European Maritime Safety Agency

SafeSeaNet monthly report
April 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.

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 (Apr.2007)

COUNTRY	INTERFACE	SHIP AIS	SHIP MRS	PORT	HAZMAT	ALERT	SECURITY	TOTAL
Belgium	XML	156,711		35,749	717			193,177
Denmark	XML				438			438
Finland	XML			8,334	432			8,766
Germany	XML				1,761			1,761
Ireland	XML			1	27	2		30
Italy	XML		22,515	1,103				23,618
Lithuania	Web			2				2
Lithuania	XML			2,109	20			2,129
Netherlands	Web			238	109	5		352
Netherlands	XML	318,515		23,951	4,061			346,527
Norway	XML	306,586		1,590	710			308,886
Poland	XML	99,377		3,073	905		1,062	104,417
Portugal	Web			83				83
Slovenia	Web		146	243	7			396
Spain	XML			11,873	277			12,150
Sweden	XML	2,054		8,460	580			11,094
TOTAL		883,243	22,661	96,809	10,044	7	1,062	1,013,826

EMSA comment

It is important to note that on the reporting period a new user, Italy, started sending Notification messages on the Production Site, but only for ship (MRS) and port 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 to continue using the web interface for providing notifications to SSN.

Figure 1 – Notifications per Type   **Figure 2 –Notification per Interface**
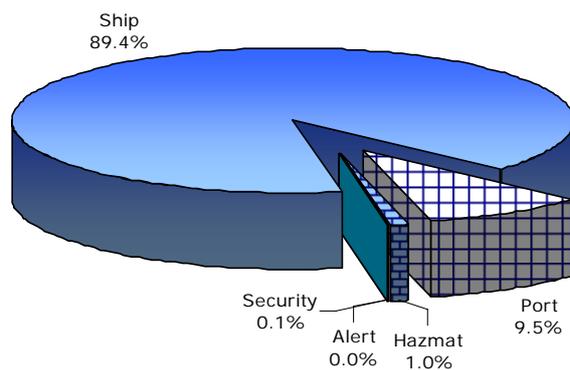
Ship
89.4%

Security
0.1%
Alert   Hazmat
0.0%   1.0%
Port
9.5%

XML
99.9%

Web
0.1%
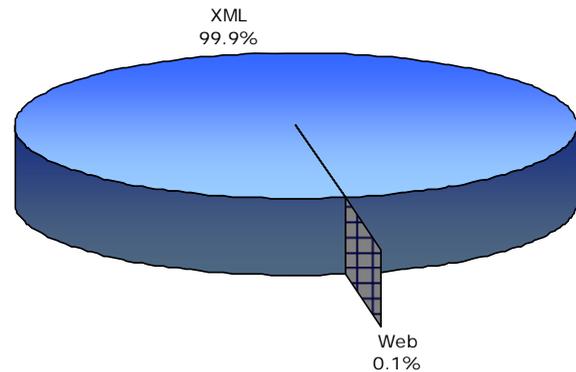
2.2. Requests

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 (Apr.2007)

| COUNTRY	INTERFACE	SHIP	PORT	HAZMAT	ALERT	SECURITY	TOTAL
Germany	Web	27		3		1	31
Germany	XML			2			2
Greece	Web	3	2	2			7
Ireland	XML	3	3				6
Italy	XML	7	5				12
Lithuania	Web	30					30
Netherlands	Web	457	28	1			486
Norway	Web	14	1	3			18
Norway	XML			17,015			17,015
Poland	Web	9		2		1	12
Poland	XML	54	13	10	2	4	83
Portugal	Web	98					98
Slovenia	Web	491	19				510
Spain	Web	120	28	3		2	153
European Commission	Web	36	4	11		5	56
TOTAL		1,349	103	17,052	2	13	**18,519**

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, Poland and Italy 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 per Interface**
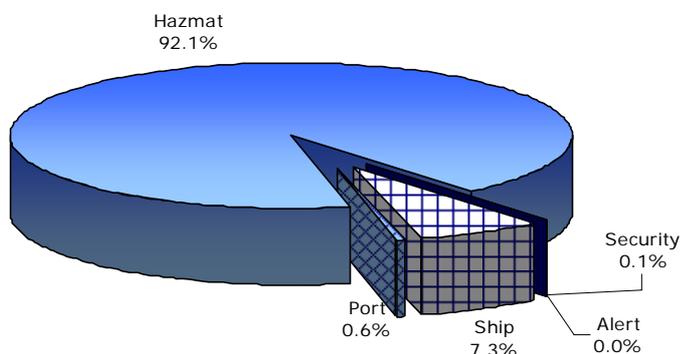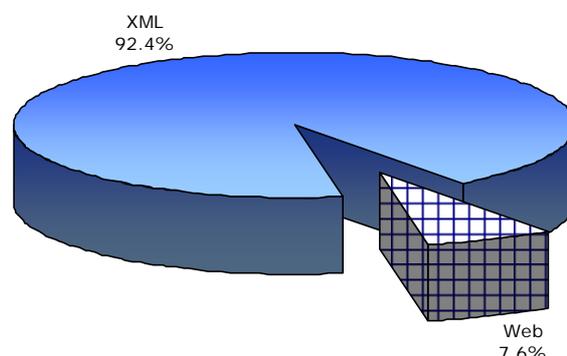
2.3. LOCODEs per MS and the number of notification (port and HAZMAT) associated with these LOCODEs

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 (Apr.2007)

COUNTRY	LOCODE		PORT	HAZMAT	TOTAL
EU Top 10 Ports					
NETHERLANDS	NLRTM	Rotterdam	16,655	4,061	20,716
SPAIN	ESLPA	Las Palmas	3,097	187	3,284
FINLAND	FIHEL	Helsinki	2,466	170	2,636
NETHERLANDS	NLVLI	Vlissingen	2,346	20	2,366
LITHUANIA	LTKLJ	Klaipeda	2,107	38	2,145
SPAIN	ESALG	Algeciras	1,986	5	1,991
SPAIN	ESBCN	Barcelona	1,146	53	1,199
POLAND	PLSWI	Swinoujscie	839	345	1,184
NETHERLANDS	NLTNZ	Terneuzen	1,079	25	1,104
SWEDEN	SESTO	Stockholm	939	44	983
EU Ports			**57,194**	**8,667**	**65,861**
Non EU Ports			**0**	**272**	**272**
Port unknown	**UNKWN**		**39,610**	**1,125**	**40,735**

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 **2.80 and 5.20** 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 (Apr.2007)

DATE	Period of Interruption (min.)	FROM	TO
06-Apr-2007	40	06/04/2007 18:20	06/04/2007 19:00
07-Apr-2007	10	07/04/2007 09:33	07/04/2007 20:35
09-Apr-2007	100	09/04/2007 10:03	09/04/2007 11:40
10-Apr-2007	0	10/04/2007 01:40	10/04/2007 01:40
18-Apr-2007	20	18/04/2007 06:03	18/04/2007 06:20
26-Apr-2007	50	26/04/2007 19:10	26/04/2007 23:40

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 (Apr.2007)

COUNTRY	Access Denied	Invalid Format	Server Error	TOTAL
Belgium		802	74	876
Denmark		4		4
Finland		4	2	6
Germany	1	2		3
Italy		541	35	576
Lithuania		20		20
N/R		142,923	4	142,927
Netherlands		1,700	110	1,810
Norway		331	197	528
Poland	2	238	218	458
Slovenia		1		1
Spain	4		1	5
Sweden		9	16	25
TOTAL	7	146,575	657	**147,239**

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 (end of April 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 23,850 records. During the last month 842 new vessels were recorded and 4,487 vessels updated, in a total of 5,329 records created/updated (average of 1,065 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 (Apr.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.	8	1	4	4							1	9
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	136	41	5	5	33	2	58	30	39	3	2	177

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.