European Maritime Safety Agency

SafeSeaNet monthly report
June 2007

1. Background information

SafeSeaNet is a complex system that requires close monitoring and follow-up throughout its development so as to ensure the prompt detection of problems as they occur and to assist in the decision making process towards further evolutions.

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 situation. The report may be further analysed by EMSA, the Commission and the MS for extracting conclusions on the usability of SSN system.

The Maritime Support Services unit was set up in June. The main objective of the team is to actively support participating countries. The MSS, apart from other tasks, started a random check activity of the notifications sent by the participating countries with the main objective to improve, at its current stage, the system. As a result of that, more than 800 notifications were checked. Some countries were contacted to clarify different issues detected. This is an on-going task which main purpose is to harmonise the performance of the SSN users.

2. Type of information

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

2.1. Notifications

The table in this chapter gives a picture of the notifications provided by Member States to SSN per message type and interface (Denmark has started to provide SSN with AIS Ship Notifications).

Table 1 - Notifications SSN (Jun.2007)

| COUNTRY	INTERFACE	SHIP		PORT	HAZMAT	ALERT	SECURITY	TOTAL
		AIS	MRS					
Belgium	XML	140,400		56,493	1,250			198,143
Denmark	XML	422,351			512			422,863
Finland	XML			6,435	467			6,902
Germany	XML				1,864			1,864
Ireland	XML		1		37			38
Italy	XML		26,011	1,172	119			27,302
Lithuania	XML			230				230
Netherlands	Web			245	106	3		354
Netherlands	XML			24,263	3,981			28,244
Norway	XML	358,652		1,683	771			361,106
Poland	XML	108,273		3,265	1,001		1,016	113,555
Portugal	Web			45				45
Slovenia	Web		86	147	7			240
Spain	XML			12,555	266			12,821
Sweden	XML	7,537		7,916	572			16,025
TOTAL		1,037,213	26,098	114,449	10,953	3	1,016	1,189,732

EMSA comment

On the reporting period no new user began activity in SafeSeaNet. from the analysis of the number of notifications sent to SSN. The web interface is still being used by Slovenia, Portugal and Netherland. Portugal is in a temporary situation and the web interface is used by one single port (Funchal, Madeira Island); Netherlands is in the same situation. Slovenia continues using the web interface for providing notifications to SSN.

Figure 1 – Notifications per Type

Ship 89.4%
Port 9.6%
Security 0.1%
Alert 0.0%
Hazmat 0.9%
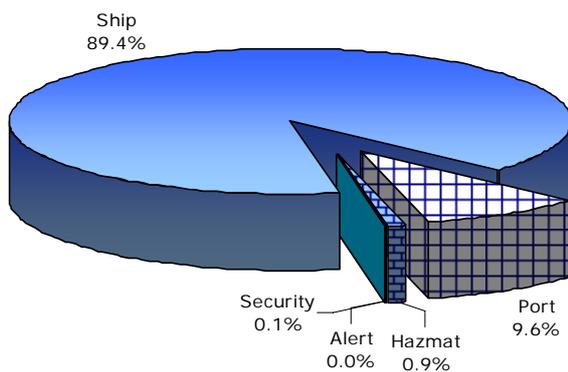
Figure 2 –Notifications: Nov.06/Jun.07

Sep-06 Nov-06 Dec-06 Feb-07 Apr-07 May-07
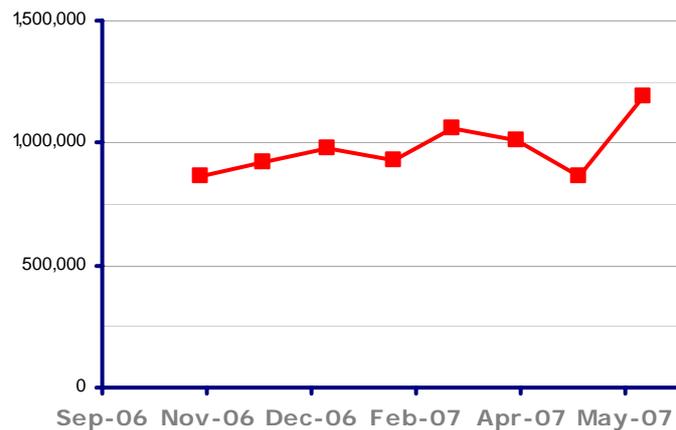
2.2. Requests

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

Table 2 - Requests SSN (Jun.2007)

| COUNTRY	INTERFACE	SHIP	PORT	HAZMAT	ALERT	SECURITY	TOTAL
Belgium	Web	9	4	2			15
Denmark	Web	25	3	5			33
Denmark	XML			4			4
Germany	XML			19			19
Ireland	XML		3				3
Lithuania	Web	3					3
Netherlands	Web	512	46	7		1	566
Norway	Web	9		6			15
Norway	XML			24,671			24,671
Poland	XML	34	2	1	1	1	39
Portugal	Web	67	2	3			72
Slovenia	Web	330	11				341
Spain	Web	61	9	2			72
European Commission	Web	513	304	63	3	2	885
TOTAL		**1,554**	**380**	**24,781**	**4**	**4**	**26,723**

EMSA comment

The web interface is most commonly used by the Member States to request information. This is due to the fact that this functionality has not been, for the time being, implemented in Xml by most of the SSN users.

However, Norway, Germany and Poland are actively using this functionality in Xml. Ireland is still testing the connection with SSN; these requests can only be considered for statistical proposes.

Figure 3 – Requests per Type   **Figure 4 – Requests: Nov.06/Jun.07**
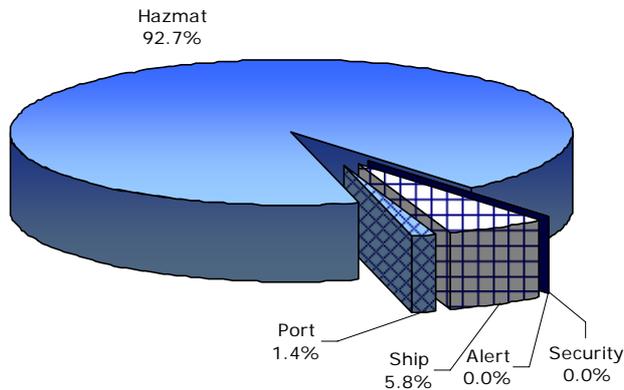
Hazmat
92.7%

Port
1.4%

Ship
5.8%

Alert
0.0%

Security
0.0%
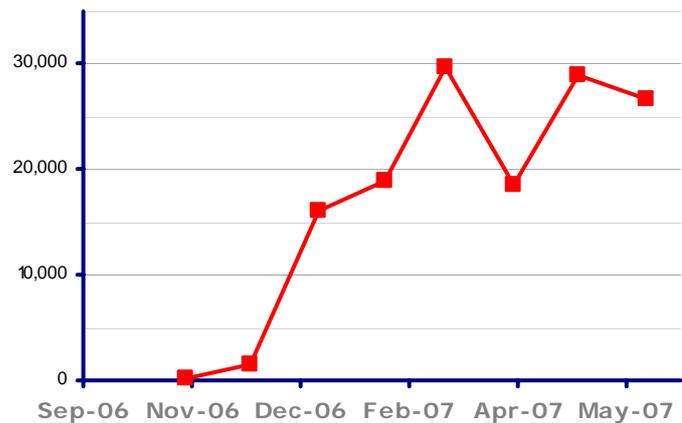
2.3. LOCODEs per MS and the number of notification (port and HAZMAT) associated with these LOCODEs

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.

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

COUNTRY	LOCODE		PORT	HAZMAT	TOTAL
EU Top 10 Ports					
NETHERLANDS	NLRTM	Rotterdam	15,747	3,972	19,719
SPAIN	ESLPA	Las Palmas	3,350	151	3,501
FINLAND	FIHEL	Helsinki	2,181	222	2,403
NETHERLANDS	NLVLI	Vlissingen	2,131	15	2,146
SPAIN	ESALG	Algeciras	1,872	9	1,881
POLAND	PLSWI	Swinoujscie	1,024	415	1,439
SPAIN	ESBCN	Barcelona	1,323	51	1,374
NETHERLANDS	NLTNZ	Terneuzen	1,178	28	1,206
POLAND	PLGDY	Gdynia	756	248	1,004
SWEDEN	SEHEL	Helsingborg	852	57	909
EU Ports			52,890	8,793	61,683
Non EU Ports			4	256	260
Port unknown	UNKWN		61,553	1,817	63,370

EMSA comment

The table shows the proportion of notifications by LOCODE. However as the next port of call is not mandatory information (according to the current XML Reference Guide), if the vessel is bounding for a non EU port, "port unknown" has a higher proportion.

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

During the reporting period, the average response time of SSN in production environment, was between **1.50 and 1.90** seconds.

The standard response time and the minimum acceptable response time have yet to be defined. After definition of the above, information about the specific periods (date/time) when degradation of the system took place (response time below the minimum acceptable response time) will be produced. This data can only be gathered using the resources available at the Data Centre.

To supplement the limited information currently provided through the Mirella web site, EMSA developed a test tool. This test probe consists, in fact, on the test client tool available since last year, programmed to send a message to the production site every ten minutes.

The results are presented in the next table and only refer to the production environment. Each record on the table represents a failed attempt to communicate with SSN.

Table 4 – SSN Availability – Periods of Interruption (Jun.2007)

MDAY	MONTH	YEAR	DATE	Period of Interruption (min.)	FROM	TO
04	Jun	2007	04-Jun-2007	10	04/06/2007 18:29	04/06/2007 18:30
05	Jun	2007	05-Jun-2007	0	05/06/2007 08:50	05/06/2007 08:50
21	Jun	2007	21-Jun-2007	0	21/06/2007 06:13	21/06/2007 06:13
30	Jun	2007	30-Jun-2007	570	30/06/2007 05:03	30/06/2007 14:30

EMSA comment

Care should be taken when interpreting this information, because the results may be biased due to the connectivity conditions between DIGIT and EMSA. Furthermore, it only tells that SSN is responding to a simple message, which does not even assure for SSN full operational capability (meaning that this does not represent that SSN responds to the request).

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 5 – Errors Analysis (Jun.2007)

COUNTRY	Access Denied	Invalid Format	Server Error	TOTAL
Belgium		650	3	653
Denmark	2	102	2	106
Germany		1		1
Italy		708	34	742
N/R	211	6,772	40	7,023
Netherlands	4	38	2	44
Norway		474	4	478
Poland		440	8	448
Portugal	5			5
Slovenia		2		2
Sweden			15	15
TOTAL	222	9,187	108	**9,517**

**EMSA comment**

The table reveals that the message error type *Invalid Format* has the higher occurrence. The N/R means that the message was not readable and so not possible to identify the sender. EMSA is going to record the "invalid format" messages to further analyse and assist MS in correcting the message formats. The task will be launched as soon as the new SSN version 1.9 will be implemented.

Figure 5 – Errors per Type

Invalid Format
96.5%

Access Denied
2.3%

Server Error
1.1%
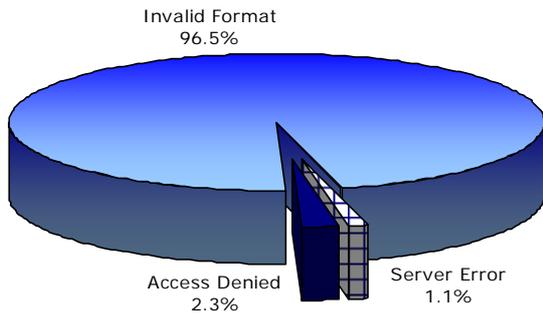
Figure 6 – Errors: Nov.06/Jun.07
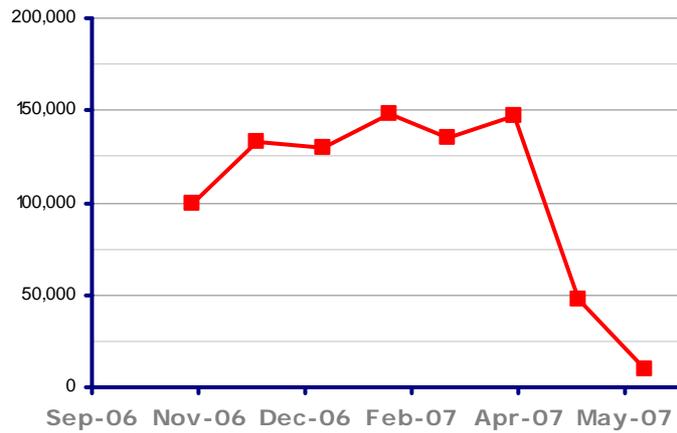
2.6. Ship database and new entrees during the previous month

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 27,220 records.

Table 6 – 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%

Figure 7 – Ship database
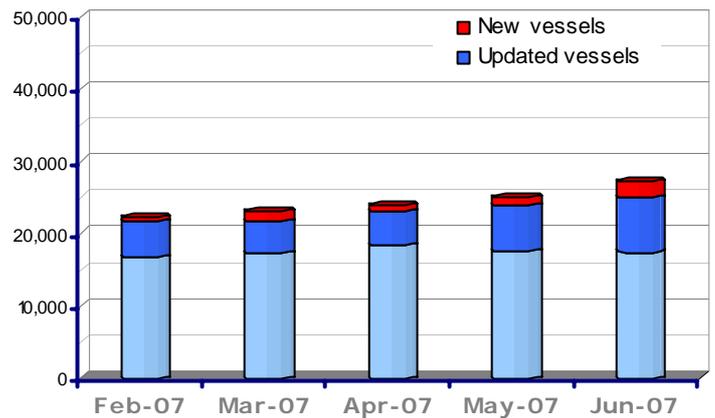
EMSA comment

During the last month 2,274 new vessels were recorded and 7,517 vessels updated, in a total of 9,791 records created/updated (average of 2,448 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.

Table 7 – SSN Users (Jun.2007)

COUNTRY	INTERFACE		ROLE TYPE									TOTAL
	Web	XML	ADM	ALL	NCA	MIN	POR	CST	PSC	OTH	PMoU	
Belgium	3	1	1		2			1				4
Czech Republic	2				1	1						2
Denmark	1	1			2							2
European Comm.	9	2	5	5							1	11
Finland	7	1			2		2	4				8
Germany	1	1			2							2
Greece	1				1							1
Ireland	1	1			2							2
Italy	1	1			2							2
Lithuania	9	1			1		2		6	1		10
Netherlands	14	5			3		10	2	2	1	1	19
Norway	5	2		1	6							7
Poland	1	1			2							2
Portugal	23	23			2		44					46
Slovenia	3				1				1	1		3
Spain	55	1			2	1		23	30			56
Sweden	1	1			2							2
TOTAL	137	42	6	6	33	2	58	30	39	3	2	179

EMSA comment

From the figures above, 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 all the SSN users are not visible in the current version of SafeSeaNet because the same userID may be used by several persons. The next version of SSN v1.9 will allow creating several users per authority giving visibility to all participants.