SafeSeaNet monthly report
January 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.
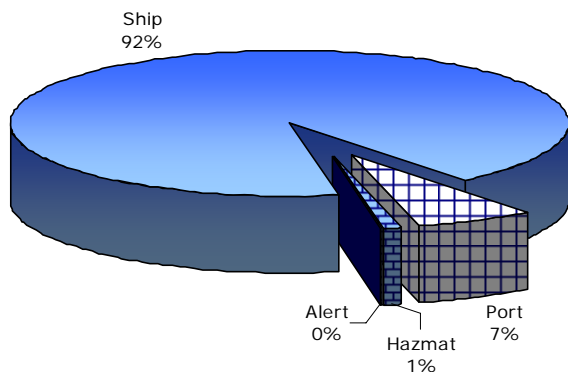
Table 1 - Notifications SSN (Jan.2007)

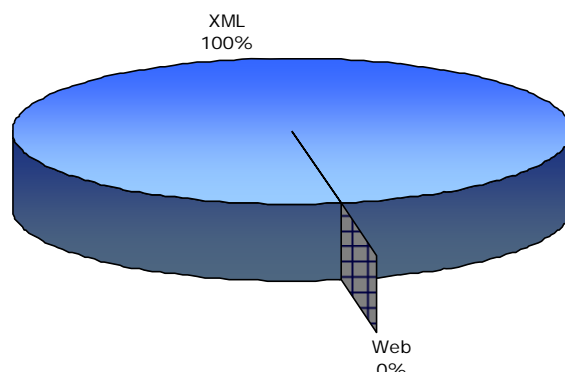| COUNTRY	INTERFACE	SHIP		PORT	HAZMAT	ALERT	TOTAL
		AIS	MRS				
Belgium	XML	92,315		19,126	691		112,132
Denmark	XML				454		454
Finland	XML				1,116		1,116
Germany	XML				1,566		1,566
Ireland	XML					1	1
Lithuania	XML			1,642	92		1,734
Netherlands	Web			170	67		237
Netherlands	XML	291,894		23,343	4,768		320,005
Norway	XML	363,107		1,463	752		365,322
Poland	XML	145,368		1,397	360		147,125
Portugal	Web			71			71
Slovenia	Web		139	220	9		368
Spain	XML			11,558	229		11,787
Sweden	XML	4,353		8,993	527		13,873
TOTAL		897,037	139	67,983	10,631	1	975,791

EMSA comment

It is important to note that on the reporting period two new users, Denmark and Finland, started sending Notification messages on the Production Site, but only for hazmat notifications.

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

Ship
92%

Alert
0%

Hazmat
1%

Port
7%

Figure 2 –Notification per Interface

XML
100%

Web
0%

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 (Jan.2007)

COUNTRY	INTERFACE	SHIP	PORT	HAZMAT	ALERT	SECURITY	TOTAL
Belgium	Web	8	2	1			11
Denmark	Web	50	7	27			84
Finland	Web	44	2	5			51
Germany	XML			41			41
Greece	Web	47	6	8			61
Ireland	Web	5	1	1			7
Ireland	XML	7	2	2	13		24
Lithuania	Web	59	3	3			65
Netherlands	Web	389	43	11			443
Norway	Web	26		4			30
Norway	XML	16	9	7,370		6,944	14,339
Poland	XML	10	8	4	4		26
Portugal	Web	77					77
Slovenia	Web	409	2				411
Spain	Web	117	36	11			164
European Commission	Web	143	13	22	4		182
TOTAL		1,407	134	7,510	21	6,944	16,016

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 and Germany 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.
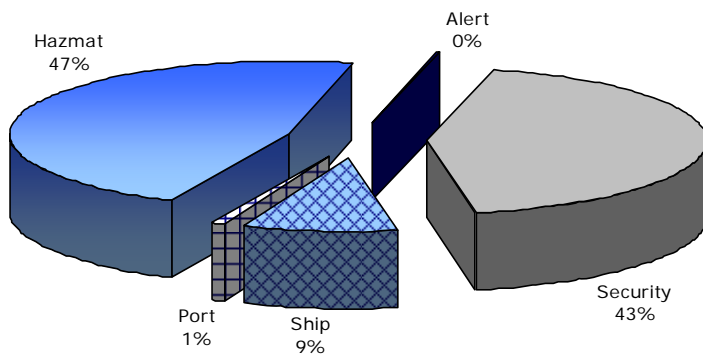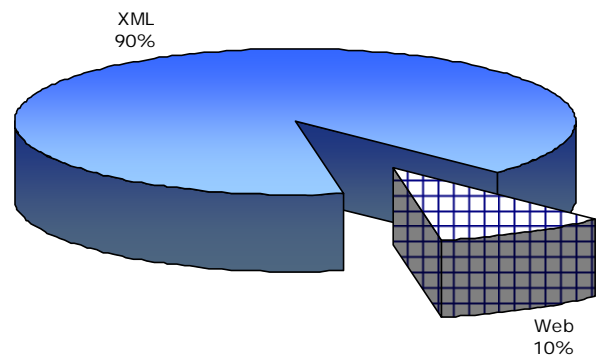
Figure 3 – Requests per Type

Figure 4 – Requests per Interface

Hazmat
47%

Alert
0%

Port
1%

Ship
9%

Security
43%

XML
90%

Web
10%

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 (Jan.2007)

COUNTRY	LOCODE		PORT	HAZMAT	TOTAL
EU Top 10 Ports					
NETHERLANDS	NLRTM	Rotterdam	16,902	4,757	21,659
SPAIN	ESLPA	Las Palmas	3,585	119	3,704
NETHERLANDS	NLVLI	Vlissingen	2,447	20	2,467
SPAIN	ESALG	Algeciras	2,050	6	2,056
LITHUANIA	LTKLJ	Klaipeda	1,634	113	1,747
NETHERLANDS	NLTNZ	Terneuzen	1,402	32	1,434
SWEDEN	SETRG	Trelleborg	1,105	188	1,293
SWEDEN	SEHEL	Helsingborg	1,045	50	1,095
SWEDEN	SEGOT	Goteborg	792	192	984
SPAIN	ESBCN	Barcelona	899	74	973
EU Ports			46,751	9,369	56,120
Non EU Ports			0	173	173
Port unknown	**UNKWN**		21,227	1,062	22,289

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 1.80 and 1.60 seconds. On Figure 2 the same information is represented but by percentage of transactions status.
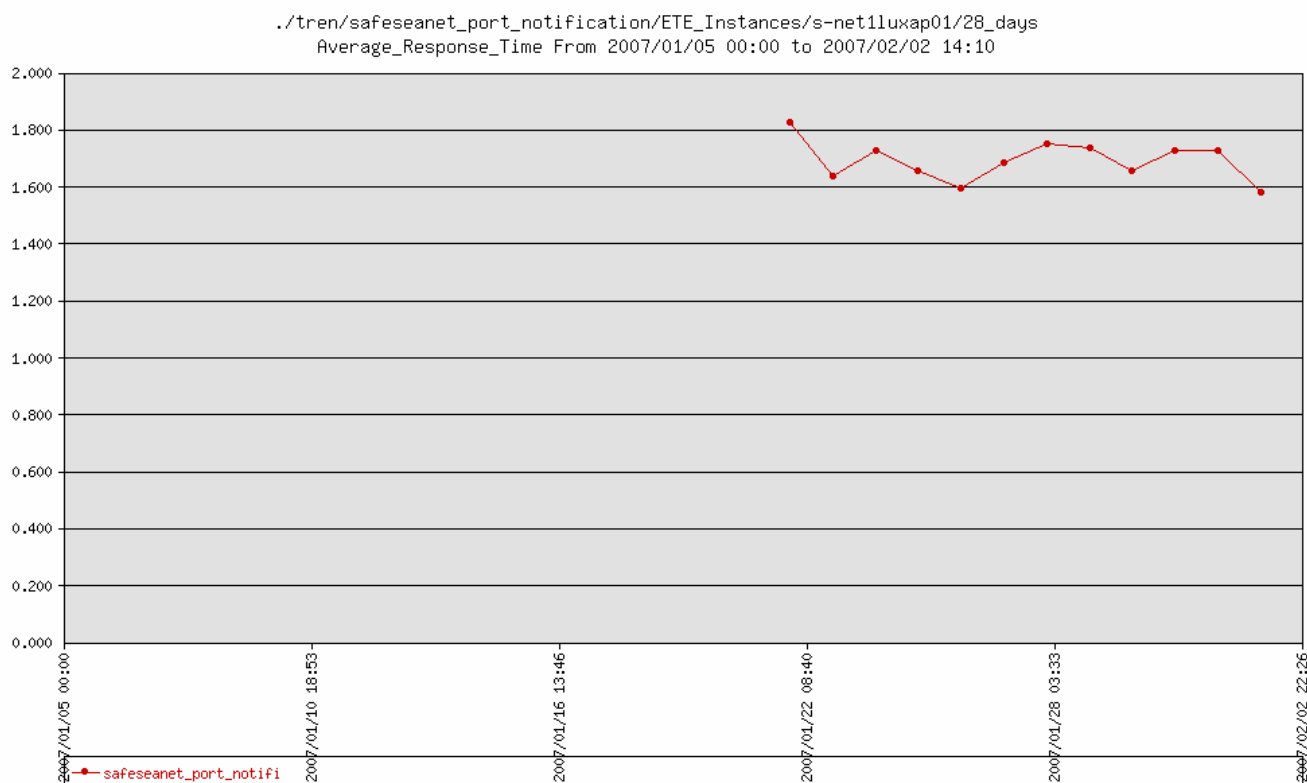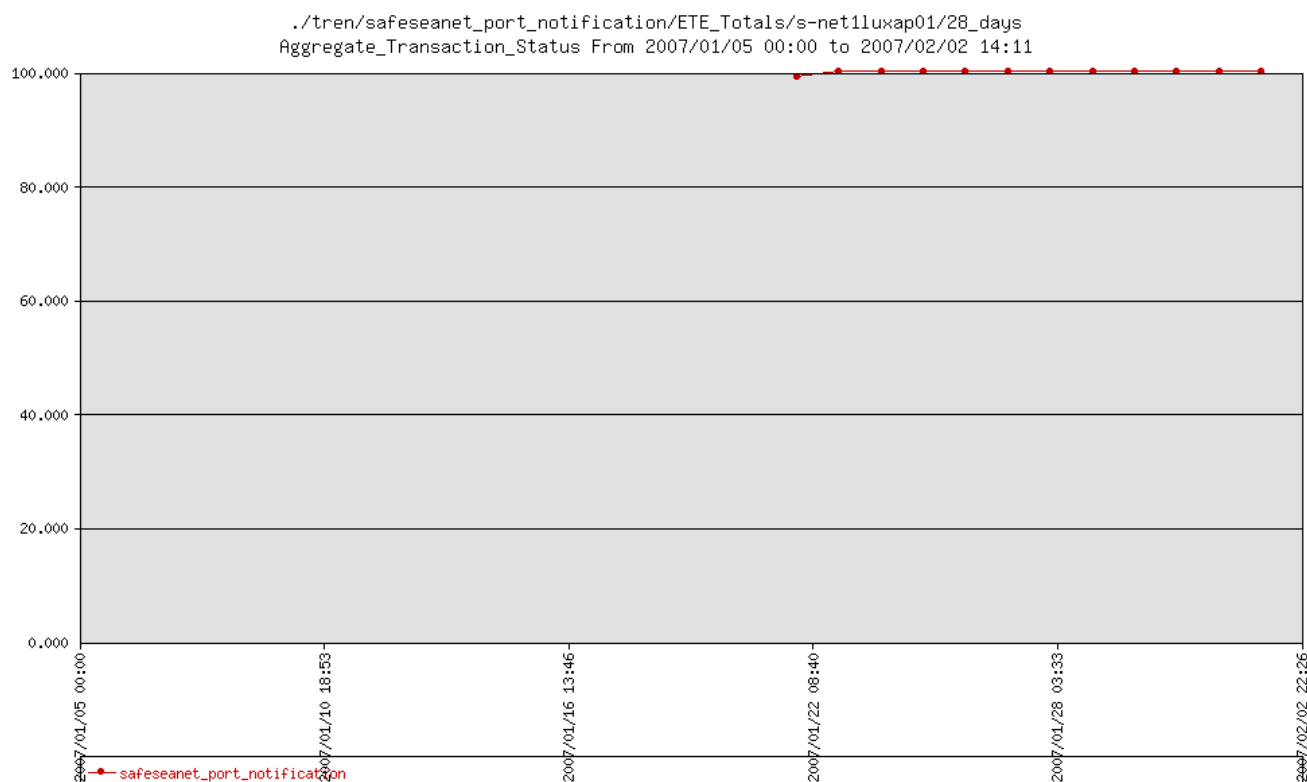
Figure 5

./tren/safeseanet_port_notification/ETE_Instances/s-net1luxap01/28_days
Average_Response_Time From 2007/01/05 00:00 to 2007/02/02 14:10

Figure 6

./tren/safeseanet_port_notification/ETE_Totals/s-net1luxap01/28_days
Aggregate_Transaction_Status From 2007/01/05 00:00 to 2007/02/02 14:11

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 (Jan.2007)

DATE	Period of Interruption (min.)	FROM	TO
04-Jan-2007	0	04/01/2007 06:30	04/01/2007 06:30
08-Jan-2007	10	08/01/2007 12:49	08/01/2007 12:50
13-Jan-2007	0	13/01/2007 00:23	13/01/2007 00:23

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.

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 (Jan.2007)

COUNTRY	Access Denied	Invalid Format	Server Error	TOTAL
Belgium	1	910		911
Denmark	1			1
European Comm	7			7
Finland	6			6
Germany		2		2
Lithuania		102		102
N/R		120,115	17	120,132
Netherlands	1	6,784	2	6,787
Norway		429	14	443
Poland		775		775
Spain	10			10
Sweden		11	11	22
TOTAL	26	129,128	44	**129,198**

EMSA comment

The table reveals that the message error type *Invalid Format* has the higher occurrence.

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 21,752 records. During the last month 4,030 records were created/updated, in an average of 1,000 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 (Jan.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	1					1						1
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	131	39	4	5	27	2	58	30	39	3	2	170

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.