

Information Sharing

EU CRIMARIO Ongoing activities and achievements & Next steps for 2019

Seychelles
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EU CRIMARIO

Maritime Information Sharing Manager

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Objective

CRIMARIO

Critical Maritime Routes Indian Ocean

To enhance Maritime Situational Awareness in the Indian Ocean Region through Information Sharing, Training and Capacity Building

EU CRIMARIO

- 2013/14 - Identification / Formulation Phase
- January 2015 – Dec 2018
 - Implementation €5.5m under EU Critical Maritime Routes (CMR) Programme – Instrument Contributing to Stability & Peace (IcSP)
- Extended to Dec 2019 within existing budget

EU CRIMARIO - Team



- Project Coordinator
 - Adm. Francois-Regis Cloup-Mandavialle (FN)
- Information Sharing
 - Mr David Nattrass
- Training and Capacity
 - Mr Olivier BEZIER
- Special Advisor
 - Mrs Marianne Peron-Doise
- Communications and Visibility
 - Mrs Isabelle Gachie-Vinson
- Monitoring and Evaluation Expert
 - Mr Jean-Phillipe Picquart

Expertise France

- Jerome HEITZ
- Laetitia de Tarlé
- Cavida Lamour



Coordination / Cooperation

CRIMARIO activities work in synergy with;

- MASE results 4 & 5 (IOC)
 - 4 - National and regional capacity for maritime tasks and support functions are enhanced;
 - 5 - A regional mechanism for coordination and exchange of information is developed
- Djibouti Code of Conduct (DCoC)
 - Extended mandate through the Jeddah Amend

Information Sharing Component

- **Main Activities:**

- **IORIS** – **I**ndian **O**cean **R**egional **I**nformation **S**haring
 - and Incident Management Network
- **AIS** – Enhance Coverage – Future cooperative agreement
 - Working with Kenya to enhance coastal coverage
- **VoIP** – Enhance Voice over IP to other regional maritime centre's (complementary to IORIS)
 - Initiated in 2012 through EU MARSIC for the 3 DCoC ISCs

Information Sharing Component

- **SOPs** – Information Sharing
 - Standard Operating Procedures
 - Formatted Messaging
- **Enhance Interagency Cooperation**
 - (National / Regional Workshop/Seminar)

IORIS

Designed through formal collaboration process with regional partners since 2015 (informal since 2010)

- **IORIS will be:**
 - **Regionally Owned** (membership for each zone defined by owner)
 - **Regionally Managed** (managed by a designated regional entity)
 - **Regionally Located** (Secure Hosting facility to be located in the region)

IORIS – Regional Benefits

IORIS is a flexible and secure information sharing communications tool with enhanced functionality for Incident Management.

Benefits for the region. IORIS can provide the essential link between existing dedicated, and future planned specialised modules/systems

Single Information Sharing Environment (SISE)

IORIS

Jordan NMIC	Oman NMIC	Egypt NMIC	Ethiopia NMIC
U.A.E NMIC			S. Arabia NMIC
Djibouti NMIC	Eritrea NMIC	Yemen NMIC	Sudan NMIC

AREA NORTH



Mauritius NMIC	Maldives NMIC	Somalia NMIC
Kenya NMIC	Seychelles NMIC	

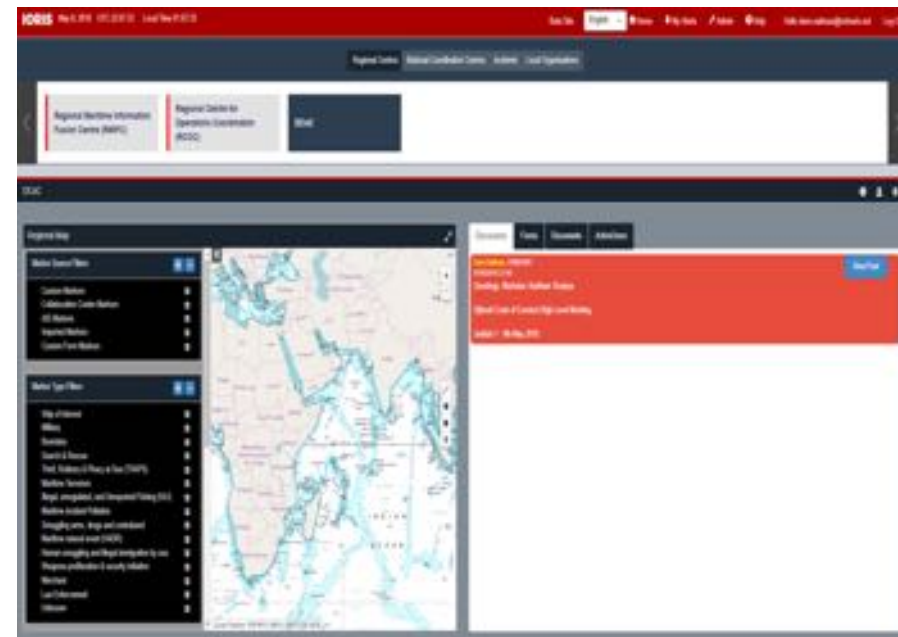
AREA CENTRAL

Comoros NMIC	South African NMIC	Reunion (France) NMIC
U.R NMIC	Madagascar NMIC	Mozambique NMIC

AREA SOUTH

Fusion Platform

RMIFC Madagascar	RCOC Seychelles
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Create a Single Information Sharing environment for the region.

Avoid duplication / Consolidate

Functionality

- Real-time communications tool
- Share Information or Data
- Manage Incidents
- Distribute and/or collection tool for information
- An ideal tool to replace existing ISC/ISN sharing networks (IMO/MARSIC legacy networks)

Complimentary to existing & future tools

- **MERCURY**
 - Dedicated to Anti-piracy in support of EUNAVFOR Atalanta
 - Owned and managed by MSCHOA (Northwood, UK)
- **MSSIS Seavision**
 - Dedicated platform for Maritime Data visualisation
 - Owned and managed by US – Volpe Center
- **RMIFC Fusion Platform (anticipated 2019)**
 - Dedicated platform for data fusion and analysis in the Regional Fusion Center

Transparency / Monitoring / Accounting / Auditing / Support

- System activity logs (including who accessed activity log)
- Administrators can set alarms for particular activities, or combination of activities
- Monitoring - comprehensive analytics and error logs
- Operational level - 24/7/365 Monitoring of System Resources and User Support
- Internal Auditing Processes/Policies

ESSENTIAL TO BUILD TRUST AND CONFIDENCE

IORIS – Regional Ownership - Legal

- A perpetual usage license with no ongoing fees (within agreed geographical and user scope)
- A copy of the software / source code
- Rights to modify the source code after 2 years/CRIMARIO support finishes with 3rd party developer.
- Intellectual Property
 - Rights for the core software and initial development will remain with the developer
 - Intellectual Property rights for future developments shall remain with the Customer / License Holder

Ownership and Management

- Designated Regional IORIS Management authority for Global administration – proposed RCOC Seychelles
 - Regionally manned with International Liaison Officers (ILOs)
 - Auditing / Transparency / Oversight
- Current dialogue assisted by MASE anticipates transfer of licence ownership from EU to IOC before the end of CRIMARIO project to manage on behalf of the region
- **Discussion Points –**
 - **Regional Ownership?**
 - **Steering Committee?**
 - **Governance?**
 - **Future Development?**

Sustainability

- Long term sustainability essential
 - Maximum upfront costs supported by CRIMARIO
 - Phase I Software Development approx. €300'000
 - Lifetime Licenses (IORIS / Mapping*)
 - Maintenance/support/hosting funded by CRIMARIO until April 2020
 - Minimise future costs (maintenance, support, hosting)
 - Estimated €25'000 - €40'000 per annum
 - Subject to bandwidth / resources etc.

*Within agreed geographical scope - license up to 1000 users

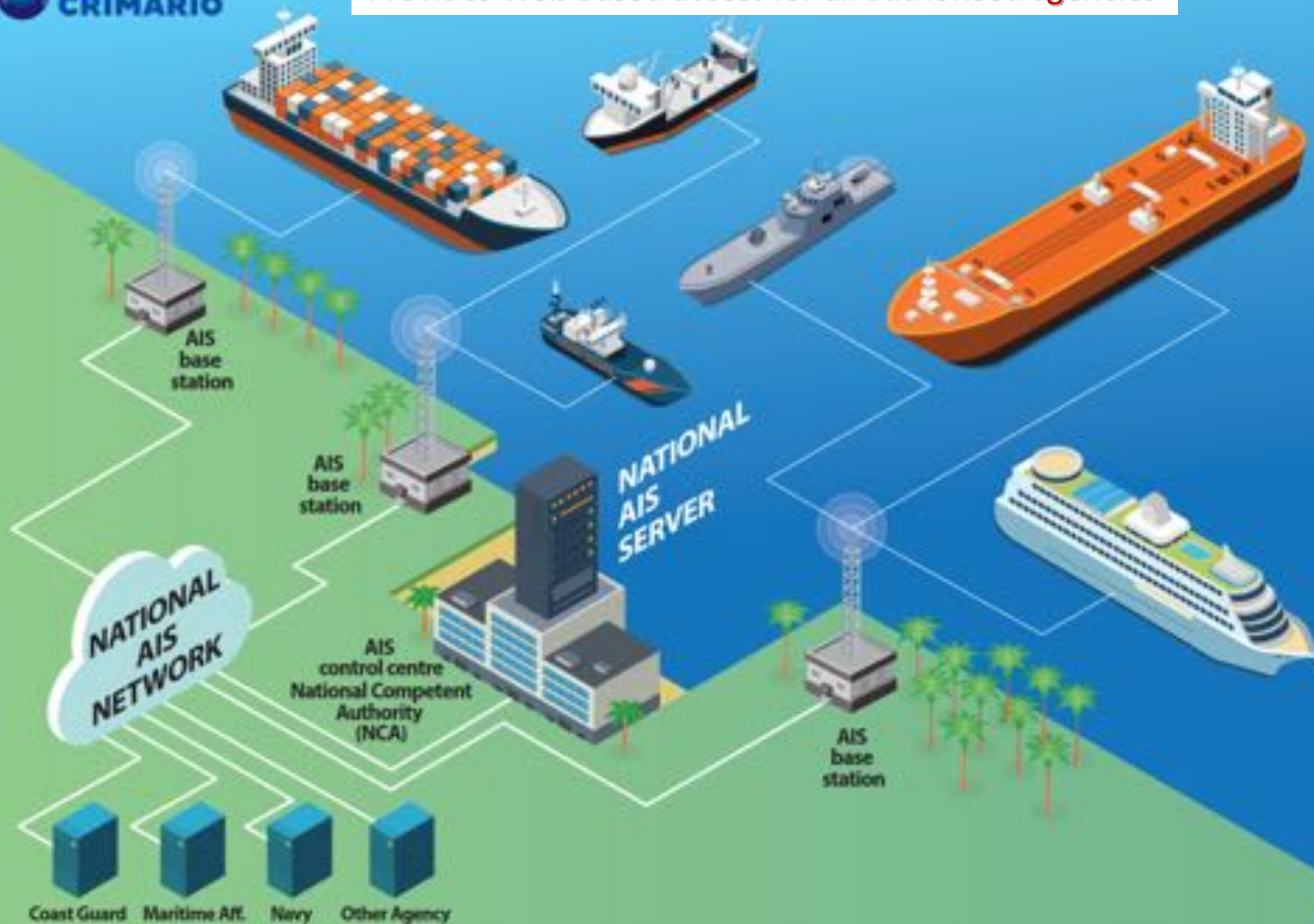
Future Development

- **Phase II - 2019**
 - IORIS – evaluated over the next 6 months
 - Feedback from Users / Centres / Regional Partners consolidated.
 - Phase II evolution implemented 2019

Important that IORIS is used continually to ensure we receive quality feedback.

Training platform is available to National users to conduct internal training/exercises

Provides Web Based access for all authorised agencies



AIS for Kenya

- National Enhancement for Kenya will benefit the region
- We would encourage a future cooperative agreement for sharing national AIS with regional partners
- Sharing essential to achieve Maritime Situational Awareness (MSA)

Provision of National AIS Network for Kenya

- **National AIS network**
 - Comprising initial 4 x AIS Transponders
 - Sophisticated Core Software – PELAGUS (Developed by ELMAN - Rome)
 - Includes maintenance and support for 2 years
 - Training held in Rome – November 2017
 - Expected completion – 1st Quarter 2019.

National AIS Network



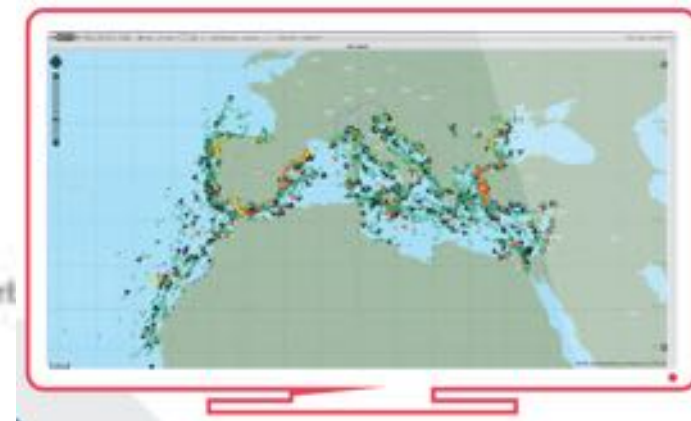
Web GIS

The **GIS MODULE** of **PELAGVS** allows maritime traffic monitoring and alerts by displaying the vessel tracks on electronic charts.

The traffic image is processed and enriched with information overlays, track information, data from sensors and warnings. Track information acquired by AIS can be displayed on the GIS (Geographic Information System) together with data from vessel databases. The GIS ensures that a variety of charts, maps and geo-referenced images can be used, including S57, S63, ESRI® shape files and a range of raster formats (GeoTIFF, etc). The GIS is compliant to the standard OGC features, in order to increase systems interoperability.

The GIS module includes advanced tools to assist the operator's activities:

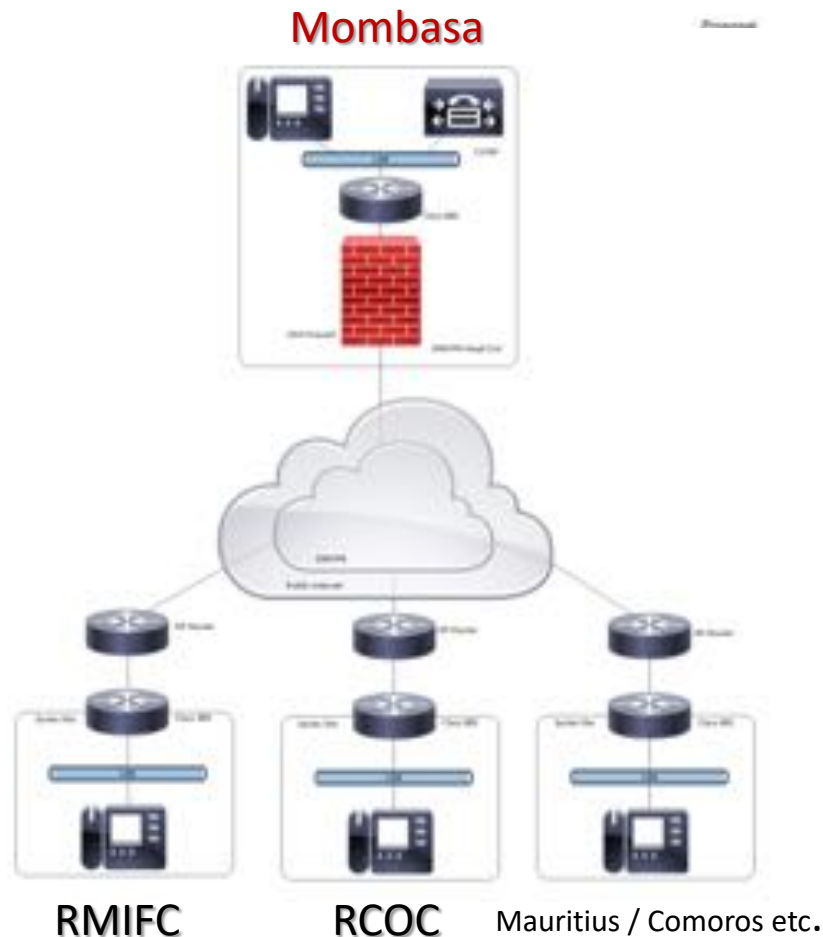
- standard GIS-navigation tools like pan, zoom, labels configuration, etc
- selection of charts layers
- area drawing
- flexible target search
- highlighting of user specified targets of interest (TOI)
- computation of advanced kinematics measures (distance, bearing, CPA, TOPA, etc)
- interaction with selected targets (AIS interrogations, text messages, etc)
- track history with export and playback capabilities
- integrated display of data coming from different sources and sensors



HI-TECH COMMUNICATIONS
SINCE 1975

PELAGVS

Voice over IP



Establish VoIP connectivity between regional maritime centres;

- Calls can route through existing equipment located in the MRCC Mombasa / or possible new location
 - TBC – good quality dedicated internet connection essential – CRIMARIO can support for year 1)
- Will provide free voice calls between centres with direct dial
 - (no operator connection required)
- No voice subscription cost
- CRIMARIO will provide initial maintenance & support period
- Countries can request access

Information Sharing Standards

SOPs – Standard Operating Procedures

Pre-formatted messages

- Essential for Information Sharing at interagency or regional level
- Formatted Messaging
- Will work with existing initiatives and partners to integrate into the IORIS platform agreed International / Regional standards for information sharing
 - Formatted messages
 - BMP5 (new release July 2018)
 - SOPs currently being developed by USNAV with regional partners

Interagency cooperation - Opportunities

CRIMARIO can provide a workshop seminar in support of interagency cooperation on request.

- 1 or 2 days
- Coordinate / cooperate with the IMO programme to avoid duplication where possible;
 - Could also include emphasis on benefits of a national coordination centre or other topics specific to the country.
- Regional seminar / workshop in 2019 (tbc)
 - Focus on regional cooperation / regional tools for information sharing etc.

Key activities to end of project – Dec 2019

- IORIS - Phase II development and Implementation
- IORIS - Establish set of User/System Policies
- IORIS - Transfer Ownership / Governance to region
- IORIS - Expand IORIS Membership
- Implement National AIS – Kenya
- Implement Voice over IP – Regionally
- Interagency / Regional Workshop
- SOPs



Any Questions / Discussion

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