European Maritime Safety Agency

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SafeSeaNet monthly report

March 2009

1 - Background Information

The purpose of the monthly report is to present the latest specific measurable elements and figures, thereby providing a picture of the current status of SafeSeaNet. It is a global overview of the status of the system, and is complemented by more detailed Member State reports which are also sent to each country individually on a bi-annual basis. The report is made available to EMSA, the Commission and the Member States for their further analysis. It provides statistical information on both the quantity and quality of data exchanged, and the main objective is to inform MSs of areas where performance should be improved.

The monthly reporting sequence will be terminated in March. Instead, a quarterly report (first issue on 1st July 2009) will be sent to SSN users, and this will mainly address data quality issues.

2 - Type of Information

2.1 – SSN Notifications

Table 1 shows the type and number of notifications sent to SSN in March 2009 by reporting country, and also shows the type of interface used for providing the data (Web-based or automatic XML-based). Fig. 1 shows the evolution in the number of notifications sent in the last year.

COUNTRY	INTERFACE	SHIP	PORT	HAZMAT	ALERT	TOTAL
Belgium	XML	158,596	7,264	2,738	4	168,602
Bulgaria	Web		232	16		248
Cyprus	XML	676,624	259	142		677,025
Denmark	XML	239,669	10,022	243		249,934
Finland	XML	67,457	3,269	593		71,319
France	XML	13,597	3,799	859	74	18,329
Germany	XML	156,718	9,758	2,015		168,491
Greece	XML	7,660	132	5		7,797
Iceland	XML	46,281	72	1		46,354
Ireland	XML	69,073	376	274		69,723
Italy	Web				2	2
	XML	224,632	7,878	1,545	2	234,057
Latvia	XML	95,612	691	28	8	96,339
Lithuania	Web		6	6		12
	XML	12,333	1,604	261		14,198
Malta	XML	34,019	121	453		34,593
Netherlands	Web		360	173	5	538
	XML	287,069	10,706	1,606		299,381
Norway	XML	390,257	6,376	1,273		397,906
Poland	Web		11		3	14
	XML	149,694	1,819	542		152,055
Portugal	Web		40			40
	XML		1,992	350		2,342
Romania	XML	25,453	507	130	1	26,091
Slovenia	Web	1				1
	XML	151	156	84	1	392
Spain	XML	8,815	8,431	424		17,670
Sweden	Web				1	1
	XML	8,625	9,685	655		18,965
United Kingdom	XML	581,791	16,272	1,357	15	599,435
TOTAL		3,254,127	101,838	15,773	116	3,371,854

Table 1 - SSN Notifications (Mar.2009)

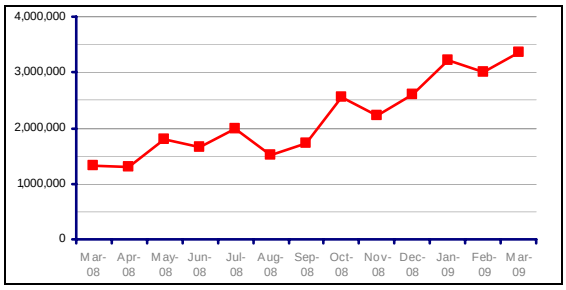

Fig. 1 - EU SSN Notifications (Mar.08-Mar.09)

EMSA comment – The number of notifications received by SSN reached almost 3.5 million in March (the highest to date). 99.9% of the notifications were provided by automatic means (XML). Greece began sending Port, Hazmat and Ship (AIS) notifications in March. Also, more and more MSs are sending data on Alerts.

2.2 – SSN Requests

Table 2 shows the type and number of requests made to SSN in March 2009 by reporting country, with the type of interface also identified. Fig. 2 illustrates the monthly evolution in the number of requests made during 2008.

COUNTRY	INTERFACE	SHIP	PORT	HAZMAT	ALERT	TOTAL
Belgium	Web	6		6	11	23
	XML	744		11		755
Denmark	XML		5	18	5	28
Finland	Web	1		2	2	5
	XML		50,632			50,632
France	Web	2		2	9	13
	XML	26		1	3	30
Germany	Web	7		2	34	43
	XML	6	3			
Greece	Web	15		3	7	25
Iceland	Web				7	
Ireland	Web	2			2	4
Italy	Web	29		9	64	102
	XML	13	1	6	1	21
Latvia	Web	1			6	7
	XML	4	2	10	2	18
Lithuania	Web	29		10	10	49
Netherlands	Web	18		7	29	54
Norway	Web	2		1	2	5
	XML	2	3	99,461	1	99,467
Poland	Web	12		25	12	49
	XML		1			1
Portugal	Web				2	2
Romania	Web				3	3
	XML	117	3	8,100	39,713	47,933
Slovenia	Web	3			10	
	XML	9	5	7	2	23
Spain	Web	13		16	3	32
Sweden	Web	2		3	12	17
United Kingdom	Web	1		2	16	19
	XML		1	1		2
European Commission	Web	235		189	120	544
	XML		4,763			4,763
TOTAL		1,299	55,419	107,892	40,088	204,669

Table 2 - SSN Requests (Mar.2009)

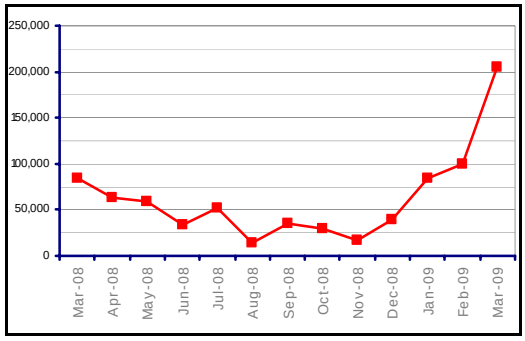

Fig. 2 - SSN Requests (Mar.08-Mar.09)

EMSA comment – The number of requests made to SSN in March was the highest ever, with more than two hundred thousand requests made during the month. MSs are using SSN more and more to request information.

3 - Member States Status

3.1 – SSN Participating Countries

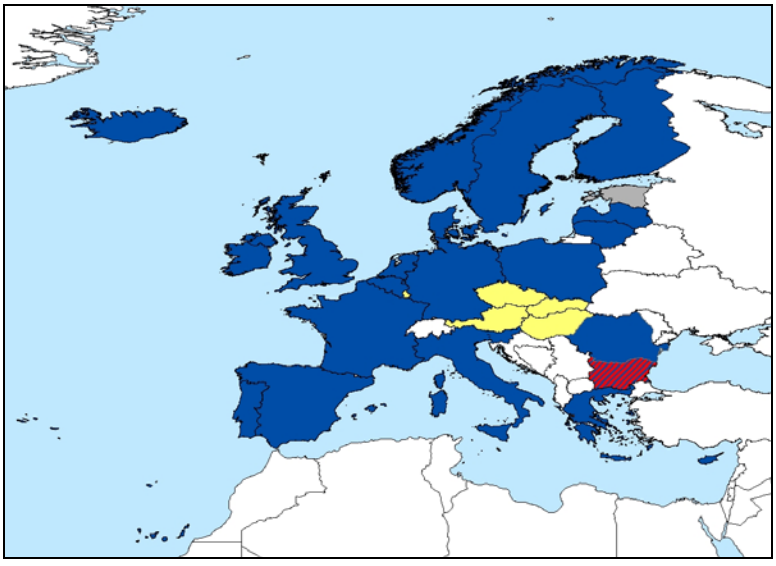

Fig. 3 - MS Current Status (Mar. 2009)

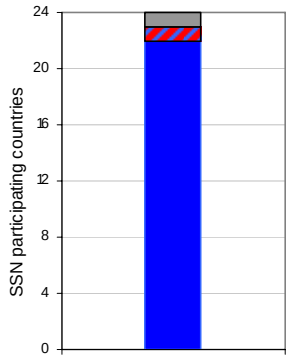

Fig. 4 - SSN Implementation (Mar. 2009)

Legend:
- Countries participating in SSN through XML
- Countries participating in SSN through the Web
- Countries ready to participate in SSN
- Countries not participating in SSN
- Landlocked countries

EMSA comment – Greece joined SSN in March and **Estonia** began sending AIS notifications on 14th April (Estonia is still indicated grey on the map since this report concerns March).

3.2 – Status of Implementation per Type of Notification

Table 3 summarises the current status of MS notifications using XML and provides information on planning related to production and commissioning activities.

COUNTRY		Notifications				Date Projected for Tests or Production
		Port	Hazmat	Ship	Alert	
AT	Austria	no	no	no	no	Pending the creation of the NCA profile
BE	Belgium	yes	yes	yes	yes	
BU	Bulgaria (*)	yes (*)	yes (*)	no	no	Test: Beginning 2009
CZ	Czech Republic	yes (*)	yes (*)	yes (*)	yes (*)	Created NCA. Able to request data through the Web
CY	Cyprus	yes	yes	yes	ready	
DK	Denmark	yes	yes	yes	ready	
EE	Estonia	no	no	yes	no	
FI	Finland	yes	yes	yes	yes	
FR	France	yes	yes	yes	yes	
DE	Germany	yes	yes	yes	no	
GR	Greece	yes	yes	yes	no	
HU	Hungary	no	no	no	no	Pending the creation of the NCA profile
IC	Iceland	yes	yes	yes	yes	
IE	Ireland	yes	yes	yes	yes	
IT	Italy	yes	yes	yes	yes	
LV	Latvia	yes	yes	yes	yes	
LT	Lithuania	yes	yes	yes	no	
LX	Luxemburg	no	no	no	no	Pending the creation of the NCA profile
MT	Malta	yes	yes	yes	yes (*)	
NL	Netherlands	yes	yes	yes	yes (*)	
NO	Norway	yes	yes	yes	ready	
PL	Poland	yes	yes	yes	yes(*)	
PT	Portugal	yes	yes	no	no	Production: Beginning 2009 for Alert and Ship notifications
RO	Romania	yes	yes	yes	yes	
SL	Slovak Republic	yes (*)	yes (*)	yes (*)	yes (*)	Created NCA. Able to request data through the Web
SI	Slovenia	yes	yes	yes	yes (*)	
ES	Spain	yes	yes	yes	ready	
SE	Sweden	yes	yes	yes	no	
GB	United Kingdom	yes	yes	yes	yes	

Notes: **Updated: March 2009**

Yes	Participating, sending notifications
Ready	Passed the "commissioning" tests that certify national compliance with SSN but not yet using the system
No	No connection to SSN
(*)	Countries participating using the Web interface

Table 3 - Status of Implementation per SSN Country

EMSA comment –The automated MS connection phase is almost completed, with 23 out of 24 MSs already connected to SSN. **Estonia** has successfully completed the commissioning tests for Ship (AIS) messages and **Greece** has begun to provide Port, Hazmat and Ship (AIS) messages.

4 - Data Quality

4.1. – Port Notifications

Fig. 5 presents the results of data quality checks by comparing the information available from external data sources (port authority web pages, Lloyds Maritime Intelligence Unit and Sea-Web) with that available in SSN. The results are based on a sample of 10 notifications per country (chosen randomly).

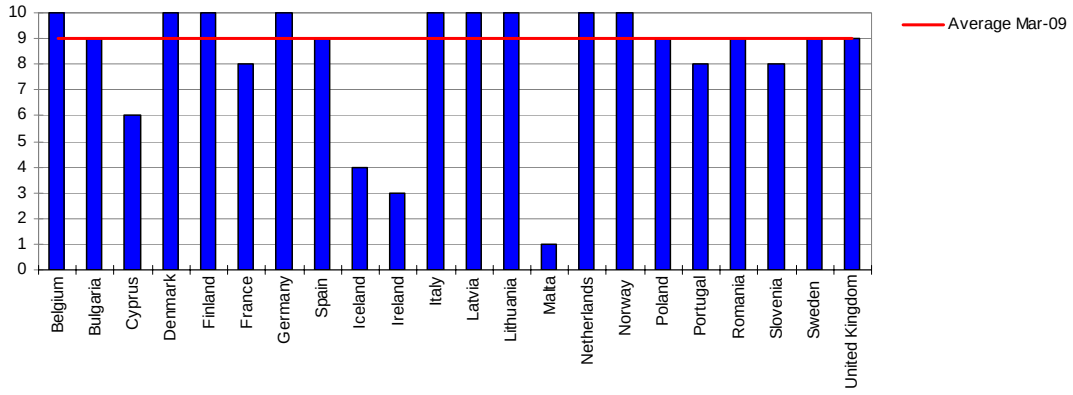

Fig. 5 - Port Notifications vs External Sources (Mar. 2009)

EMSA comment – Only 9 out of 23 MSs providing Port notifications are reporting all of the required information. **Iceland** has reported that 6 port notifications available via external sources, but missing from SSN, related either to ships reported previously in the system, or to ships not participating in SSN (i.e. exempt vessels). **Malta** reduced its number of port notifications significantly, and therefore the rate of missing notifications is very high. It appears that **Ireland** also needs to improve its performance.

Whenever the checks show that information available via external sources is not available in SSN, the MSS reports it to the MS concerned.

4.2. – Impact of the Data Quality Checks in v1.9.1

The new version of SSN v1.9.1 will include a set of new data quality checking rules which were agreed by the SSN Group at WS 9. The implementation of these additional data quality checks may result in the rejection of notifications if the same rules have not been implemented at national level.

In order to assess the impact of the implementation, the MSS analysed the notifications provided in **March** by automatic means (XML) and estimated what the rate of rejection would be if the checking rules were already in force. The findings are shown in this section.

4.2.1 – IMO Number

The IMO number rule will be applied to all messages and will check whether the IMO number is technically correct. Fig. 6 shows the percentage of invalid IMO numbers reported in the Port and Hazmat notifications sent to SSN in March.

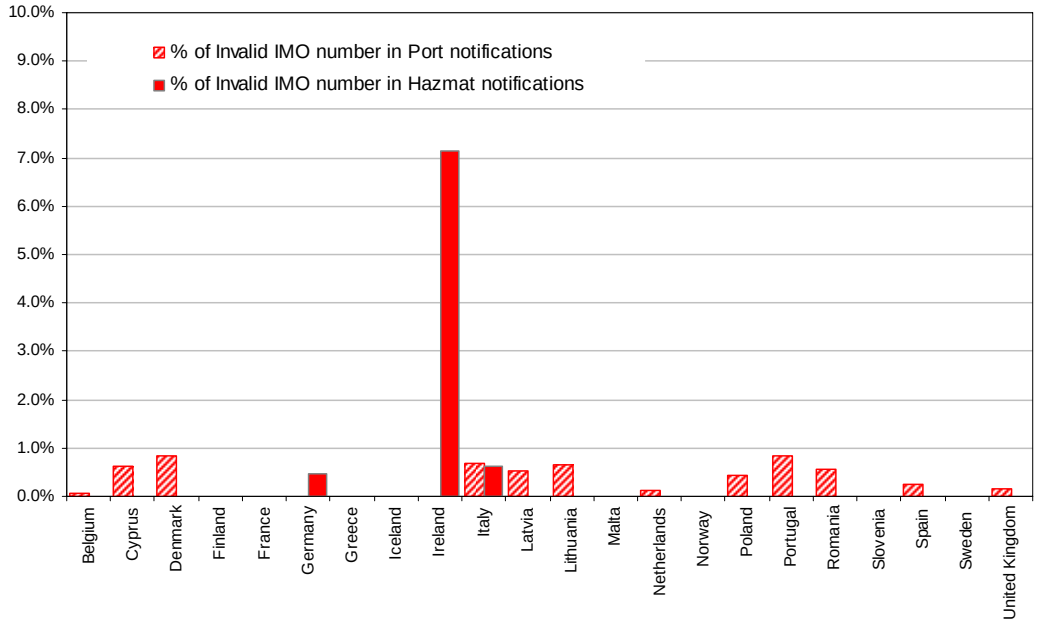

Fig. 6 - % of Invalid IMO in Port and Hazmat notifications (Mar. 2009)

EMSA comment – There are still some notifications provided with an invalid IMO number, but the number is insignificant. According to the analysis, less than 1% of the notifications would be rejected due to the new checking rule.

4.2.2 – Port Notifications – Checking Rule for Sent At, ETA and ETD Attributes

According to the "checking rules" agreed in 2008, Port Notifications are rejected every time a message is after the vessel arrival (SentAt is after ETA or ETA is after ETD). The current SSN version incorporates the above checking rule and Fig. 7 shows the percentage of messages that should have been rejected in March.

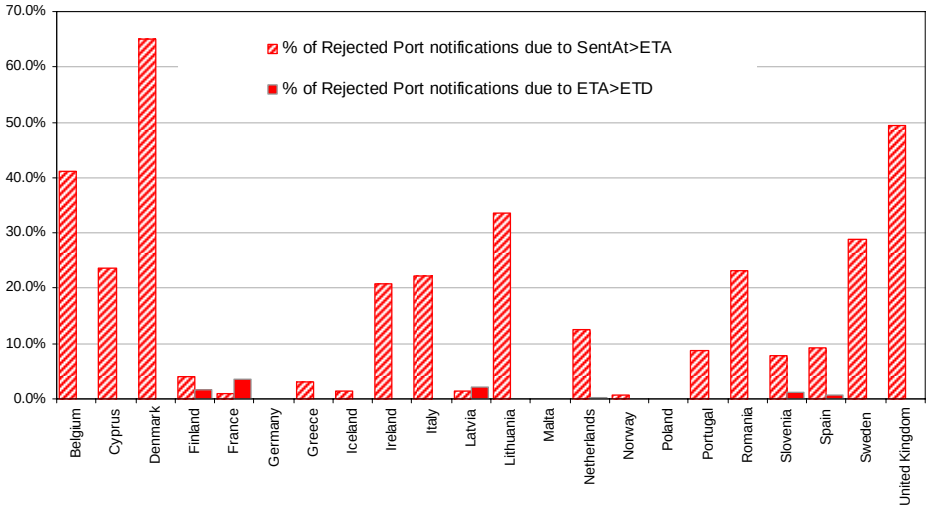

Fig. 7 - % of rejected Port notifications due to the checking rules – (Mar. 2009)

EMSA comment –The impact of the checking rule relating to the SentAt attribute was very high for March (more than 20% of Port notifications rejected). With respect to the ETA and ETD, the percentage of rejected messages was 0.2%.

Subject to Article 4 of the Directive 2002/59/EC a Port notification has to be provided "prior to entry into ports of the Members States". Therefore Port notifications sent after the ship arrival are not in line with the requirement of Article 4. A further analysis of the "percentage of rejected Port notifications due to SentAt>ETA" presented in Fig. 7 is represented in the following table:

Country	1st SentAt > ETA		Next SentAt > ETA		Total	
	Notifications	% rejected	Notifications	% rejected	Notifications	% rejected
Belgium	368	4.6%	2,922	36.6%	3,290	41.2%
Cyprus	66	22.6%	3	1.0%	69	23.6%
Denmark	1,335	12.9%	5,419	52.2%	6,754	65.1%
Finland	37	2.5%	20	1.4%	57	3.9%
France	203	0.7%	71	0.3%	274	1.0%
Germany	0	0.0%	0	0.0%	0	0.0%
Greece	4	3.0%	0	0.0%	4	3.0%
Iceland	1	1.4%	0	0.0%	1	1.4%
Ireland	74	19.1%	6	1.6%	80	20.7%
Italy	1,739	15.5%	741	6.6%	2,480	22.1%
Latvia	9	1.3%	0	0.0%	9	1.3%
Lithuania	405	19.1%	307	14.4%	712	33.5%
Malta	0	0.0%	0	0.0%	0	0.0%
Netherlands	1,032	9.9%	287	2.7%	1,319	12.6%
Norway	12	0.8%	0	0.0%	12	0.8%
Poland	0	0.0%	0	0.0%	0	0.0%
Portugal	68	4.3%	69	4.4%	137	8.7%
Romania	82	16.1%	37	7.2%	119	23.3%
Slovenia	10	6.4%	2	1.3%	12	7.7%
Spain	807	9.0%	18	0.2%	825	9.2%
Sweden	722	7.4%	2,080	21.5%	2,802	28.9%
United Kingdom	7,366	45.2%	679	4.2%	8,045	49.4%

Table 4 – Details of rejected Port notifications due to SentAt>ETA

Table 4 has considered Port notifications grouped for the same IMO, same NextPortOfCall and same ETA per MS. The 1st notification of each group (first "SentAt") has been considered as initial Port notification and the rest were considered as updates.

The "1st SentAt>ETA" columns represents numbers and percentages of the first Port notifications sent after the ETA. There is no doubt that the respective MSs do not comply with Article 4 since they provide even the 1st notification after the vessel arrival.

The columns "next SentAt>ETA" represents the following (after the first) port notifications provided by MSs. These notifications may also be of similar nature as of the previous columns but we cannot exclude the possibility that these messages have been sent to update the "persons on board" or the EDT attributes. This case should further analysed to make sure what exactly the case is for each MS.

MSs are also requested to further investigate this issue and provide feedback to the MSS.

4.2.3 – Hazmat Notifications – Checking Rule for Sent At, ETA and ETD Attributes

Hazmat notifications will be rejected every time a message is sent when SentAT is after ETA or ETD is after ETA. Fig. 8 indicates the percentage of messages rejected in March by SSN when applying the checking rules.

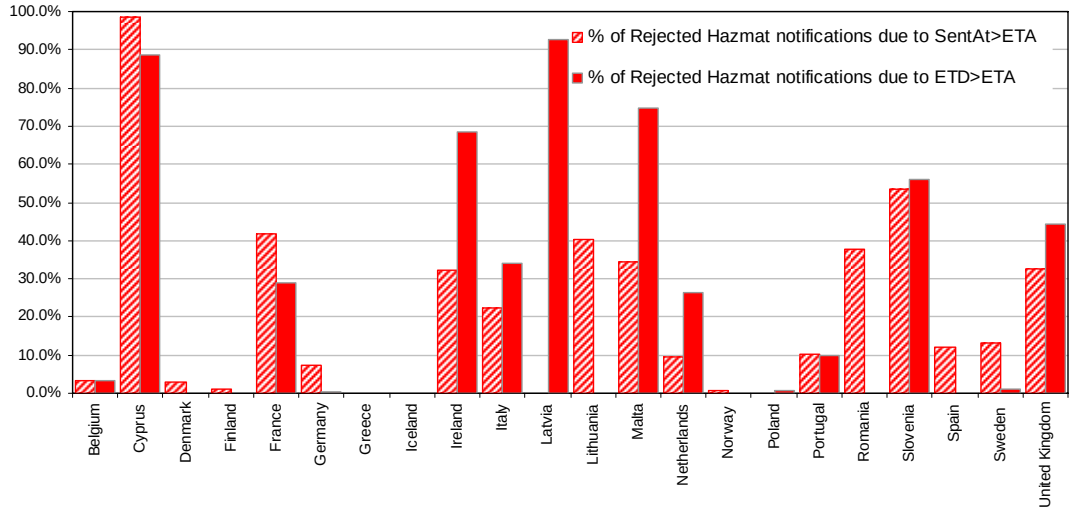

Fig. 8 – % of Rejected Hazmat notifications due to the checking rules – (Mar. 2009)

EMSA comment – The impact of the checking rules concerning the SentAt, ETD and ETA attributes will be very high since, in both cases, more than 15% of Hazmat notifications would be rejected if the checks were already in place.

Comments on the relationship between the SentAt and ETA attributes referred to in 4.2.2 remain valid.

MSs are requested to further investigate this issue and provide feedback to the MSS.

5 – Other Issues

5.1. – Ship (AIS) Notifications vs. Coverage Area

After analysing Ship (AIS) notifications during the last quarter, the MSS detected that the AIS coverage in some national systems is incomplete. This can be seen in the Polish and Maltese examples shown in Fig.9, and they have already been informed of this issue. Malta is apparently filtering out AIS transmissions received over 12 miles from its coast, while Poland is filtering based on its Exclusive Economic Zone.

Bulgaria, Estonia, France, Portugal, Slovenia and Spain are still lagging behind in the implementation of AIS notifications (although Greece is not shown on the map, it began providing notifications at the end of March). Sweden is not providing notifications at the agreed rate of one every two hours while a ship is in the national AIS coverage area.

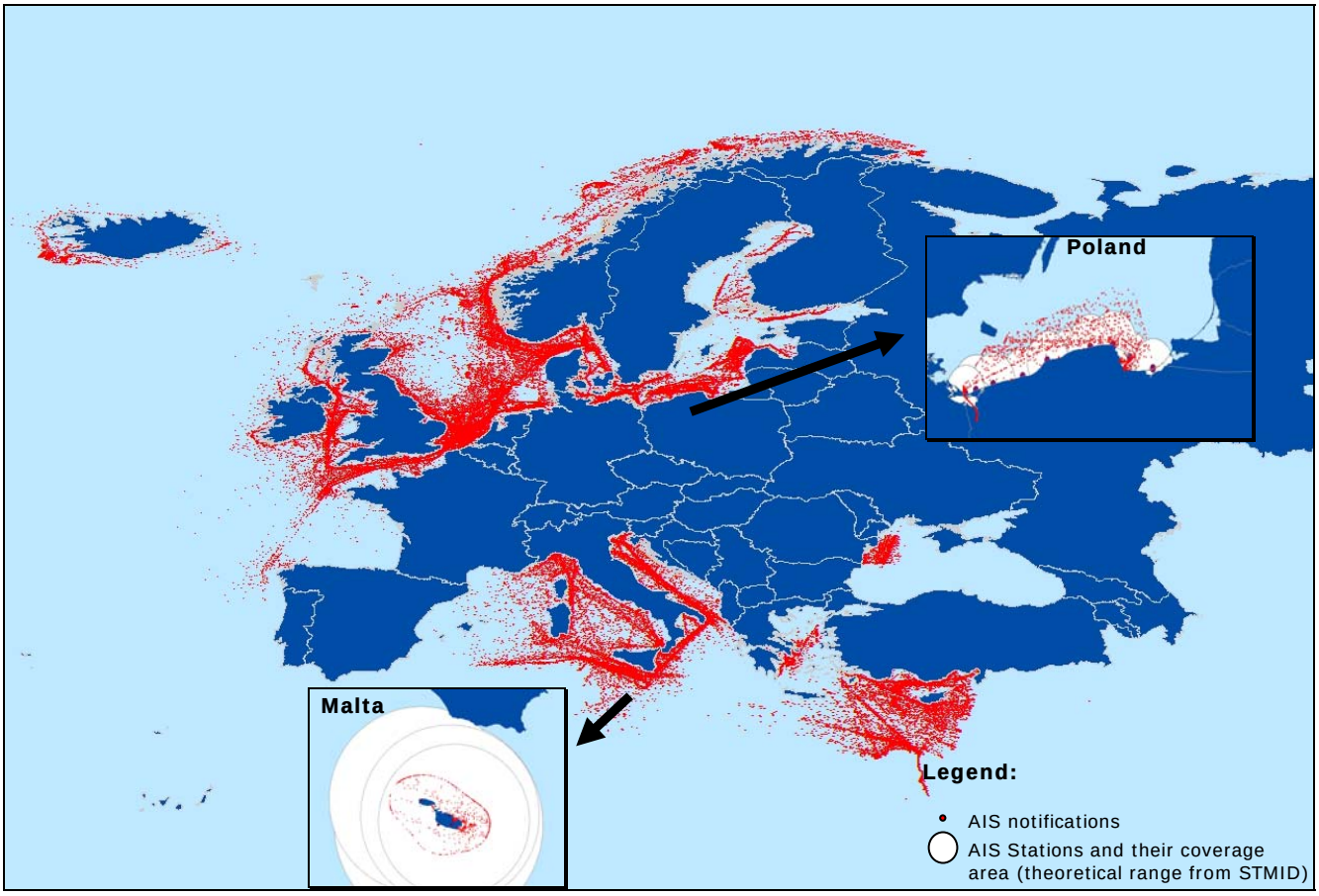

Fig. 9 – AIS notifications/coverage area (Mar. 2009)

EMSA strongly recommends that MSs do ***not filter AIS notifications*** sent to SSN. By filtering the data in such a way, MSs are reducing the associated benefits (loss of redundancy, maximum range, etc.).