



1st SSN LRIT Group Meeting

SSN Data Quality Report

Agenda item 1.5.1

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Lisbon / 17 May 2017



- 1. SSN IMPLEMENTATION**
2. SSN AVAILABILITY AND PERFORMANCE
3. DATA QUALITY AND AVAILABILITY
4. INTERFACE WITH THETIS

SSN Implementation



Central SSN			National SSN	
<ul style="list-style-type: none"> - Deployment Central Hazmat Database (CHD) - Migration of exemptions registered prior to SSN V3 	2016		SEP	
		SSN 26	OCT	<ul style="list-style-type: none"> - Malta entered in production for SSN V3 - Estonia and Malta phased out Ship AIS notifications (XML)
			NOV	<ul style="list-style-type: none"> - Greece entered in production for SSN V3
			DEC	
- Deployment SSN v3.3				
<ul style="list-style-type: none"> - Deployment of UNECE LOCODEs (release 22Dec2016) - Deployment Central Organisations database (COD) 	2017		JAN	
			FEB	
			MAR	<ul style="list-style-type: none"> - Bulgaria phased out Ship AIS notifications (XML)
			APR	<ul style="list-style-type: none"> - Lithuania phased out Ship AIS notifications (XML)
		SSN LRIT 1	MAY	<ul style="list-style-type: none"> - Slovenia phased out Ship AIS notifications (XML)
			JUN	

SSN Implementation – PortPlus



- **PortPlus notifications** are widely reported but not harmonised for all Member States:
 - Some “data-groups” are reported in more than one Shipcall (double reporting of Shipcalls);
 - Detailed part of notifications is unavailable or incomplete;
 - Unrealistic low number of notifications reporting “Hazmat non-EU Departure”;
 - Lack of provision of ATA/ATD.
- **Denmark, Estonia, Finland, Germany, Ireland, Malta, Lithuania, Norway, Spain and the United Kingdom** do not provide the detailed part of notifications or do not provide the complete information

Recommendation 1:

Member States are invited to resolve the reported issues and provide feedback

SSN Implementation – Exemptions

- **The majority of MSs** do not benefit from the exemptions possibilities or do not report them in SSN
- EMSA acknowledges that the use of exemptions is new in SSN and some **guidance might be necessary** to better understand the implications and identify the best way forward.

Recommendation 2:

Member States are invited to:

- 1) Provide their feedback on the problems encountered in relation to granting exemptions and registering them in SSN
- 2) Analyse the difference between the numbers of ship calls and the relevant Waste and Security notifications

SSN Implementation – AIS information



- **All Member States** provide AIS data to the central SSN through Streaming Interface
- **Germany and Ireland** still provide AIS information using XML mechanism which adds no value and causes unnecessary data flows

Recommendation 3:

The 2 Member States still using the AIS XML interface are invited to phase-out this interface

SSN Implementation – Ship MRS



- MRS information from **Ireland** (WETREP), **Norway** (BAREP), **Portugal** (WETREP) and the **United Kingdom** (CALDOVREP and WETREP) are not yet reported
- **Portugal** is providing Ship MRS Notifications in V.2 format for which the detailed part cannot be retrieved by other MSs using the SSN V.3

Recommendation 4:

MSs facing delays and problems in implementing their MRS reporting obligations are invited to consider requesting the assistance of EMSA in order to speed up their implementations.

Recommendation 5:

Portugal is invited to implement the V.3 XML messaging framework for Ship MRS Notifications and phase-out Ship MRS Notifications in V2 format.

SSN Implementation – Incident Reports

- **Cyprus, Iceland, Lithuania, Romania and Slovenia** use the old framework Alert notifications
- **Denmark, Latvia and the United Kingdom** completed the commissioning test for the new framework but are not using it via XML/SOAP.

Recommendation 6:

Member States are invited to:

- 1) Use the new IR framework either through XML/SOAP or the SSN UWI
- 2) Phase-out the old Alert notifications

SSN Implementation – Recommendations

- **Recommendation 1:** MSs are invited to note the information on SSN implementation and to provide feedback should there be any changes in the information presented at the time of the meeting.
- **Recommendation 2:** MSs are invited to:
 - provide their feedback on the problems encountered in relation to granting exemptions and registering them in SSN;
 - analyse the difference between the numbers of ship calls and the relevant Waste and Security notifications.
- **Recommendation 3:** MSs still using the AIS XML interface (DE, IE and SI) are invited to phase-out this interface.
- **Recommendation 4:** MSs facing delays and problems in implementing their MRS reporting obligations (IE, NO, PT and the UK) are invited to consider requesting the assistance of EMSA in order to speed up their implementations.
- **Recommendation 5:** Portugal is invited to implement the V.3 XML messaging framework for Ship MRS Notifications and phase-out Ship MRS Notifications in V2 format.
- **Recommendation 6:** MSs are invited to:
 - Use the new IR framework either through XML/SOAP or the SSN UWI;
 - Phase-out the old Alert notifications (CY, IS, LT, RO and SI).



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System Availability and Performance

- **SSN Central system:** 99.83% availability in 2016 (6 downtimes with total duration of 14h 50m)
- **SSN–THETIS interface:** 19 downtimes with total duration of 38h 8m
- **SSN National systems:**
 - No relevant full downtimes
 - Significant downtimes affecting the provision of PortPlus information to Thetis (**Croatia, Denmark, Malta, The Netherlands, Portugal, Romania, Sweden and the United Kingdom**)
 - **Portugal** is experiencing a major failure in its SSN National system since 25 August 2016 (delivery of PortPlus and MRS notifications to SSN is affected)

Recommendation 8:

Member States are invited to take appropriate measures to reduce downtimes as far as possible

Back-up procedures

- **Back-up procedures** – in the event of a failure or a scheduled interruption, back-up procedures should be in place for each SSN system component (IFCD - section 4.4)
- **NCAs** shall ensure that SSN messages are stored and then transmitted to the central SSN system when communications and/or systems have recovered
- **The national and central SSN systems** should be able to re-send messages for up to 2 weeks (ship position information may be down-sampled for this purpose).

Back-up procedures (SSN National system downtime)



- 14 MSs (**Belgium, Cyprus, Denmark, Estonia, Germany, Iceland, Ireland, Italy, Lithuania, The Netherlands, Norway, Spain, Sweden and United Kingdom**) are performing PortPlus data buffering (not conclusive for Bulgaria, Finland, France, Greece, Latvia, Poland, Romania and Slovenia).
- 4 MSs (**Denmark, Estonia, France** and **Italy**) are doing MRS data buffering (not conclusive for Belgium, Finland, Iceland and Spain).
- 4 MSs (**Croatia, Malta, Portugal** and **Gibraltar**) are not doing any data buffering

Back-up procedures (Central SSN downtime – 13 December 2016)

- Several national systems continued sending messaging notifications during the official SSN downtimes.
- 15 MSs (**Belgium, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, The Netherlands, Norway, Poland, Romania, Spain, Sweden and the United Kingdom**) are performing PortPlus data buffering (not conclusive for Croatia, Cyprus, Denmark, Iceland, Malta and Slovenia).
- 3 MSs (**Estonia, France and Poland**) are performing MRS data buffering (not conclusive for Belgium, Croatia, Denmark, Finland, Iceland, Italy, Slovenia and Spain).
- 4 MSs (**Bulgaria, Finland, Malta and Portugal**) are not doing any messaging notifications data buffering.

Recommendation 9:

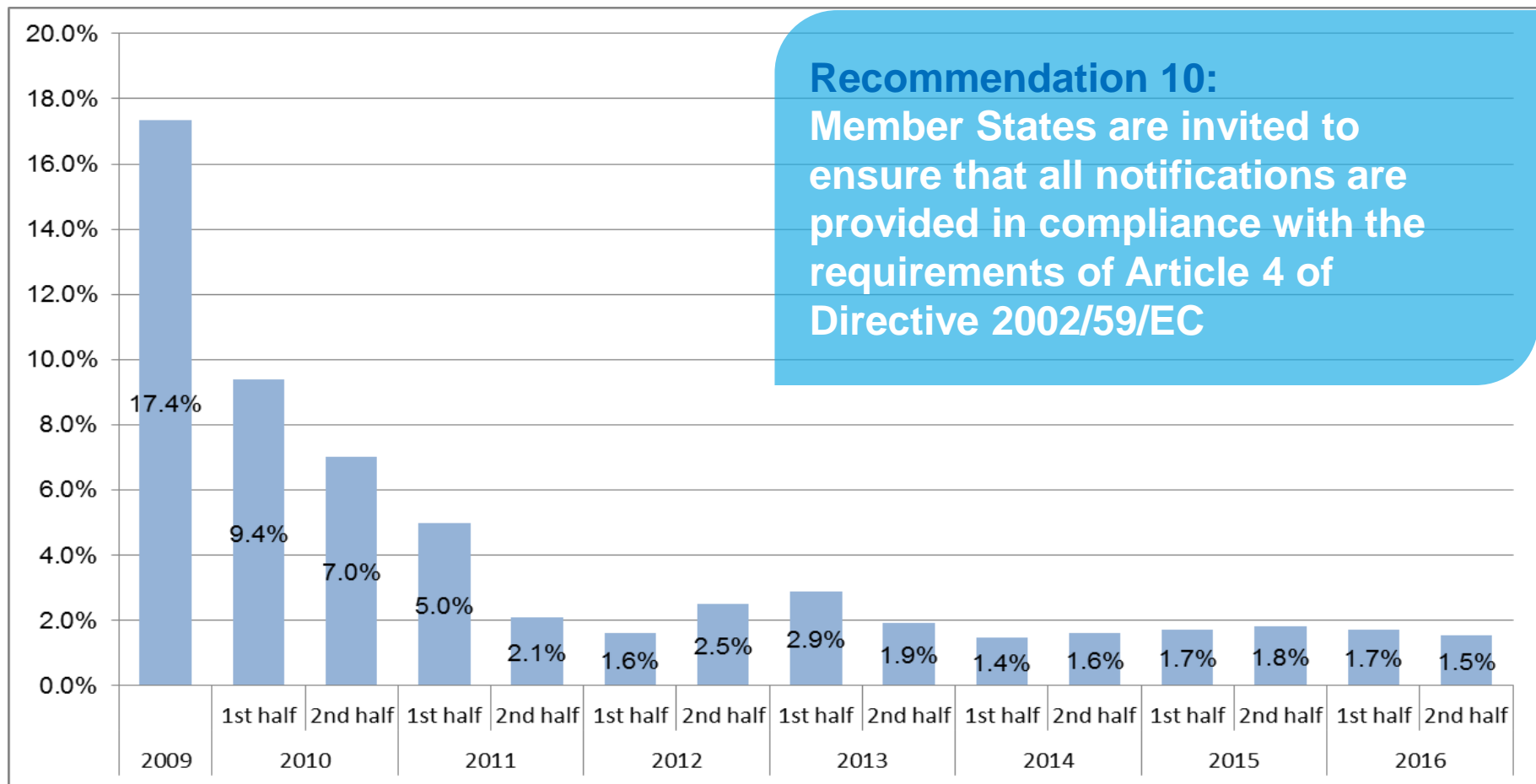
MSs are invited to store the notifications during SSN intervention time windows, and to ensure that they are transmitted to the to the central SSN system when communications and/or systems have recovered (in accordance with Section 4.4 of the IFCD).



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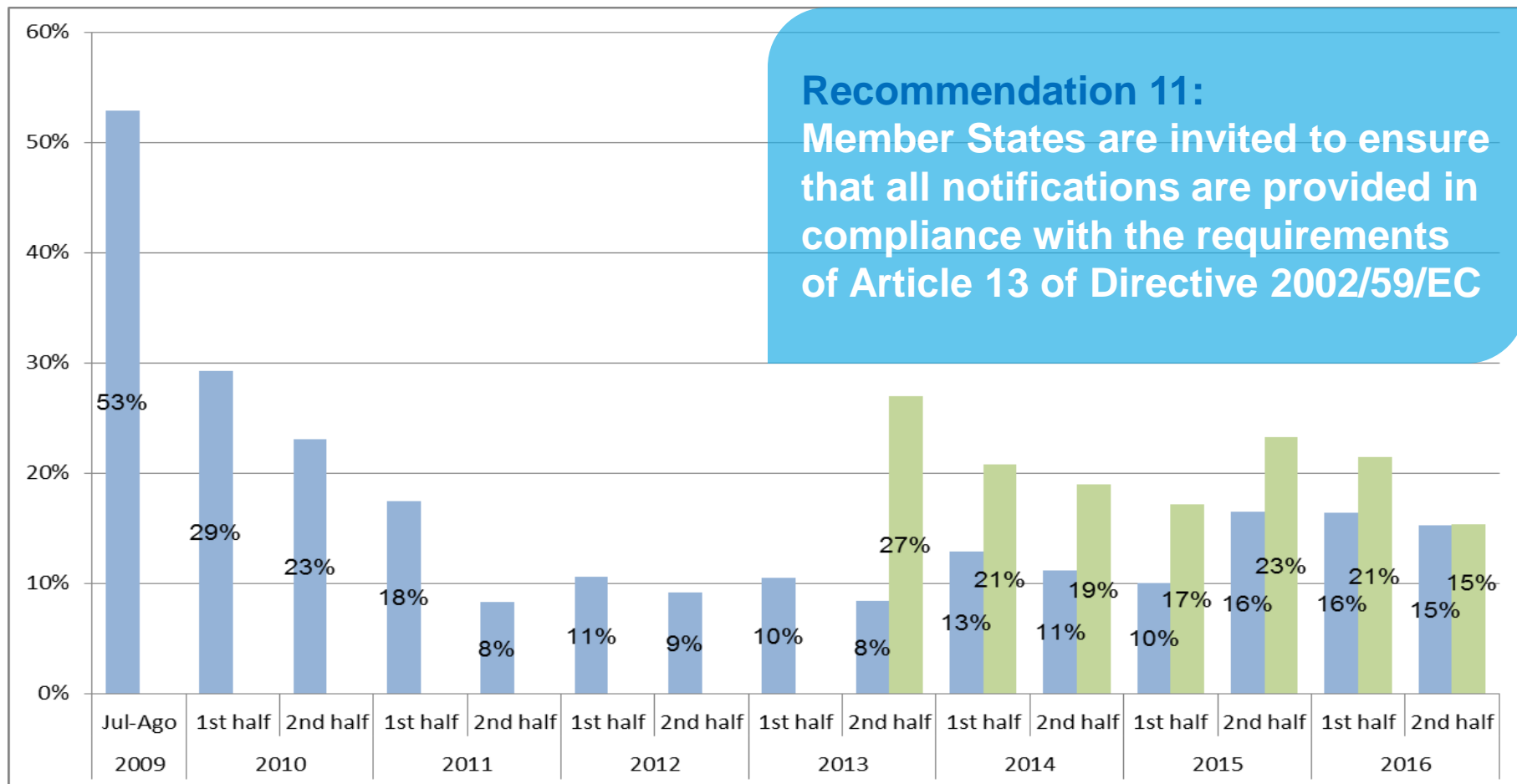
Port arrivals

1.5% (68 out of 4,436 checked shipcalls) were missing



Hazmat information

15% (320 out of 2,088 checks) were missing



Data Quality and Availability

Availability of the details (week 19)

Member State	Hazmat	MRS	Waste	Security
Belgium	V3	V3	V3	V3
Bulgaria	V3	-	V3	V3
Croatia	V3	V3	V3	V3
Cyprus	V3	-	V3	V3
Denmark	V3	V3	V3	V3
Estonia	V3	V3	V3	V3
Finland	V3	V3	V3	V3
France	V3	V3	V3	V3
Germany	V3	-	V3	V3
Greece	V3	-	X	X
Iceland	V3	V3	V3	V3
Ireland	V3	X	V3	V3
Italy	V3	V3	V3	V3

Member State	Hazmat	MRS	Waste	Security
Latvia	V3	-	V3	V3
Lithuania	V3	-	V3	V3
Malta	V3	-	V3	V3
Netherlands	V3	-	V3	V3
Norway	V3	X	V3	V3
Poland	V3	V3	V3	V3
Portugal	X	X	X	X
Romania	V3	-	V3	V3
Slovenia	V3	V3	V3	V3
Spain	V3	V3	V3	V3
Sweden	V3	-	V3	V3
United Kingdom	V3	X	V3	V3

Recommendation 12:

Member States are invited to ensure that the detailed part of the relevant notifications is made available to the MS data requester in electronic format

Recommendation 13:

Member States are invited to ensure that their contact details are kept updated and made available to MS data requesters on a 24/7 basis as a back-up solution for the provision of the detailed part of notifications.



Rejected notifications

- Overall situation worsened from 0.9% to 1.87%
**Most of the Member States are still above the limit defined in IFCD
(0.1% of messages sent)**
- What is being done:
 - MSS is continuously monitoring and reporting to the MSs on a monthly basis;
 - Member States are progressively monitoring national system;
 - Member States are correcting the causes of rejection, and;
 - resending notifications upon correction.

Recommendation 14:

Member States are invited to rectify the reported quality problems to ensure that rejected messages are eliminated, in particular by implementing checking rules in the national SSN system

SSN DQ and Availability – Recommendations

- **Recommendation 8:** MSs are invited to take appropriate measures to reduce downtimes as far as possible.
- **Recommendation 9:** MSs are invited to store the notifications during SSN intervention time windows, and to ensure that they are transmitted to the central SSN system when communications and/or systems have recovered (in accordance with Section 4.4 of the IFCD).
- **Recommendation 10:** MSs are invited to ensure that all notifications are provided in compliance with the requirements of Article 4 of Directive 2002/59/EC.
- **Recommendation 11:** MSs are invited to ensure that all notifications are provided in compliance with the requirements of Article 13 of Directive 2002/59/EC.
- **Recommendation 12:** MSs are invited to ensure that the detailed part of the relevant notifications is made available to the MS data requester in electronic format.
- **Recommendation 13:** MSs are invited to ensure that their contact details are kept updated and made available to MS data requesters on a 24/7 basis as a back-up solution for the provision of the detailed part of notifications.
- **Recommendation 14:** MSs are invited to rectify the reported quality problems in order to ensure that rejected messages are eliminated, in particular by implementing checking rules in order to minimise inconsistent data in the national SSN system.



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Provision and timeliness of ATA and ATD

Shipcalls in THETIS are recognized only when ATA has been provided

- On the missing ATAs / ATDs

2.0% of the ship calls are missing the ATA and ATD
(4.9% in previous reported period)

- On the timeliness of ATAs / ATDs

- 0.1% of ATAs are provided more than 3h in advance (previously 0.08%)
- 0.045% of ATDs are provided more than 3h in advance (previously 0.034%)

88.9% of the notifications the difference between the SentAt and the ATA / ATD
is within 3h (86.5% in previous reported period)

Recommendation 15 and 16:

Member States are invited to:

- 1) Ensure that correct ATA and ATD information is always provided
- 2) Provide the ATA and ATD for ships calling at their ports and anchorages via SSN within a reasonable time



Why to work further on the quality and availability of data in SSN?

- SSN is a cooperative system benefiting from the exchange of information between Member States (MSs)
- Several communities adopted SSN to facilitate the electronic exchange and sharing of useful data:
 - VTMISS – Directive 2002/59/EC
 - Port State Control – Directive 2009/16/EC
 - Ship and Port Facility Security – Regulation (EC) No 725/2004
 - PRF for Ship-generated Waste and Cargo Residues – Directive 2000/59/EC
- The quality of the data made available through SSN depends mostly on the information provided by MSs
- SSN Business Rules will continue to increase whenever further messages and systems are linked to the system.

Raising SSN Data Quality – Proposal



To organise bilateral data quality meetings on a voluntary basis in order to better support MSs in addressing the data quality issues and to:

- Increase the level of awareness on data quality requirements
- Help MSs to improve national SSN systems implementation
- Identify, develop and implement “best practice” approaches based on shared experience gained in operating SSN and port information systems
- Identify potential technical and operational improvements in both the national and central systems.
- Define an horizontal approach and criteria to identify and study common issues/opportunities associated with the implementation of the SSN system, and providing ideas for improvement



When and how to organise these meetings?

- **EMSA to carry out up to 4 bilateral meetings per year**
- **Meeting should take place at MS premises**, allowing more of the relevant people to attend.
- **Meeting could be organised back-to-back with operational/technical training** of staff from relevant national administrations. The training would be focused on:
 - Current functionalities of the SSN system
 - SSN future developments (e.g. new waste message, how information will be exchanged through SSN, etc.)



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