

IORIS: the Indian Ocean Regional Information Sharing & Incident Management web-platform

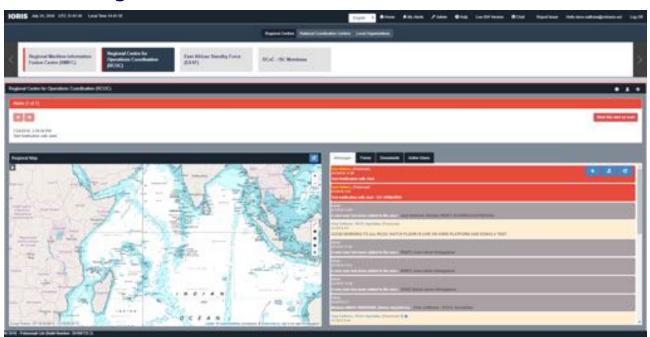
Initiated by EU CRIMARIO project, the new secure information sharing and incident management tool will enable member countries to set up a collaborative working environment to improve the understanding of the maritime domain and coordinate operations when incidents at sea occur. It expresses the cooperative approach that has been developed by the European Union to address piracy and new maritime security challenges faced by the Indian Ocean littoral states such as drugs and arms trafficking, illegal fishing, environmental damages, etc.

Development of IORIS based on user-oriented method

The IORIS development benefited from an intense and collaborative testing phase where CRIMARIO team, regional partners and the IT company (Polymorph Ltd) worked closely in synergy to ensure that all of the planned functionalities work efficiently, and to also incorporate postevaluation improvements suggested by users into v.1.0.

Training sessions are conducted in the partner countries and regional organisations and include a basic 'Train the Trainer' course essential for staff to maintain continuity by internal knowledge transfer to their respective colleagues.

IORIS designed to be a flexible and sustainable tool



The integrated modules are designed to achieve: (a) information sharing in a secure and flexible environment; (b) real time management of incidents at sea; (c) secure communications between users (national agencies, regional centres); allowing each to control members and access rights for their designated areas.

Key functions include:

→ <u>Multiple areas</u>: ability to create a dedicated area for each regional centre, national centre, or local organisation to manage day to day information sharing, communications and operations within their respective maritime community in private, whilst remaining in a Single Information







Sharing Environment (SISE) providing the instant capability to connect outside of their private community to any user on IORIS to collaborate as required; for example an area can be created to manage a specific incident.

- → <u>Instant messaging</u> (public/private): users can utilise a public or private secure chat function within the secure areas to chat with members of any group for routine exchange of information or in support of an event;
- → <u>Advanced mapping</u>: using OpenStreet map and dedicated nautical charts, the module allows the import and export of maps and navigation markers (location of vessels, tracking, etc.), to plot incidents and polygons in support of incidents or routine operations. It also shows the range of vessels based on the direction of travel and estimated speed to extrapolate where a vessel might be now;
- → <u>Sharing of documents</u>: users can share any format of documents (image, text, etc.) within the secure areas, with an additional option to encrypt where sensitive information requires;
- **→** <u>Form creation</u>: any action can be easily documented and followed through the creation of online forms:
- → <u>Area management</u>: only accessible to the designated administrator of each area, they will define the access rights and the membership of their dedicated area for centres, local organisations or incidents.

The development of IORIS was awarded to Polymorph Ltd after a global open tendering process. A second development phase of IORIS is planned in 2019 which will follow a period of operational use to maximise valuable feedback from partners. The development and future phases of IORIS will be supported by EU CRIMARIO, which includes running costs (hosting, maintenance and support) until March 2020.

Special attention to the security aspects

The IORIS platform is **only accessible to authorized users** designated by partner countries, maritime centres and regional organisations. The first centres to join IORIS are the two regional centres: RMIFC (Regional Maritime Information Fusion Centre) based in Madagascar and RCOC (Regional Centre for Operational Coordination) based in Seychelles. IORIS is also accessible to national maritime administrations and agencies of Kenya, Madagascar, Mauritius, and Seychelles. Comoros will follow very soon as well as other Indian Ocean regional countries.

IORIS incorporates the latest technologies for ensuring a high level of security: including over-thewire encryption, additional encryption of documents, two-factor authentication for mobile users, IP restriction, etc. IORIS is a web-platform hosted in a secure environment to ensure the correct balance of availability vs security for regional users (detailed security specifications can be provided on request to authorised agencies).

Regional governance under discussion

During the official launch of IORIS in Seychelles (4 September 2018), high level officials started discussions on the future governance of the platform among the Indian Ocean countries and beyond.

CRIMARIO team will continue to train centres and agencies involved and propose a set of draft policies initially recommended and agreed with the participants. Ultimately however the decision on all system and user policies will be agreed on a regional basis as the ownership is transferred to become a truly regional platform that will enhance **Maritime Situational Awareness** in an efficient and cost-effective manner.

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