

Meeting: 1st SSN / LRIT Group Meeting

Place and date: Lisbon, 17 May 2017

Agenda item: Overview on the migration of the Regional Servers

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Submitted by EMSA

Summary	Presents the status of the HELCOM and North Sea AIS Regional Servers migration, and activities taken by EMSA, Denmark (DMA) and Norway (NCA) to ensure the smooth handover.
Action to be taken	As per paragraph 5.
Related documents	n.a.

1. Background

In accordance with the SafeSeaNet Interface and Functionalities Control Document (SSN IFCD), the Regional AIS Server (RS) constitutes an integral part of the current SafeSeaNet architecture as long as the MSs concerned request to use it, as an alternative to the direct connection to the central SSN system.

On 8 April 2016, the Danish Maritime Authority (DMA) informed EMSA and the HELCOM Secretariat of its decision to cease the hosting of the HELCOM Information centre by the end of 2016. As a follow up to the decision, the Norwegian Coastal Administration (NCA, Kystverket) offered to host both the HELCOM and North Sea RS, and the new hosting arrangements were discussed at HELCOM AIS Expert Working Group (EWG) 27 (Saint Petersburg 31 May - 1 June 2016) and the North Sea AIS EWG (Dublin 25 August 2016). It was agreed that the services would be moved from Denmark (DMA) to Norway (NCA) by the end of 2016.

2. Actions by the participating States

Following the DMA decision, the AIS RS future status was discussed at several meetings.

The HELCOM AIS EWG 27 (St. Petersburg, Russia, 31 May – 1 June 2016) considered the minimum requirements of the HELCOM AIS network for a future host, and drafted a list of minimum functions:

- providing and sharing of joint, real time data stream between members of the network (with the needed processing);
- a sufficient reliability of live data stream;
- 24/7 service;
- compiling and storing historic data from live data stream, and enabling retrieval.

The EWG 27 also defined the additional functions to be implemented by interested States and the HELCOM Secretariat (statistics; web-based client service; monitoring the quality of data and the extensive historic

databases). As the regional server is considered to be a component of the central SSN system, the AIS EWG 27 also agreed to the minimum requirements from SSN, in particular:

- Collection, storage, back-up and re-distribution as well as monitoring the availability and quality of the data;
- The server shall comply with the security and reliability requirements of the SSN system and relay AIS data from the national SSN systems of the EU Member States to the central SSN system.

The HELCOM 50th meeting of the Heads of Delegations (Laulasmaa, Estonia, 15-16 June 2016) decided, according to recommendation by AIS EWG 27, to move the HELCOM AIS services from Denmark to Norway before the end of 2016, in order to avoid breaks in the service, and invited the HELCOM Secretariat and the Contracting Parties to take the necessary steps for the migration of the hosting of HELCOM AIS, including arranging a meeting between the Secretariat, Norway, Denmark and EMSA.

The status and the hand-over of the North Sea RS were also discussed at North Sea AIS EWG (Dublin, Ireland, 25 August 2016). Participating States agreed to be connected to the RS hosted by Norway.

3. Actions by EMSA, Norway and Denmark

To ensure the smooth handover, several activities were executed by EMSA, Denmark (DMA) and Norway (NCA). Please find herewith a summary of those activities.

A technical meeting between EMSA and NCA was organised on 26 September 2016, in Lisbon. The NCA informed about EMSA on their plans to hand-over the HELCOM and North Sea RS, and presented the technical and operational solutions of the future system. At the meeting it was agreed to follow a “phased in” approach in connecting the data streams of the participating MSs to the central SSN (i.e. whenever the participating state would complete successfully its interface with the RS, their data flow would be connected to the central SSN regardless of the defined deadline. At the same time, the participating state would be disconnected from the RS hosted by Denmark). At the meeting it was also agreed the extension of the existing Service Level Agreement (SLA) for the North Atlantic Regional server (for the transition period), and the signature of a new SLA for the North Atlantic, HELCOM and North Sea AIS Regional servers (following the EMSA Administrative Board consideration).

The status and the necessity to renew the SLA between EMSA and the Danish Maritime Authority (DMA) for the HELCOM and North Sea servers (for the transition period) was discussed and agreed between EMSA and DMA on the 10 October 2016.

During the transition period, the main actions were as follows:

- On 24 October 2016, Member States of the HELCOM and the North Sea region (SSN NCAs) were informed regarding the RSs hand over, and were requested to inform EMSA about their status, the preparations made, and the planned/agreed date of migration.
- From 4 November till 22 December 2016, all Member States were connected to SSN pre-production environment through the RS hosted by Norway (in four steps). At the same time, the particular MS were disconnected from the pre-production stream through RS hosted by Denmark;
- From 4 November till 20 December 2016, EMSA and the NCA tested the connection stability and the data quality of the information transmitted from all the Member States;
- From 20 December 2016 until 18 January 2017, all Member States were gradually connected to the SSN production environment through the Norwegian RS (in three steps), and disconnected from the data stream through RS hosted by Denmark.

- On 22 December 2016, Member States were informed about the migration status and recommended to maintain the data streams to both RSs (DMA and NCA) only to ensure the operation during the transition period until all Member States would be connected to the RS hosted by Norway.
- On 19 January 2017, the migration was completed and updated status information was provided to Member States.

A video conference with the participation of EMSA, Norway, Denmark and the HELCOM Secretariat was conducted on 19 January 2017, with the objective to review the status of the handover and discuss the next steps. The Participants concluded that the migration of the AIS data providers' connections was successfully finalised. Following the DMA proposal, EMSA agreed to inform Member States about the hand over status and the date when the data streams to the Danish RS could be phased-out.

On 23 January, a message regarding the migration status was sent to SSN NCAs (after prior coordination between EMSA, NCA, the Helcom Secretariat and DMA).

4. Further steps

A meeting between the AIS Regional servers (ICG, Italy and NCA, Norway and EMSA was organised (Lisbon, 07 February 2017). The objective of the meeting to discuss the problems encountered during the migration of Regional servers and the lessons learnt. The Participants discussed the availability of MSs 24/7 contacts. It was stated that, in certain cases, the SSN 24/7 operational contact and AIS 24/7 contacts are different. The meeting concluded that the AIS Regional servers should have access to SSN 24/7 contact information (for contacting MSs in case of incidents with the AIS data providing).

The role of the AIS Regional server's administrator was also discussed. The AIS Regional Server is considered to be a component of the central SSN system, and its role is defined in section 1.4 of the SSN IFCD. However, IFCD is not defining the role of the Regional server administrator or its 24/7 service. Following the discussion, EMSA agreed to assess the issue and propose the necessary amendments to reflect the role of the RS administrator or its 24/7 service in the IFCD.

5. Actions required

Member States are invited to:

- note the above information;
- coordinate their operational 24/7 contacts to support an effective information exchange with AIS RS 24/7 services (in case of incidents with the AIS data streaming), and agree on use of the SSN 24/7 contacts by AIS Regional servers, in case the AIS contacts are unavailable;
- agree to reflect the role of the RS administrator or its 24/7 service in the IFCD future amendments.