

**SafeSeaNet Group meeting no. 23**  
**Agenda item IV**  
**6 May 2015**

**SSN 23/4/2 (v.1.0)**  
**Lisbon, 29 April 2015**

## **SAFESEANET TECHNICAL ASPECTS**

### **SSN 2-way SSL protocol**

#### **Submitted by EMSA**

<i>Summary</i>	This document proposes a way forward regarding the issue of the upgrade to the 2-way SSL Protocol.
<i>Action to be taken</i>	As per paragraph 4
<i>Related documents</i>	

## **1. INTRODUCTION**

For over five years, the communication between central SSN and national SSN systems has operated using same 2-way SSL protocol. Given all of the high profile ICT security incidents and hacking around the world during this period, and the consequential frequent improvements and updates in the domain of ICT Security and security protocols, this protocol has effectively become obsolete. In addition, in 2015, the provider of the hardware and software will cease its technical support to the protocol. This gives rise to significant issues which affect the continuity of operations and the security of the overall SSN system.

## **2. CURRENT SITUATION**

EMSA attempted to install an upgrade to the protocol in June 2014, but technical issues with some national SSN systems which could not cope with the upgrade forced EMSA to cancel the installation.

A first series of tests with national SSN systems were carried out from October 2014 in collaboration with MSs, and the test results obtained by the end of January 2015 identified problems in 11 national SSN systems. Some MSs said that fixing the issue would require the migration of their infrastructure, and therefore additional budget and time. In addition, the tests on some national SSN systems were not completed. Consequently, the new protocol could still not be installed in SSN.

## **3. PROPOSED WAY FORWARD**

Taking into account the operational and security issues described above, EMSA strongly recommends that the new protocol be installed in the central SSN system before summer 2015. Before proceeding with the installation, all national SSN systems need to be compatible with the new protocol.

On 6 March, EMSA sent a questionnaire to all SSN NCAs in order to ascertain when the remaining tests on the national SSN systems could be executed, and when the national SSN systems which do not comply with the new protocol would be upgraded.

Answers to the questionnaire were expected by 21 April. The results received at the time this report was generated are shown in the Annex.

Once having assessed the answers to the questionnaire, EMSA will propose a date for the migration of the central SSN system to the new protocol.

#### **4. ACTION REQUIRED**

The members of the SSN Group are invited to agree on a date for the migration of the central SSN system to the new SSL protocol.

### Annex: Answers to the questionnaire

2-way-SSL					EMSA	
Member State	Status	Estimated date for testing	Planned date for completion of implementation	MS Comments	INCOMING	OUTGOING
Belgium	Implemented		Is already implemented in Belgium.	Belgium set up a new server to support the new 2-way SSN protocol and it has been tested recently	OK	OK
Y Bulgaria	Implemented				OK	OK
Y Croatia	Implemented				OK	OK
Y Cyprus	Implemented	TESTED 28/11/2014			TBC <sup>1</sup>	TBC <sup>1</sup>
Denmark					OK	OK
Estonia					OK	OK
Y Finland		28.5.2015	29.5.2015		MS did not send notifications	NOK
France					OK	OK
Y Germany					OK	OK
Greece					MS did not send notifications	NOK
Iceland					OK	OK
Ireland					OK	NOK
Y Italy	Implemented	Done	Done	Waiting feedback from EMSA	TBC <sup>1</sup>	TBC <sup>1</sup>

<sup>1</sup> Pending validation from EMSA

2-way-SSL					EMSA	
Member State	Status	Estimated date for testing	Planned date for completion of implementation	MS Comments	INCOMING	OUTGOING
Latvia					MS did not send notifications	OK
Lithuania					OK	OK
Malta					OK	NOK
Netherlands					OK	OK
Norway					OK	NOK
Poland					OK	OK
Portugal					OK	NOK
Romania					OK	NOK
Slovenia	Testing	15.04.2015	20.04.2015		TBC <sup>2</sup>	TBC <sup>2</sup>
Spain	Testing				OK	OK
Sweden					OK	OK
United Kingdom	Testing	27.04.2015	TBA – To be announced		OK	NOK

<sup>2</sup> Pending validation from EMSA