European Maritime Safety Agency

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SafeSeaNet monthly report

December 2007

1. Background information

The purpose of the report is to produce on a monthly basis, specific measurable elements and figures giving a full, clear and current picture of the SafeSeaNet situation. The report may be further analysed by EMSA, the Commission and the MS for extracting conclusions on the usability of SSN system.

As announced during the SSN 8 workshop (Lisbon 24 and 25 October 2007), the V1.9 production site was successfully deployed on 4th of December 2007. This version is the final outcome of the long process started at the beginning of 2005 when it was recognised that the existing SSN application had to be stabilised and corrected. The new version will create a faster system able to deal with the expected raise of messages and will facilitate SSN evolution in terms of upgrading and integration with other systems. The main improvements could be summarised as follows:

- The web interface has been completely renovated;
- Implemented a more comprehensible and user friendly management of NCAs, their attached LCAs and users (establishing the hierarchy);
- A new complete statistic facility is implemented;
- Error messages will be recorded and easily analysed;
- Vessels, ports and SSN users activities will be easily monitored and analysed;
- A new management concept for databases is implemented (vessel, locodes and users) to avoid detected problems in former versions.

The new version was developed using industry proven technologies complying with the most recent standards. SSN V1.9 is expected to improve significantly the system performance, scalability, robustness and easier software maintainability.

This report presents the first set data obtained through the new version of SSN V 1.9.

2. Type of information

All bellow information was produced through the SSN application with the support of the ICT pillar.

2.1. Notifications

The table 1 gives a picture of the notifications provided by Member States to SSN per message type and interface.

Table 1 - Notifications SSN (Dec.2007)

COUNTRY	INTERFACE	SHIP		PORT	HAZMAT	ALERT	SECURITY	TOTAL
		AIS	MRS					
Belgium	XML	117,862		2,660	329			120,851
Denmark	XML	131,691		1	439			132,131
Finland	XML			3,001	332			3,333
Germany	XML	79,048		4,326	1,727			85,101
Ireland	XML				67	1		68
Italy	XML		17,802	415	292			18,509
Lithuania	XML	4,615		770	93			5,478
Malta	XML	21,805		298	57			22,160
Netherlands	Web			195	52	5		252
Netherlands	XML	113,309		6,789	2,170			122,268
Norway	XML	458,143		1,533	754			460,430
Poland	XML	88,833		4,188	1,279		3,049	97,349
Portugal	Web			1				1
Portugal	XML			806	88			894
Romania	Web			484	85			569
Slovenia	Web		136	301	11			448
Spain	XML			8,020	689			8,709
Sweden	XML	8,688		10,612	546			19,846
TOTAL		1,023,994	17,938	44,400	9,010	6	3,049	**1,098,397**

EMSA comment

Notifications numbers have decreased due to the application of the first checking rules that reject messages before processing. Also the implementation of the new version caused malfunctioning affecting several MS at its initial stage (2/3 days).

Web interface is being used to provide notifications by some LCAs of The Netherlands, Portugal, Romania and Slovenia. Slovenia and Romania continue using the web interface for providing notifications to SSN but are planning to introduce XML interfaces. Fifteen (15) countries introduced XML interfaces and fourteen (14) are using it actively. Germany has started to provide Port Notifications for production site.

Figure 1 – Notifications per Type

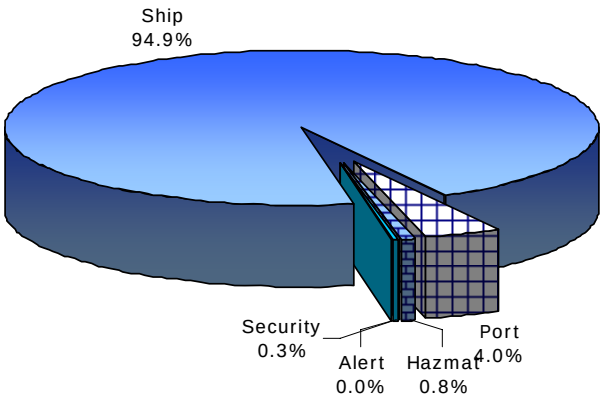
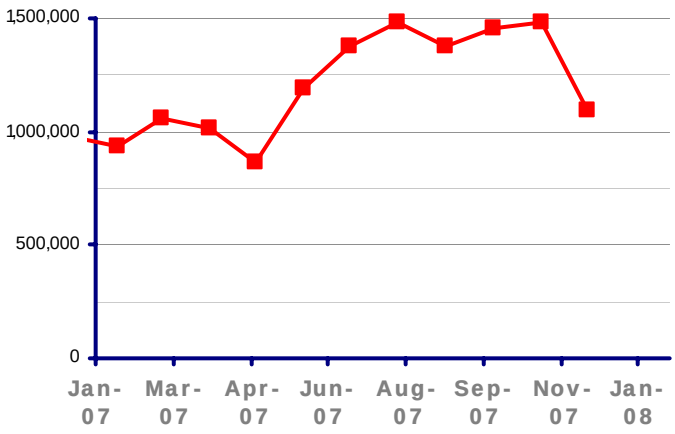


Figure 2 –Notifications: Jan.07 / Dec.07



2.2. Requests

The table 2 gives a picture of the requests made by Member States to SSN per message type and interface.

EMSA comment

The table shows that MS (except Norway) do not use SSN to request data. An explanation for the low number of requests is that the current SSN is oriented to emergency purposes and not for routine operations. Another possible reason is because data is not available. For those who are requesting information, the web interface is most commonly used by the Member States to request information. Denmark, Germany, Italy, Norway and Poland are using their Xml interface for the request functionality. Number of information requested is growing. Most popular requests are for HAZMAT and Ship Notifications. Other Member states are using web interface actively to obtain data from SSN.

Table 2 - Requests SSN (Dec.2007)

COUNTRY	INTERFACE	SHIP	PORT	HAZMAT	ALERT	SECURITY	TOTAL
Belgium	Web	4		1	5		10
Denmark	Web			1			1
Denmark	XML			27			27
Finland	Web			1			1
Germany	XML	18	8				26
Ireland	XML	1	1	1	11		14
Italy	XML			6			6
Netherlands	Web	30		29	21	2	82
Norway	Web	1		1			2
Norway	XML		56	60,768			60,824
Poland	Web	6		35		5	46
Poland	XML	10	2	3			15
Romania	Web	1		4			5
Slovenia	Web	2		1			3
European Commission	Web	38		39	23	3	103
TOTAL		111	67	60,917	60	10	61,165

Figure 3 – Requests per Type

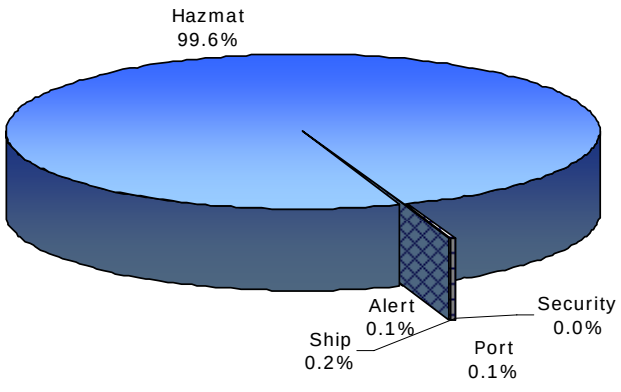
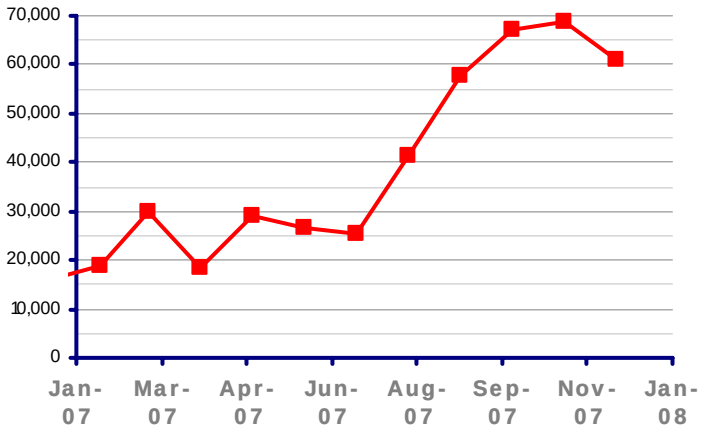


Figure 4 – Requests: Nov.06 / Nov.07



2.3. LOCODEs per MS and the number of notification (port and HAZMAT) associated with these LOCODEs

In this chapter the notifications sent to SSN are analysed according to the next port of call LOCODE mentioned in the Port and Hazmat notifications. The information is grouped by three categories, European ports, non European ports and unknown ports. The top 10 EU ports are also displayed in the table.

EMSA comment

The table shows the proportion of Port and HAZMAT notifications by LOCODE. According to the current XML Reference Guide, the next port of call is not mandatory information in HAZMAT, when the vessel is bound for a non EU port; that is the reason why "port unknown" has a higher proportion. In comparison with previous months the proportion of the "ZZCAN" LOCODE in Port Notifications decreased due to the follow-up actions performed by the Maritime Support Services (MSS) and the MS.

Table 3 – Port and Hazmat Notifications per LOCODE (Dec.2007)

COUNTRY	LOCODE		HAZMAT	PORT	TOTAL
EU Top 10 Ports					
Netherlands	NLRTM	Rotterdam	2,226	3,109	5,335
Sweden	SEGOT	Göteborg	193	2,327	2,520
Netherlands	NLVLI	Vlissingen	28	2,121	2,149
Poland	PLGDY	Gdynia	558	1,372	1,930
Germany	DEHAM	Hamburg	413	1,331	1,744
Netherlands	NLTNZ	Terneuzen	21	1,597	1,618
Belgium	BEZEE	Zeebrugge	15	1,541	1,556
Sweden	SEUKN	Unknown		1,551	1,551
Spain	ESLPA	Las Palmas	166	1,330	1,496
Spain	ESALG	Algeciras	58	1,280	1,338
EU Ports			**8,180**	**45,231**	**53,411**
Non EU Ports			**293**	**1**	**294**
Port unknown (ZZUKN / ZZCAN)			**625**	**409**	**1,034**

2.4. Availability of the SSN EIS (H/W, S/W, communications etc) and the response time (diagram)

For technical reasons EMSA test probe tool information on the availability could not be provided for the month of December.

2.5. Error Analysis

The table in this chapter shows the number not accepted notifications in SSN by type of error and by Member State. N/R stands for user not identifiable.

Table 4 – Errors Analysis (Dec.2007)

COUNTRY	AccessDenied	InvalidFormat	ServerError	TOTAL
Belgium		7,094	3,248	10,342
Denmark		103,721	23,235	126,956
Finland		11		11
Germany		72	1	73
Ireland		4		4
Italy		28,636		28,636
Lithuania		40,310		40,310
Malta		757	7	764
N/R		85		85
Netherlands		431,146	130	431,276
Norway		9,207	2	9,209
Poland		2,481	192	2,673
Portugal		77		77
Spain		55	1	56
Sweden		1,374	34	1,408
Total	0	625,030	26,850	651,880

EMSA comment

The error messages have increased significantly since the deployment of the new version. The reason is a second filter applied to validate notifications, apart from the ones employed before processing the messages, rules mentioned in paragraph 2.1. In some cases (such as for Denmark and the Netherlands), the high numbers are due to a systematic employment of invalid data and/or the repetition of the same message, multiplying the number of errors. The new checking rules applied are the "business rules", such as the validation of the employed LOCODES, the MMSI (with a valid MID number), the length of the Call Sign, the existence of due data such as port of destination, ETA, ETD and their relation (in case of Port Notifications), valid telephone and fax numbers, the repetition of the identification number of the message (it should be unique), etc.

EMSA and the SSN group are developing actions to correct this invalid format of messages. A possible reason causing this error may be due to the monitoring procedure in SSN v1.9 for handling and analysing the rejected messages.

Figure 5 – Errors per Type

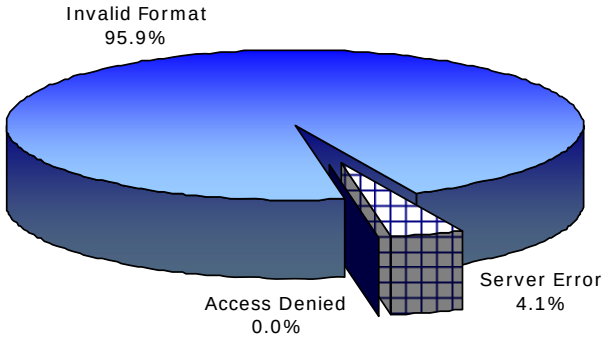
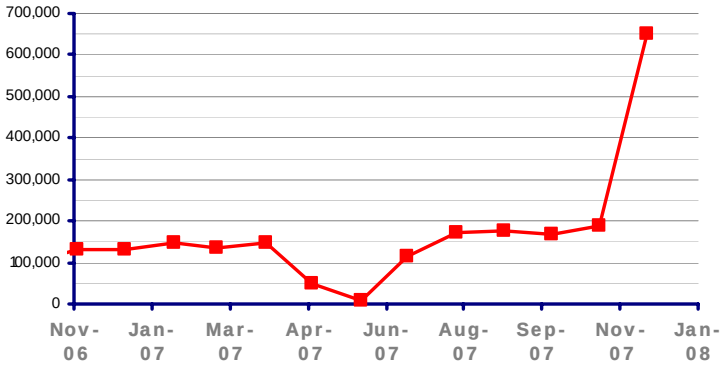


Figure 6 – Errors: Nov.06 / Dec.07



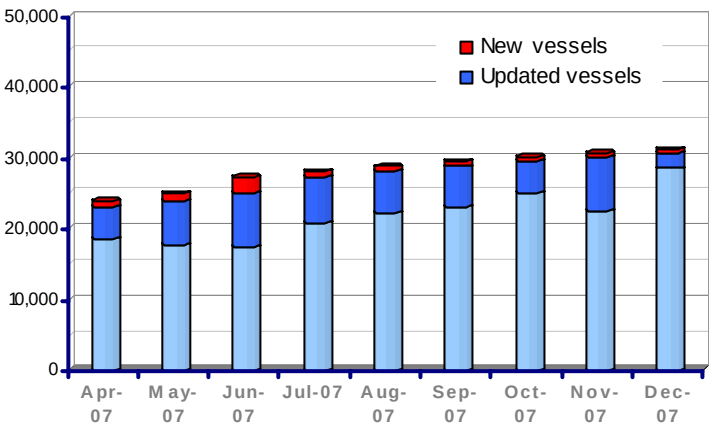
2.6. Ship database and new entrees during the previous month

The total lists of ships recorded in SafeSeaNet database with their IMO number, MMSI, ship's name and call sign has now a total of 31,070 records.

Table 5 – Ship database

	New vessels	Updated vessels	TOTAL	var (%)
Feb-07	554	5,025	22,306	2.55%
Mar-07	1,256	4,553	23,008	3.15%
Apr-07	842	4,487	23,850	3.66%
May-07	1,096	6,260	24,946	4.60%
Jun-07	2,274	7,517	27,220	9.12%
Jul-07	744	6,407	27,964	2.73%
Aug-07	805	5,825	28,769	2.88%
Sep-07	597	5,729	29,366	2.08%
Oct-07	722	4,486	30,088	2.46%
Nov-07	528	7,709	30,616	1.75%
Dec-07	454	2,169	31,070	1.48%

Figure 7 – Ship database



EMSA comment

During last month 454 new vessels were recorded and 2,169 vessels updated, in a total of 2,623 records created/updated (average of 655 records per week).

2.7. SSN Users

The table in this chapter gives a picture of the SSN registered users by Member State per associated role and interface.

EMSA comment

From the figures bellow, results that most Member States have not yet introduced in SSN all their users, namely their LCAs (PORT, PSC and CST). However it is worth noting that a significant effort has been made since SSN workshop 8 and the number of LCAs authorities now visible has increased. Finland, Germany, Iceland and Latvia have increased their number of LCAs since last month.

Table 6 – SSN Users (Dec.2007)

COUNTRY	Authorities						TOTAL	Users						TOTAL
	SSN	NCA	POR	CST	PSC	OTH		SSN	NCA	POR	CST	PSC	OTH	
Belgium		1	4	2	5		12		1	4	2	5		12
Czech Republic		1					1		2					2
Denmark		1					1		1					1
European Union	1						1	9						9
Finland		1	1	5	2		9		2	2	14	3		21
Germany		1	33				34		1					1
Iceland		1	33	1	1	1	37		1		1	1		3
Ireland		1		1			2		1		3			4
Italy		1					1		2					2
Latvia		1	5	1	1	8	16		1	5	2	1	8	17
Lithuania		1	1		1	1	4		1	1		6	1	9
Luxembourg		1					1		1					1
Malta		1	1	1			3		3					3
Netherlands		2	9	1	1	1	14		3	7	1	2	1	14
Norway		1					1		1					1
Poland		1	7				8		1					1
Portugal		1	22				23		1	22				23
Romania		1	5	1		3	10		1	5	1		3	10
Slovenia		1	1	1	1	1	5		2	1	1	1	1	6
Spain		1		20	30	1	52		2		23	30	1	56
Sweden		1					1		1					1
United Kingdom		1					1		1					1
TOTAL	1	22	122	34	42	16	237	9	30	47	48	49	15	198

3. Member States XML status

This table gives the full picture of the situation of each MS regarding the XML status (automatic connection for the message exchange):

		Notifications (XML interface)			
		Port	Hazmat	Ship	Alert
BE	Belgium	yes	yes	yes	no
BU	Bulgaria	no	no	no	no
CY	Cyprus	no	no	no	no
DK	Denmark	com	yes	yes	no
EE	Estonia	no	no	no	no
FI	Finland	yes	yes	no	no
FR	France	com	com	com	com
DE	Germany	yes	yes	yes	no
GR	Greece	no	no	no	no
IC	Iceland	com	com	com	no
IE	Ireland	com	com	com	com
IT	Italy	yes	yes	yes	yes
LV	Latvia	no	no	no	no
LT	Lithuania	yes	yes	yes	no
MT	Malta	yes	com	yes	com
NL	Netherlands	yes	yes	yes	no
NO	Norway	yes	yes	yes	yes
PL	Poland	yes	yes	yes	yes
PT	Portugal	yes	yes	no	no
RO	Romania (')	no	no	no	no
SI	Slovenia (')	no	no	no	no
ES	Spain	yes	yes	no	no
SE	Sweden	yes	yes	yes	no
GB	United Kingdom	com	com	com	com

(') operational using the WEB interface updated: 08.January.2008

Yes: *means in production;*

Com: *means commissioned, test successfully completed but not in production;*

No: means under testing or activities as previously referred.