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**Co-ordinated AIS shore-based implementation
development of an AIS master plan for Europe**

Submitted by EMSA

<i>Executive summary</i>	This document was introduced to the COSS meeting held in Brussels on 1 st March 07. The need for a plan is urgent to avoid problems with the national networks that are to be connected to SSN.
<i>Action to be taken</i>	As per paragraph 3
<i>Related documents</i>	

1. Background

The mandatory infrastructure for vessel traffic monitoring in accordance with Directive 2002/59/EC includes AIS networks with coastal coverage in all Member States. Some Member States have already finalized their installations but some are still in the planning or procurement phase. Some have also set up regional networks in co-operation with neighbouring States.

In addition to these networks, which are compulsory for the Member States, other single AIS base stations or local networks have been set up by ports, VTS authorities, maritime surveillance authorities and other interested parties to use the AIS information transmitted by ships. Commercial entities have also installed AIS base stations or AIS receivers.

2. Issues to be discussed

The AIS system uses VHF frequencies that, like all other VHF frequencies, have a limited space for transmissions. Since the AIS base stations function as a ship AIS, they also use the same frequencies for transmitting. The AIS system has a special feature that suppresses transmissions if there is an overload on the frequency. The transmissions that are suppressed are those at a distance from the receiving station. The effect of this is that both the shore-based stations and ship-based stations will have a limited coverage.

To limit the problem with overload, national authorities should restrict the number of AIS shore-based stations to a minimum to ensure the safety of the AIS network.

The way to achieve better co-ordination is to allow all public/authority/law enforcement/defence/security users access to the compulsory network set up in accordance with this Directive. Public users should include ports and VTSSs. To avoid problems with commercial competition, access rights should be role-based as in SSN.

Another problem with the AIS system is the open distribution of the AIS information. Based on the IMO recommendations, national authorities should actively discourage the use of AIS information for purposes other than safety, security and the protection of the marine environment. Unfortunately authorities in some Member States have not heard about the IMO recommendation or they ignore it, since they make use of information from the commercial operators instead of the official network. This practice is counterproductive to the effort to prevent the AIS information being misused.

An appropriate tool to achieve these results is the development of an AIS Master Plan for Europe.

When developing a European AIS master plan, the relevant IMO, ITU and IALA recommendations should be taken into account, as well as experiences from the Baltic.

The AIS master plan should as a minimum include the following objectives:

- .1 to minimize the number of shore-based AIS base stations to avoid overload on the VHF channels;
- .2 to establish co-operation between Member States and non Member States to avoid duplicated coverage;
- .3 to establish a common standard for exchange of AIS information
- .4 to establish a common standard for the use of binary messages within the Community

3. Action required

The Med AIS EWG is invited to consider the need for a European AIS master plan and to support a workshop, in co-operation with EMSA giving an opportunity to AIS experts to clarify the objective, develop the principles for a European AIS master plan and initiate the work with regional plans