

Digitilization of nautical information

PING Project

A national platform for nautical information

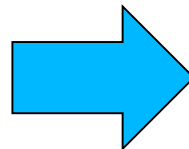
12th Meeting of the IHO-EU Network WG

8th – 9th December 2021

Nautical information



**Navigational
warnings**



**Nautical charts (ENC)
and nautical
publications updates**

Navigational warnings today

NAVAREA III 0102/2021

WESTERN MEDITERRANEAN SEA

1.- UNDERWATER WORKS, SARDINIA -
CORSICA SEA, FROM 010000 UTC FEB 2021
UNTILL 072359 UTC FEB 2021, BY O/S TETHYS
II, IN AREA BOUNDED BY:

41 40N-006 00E

41 40N-006 40E

41 21N-006 40E

41 20N-006 34E

41 32N-006 00E

SHIPPING-FISHING-ANCHORAGE AND EVERY
SURFACE/UNDERWATER ACTIVITY IS
DANGEROUS.

ALL TRANSITING SHIPS BEWARE.

2.- CANCEL THIS MSG ON 080100 UTC FEB 21

- Issued by national authorities
- In the framework of the World-Wide Navigational Warning Service (IMO, IHO*)
- Radiobroadcast (NAVTEX, SafetyNET, in TELEX format)
- Posted on Issuing Authority web Portals

(*): IHO - International Hydrographic Organization

Navigational warnings today – lack of interoperability

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Digitalization is needed

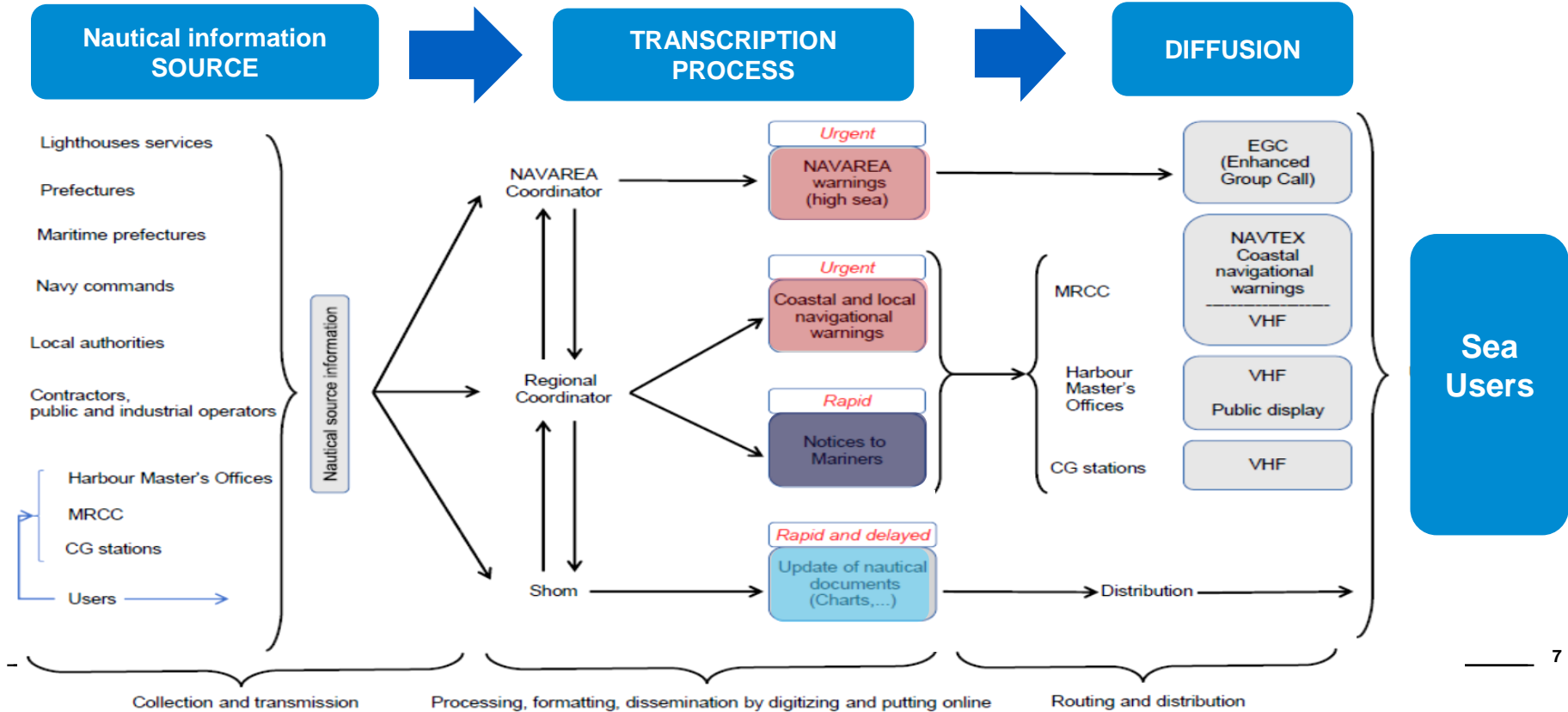
- Instruction from the Government
- To promote wide dissemination and integration into user systems
 - ship navigation systems (ECDIS...)
 - shore services systems (VTS...)
 - systems for users like a smartphone application
- This marine spatial information should be interoperable
 - standardized data
 - accessible according standardized exchange protocols



Standardization

- IMO e-navigation: harmonized exchanges of digital information shore-ship, ship-ship, and shore-shore
- IMO adopted IHO S-100 framework standard for a common data structure
- IHO and other organizations develop S-100 products specifications
 - S-102 for bathymetric surfaces
 - S-104 for water level
 - S-111 for currents
 - ...
- S-124 for Navigational warnings (IHO - draft)

PING project → Modernize the national organisation for nautical information



PING project

- Following a proof of concept phase in 2016-2017 (based on DMA MSI-MN system)
- Setting up a national web platform for nautical information (PING). PING will consist of a shared information system dedicated to the transmission, processing, digitisation and diffusion of nautical information online
- A portal for humans and APIs for systems

4 parts:

- 1. Navigational warnings (2021)
- 2. Transmission of source information (2022)
- 3. Geo-regulation (2022)
- 4. App for smartphone (2023)

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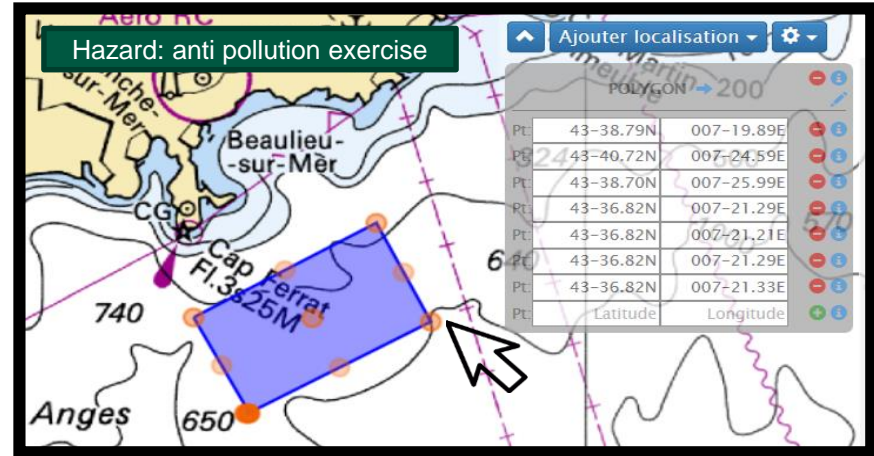
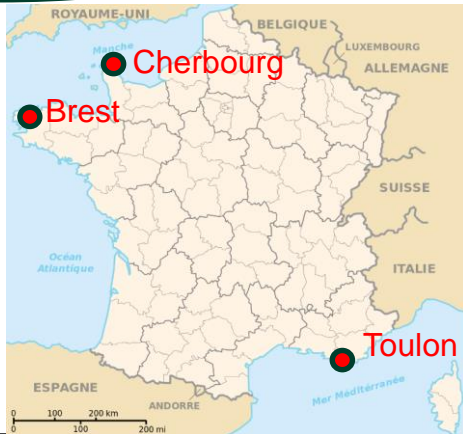
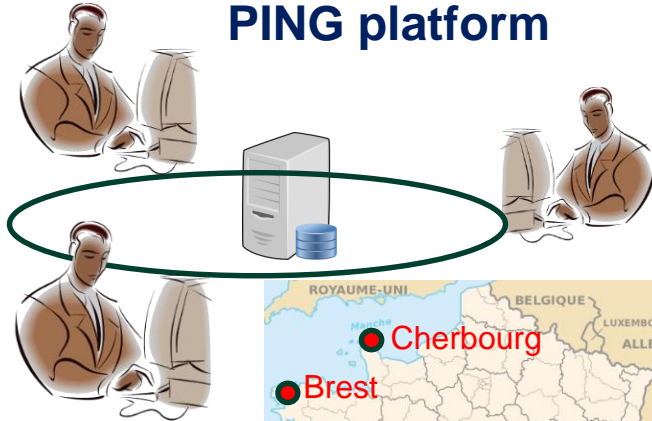
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MED OSMoSIS
/ Pilot study 3

Production of
S-124 NWs and
their delivery to
onshore systems,
including GIS, via
an API

MED OSMoSIS – Production of Nav warnings

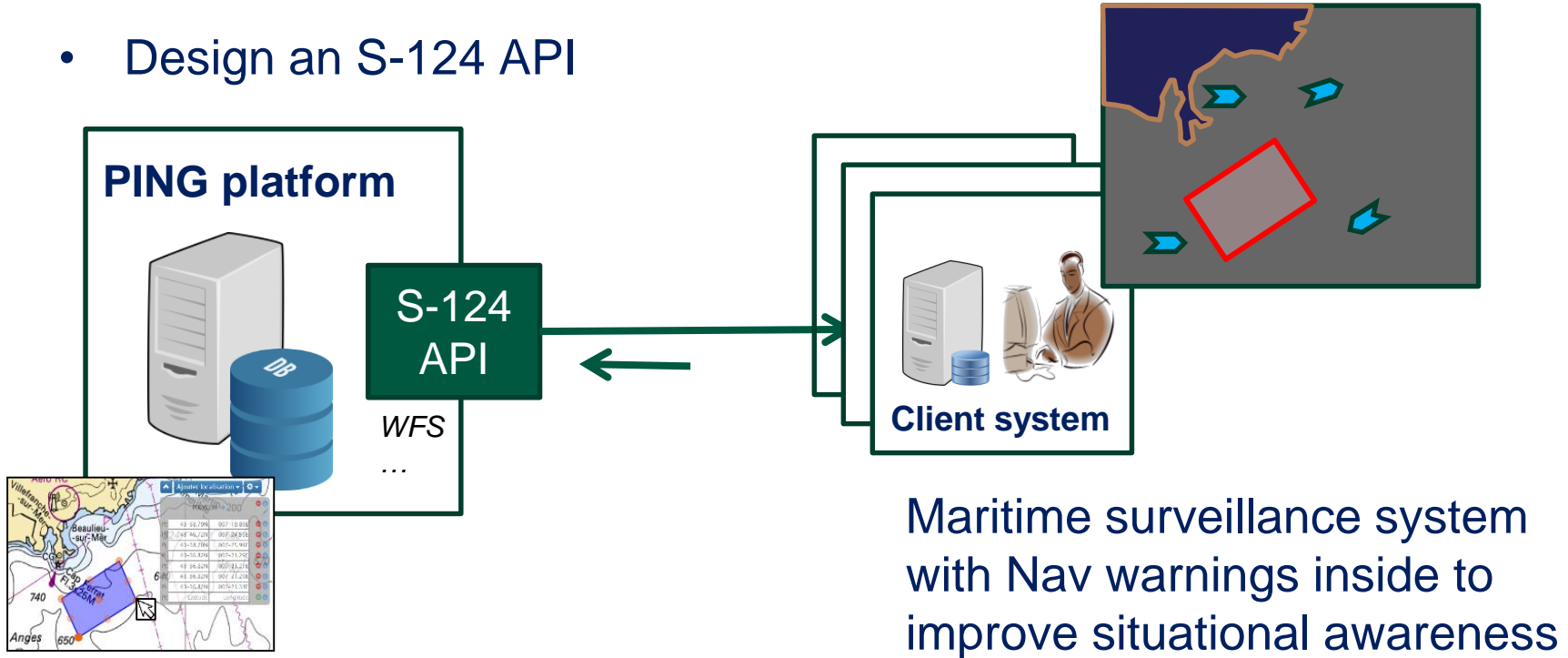
PING platform



- Design of an Internet portal with tools for FR regional Authorities issuing Nav warnings
- To create Nav Warnings using the S-124 data model
- In French and in English

MED OSMoSIS - Diffusion of Nav warnings by web services

- Design an S-124 API



Testing phase

- Platform development underway since November 2020
- Testing phase planned for the second half of 2021 and 2022
- In Mediterranean Sea with the French regional Authority issuing Nav warnings
- Partners for client system testing (S-124 API)
- Partners for production tools testing (if possible)

Merci!

