



**ATHANOR**  
*For a safer ocean*

**CISE OPEN DAY**

*11th December 2025*

**ATHANOR**



# ATHANOR Engineering

Engineering and consultancy company, founded in 2015, in the field of maritime security

## Engineering Manufacture of equipment

- **RF Solutions**
  - **AIS/X (Automatic Identification System)**
    - **Transceiver AIS/X** (Naval, drone & Aero version)
    - **Smart AIS Base stations** (Spoofing detection – TDL)
  - **ADSB/X (Automatic Dependent Surveillance-Broadcast)**
    - Aero and UAV versions
- **Maritime surveillance solutions**
  - **"SeaWatch"** – VTS solution for critical infrastructures and areas (• CISE )
  - • CISE - administration of the French node for exchanging European maritime surveillance data (SG MER)
- **Tracking solution**
  - **Vessel Monitoring System (VMS)** ( • CISE )
  - **Tracking beacon**



## Studies / SW services Research services

Carrying out studies in the field of maritime security, particularly in the areas of AIS and surveillance of small areas (port approaches or critical installations, etc.).

- **HORIZON EUROPE "AI ARTIC"** - Design of an Arctic Ocean monitoring system (*European Commission*)
- **HORIZON EUROPE "SMAUG"** - Design of a drone-based port surveillance system (*European Commission*) – ( • CISE )
- **RAPID AdSEA** - surveillance system using on-board sensors on cooperative carriers (*Defence Innovation Agency*)
- **RAPID CAAPIA** - AIS data analyze (*Defence Innovation Agency*)

### Athanor information :

Staff: 14 (64% engineers)

Head office: 9 rue du général Beuret, Paris 15

Engineering office: Grenoble & Toulon



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# ATHANOR 's experience with CISE

- ATHANOR and the development team have been working on CISE since the project's inception (POV CISE project conducted in 2014).
- As part of the overall development, ATHANOR has created:
  - A "light node", which allows adaptor developments to be validated without connecting to the sovereign node.
  - Various generic adaptors (see following pages).
- For several years, ATHANOR has been responsible for the technical administration of the French node and provides support to the various French administrations and industries involved in the CISE project.



# Applications integrating CISE

## **WARSHIP AIS/X**

Transponder developed specifically to meet the needs of administrations involved in state action at sea.

## **VTS SeaWATCH®**

Surveillance of critical maritime areas / Coastal surveillance

## **VMS**

Fishery monitoring



# AIS/X - AIS/X functionalities

## Cyber functionalities :

- Deception > **100** false tracks
- Spoofing
- Deception
- **Discrete mode** (power setting & emission period)
- **Detecting false tracks**
- **Identity theft detection**

## Tactical data functionalities :

- **Community** management (sets of AIS/X sharing secure data)
- Issuing **Points of Interest** (POI = false lead visible only to the AIS/X community)
- Generate a False Trail or Point of Interest using **information from an external sensor** (radar / camera)
- Track relay

## Other functionalities :

- **Webservices and Serial interfaces**
- **Multicast mode** (allowing connection to a classified system)

Warship AIS

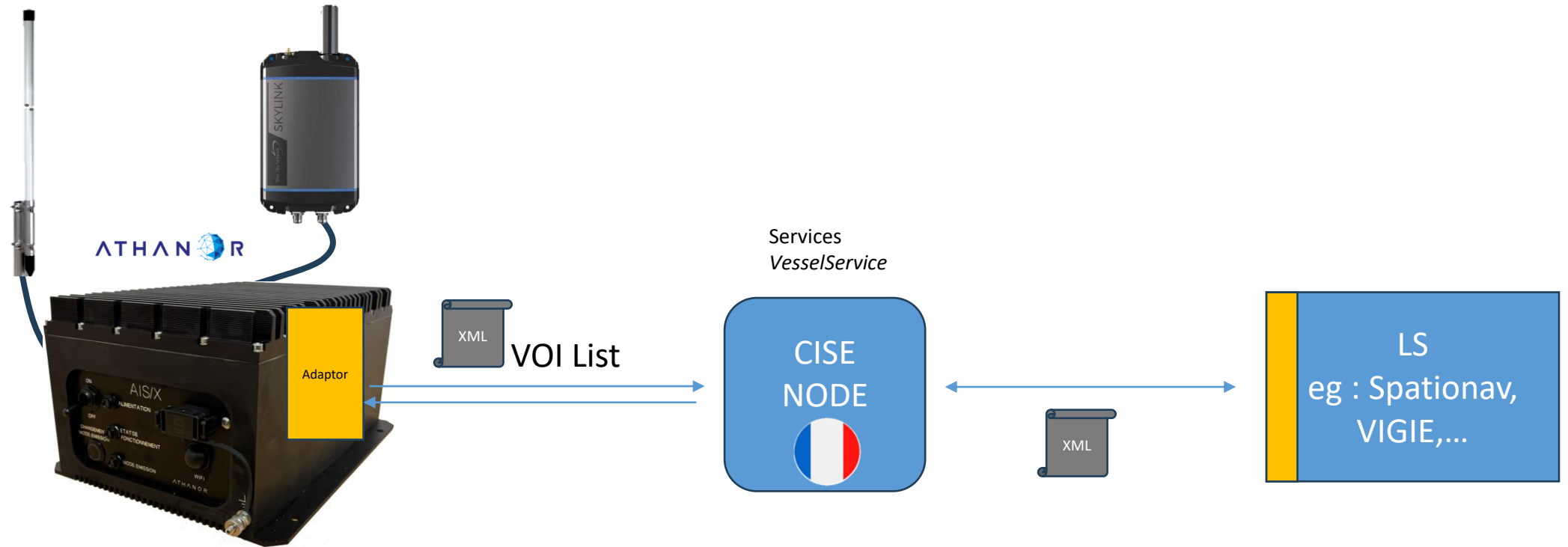
AIS/A

AIS/X



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# Warship AIS/X and CISE



The W-AIS/X receives a vessel list (VOI List) through the subscription mechanism. If a vessel on the list is detected, a *Vessel* message is transmitted.

The W-AIS/X is connected to the CISE node via an Iridium link (antenna integrated into the SAT/GPS antenna). Product available through the EU SATCOM MARKET.

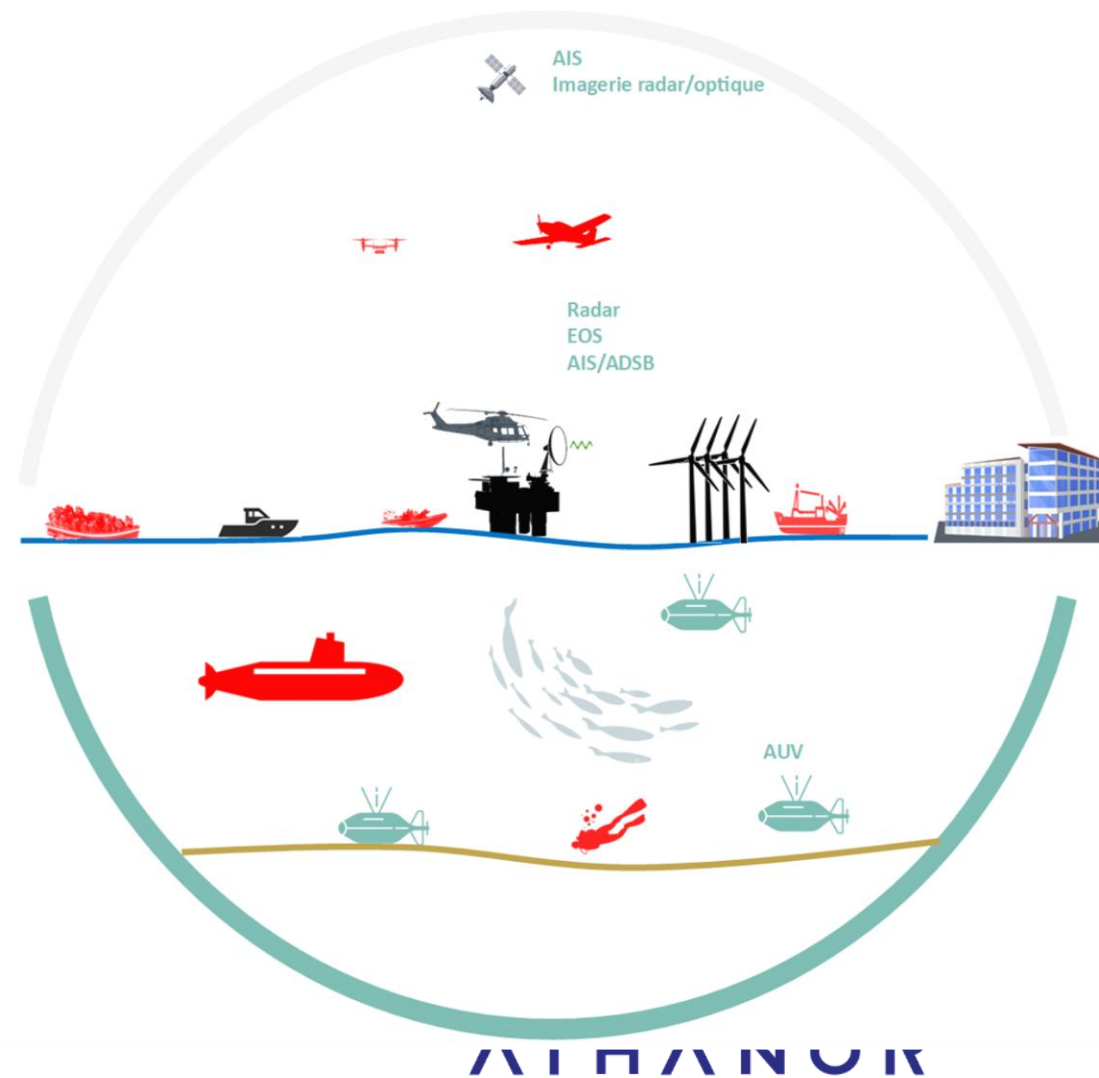




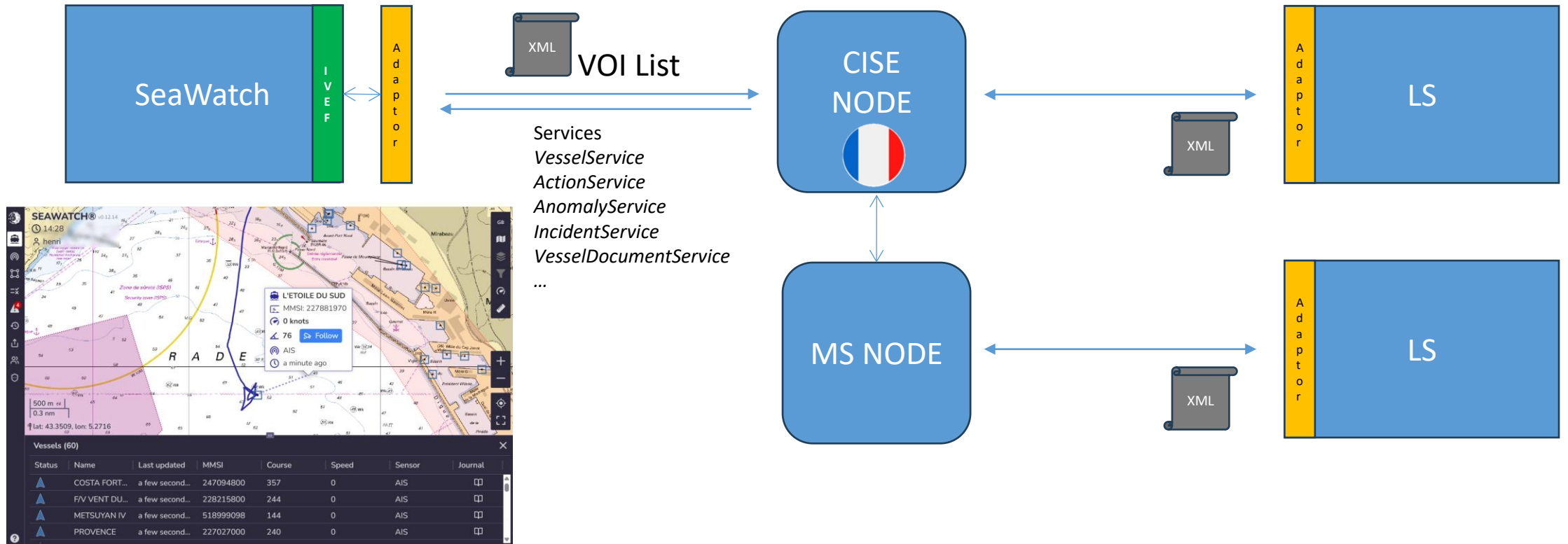
# VTS SeaWATCH®

**SeaWATCH is a web-based VTS that enables users to monitor a maritime zone and intervene in real time if abnormal behavior or situations are detected.**

- **Real-time monitoring** of the maritime situation in the critical zone and its approaches.
- Surface **and submarine** detection capability
- **User-defined rules for abnormal behavior detection.**
- **Artificial intelligence for maritime traffic analysis.**
- **Broadcast information and alerts in real time:**
  - *Cooperative vessels (protection/maintenance vessels, etc.).*
  - *To the relevant authorities (cross, maritime police, etc.).*
  - *To the platform administrators.*
- **Replay of a past event via a replay function** Automatic recording of alerts (creation of a share link) and replay (basic duration 1 month).
- Documented **computer interface** (API) for adding external data or exporting data (vessels/zones/rules/alerts) to another system.



# CISE - SeaWatch functionalities



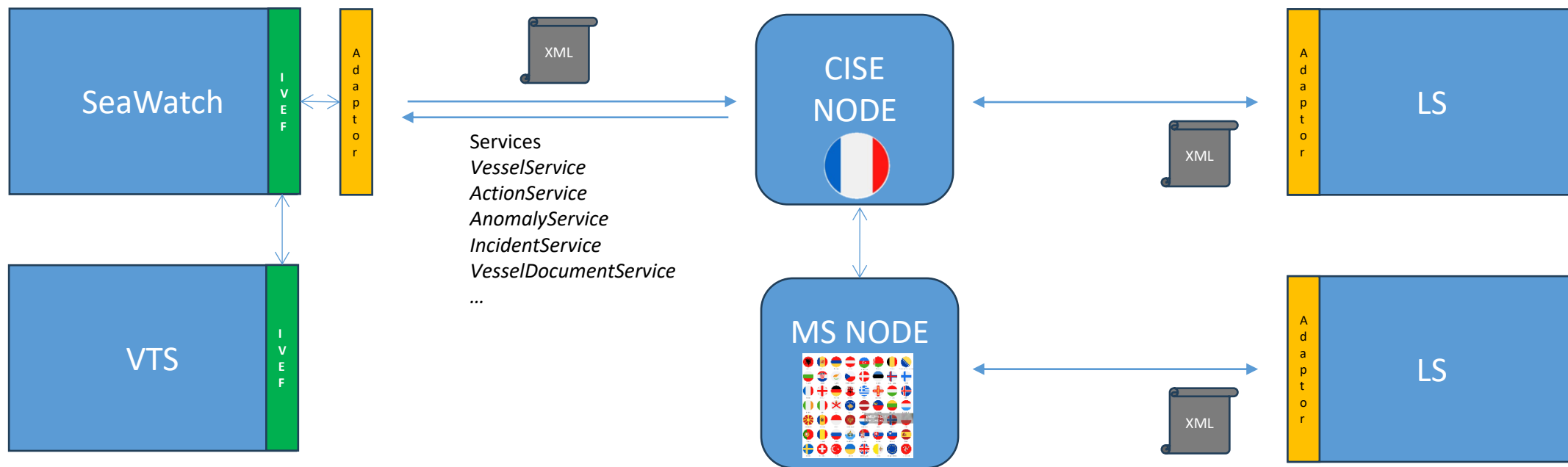
Integration of an IVEF–CISE gateway into SeaWatch with the development of a generic adapter compatible with the IVEF format.

The information contained in SeaWatch (ship tracks, zones, etc.) can be exchanged with other administrations with an LS connected to CISE at the operator's request.





# CISE - SeaWatch functionalities



Thanks to the IVEF interface, SeaWatch can provide any VTS with the following functionalities:

- Gateway to CISE
- Interface for managing exchanges with CISE

Thus offering the functionalities of the “Light Client” previously used



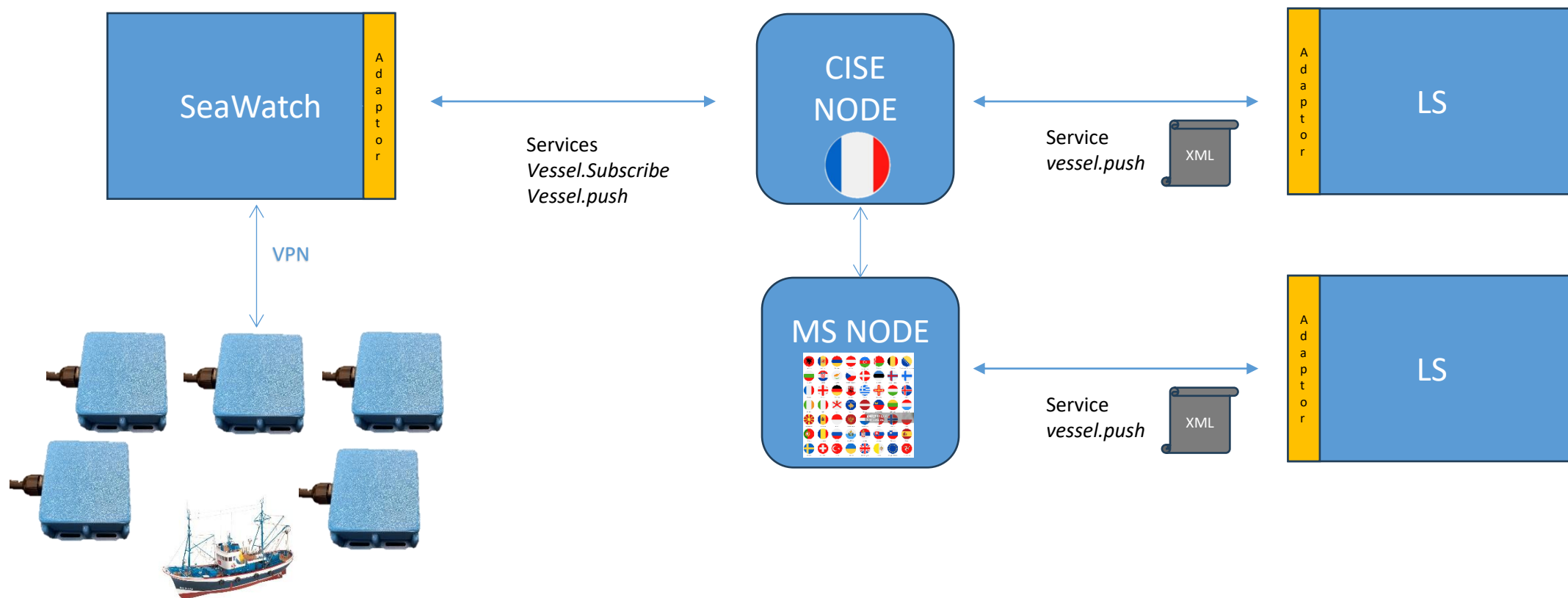
# Coastal VMS

- Solution for tracking fishing vessels in coastal areas with regular reporting of position, identity, course and speed (every 5 minutes) via GSM.
- Position recording in the event of loss of GSM coverage, then position retrieval once GSM network coverage is restored.
- System for detecting removal or disconnection of the beacon with immediate transmission of a message.
- Automatic standby mode for the beacon when docked to preserve battery life (position reporting every 2 hours).
- Integrated connectivity for a period of 5 years all around the world.
- Secure position reporting via an API.
- Option to report beacon positions in SeaWatch®.
- White label beacon that can be branded on request.





# CISE – VMS functionalities



Ability to report fishing vessel positions to another LS (VTS or other) via CISE and SeaWatch.  
Ability to report VMS beacon positions directly to CISE using a proxy.



# Contact

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