AFRICA CENTER FOR STRATEGIC STUDIES
ENHANCING MARITIME SECURITY IN AFRICA

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INFORMATION EXCHANGE AND SHARING
the case of the AfOIl-OI region

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#MASE Program
Interests
- Respond to a regional need;
- Improve knowledge of the maritime domain;
- Have multi-purpose information available for use.

Issues
- Ensure timely access to information to increase awareness and knowledge of the situation at sea;
- Affirm its utility and operational effectiveness.

Types of information:
- All information from maritime surveillance considered necessary for maritime activities.
Maritime Information Exchange and Sharing Mechanism

A regional agreement to amalgamate and share maritime information that includes:

- Practical modalities for exchanging and sharing maritime information;
- The protection of information;
- The rights and responsibilities of the Stakeholder States;
- The missions of the regional center;
- The governance of the center.

The regional center based in Madagascar:

- The main tool, the heart of the mechanism.

Liaison Officers

- Interface between the RC, Member States, and partners;

National and regional centers

- ISC, MRCC, IFC Singapore, etc.
Requirements

OWNERSHIP:
- Political will;
- Develop a sharing culture

INTEROPERABILITY:
- Between humans: A common language and common SOPs;
- The system: A common information sharing environment;

PROTECTING INFORMATION:
- A national regulatory framework;
- Compliance with procedures;
- Access to information;
- Terms of use for the data;
A REGIONAL CENTER FOR THE GATHERING AND EXCHANGING OF MARITIME INFORMATION

A platform for gathering maritime information:
- Gathering software + server + databases;
- Big Data.

Main mission:
- Centralize all geo-positioning information regarding seafaring vessels on a single interface.

Specific tasks:
- Monitor maritime traffic and activities at sea and detect abnormal behavior (e.g., a ship stopping on the high seas, abrupt changes of course, lack of data transmissions, rendezvous at sea);
- Make a common, validated maritime situation image or Recognized Maritime Image (IMR*) available to Member States by way of a dedicated, secure web-based platform;
- Provide information to the CRCO* and national centers.
The center can also manage and display on its visualization screen:
- Geo-referenced objects from various sources in order to provide a comprehensive view of the environmental situation at sea (oceanography and meteorology)
- Events resulting from human activities such as:
  - Sea pollution
  - Accidents at sea (collisions, capsizing, loss of machinery)
  - Illicit trafficking
  - Clandestine immigration
  - Illegal fishing
Maritime Information: any information and any support vehicles, including documents and copies thereof, that help locate or identify a maritime vessel or event. Such information includes position, nature, registration, country of origin, points of departure and destination, crew, passengers, the type of cargo aboard, speed, and any other pieces of information related to maritime safety and the management of the vessel;

**CRFIM area of interest**
- Northern Border: 26° N
- Southern Border: 13° S
- Eastern Border: 20° E
- Western Border: 76,5° E
MASE States and Partners

LRIT, VMS, Costal AIS, Ship reports

Database Maritime incidents, ships, and ports

Information Bulletin

INTERNET

Behaviorsal algorithms

Handling

• Collection of data
• Ship tracking data
• Receipt, archives

Radar and optical imaging

SAT-AIS

MSSIS

Interpol, ISC, EMSA, Naval Forces, etc...
Example SAT-AIS traces displayed on WEB interface
Illustration of a correlation using VMS/AIS/RADAR data
A few months of AIS data and VMS data
MERGER OF DATA FROM LRIT, AIS, VMS, Optical, & Radar Imagery

LRIT, AIS, SAT-AIS, VMS

MONITORING VIA SATELLITE
Partners

**INTERPOL**
- Databases
  - Maritime Piracy
  - Stolen Vessels Database

**PMAESA**
- Ship and port data

**COPERNICUS PROJECT**
- Satellite images
- A 2-satellite constellation with a 12-day orbital cycle
- Free access to raw data

**SMART-FISH PROJECT**
- Experience sharing

**CRIMARIO**
- Training
Added Values of COOPERATION
- Economy of scale
- Economy of means
- Avoid duplication
- Act as quickly as possible

Challenges:
- Bringing the State/center network online
- Switch from Need to Know to Need to Share
- Find an economic model that will ensure the mechanism’s sustainability.
Questions?