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**Report from the chairman of the working group on exchange of coastal radar data
through SafeSeaNet
for consideration by the Heads of Maritime Administration of participating states
(ES, FR, IT) and agencies involved in the pilot project**

1. Introduction

Following publication of the Commission Green paper on a future EU integrated maritime policy questions were raised on how EMSA should move forward towards integrating existing and future maritime surveillance systems for cross-sectoral cooperation. EMSA contacted three Member States (Italy, France and Spain) proposing they participate in a traffic surveillance pilot project addressing the "exchange of radar data through SSN".

The three Administrations have in principle agreed to participate in the initiative and have assigned technical experts to deal with the associated issues.

2. Legal background

Radar networks have been developed mainly by the military and/or law enforcement authorities for border control and defence and there is no legal framework for, or any clear expression of interest in, sharing this type of information.

The exchange of VTS messages through SSN serves the purposes of the VTMIS directive. Though VTS systems are based on radar, some MSs have developed additional radar networks (independent of VTS) for surveillance purposes. The purposes associated with exchanging radar data between these networks are not always well defined, but FRONTEX wishes to promote it for monitoring non-cooperative targets (i.e. only by radar, not AIS).

3. Outcome of the technical meetings

EMSA has had two meetings with Member States' experts (Paris 29 June 09 and Vigo 4 December 09) discussing a pilot project and issues associated with exchanging radar data between networks via SSN. The outcomes were as follows:

- The specific objective will be to exchange radar data through SSN for maritime safety, security, counter-pollution, border surveillance and fisheries management. Frontex is the EU Agency with the greatest interest in exchange of radar data.
- It is recommended that before launching development, the operational needs should be agreed with Frontex (as the Agency with the greatest interest). Once the principles were agreed with Frontex, EMSA gave a presentation on the operational concept for "radar exchange" via SSN, and this **was supported by the participating MSs with slight modifications**. It is briefly described in the next paragraph.

- For the purposes of the pilot, it is necessary to establish common standards for protocols and message contents taking into account relevant IALA standards. EMSA contacted IALA technical experts and was briefed that there is a draft IALA standard (called IVEF) in place and serving point to point communication between VTS.
- The IVEF standard is already implemented by the Dutch Coastguard, who invited EMSA to a meeting at Den Helder on 14th January 2010. There they presented the technical details associated with the standard and demonstrated its use in creating the traffic image connecting all Dutch port-based VTSs.
- EMSA experts concluded that the IVEF standard could be used for the purpose of radar exchange through SSN, but with certain modifications. They also recommended that the benefits would be maximised if the standard could be adapted to SSN.

4. Operational concept

The operational concept for a radar exchange pilot project was defined by EMSA, Frontex and the participating MSs as follows:

- Radar images will be exchanged by MSs on request, through SSN. For example France may request the full or a part of the real time radar image collected via the radar network of Italy.
- Frontex would have access to the radar data only on request. For example, should it need to, it would be able to access the radar image for the sea area between Italy and France.
- The SSN architecture/philosophy will be used to exchange radar traffic images between different areas with the resulting images presented on the existing GIS and charts as an additional layer of information.
- The IVEF should be used (suitably adapted) for the exchanges. But other options should be left open.

5. Member States availability

At the meetings, the experts of Italy, Spain, France and Frontex agreed to take forward and participate in the pilot project. The MSs provided information on their current systems status (radar networks) as well as the competent authorities responsible for each system.

France: The radar network (Spationav) in place has been developed by the Navy and is used for both civilian and military purposes. The navy has the responsibility for surveillance and participates in discussions with Frontex. Spationav is a secured network and transfer of data is only permitted with special permission (use of DMZ). An "export" function is being developed that once finalised (for the end of 2009 but with some delay announced at Vigo), data will be available for the French Maritime Administration (FMA) to use in the EMSA pilot project.

Spain: Sasemar has two Mediterranean coastal VTS and one in the Atlantic (Finisterre), and there are many port VTSs. The Guardia Civil has a separate radar network (mainly mobile radars used for surveillance purposes).

Italy: The Italian Coast Guard (ICG) has a national network linking all of their VTSs.

6. Conclusions and follow up actions

- EMSA experts believe that exchange of radar images through SSN is technically feasible and the optimal solution will be to adjust the IVEF standard for use in SSN. Further analysis is needed to identify the technical impacts and modifications to the IVEF standard; with EMSA drafting more detailed technical specifications for presentation to MSs' experts at a next technical meeting (scheduled for May 2010).
- Once agreement by all parties is achieved at technical level, it is anticipated that a formal meeting of the three MSs will be necessary (at Director level), during an event formally signalling their participation.



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