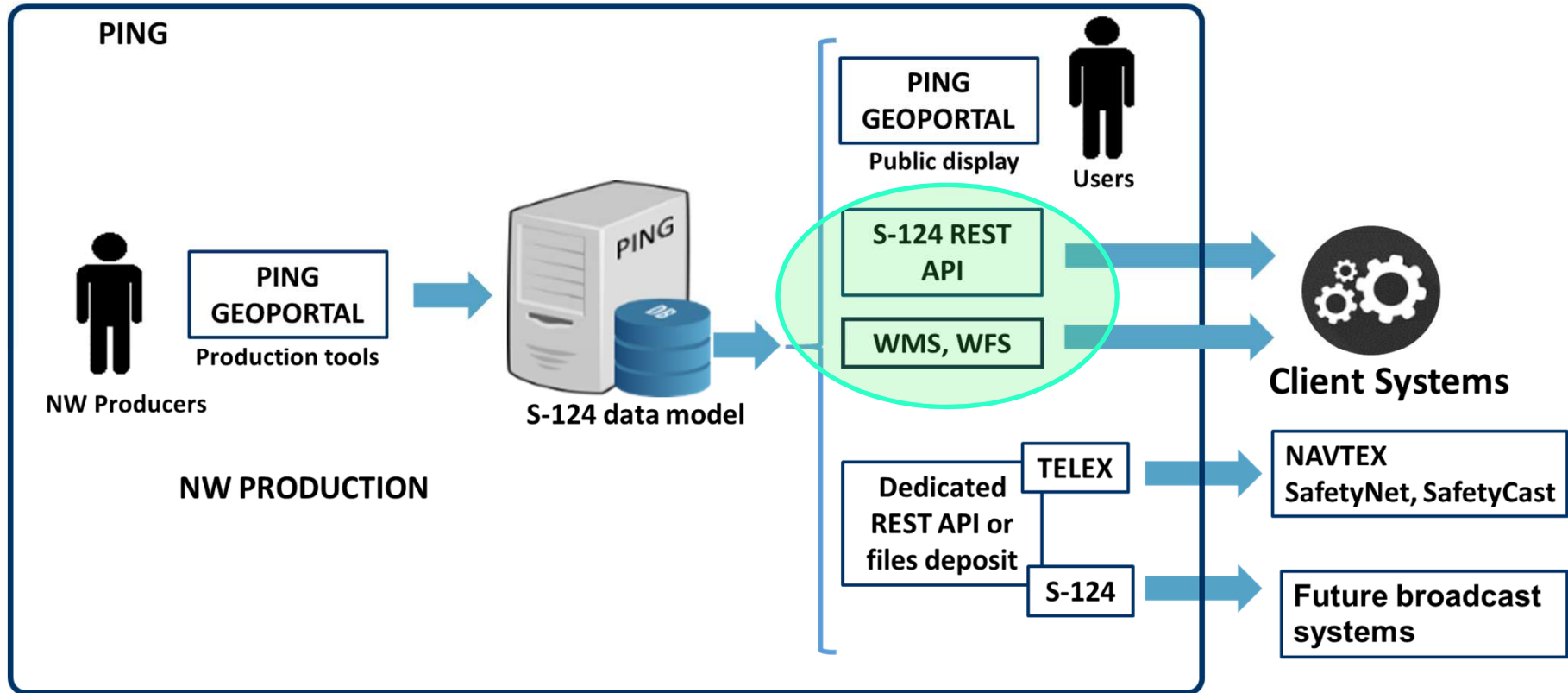
48-27.60N 005-36.69W

48-31.18N 005-39.23W

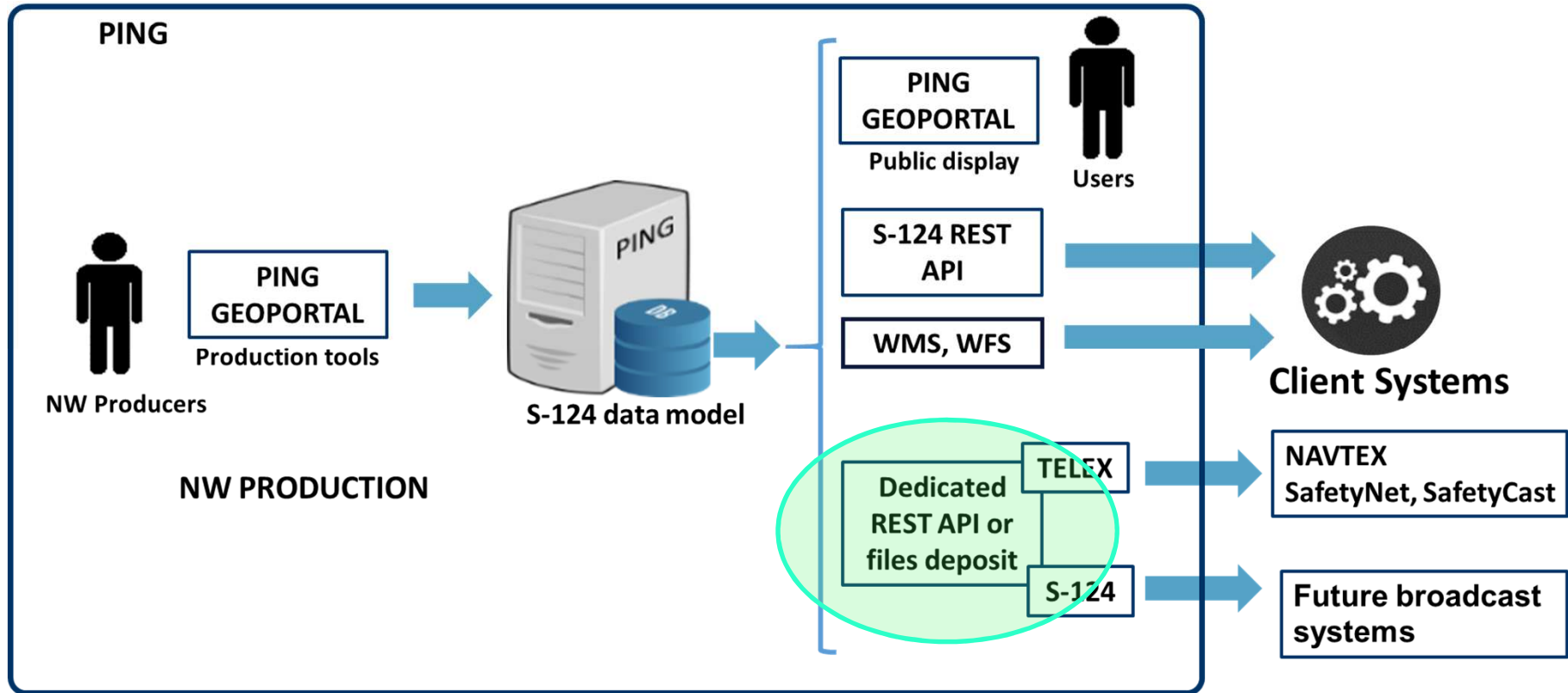
Close

Sitemap Legal notice CGU Accessibility Collection of opinions

# NAVWARNINGS MODULE OVERVIEW



# NAVWARNINGS MODULE OVERVIEW



# PING OUTPUTS

## S-124 format

TELEX	NAVTEX
	
	<p>AVURNAV TOULON 10/2022 LION SPECIAL OPERATIONS - SEAPLANE OPERATIONS FROM 172200 UTC AUG 22 AREA BOUNDED BY: 43-23.85N 003-48.14E 43-30.42N 003-58.98E 43-28.90N 004-01.13E 43-22.32N 003-50.13E</p> <p>AVURNAV TOULON 10/2022 LION OPERATIONS SPECIALES - HYDRAVION EN OPERATIONS A PARTIR DU 172200 UTC AOU 22 ZONE DELIMITEE PAR : 43-23.85N 003-48.14E 43-30.42N 003-58.98E 43-28.90N 004-01.13E 43-22.32N 003-50.13E</p>

```

<S124:DataSet>
  <member>
    <S124:NWPreamble gml:id="PR AVURNAV TOULON 10.2022">
      <id>NW.AVURNAV_TOULON.10.2022</id>
      <messageSeriesIdentifier>
        <nameOfSeries>AVURNAV Toulon</nameOfSeries>
        <warningNumber>10</warningNumber>
        <warningType>COASTAL_NAVIGATIONAL_WARNING</warningType>
        <year>2022</year>
        <language>en</language>
        <productionAgency>CECMED</productionAgency>
        <messageSeriesIdentifier>
          <publicationDate>2022-08-18T15:05:31.270272Z</publicationDate>
        </messageSeriesIdentifier>
        <generalArea>
          <locationName>
            <text>LION</text>
          </locationName>
          <generalArea>
            <warningHazardType>SPECIAL_OPERATIONS</warningHazardType>
            <theWarningPart xlink:href="#NW.AVURNAV_TOULON 10.2022.1">
          </generalArea>
        </S124:NWPreamble>
      </member>
    <member>
      <S124:NavigationalWarningFeaturePart gml:id="NW.AVURNAV_TOULON 10.2022.1">
        <id>NW.AVURNAV_TOULON.10.2022.1</id>
        <geometry>
          <S100:surfaceProperty>
            <S100:surface>
              <gml:Polygon srsName="EPSG:3857">
                <gml:outerBoundaryIs>
                  <gml:LinearRing>
                    <gml:coordinates>
                      432279 3460038737,5372662 7482798295 443392 6045344159,5389472 446665259 447376 4858857594,5385585 811200419 426971 6496954708,5368776 112814991 423279 3460038737,5372662 7482798295
                    </gml:coordinates>
                  </gml:LinearRing>
                  <gml:outerBoundaryIs>
                    <gml:LinearRing>
                      <gml:coordinates>
                        432279 3460038737,5372662 7482798295 443392 6045344159,5389472 446665259 447376 4858857594,5385585 811200419 426971 6496954708,5368776 112814991 423279 3460038737,5372662 7482798295
                      </gml:coordinates>
                    </gml:LinearRing>
                  </gml:outerBoundaryIs>
                </gml:Polygon>
              </S100:surface>
            </S100:surfaceProperty>
          </geometry>
        </S124:fixedDateRange>
        <timeOfDayStart>22:00:00</timeOfDayStart>
        <dateStart>
          <date>2022-08-17</date>
          <dateStart>
            <dateEnd>
          </dateStart>
        </S124:fixedDateRange>
        <S124:warningInformation>
          <warningType>SEAPLANE_OPERATIONS</warningType>
          <information>
            <area bounded by: 43-23.85N 003-48.14E 43-30.42N 003-58.98E 43-28.90N 004-01.13E 43-22.32N 003-50.13E
          </information>
        </S124:warningInformation>
        <header xlink:href="#PR AVURNAV TOULON 10.2022">
        </S124:NavigationalWarningFeaturePart>
      </member>
    </S124:DataSet>
  </member>
</S124:DataSet>

```

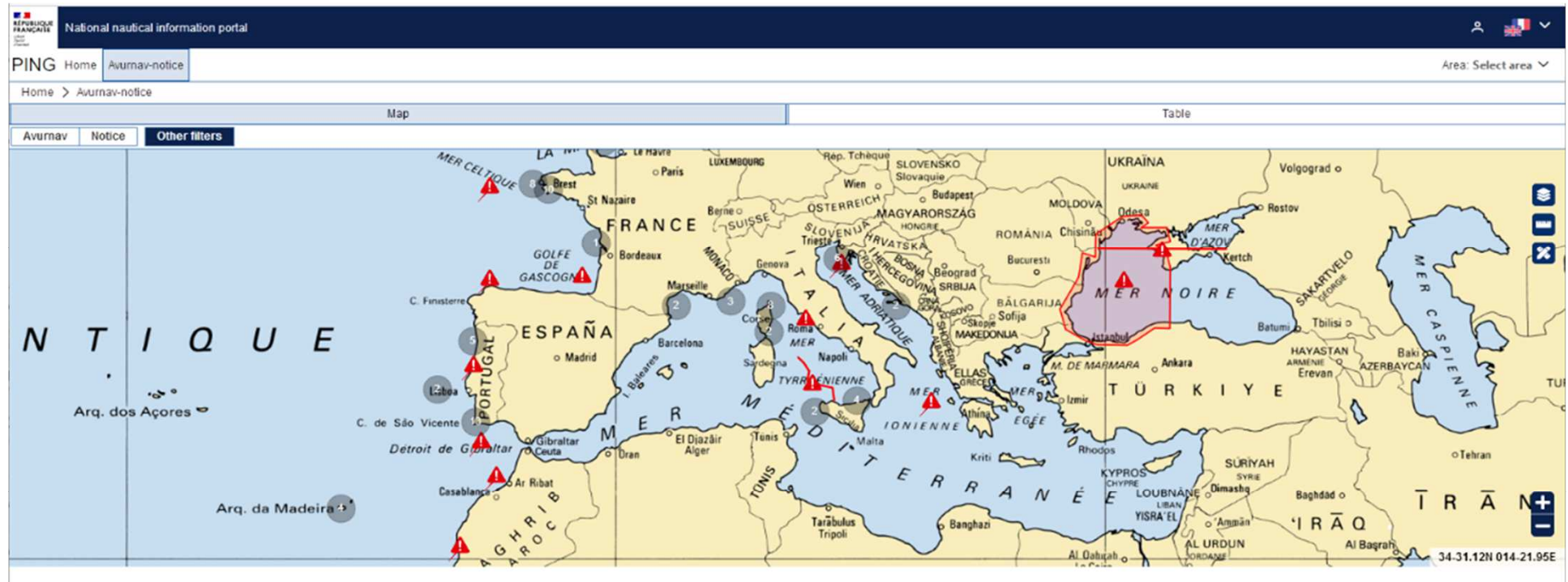
## EU MED OSMOSIS PILOT STUDY 3



**Pilot study 3 (Shom):** promote interoperability of navigational warnings to improve situational awareness in maritime surveillance systems.



## TESTS OF PRODUCTION TOOLS BY PARTNERS



# Portugal

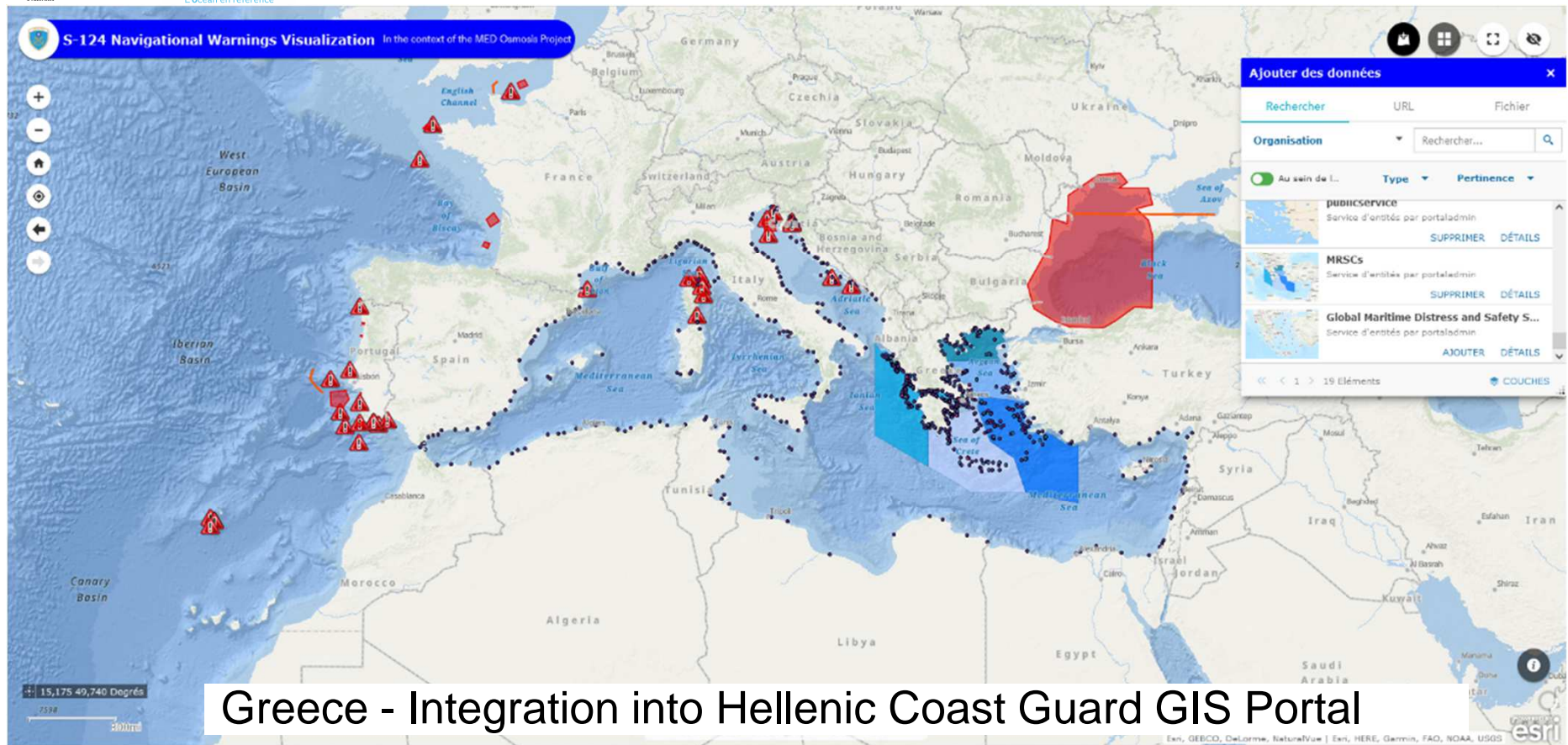
# France

## Italy

# Croatia

## Spain (NAVAREA III)

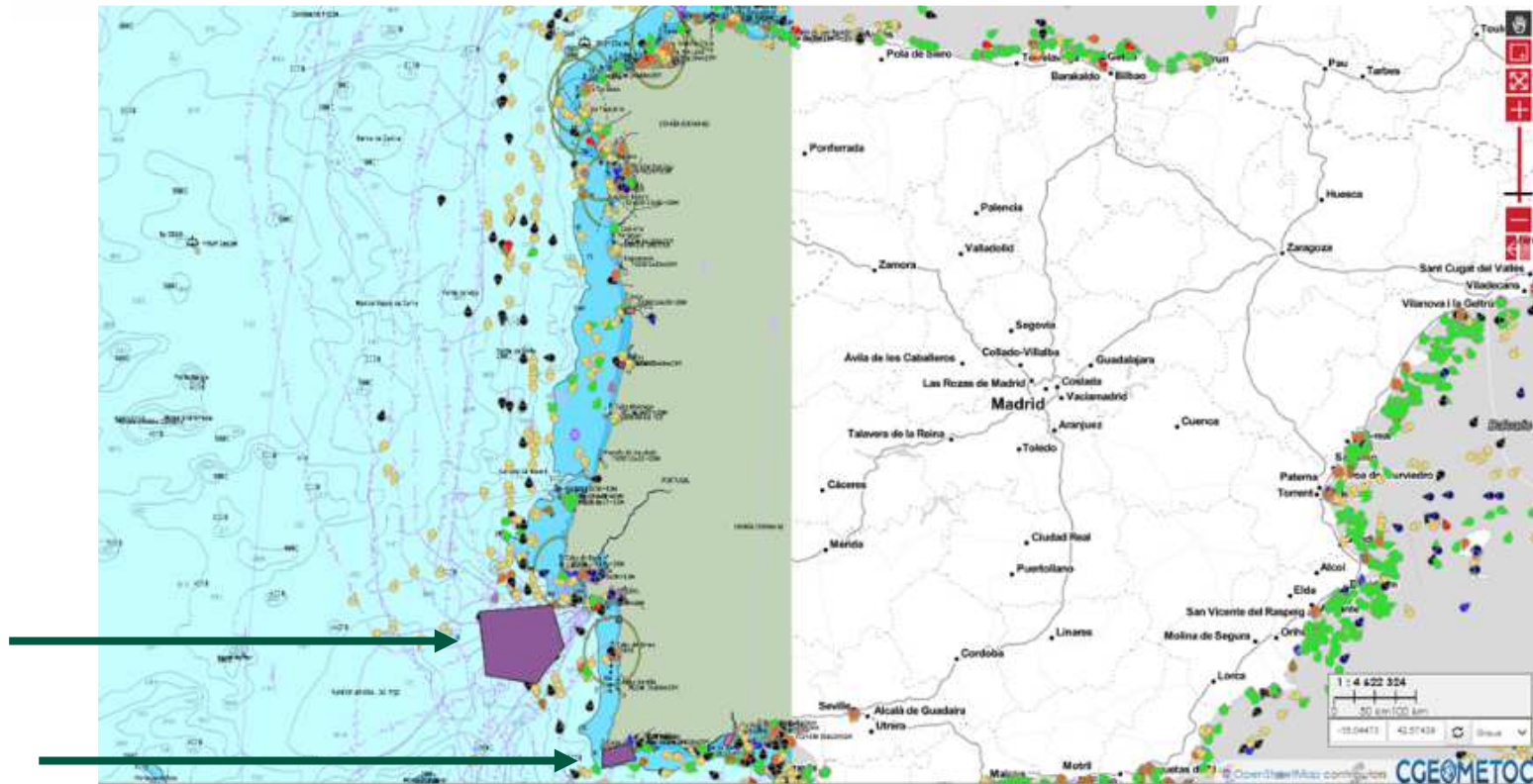
# TESTS OF DATA INTEGRATION INTO CLIENT SYSTEMS



Greece - Integration into Hellenic Coast Guard GIS Portal

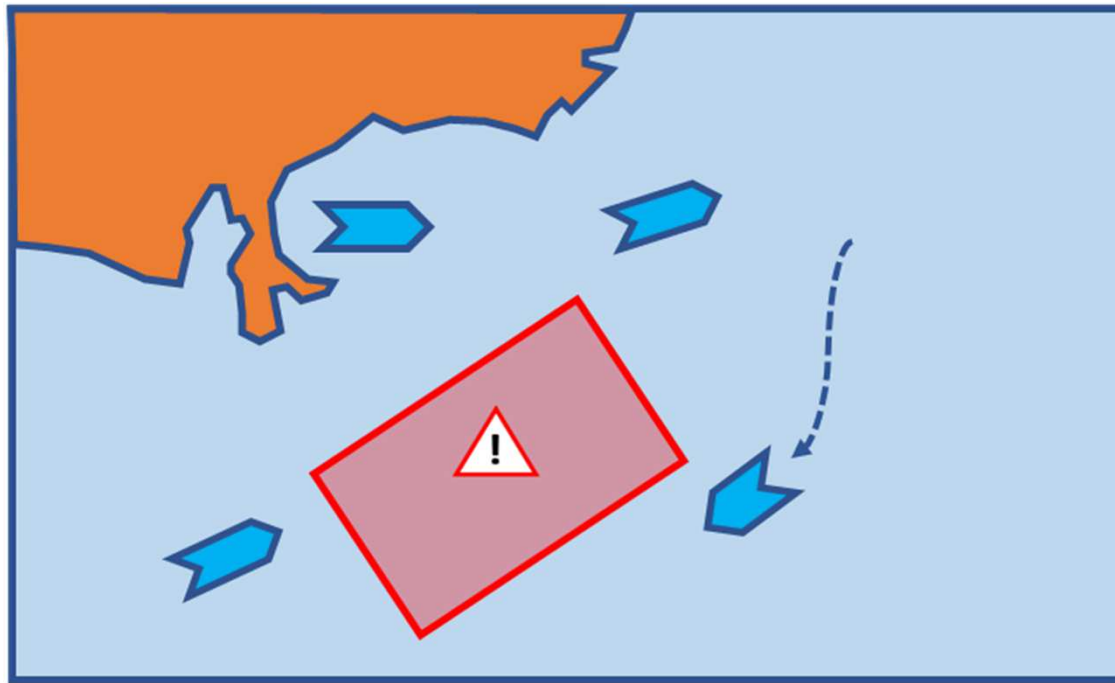


## TESTS OF DATA INTEGRATION INTO CLIENT SYSTEMS



Portugal into GEOMIL maritime surveillance system

# SITUATIONAL AWARENESS IMPROVEMENT

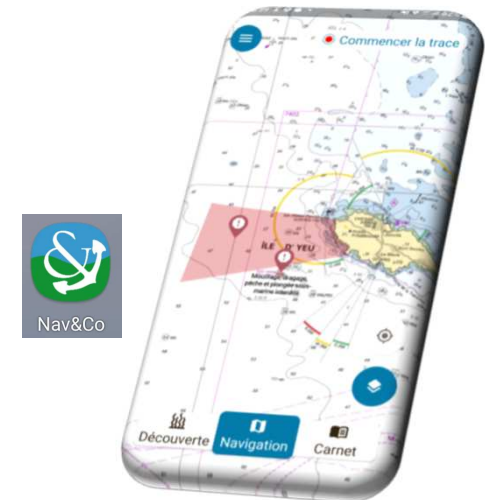


# ACHIEVEMENTS

- Major software developments completed:
  - ✓ **Navigational warnings module**
  - ✓ **Transmission of source information module**
  - ✓ **Geo-regulation module**
  - ✓ **Associated mobile app (Nav&Co)**
- Operational hosting under construction
- System and operators running in
- Data capture underway with existing data (existing navigational warnings, notices to mariners geo-regulations)

## FOLLOWING STEPS

- PING to be consolidated with S-124 ed. 1 once published
- New cyber SECOM standard (IEC 63173-2) to be considered
- **PING to be deployed operationally in 2023** in mainland France, then in French overseas territories
- With Nav&Co app associated
- PING is planned to be available in open source





# MERCI !

