

SafeSeaNet Workshop no. 20
Agenda item IV
6 November 2013

SSN 20/4/4 (v1.00)
Lisbon, 2 October 2013

SAFESEANET TECHNICAL ASPECTS

SSN performance and data archiving

Submitted by EMSA

<i>Summary</i>	This document presents a proposal for improving the performance of SSN
<i>Action to be taken</i>	As per paragraph 4
<i>Related documents</i>	a) IFCD (Chapter 4, para. 4.2) b) SSN 20.3.2 SSN Change Management Evaluation Report

1. BACKGROUND INFORMATION

According to the IFCD (chapter 4, para. 4.2), information related to port calls and hazmat shall be directly available in the SSN system for a minimum of 2 months from the departure of the ship.

As soon as this period is expired the data should be archived. Archived data should be made available when requested by NCAs or EMSA, on the basis that the requester must provide a justification for why the information is required.

2. CURRENT STATUS

Archiving of data as described above is currently not being implemented. Data from all PortPlus notifications received by SSN are kept in the SSN database (at the time of writing this document, this represented more than 2.3 million ship calls). This creates a serious performance overhead and leads to a gradual degradation of the system performance.

In addition, there are a significant number of ship calls in the SSN database which did not receive proper information regarding arrival or departure. These "open" ship calls would not be archived under the described procedure.

It was also found that SSN receives PortPlus messages for expected calls with ETAs extremely far in the future. These PortPlus messages also contribute to the degradation of the performance of the system.

3. PROPOSED SOLUTION

In order to reduce the number of port call records in the SSN database and so improve the performance of the system, EMSA proposes to apply an archiving procedure in SSN and to introduce a rejection rule for PortPlus messages based on the ETA value.

The rejection rule would be: PortPlus notifications where ETA is more than 365 days after the SentAt are rejected with indication of "invalid format" (ETAPortofCall - SentAt >= 365 days).

The archiving procedure would be implemented as follows:

- a. Ship call records are archived 60 days after the ATD or detected exit from the port. An exit is detected by Central SSN when (based on ship notifications provided by MS to SSN) the ship's track, having left a port area, had a speed of more than 3 knots for a minimum of 15 minutes.
- b. Ship call records with no ATA are archived 30 days after the ETA.
- c. Archiving is executed by SSN every day at 3:00 AM.

This proposal is recorded as RFC number "artf7488" (see SSN Change Management Evaluation Report – paper SSN 20.3.2).

This measure could represent archiving up to 87% of ship calls stored in SSN database.

4. ACTIONS REQUIRED

The Member States are invited to approve the proposed change in SSN and reflect the change in the SSN XML Messaging Reference Guide.