European Maritime Safety Agency

SafeSeaNet monthly report
February 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.

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.

Table 1 - Notifications SSN (Feb.2007)

COUNTRY	INTERFACE	SHIP AIS	SHIP MRS	PORT	HAZMAT	ALERT	TOTAL
Belgium	XML	115,930		50,916	1,092		167,938
Denmark	XML				491		491
Finland	XML				390		390
Germany	XML				1,742		1,742
Ireland	XML			1			1
Lithuania	Web			1			1
Lithuania	XML			1,784	83		1,867
Netherlands	Web			312	85		397
Netherlands	XML	257,714		24,821	3,809		286,344
Norway	XML	344,015		1,356	663		346,034
Poland	XML	103,655		1,305	364	3	105,327
Portugal	Web			52			52
Slovenia	Web		128	202	3		333
Spain	XML			10,490	258		10,748
Sweden	XML	3,141		7,401	531		11,073
TOTAL		824,455	128	98,641	9,511	3	932,738

EMSA comment

On the reporting period no new user began activity in SafeSeaNet.

The web interface is still being used by some Member States (Slovenia, Portugal and Netherland). Portugal is a temporary situation and is being used by one single port (Funchal, Madeira Island); Netherlands is the same situation; Slovenia decided not to connect trough xml in the mean time.
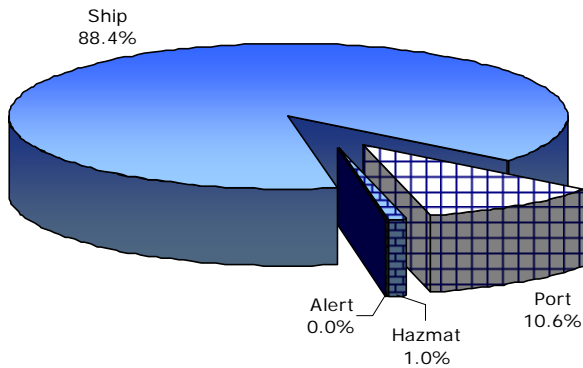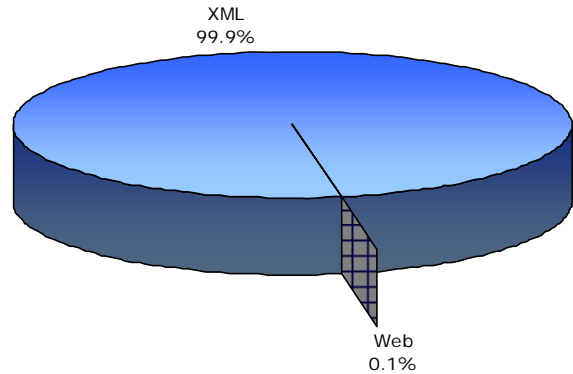
Figure 1 – Notifications per Type

Figure 2 –Notification per Interface

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 (Feb.2007)

COUNTRY	INTERFACE	SHIP	PORT	HAZMAT	ALERT	SECURITY	TOTAL
Denmark	Web	22	3	1			26
Finland	Web	1					1
Germany	Web	1		1			2
Germany	XML			26			26
Ireland	XML	1	11				12
Lithuania	Web	55	5				60
Netherlands	Web	578	63	1			642
Norway	Web	5		2			7
Norway	XML		1	14,335		3,075	17,411
Poland	Web	2			3		5
Poland	XML	10	7	4	10	1	32
Portugal	Web	54					54
Slovenia	Web	381					381
Spain	Web	116	42	10			168
European Commission	Web	95	13	8	2		118
TOTAL		1,321	145	14,388	15	3,076	**18,945**

EMSA comment

The web interface is more used by Member States to request, because this functionality is still not implemented in Xml to many of the SSN users.

However, Norway, Germany and Poland are actively using this functionality in Xml. The requests made by Norway for security notifications can only be considered as tests, because this functionality is not yet operational in SSN.

Ireland is still testing the connection with SSN, so these requests can not also be considered as valid for statistical proposes.
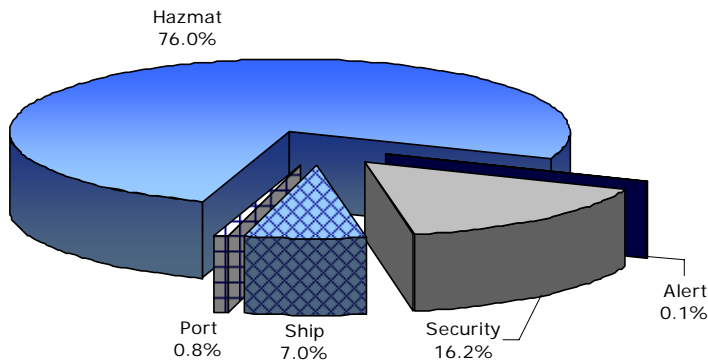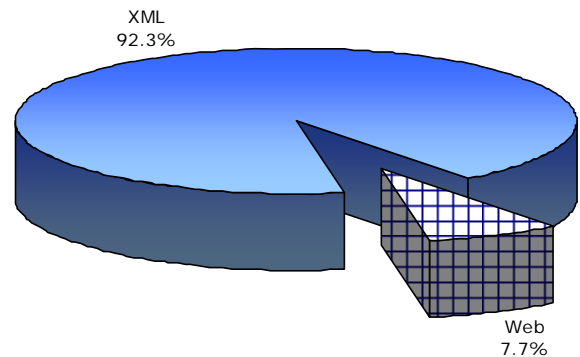
Figure 3 – Requests per Type

Hazmat
76.0%

Port
0.8%

Ship
7.0%

Security
16.2%

Alert
0.1%

Figure 4 – Requests per Interface

XML
92.3%

Web
7.7%

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 in tree 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 (Feb.2007)

COUNTRY	LOCODE		PORT	HAZMAT	TOTAL
EU Top 10 Ports					
NETHERLANDS	NLRTM	Rotterdam	15,786	3,858	19,644
SPAIN	ESLPA	Las Palmas	3,136	163	3,299
NETHERLANDS	NLVLI	Vlissingen	2,290	17	2,307
LITHUANIA	LTKLJ	Klaipeda	1,775	116	1,891
SPAIN	ESALG	Algeciras	1,863	14	1,877
NETHERLANDS	NLTNZ	Terneuzen	1,177	21	1,198
SWEDEN	SEGOT	Goteborg	756	193	949
SWEDEN	SEHEL	Helsingborg	882	53	935
SPAIN	ESBCN	Barcelona	827	73	900
POLAND	PLGDY	Gdynia	655	160	815
EU Ports			42,526	7,798	50,324
Non EU Ports			0	241	241
Port unknown	**UNKWN**		56,114	1,420	57,534

EMSA comment

The table shows the proportion of notifications sent by LOCODE. However as the next port of call is not mandatory information if the vessel is bounded 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)

The first graph represents the average response time of SSN in production environment. On the reporting period the average time was between 1.82 and 1.40 seconds. On Figure 2 the same information is represented but by percentage of transactions status.
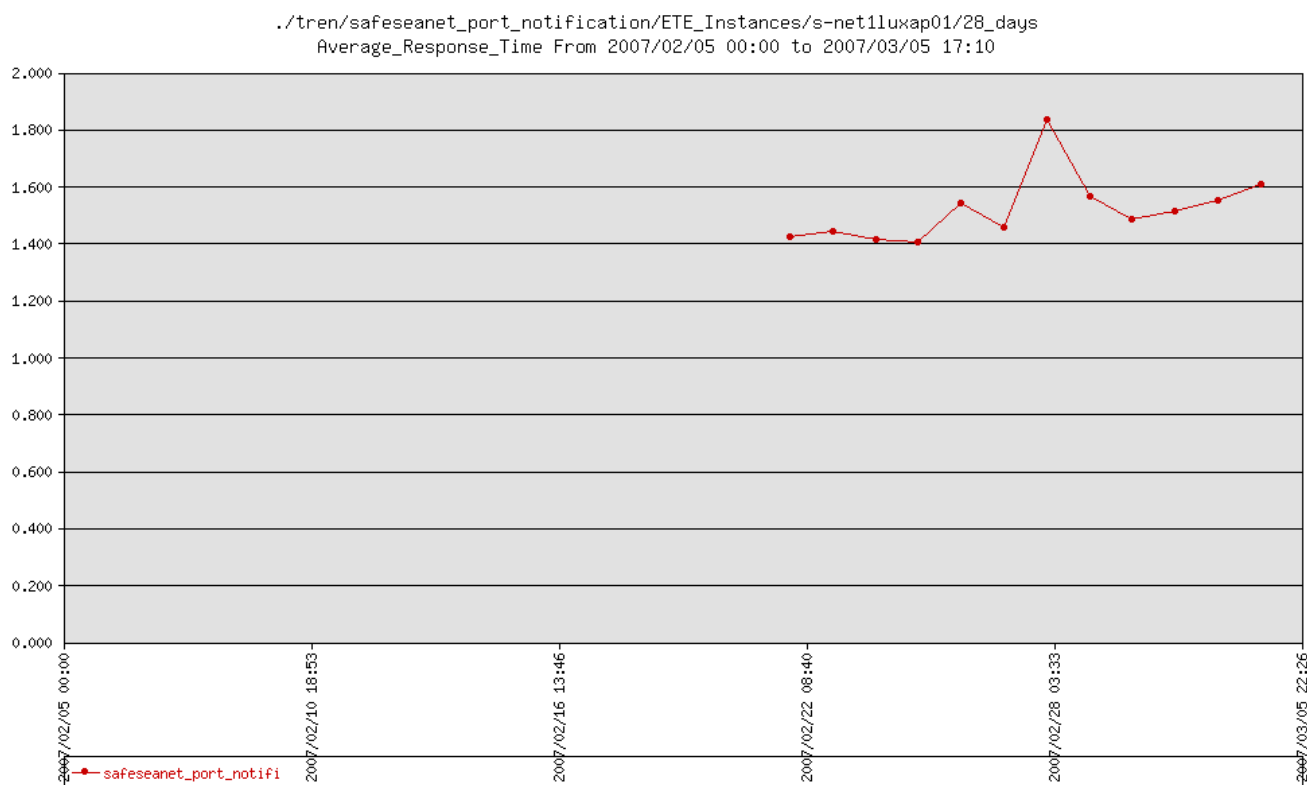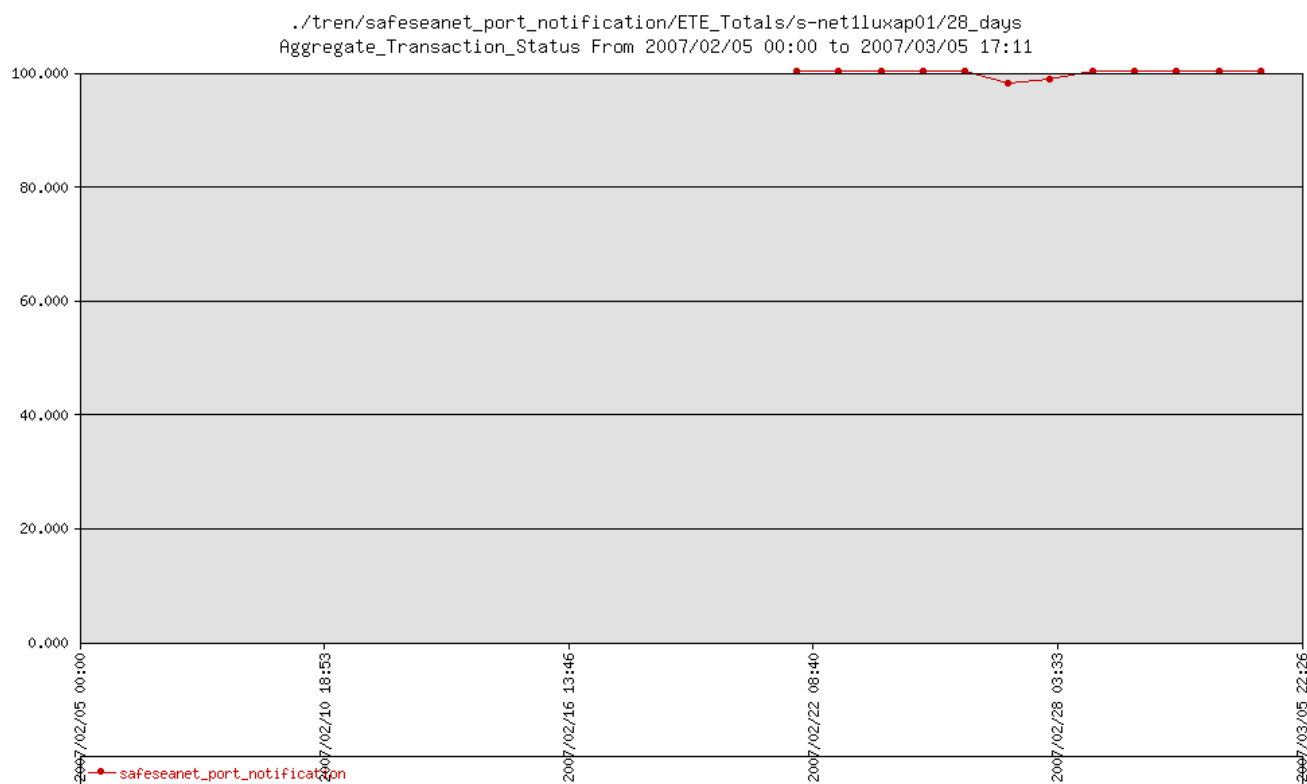
Figure 5

./tren/safeseanet_port_notification/ETE_Instances/s-net1luxap01/28_days
Average_Response_Time From 2007/02/05 00:00 to 2007/03/05 17:10

Figure 6

./tren/safeseanet_port_notification/ETE_Totals/s-net1luxap01/28_days
Aggregate_Transaction_Status From 2007/02/05 00:00 to 2007/03/05 17:11

Source: DI Data Centre Luxembourg - EMSA Monitoring

The standard response time and the minimum acceptable response time has 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 (Feb.2007)

DATE	Period of Interruption (min.)	FROM	TO
02-Feb-2007	60	02/02/2007 06:33	02/02/2007 07:33
04-Feb-2007	0	04/02/2007 11:23	04/02/2007 11:23
16-Feb-2007	70	16/02/2007 22:00	16/02/2007 23:10
26-Feb-2007	0	26/02/2007 19:10	26/02/2007 19:10
27-Feb-2007	0	27/02/2007 19:10	27/02/2007 19:10

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 (Feb.2007)

COUNTRY	Access Denied	Invalid Format	Server Error	TOTAL
Belgium		1,141	5	1,146
Denmark		6		6
European Commission	6			6
Germany	2	1		3
Lithuania		54	5	59
N/R		142,244	9	142,253
Netherlands	3	3,814	10	3,827
Norway		473	7	480
Poland		165	2	167
Spain		1		1
Sweden		14	10	24
TOTAL	11	147,913	48	**147,972**

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.

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 22,306 records 21,752 records. During the last month 554 new vessels were recorded and 5,025 vessels updated, in a total of 5,579 records created/updated (average of 1,400 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 6 – SSN Users (Feb.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.	7	1	3	4							1	8
Finland	7	1			2		2	4				8
Germany	1	1			2							2
Greece	1				1							1
Ireland	1	1			2							2
Lithuania	9	1			1		2		6	1		10
Netherlands	14	5			3		10	2	2	1	1	19
Norway	3	1		1	3							4
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	132	39	4	5	28	2	58	30	39	3	2	171

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).

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