



European Maritime Safety Agency

Draft Workshop Report

7th VTM Mediterranean Expert Working Group

Held in Rome on: 28th January 2009

Background

Introduction

This was EMSA's seventh Workshop on VTM for Mediterranean maritime Member States, Expert Working Group (EWG) for development of the Mediterranean regional AIS.

The list of participants is attached as **Annex 1**.

The meeting was attended by delegations from: Bulgaria, Croatia, Cyprus, Greece, France, Italy, Malta, Norway, Portugal, Romania, Spain and Slovenia. The contractors for the Italian server also participated as part of the Italian delegation.

A copy of the Agenda is included as **Annex 2**.

Mr Lazaros Aichmalotidis acted as chairman.

The actions as a result of the meeting are listed in section 2,

Note: Fuller details may be obtained by referencing copies of the original papers which can be accessed from: <http://www.emsa.europa.eu>

Objectives

The main objective of the meeting was to review forthcoming delivery of the system, to consider the feedback from use of the system, review status of the original tasks of the group and agree the need and terms of reference for future meetings.

Programme

1. Opening of the meeting

Admiral Melone of Italian Coast Guard gave an opening address, welcoming the participants extending his thanks to all of the countries collaborating on the project. EMSA was thanked for supporting this initiative from the very beginning and helping to produce the best results. The project had reached an advanced stage of development. The Italian Coast Guard strongly supports this initiative for the future and had already allocated resources and would continue to full development.

Italy was already using and experiencing use of the system in daily operations and recognising its importance, had great expectations for its future. Italy was honoured to be able to host the Mediterranean Server and would continue doing so.

2. Opening address from EMSA

Mr. Lazaros Aichmalotidis referred to the tangible results from the project that had already been demonstrated to the EMSA Administrative Board.

Reflecting upon the lessons learnt during development of the server, it had been decided in the Mediterranean that for access rights, no further agreement was required other than the Directive under Article 9. This was wise and had simplified the process. Any distribution at the local level would be different.

The Russian Federation, Canada and Croatia are members of the Paris Memorandum for Port State Control. The THETIS project was being developed to meet new reporting requirements including actual times of arrival and departure from port, using

SafeSeaNet for its XML interface. The STIRES module would at a second level provide an image and actual indication, verifying these events.

Italy supported the participation of Croatia and mentioned a separate agreement (Memorandum of Ancona), for exchange of data between Italy, Croatia, Slovenia and Greece. Italy invited the group to consider creating a virtual sub-centre for the Adriatic.

Member States were informed that the ceremony for the official opening of the MED AIS system would be an event associated with the European Maritime day (20th May 2009). EMSA requested that three of the participating Member States (e.g. Spain, Italy and Cyprus) could contribute to the successful official launch by describing their own national experiences. The arrangements were for Italy to consider.

The group agreed to reconsider the conditions of a possible participation of Croatia into the common Mediterranean AIS regional system.

The Group approved the agenda of **Annex II**.

3. Approval of the minutes/report from previous meeting, EMSA (6/MED/2)

The report was adopted without further comment.

4. Activity report (June 2008 - January 2009), Italy (5/MED/3)

The Chronology of events was as given in the paper.

A test with the addition of Norwegian data for about ten days provided for a large amount of AIS data with over 5,000 vessels. Meteorological conditions during much of the period produced extended coverage in some areas due to the "ducting effect", yielding over 1.2 million messages per day. Future filtering may have to be considered. The current conditions (demonstrated) without ducting effect could be used to define the minimum coverage.

Amongst improvements had been development of the web interface and light software (for use with a GIS platform), flexibility in measurements to Kilometres or nautical miles, availability of second IP address (as a backup), a tool to monitor bandwidth consumption, the Hardlock Key (a retention of).

A separate technical solution had been found to the use of Linux by France as the software platform.

Colours had been added for different ship types. This raised the question of the use of AIS as an alternative to the VMS or "Blue Box" monitoring for the Adriatic. This was discussed later in the context of symbology (7/MED7).

Italy agreed to provide the hard lock key service by July 09.

5. Guidelines for Users in the Common Mediterranean Network, Italy (7/MED/5)

Italy presented the guidelines for the users that is a consolidated document containing all the requirements and the specifications agreed by the EWG during the meetings.

The group recognised the guidelines as the main reference document of the Med AIS.

6. System availability, Italy (7/MED/4)

Italy provided an algorithm for calculating the system availability.

The group recognised that it is not possible to measure the availability of the overall system due to the uncertainty of the Internet availability. Italy proposed to define minimum values for the availability of the national AIS networks as well as for the regional server. EMSA recalled that the actual service level requirements were specified in the ICD.

Spain asked about the possible provision of a system Helpdesk. Italy replied that they will maintain an e mail contact with the participant countries and that other technical solution (as remote intervention) may be considered in the future.

The group **agreed** EMSA to consider collecting together these concepts and methods together with the issues of coverage with the objective of defined the overall regional network services standards and coverage.

7. Status of implementation, all Mediterranean Member States

Italy completed its AIS infrastructure in 2007 and plans to install ten additional AIS stations in 2009 to improve coverage. The potential for using data in collaborative support of new Traffic Separation schemes for joint submission to the IMO was also being given serious consideration, these being in the Malta/Sicily straits and in the area between Corsica and the Italian mainland. The involvement of EMSA and the Commission would be necessary in view of Article 23(c) of the Directive.

The integration of data from Spain and Italy was very useful to counter illegal trafficking, as advance look ahead and for search and rescue and in the latter case, particularly for identifying other ships in the area of a casualty. The use of AIS data to fuse it with CleanSeaNet satellite imagery was also very prominent.

Romania had signed a contract to provide more coastal coverage as the existing coverage was principally provided by a river system.

Greece was connected to the MedAIS Regional Server in December. The coverage was provided from two national networks. This was comprehensive, but because of the geographical characteristics of Greece, the coverage area could be further improved. Some problems and breaks in service had been experienced during the first days, but solved with the use of the updated version of the proxy software. The system was very important as a tool for search and rescue and pollution prevention.

Spain had experienced full coverage since 2006. Spain was ready to use the system when it becomes fully operational.

Slovenia had experience no problems with coverage. The overlapping coverage with Italy was proving to be very useful.

France was covered nationally and plans to export the data externally by June 2009, with a connection to the Med Sea regional network.

Bulgaria had experienced full national coverage with 6 base stations. There were plans to increase the bandwidth available. At present the system was only available to the VTS and was also used in accident investigation.

Cyprus covered the entire coastline. A software update was planned for next week.

Malta was not yet at a stage where it is used for practical purposes, but from a comparison with the national system, the information being received and used in the MED was accurate. Malta would look at TSS issue for the Sicily/Malta Channel raised by Italy as this had already been recommended in the Van Miert report (Ten T project) some years ago which report will be traced for further discussion.

Portugal had been in operation since June 2008 with full coverage. The system will exchange information with the Med AIS network in two months time.

Croatia had a full operational system with 10 base stations; four more planned. Some of these were situated further back from the coast with heights exceeding one Kilometre in height.

Italy and Malta **agreed** to use the Med AIS data and with the support of EMSA and the Commission will investigate the possibility of submitting a proposal to IMO for a new TSS in the sea area between Sicily and Malta.

8. Review of document "User Manual – NAISP National AIS Proxy", Italy (7/MED/6)

Italy presented the newly revised user manual or guide on the installation and use of the national proxy software to the Group.

New features included the increased flexibility in the refresh rate from the normal 6 minutes and the bandwidth monitoring tool.

It was concluded that the national proxy software would be considered a completed and stable tool. Nevertheless, Italy would be pleased to receive further feedback from the users and in view of comments, additional guidance on system recovery and resetting, following amendments or augmentation of national systems.

Italy agreed that further consideration would be given to amending the guidance on the relevant "configuration file".

9. Web interface, Italy (presentation only)

Italy presented the newly available web applications. This included access to and use of the home web page and such tools as passage lines and polygons for the accumulation of historic data.

It was recognised that although France and Portugal were not yet feeding AIS data, that they could also benefit from its use and could provide useful feedback.

The group agreed the following:

- a. EMSA to consider providing a link to the MED AIS home web page.
- b. Italy would circulate the user guide for the web including the associated tools and features during the next week (ending 6th February).
- c. EMSA would provide the necessary web links and passwords to Italy for them to access these dynamic lists of ships and in order for them to develop the necessary "banned ships" and "Single Hulled Tanker" applications.
- d. Italy would send out a short document to Member States users for their registration. On that basis, 5 user-accounts per Member State would be provided in order to begin the official full use of the system. These accounts would be assigned to individuals and only be for use within the national maritime Coastal Administrations and not to other or commercial users such as ports. Further feedback on the results is requested and welcomed.

10. Symbology, EMSA (7/MED/7)

EMSA presented the target symbology that had been developed for the STIRES module of the SafeSeaNet system, based closely upon IALA standards (IALA Recommendation V.125 - The use and presentation of symbology at a VTS Centre). The Group were invited to recognise that the target information provided by the STIRES/SafeSeaNet was at a higher level and in some ways unique. EMSA foresaw a future need to develop new target symbology e.g. for LRIT, pseudo-AIS, VMS. At the same time the group acknowledged the usefulness of different colours as used by the Mediterranean server for different ship types, as dictated by the AIS messages, in particular for fishing vessels.

In view of amendments to the 2002/59 Directive and the AIS carriage requirement extending to fishing vessels, EMSA reminded the group that the AIS message did not identify fishing vessels, but only vessels when engaged in fishing as the navigational status. AIS had been designed primarily as a ship to ship anti-collision aid. The possibility of identifying fishing vessels from a known list was also discussed. If however it was necessary to identify fishing vessels and other types especially using AIS as an alternative to other tracking systems, an urgent approach to IMO/IALA/IEC would be required in order to change the IEC sentences in the AIS message.

The target symbology indicated in Annex 2 of the paper was adopted as the standard for the Mediterranean server.

Italy and EMSA would have further informal contacts to ensure the symbology of the two systems would remain as harmonised as far as possible, recognising that STIRES would also need to maintain links with the other regional systems of the EU.

11. Terms of reference, EMSA (7/MED/9)

The terms of reference drafted as Annex 2 in the document were adopted, subject to carrying forward any items incomplete from the list of actions identified in 2006.

The revised future activities/terms of reference are provided at Annex III.

12. MED AIS Demonstration to the EMSA Administrative Board, EMSA (7/MED/8)

EMSA reported on the presentation of the Mediterranean Sea Monitoring System made by the Italian authorities to the EMSA Administrative Board. The Board Members of the countries directly involved expressed their willingness to achieve further, enhanced cooperation.

The Group noted the response by the EMSA Administrative Board to the MED AIS demonstrated and agreed that together with the support expressed by Italy, by all Members of the Group and hence at policy and technical levels, that this should be seen as explicit support to go forward with the future activities and terms of reference in the previous agenda item.

13. Meeting Follow-up Actions

- a. Member States will reconsider the conditions of a possible participation of Croatia into the common Mediterranean AIS regional system.
- b. Member States are invited (subject to the agreement of Italy) to consider the involving three of the participating Member States to contribute to the official opening of the MED AIS system associated with the European Maritime day (20th May 2009).
- c. Italy should provide the hard lock key service by July 09.
- d. EMSA would consider collecting together the concepts and methods on system availability (7/MED/4), together with the issues of coverage with the objective of defined the overall regional network services standards and coverage.
- e. Member States are urged to complete their technical implementations as soon as possible and preferably before the official commissioning associated with the European Maritime Day in May 2009.
- f. Italy and Malta should work together using the Med AIS data and with the support of EMSA/COM should submit a proposal to IMO for a new TSS in the sea area among Sicily and Malta.
- g. Italy should give further consideration to amending the guidance on the relevant "configuration file" of the user manual.
- h. EMSA would consider providing a link to the MED AIS home web page.
- i. Italy would circulate the user guide for the web solution including the associated tools and features during the next week (ending 6th February).
- j. EMSA would provide the necessary web links and passwords to Italy for them to access these dynamic lists of ships and in order for them to develop the necessary "banned ships" and "Single Hulled Tanker" applications.
- k. Italy will send out a short document to Member States users for their registration. On that basis, 5 user-accounts per Member State would be provided in order to begin the official full use of the system.

- l. The target symbology indicated in Annex 2 of the paper was adopted as the standard for the Mediterranean server.
- m. Italy and EMSA would have further informal contacts to ensure the symbology as a whole for the two systems would remain as harmonised as far as possible.
- n. The draft terms of reference were adopted (7/MED/9), subject to carrying forward any items incomplete from the list of actions identified in 2006. These are contained at Annex III of this report.

14. Date of next meeting

Wednesday 23rd July was tentatively set as the date for the next meeting of the Group.

Annex:

- I) List of participants
- II) Workshop Agenda.
- III) Draft Future Terms of Reference

ANNEX I – List of Participants

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ANNEX II

Agenda 7th Mediterranean EWG Meeting

28th January 2009

0930	Registration and coffee	
0945	Opening of meeting and adoption of the agenda	STIRES 7/MED/1 (EMSA)
1000	Wrap up of previous meeting/approval of minutes	STIRES 7/MED/2 (EMSA)
1015	Report of activities (June 2008 – January 2009) Clarification of "filtering management" Technical improvement Investigation of technical implementation	STIRES 7/MED/3 and STIRES 7/MED/5 (Italy)
1130	Coffee break	
1145	System Availability	STIRES 7/MED/4 (Italy)
1210	MS status of implementation	
1230	Lunch break	
1400	Review of document " <i>User Manual – NAISP National AIS Proxy</i> "	STIRES 7/MED/6 (Italy)
1415	Web interface	
1500	Coffee break	
1515	Symbology	STIRES 7/MED/7 (EMSA)
1540	Terms of Reference MED AIS Demonstration at EMSA Administrative Board Suggestion for further improvement Discussion / conclusions	STIRES 7/MED/9 (EMSA) STIRES 7/MED/8 (EMSA)
1730	End of the meeting/ Date of next meeting	

ANNEX III

MED AIS EWG tasks (proposed future work and Terms of Reference)*

1. Uphold **and exploit** the Mediterranean AIS system **to**:
 - Monitor and co-ordinate the exchange of the agreed AIS information between the participating countries and the Med AIS server (continuous),
 - Propose developments of the Med AIS server (continuous),
 - Implement redundancy of the Med AIS server (2009),
 - Solve practical technical issues related to AIS (continuous)
 - **Prepare for the participation of Non-Member State Mediterranean countries, (subject to policy endorsement).**
2. Monitor international developments in AIS and prepare reflection of changes to the Med AIS server as appropriate and provide feedback to the international forums, such as IMO, IALA and EMSA, with regard to testing and implementation of new solutions and standards e.g. use of binary messages (continuous).
3. Harmonise development of national AIS networks as appropriate (continuous).
4. Develop recommendatory standards for availability and definitions for service area and service levels for the system (MED AIS as well as national AIS systems) (2009).
5. Work on improving AIS data quality (2009-2011).
6. Consider the use of VDL bandwidths by provision of the FATDMA software planning tool to assist national authorities in time reservations and planning of base stations installations (2009-2011).
7. Work to develop tools to detect and report inconsistent and erroneous AIS information, in particular IMO and MMSI numbers and to co-operate with the Port State Control authorities in solving such difficulties (2009-2011).
8. Follow-up the developments in European AIS systems, e.g. STIRES (2009 - onwards).
9. Cooperate in making use of the information and results provided by the Med AIS enhancing the identification and monitoring of ships.
10. **Work on drafting proposals on new Traffic Separation Schemes submitted through COM to IMO.**

* Amendments to tasks originally proposed in STIRES 7/MED/8 are **highlighted**