

**11<sup>th</sup> Mediterranean AIS Expert Working Group**  
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**MAREΣ 11/9/1**  
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**Functionalities of the new SafeSeaNet SI**  
**Submitted by EMSA**

<i>Executive summary</i>	This document presents the functionalities of the new SafeSeaNet SI provided to Italy for installing at MAREΣ.
<i>Action to be taken</i>	As per paragraph 3
<i>Related documents</i>	10 <sup>th</sup> Mediterranean AIS Expert Working Group Workshop report

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## **1. Background**

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Upon its launch in 2010, the SSN GI application of the SSN central system was conceived as an enhancement to the SSN system for facilitating relaying and exchanging information between the EU Member States, Norway and Iceland. A software application, called National Proxy (NPR) was developed to facilitate the connection between Regional Servers (RS) and the EMSA server.

Towards a more open and future-proof design approach a new SSN streaming interface (SSN SI) solution has been implemented by EMSA with the objective to:

- a. Enable the potential distribution, of "enriched" AIS data to MSs, with minimum impact to MS and other EMSA applications;
- b. Enable simultaneous processing of data from different sensors (e.g. Class B originated AIS messages) and from different data policies and technical constraints;
- c. Improve performance (e.g. by increasing the throughput rate from 20 messages per second to more than 100);
- d. Enable the full time stamp of the position, and additional information (e.g. the identity of the data provider).

The improved functionality should also allow:

- T-AIS data distribution from MS and to MS (based on the agreed data exchange policy);
- T-AIS data distribution from 3<sup>rd</sup> countries, and only to those MS with an agreement to a 3<sup>rd</sup> country;
- S-AIS data exchange in line with the distribution rules applicable between S-AIS data provider and S-AIS data recipient;
- LRIT data exchange in line with IMO agreements (if so decided);
- Exchange of data collected from other sensors in line with the applicable rules and agreements (if so decided).

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## 2. Advantages

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The main advantages of the new SSN SI are:

- a. Transparency: data providers and recipients who do not support CBs will still be able to send and receive messages in IEC 61162 format while data providers and recipients who implement CBs will be able to send and/or receive the additional information embedded in CBs;
- b. Standardization: CBs are defined in the IEC 62320-1 standard for AIS Base Stations.
- c. Improved performance and ease the daily maintenance.

The new SSN streaming interface (SSN SI) solution was tested by MAREΣ and EMSA. Initially for testing purposes, the data would be provided to SSN in two streams: through the existing SSN SI (for the current production environment) and through the new SSN SI (for the training environment). A decision on the phasing out of the existing version and switching the new SSN SI into the production would be made only after the assessment of the test results.

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## 3. Action Required

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Participants are invited to note the information provided.