

IMS Cloud solutions (HP IMS)

IMS UCM#18

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Perimeter: IMS cloud based solution includes a test and prod environment for:

- **Raw AIS Archive;**
 - AIS data (T and S) store are sent by the data provider
- **Long Term Storage**
 - AIS, VMS and LRIT information
 - Positions associated to the Ship ID from Star Tracking OVR
- **H-ABM including Port Calls detection**
 - Historical ABMs
 - Detected port call: combining ports areas and ship positions in a detection algorithm to detect potential port call

Solution envisaged for displaying vessels track in SEG (to be validated):

- VTQ: queries for which start date > 2.5 years in the past OR query duration is > 90 days go to LTS.
- ACQ: queries for which start date > 2.5 years in the past OR query duration is > 2 days OR area > 50,000km² /14,400 nm² go to LTS.
- The rest of the services provided by STK.

LTS used for:

- data extraction
- analysis

Developments foreseen:

1. MRS positions
2. AIS CLASS A Ship static and voyage related data (Message 5) and queries
3. CSD information integration

New service that will use LTS: Integrated Vessel Track Service (IVTS) - 2023

- back-end component for delivering vessel tracks to SEG.
- It will increase SEG performance + improve the user experience
- Overcome some limitations on the existing vessel track service.

LTS will become the Track Service back-end for IMS

Status:

- 7 different H-ABMs algorithm developed (in the cloud) and available
- Available via webservices
- Requires EMSA support for configuration until implemented in SEG
- Detected Port calls require monitoring of the quality of worldwide port areas

Details:

Event Number 2 of 16
Source T-AIS
Start Time 2020-11-07 08:17:10 GMT

ID 000000000337_00002_00000_1633016593
Status IN
End Time 2020-11-07 08:17:10 GMT

Vessels:

Overview:

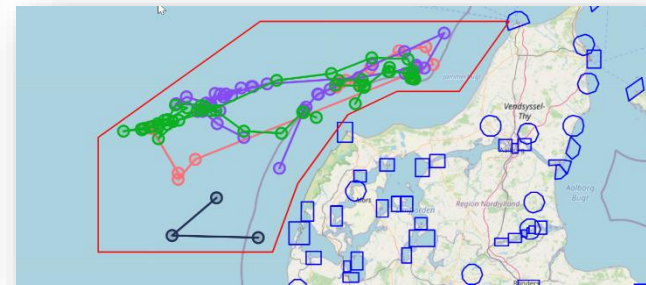
Main Vessel Yes	Navigation Status 0	
IMO 9240976	MMSI 215188000	IR N.A.
Type 355	Breadth 25	Length 158
Name NEPTUNE DYNAMIS	Flag State MT	Call Sign 9HFR7

Last Port Call:

Port: GBAVO	Arrival Time: 2020-11-05 18:41:10 GMT	Departure Time: 2020-11-06 11:26:42 GMT
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Location ([Google Maps](#)):

Timestamp	Latitude	Longitude	Heading	Speed
2020-11-07 08:17:10 GMT	52.13953	-6.3209815	45	15.8



Next steps:

- **Integrate with SEG version 3.1 - 2022**

ABM admins will be able to configure limited number of H-ABM algorithms per day

All users will be able to see results of the H-ABMs - Port Call detection

- **Develop new algorithms – 2022/2023**

Vessel approached during the voyage, Sudden Change of Heading, Sudden Change of Speed, Line crossing, Message 5 Destination/ETA changes

- **Provide a global capability for continuous record of certain H-ABMs outside ports - 2022/2023**

Drifting, At Sea Encounter, Speed Anomaly, Sudden Change of Heading, Sudden Change of Speed, Gap in Reporting, Vessel approached during the voyage, Change of AIS Destination or Estimated Time of Arrival

- **Create a database of voyages and voyage related events (Message 5 and MRS) – 2022/2023**



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